## **Neometals Ltd**

A.C.N. 099 116 631

Half-Year Report for the 6 months ended 31 December 2021 The directors of Neometals Ltd ("**Company**") ("**Neometals**") submit herewith the financial report of Neometals and its subsidiaries ("**Group**") ("**Consolidated Entity**") for the half-year ended 31 December 2021. Pursuant to the provisions of the Corporations Act 2001, the directors report as follows:

The names of the directors of the company during or since the end of the half-year are:

- Mr S. Cole Appointed 24 July 2008
- Mr D. Reed Resigned 30 November 2021
- Mr C. Reed Appointed 20 December 2001
- Dr N. Streltsova Appointed 14 April 2016
- Mr D. Ritchie Appointed 14 April 2016
- Mr L. Guthrie Appointed 27 September 2018
- Dr J. Purdie Appointed 27 September 2018

## **REVIEW OF OPERATIONS**

Neometals innovatively develops opportunities in minerals and advanced materials essential for a sustainable future. We leverage our proprietary, green process technologies to build battery materials projects with unparalleled exposure to commodities most impacted by the energy storage megatrend.

We build value, de-risk and develop these long-life projects with strong partners having a strategic focus on increasing margins through integration down the value chain. We have a growing suite of sustainable downstream, recovery and recycling projects, supporting the global transition to more circular supply chains and cleaner energy. Our core projects are:

Downstream Recycling and Materials Processing:

- Lithium-ion Battery Recycling commercialising a proprietary process for recovering lithium, nickel, cobalt and other valuable materials from spent and scrap lithium-ion batteries through a 50:50 incorporated JV with SMS group called Primobius GmbH. Primobius is targeting commencement of 10tpd commercial operation as principal in Germany during the MarQ 2022. Development decision on larger 50tpd plants in SepQ 22;
- Vanadium Recovery sole funding evaluation studies for a 50:50 incorporated joint venture with Critical Metals Ltd to
  produce high-purity vanadium pentoxide from processing steelmaking 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; and
- ELi® Lithium Process commercialising a proprietary process to produce lithium hydroxide from lithium chloride solutions (salar or rock) using electrolysis to avoid costly and carbon-intensive reagents used in the traditional chemical conversion. Technology 70:30% owned by NMT and Mineral Resources Limited. Bondalti Chemicals S.A is co-funding and piloting the process in Portugal. Development decision in SepQ 2023.

## Upstream Mineral Extraction:

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



Figure 1 – Location map of Neometals' Core Projects together with partner developments

## DOWNSTREAM – MATERIALS PROCESSING

## Lithium Battery Recycling Project

## (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, carbon and manganese into saleable products that can be reused in the battery supply chain.

A pilot trial ("**Pilot**") at SGS Lakefield, Canada in 2019/20 successfully produced cathode-grade nickel and cobalt sulphate products which collectively represent approximately 80% of the value of the basket of products recovered. Demonstration scale trials commenced during the period which will generate data for the Company's Feasibility Study.



Figure 2 - High level flowsheet showing the materials generated from 'Shredding and Beneficiation' 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 from the active materials ("Shredding Circuit"); and
- 2. Leaching, purification and precipitation to produce predominantly refined chemical products via the hydrometallurgical processing facility ("**Refining Circuit**").

## JV with SMS

Neometals entered into an incorporated 50:50 joint venture ("**JV**") with SMS group GmbH ("**SMS group**"), called Primobius GmbH ("**Primobius**"). Primobius was incorporated to co-fund and complete final stage evaluation activities and to consider commercialisation of the LIB Recycling Technology.

Any positive financial investment decisions to construct commercial plants, will involve Neometals contributing its share of funding, technical and commercial know-how to the JV. SMS will perform the engineering design and cost studies in addition to its share of funding. SMS has the right of first offer to provide engineering, construction, operation and maintenance of each recycling plant Primobius undertakes. SMS will also, on a best endeavours basis, procure debt financing for no less than 50% of the capital expenditure (for full details refer to Neometals ASX announcement entitled "Neometals and SMS create Lithium Battery Recycling JV" released on 3<sup>rd</sup> August 2020).

## **Project Activities**

During the period, Primobius made strong progress towards technical and commercial validation of its sustainable LIB Recycling Technology.

## Demonstration Plant ("DP")

The DP serves as a showcase for validating earlier pilot plant results and will generate evaluation products for potential customers, partners and off-takers. The fully-integrated continuous DP trials constitute the main evaluation activity required for the JV shareholders to consider an investment decision relating to commercial recycling plants with throughput capacity at 50tpd (~20ktpa). Significant progress was made during the period with:

- DP Shredding and Refining Circuits commissioned;
- DP Shredding Circuit trials successfully completed;
- Upgrades and commissioning of Shredding circuit equipment to facilitate 10tpd commercial shredding operations during 2022; and

The DP is located in a dedicated building leased from SMS group within its engineering competence centre at Hilchenbach. LIB feedstocks for the DP trials have been secured from electric vehicle and energy storage system manufacturers. The DP will continue to provide potential partners with the ability to verify Primobius' capability to safely, sustainably and ethically dispose of their hazardous LIBs.



Figure 3 - Shredder and beneficiation processing EV cells



Figure 4 – Shredding of EV cell



Figure 5 – Recovered Copper and Aluminium foil

## **Evaluation Studies**

During the period, Neometals advanced its AACE Class 3 Engineering Cost ("**ECS**") and Feasibility Study ("**FS**") that will incorporate the data and learnings from the DP trials. Outcomes from the FS will inform the Primobius evaluation processes for 50tpd (~20,000tpa) LIB shredding and or hydrometallurgical refining plants ("**50tpd Plant/s**").

Primobius initially planned to evaluate the construction and operation of its first plant as principal, in Germany, as a single integrated shredding and refining operation. It has become apparent from commercial discussions that the market requires a network of shredding "spokes" in the short term. This coupled with the improved economics from refining at larger scale in a centralised "hub" has led Primobius to separate the engineering cost studies for the separate plants. This will enable the Class 3 ECS and detailed design phase for the shredding plants to be expedited and for SMS group to reach "product readiness", i.e. to offer plant supply contracts to Primobius, its potential JV partners and licencees. Concurrent Refinery Circuit test work will optimise and finalise the process flowsheet for the Class 3 ECS which remains on schedule for completion in June 2022.



## **Commercial Activities**

## Primobius as Principal

During the period, Primobius completed and commissioned modifications to the DP in order to accelerate commercialisation activities and establish market share. The Shredding Circuit capacity has been increased to enable the provision of small-scale commercial battery disposal services to European cell and EV makers in Hilchenbach. Primobius is awaiting the imminent receipt of a federal emission permit (BImSchG) which will enable the Shredding Plant to be operated at a rate of 10 tonnes per day of batteries. The disposal service will generate near-term revenue as well as prove the efficacy and operability of the Shredding Circuit at a scale that will be 1/5th of the commercial plants which are being evaluated at present.

## Stelco Licence and Option

The Primobius commercial strategy is designed to foster multiple partnerships. The relationship with Stelco Holdings Inc ("**Stelco**") is the first example. During the period, Primobius progressed its MoU with Stelco into formal agreements for commercialising the LIB Recycling Technology in North America. Stelco is a wholly-owned subsidiary of Stelco Holdings Inc., a Toronto Stock Exchange-listed steelmaking company headquartered in Hamilton, Ontario.

Stelco and Primobius entered into a MoU earlier in the year to evaluate future joint LIB recycling operations (*for full details refer* to Neometals ASX announcement entitled "Primobius Enters MOU for North America with Stelco to Construct a Plant for Extraction and Recycling of Battery Metals" released on 27<sup>th</sup> May 2021).

The parties worked together towards outlining a significant North American LIB recycling business plan and have entered into binding formal arrangements that allow Stelco to accelerate its sourcing of feedstock ahead of battery processing operations. Primobius has an option to secure equity ownership of the Stelco battery recycling special purpose vehicle ("**Stelco SPV**").



Figure 7 – Map showing the proposed location of Stelco SPV's initial recycling's hub and spoke in relation to the electric vehicle and LIB ecosystem in the USA

Specifically, Primobius has exclusively licenced its LIB recycling technology to Stelco SPV ("Licence") in the field of end-of-life vehicle battery processing in North America to enable Stelco to advance commercial LIB feedstock sourcing agreements and advance its construction and operating permit approvals processes. Under the option agreement ("Option"), Primobius can elect to acquire between 25% and 50% equity in the Stelco SPV by contributing its pro-rata share of Stelco SPV's sunk evaluation and development costs as a condition of exercise. If the Option is not exercised by Primobius, the Licence conditions award Stelco the exclusive rights to utilise the Recycling Technology in North America to recycle LIBs removed from end-of-life electric vehicles and Primobius will be entitled to a gross revenue royalty.

The formal agreements contemplate Stelco SPV evaluating a 50tpd (18,250 tpa) integrated Shredding ("**Spoke**") and Hydrometallurgical Refinery ("**Hub**") located at its Lake Erie Works in Ontario, Canada. Primobius is capable of supplying Stelco SPV a network of 50tpd Shredding plants across the licenced territory (Canada, USA, Mexico) to feed a larger scale, centralised hydrometallurgical refining Hub as and when required. The formal Licence and Option Agreements with Stelco represent a significant milestone for Primobius and its strategy to become the leading LIB recycler through the establishment of a second operating base, in North America. The Stelco SPV will help meet the need for multiple large recycling facilities to manage significant anticipated volumes from end-of-life electric vehicle batteries originating from the World's fastest growing cell making jurisdiction.

Stelco is now in a position to mature its feedstock targeting activities with direct access to a sustainable industrial scale recycling solution supplied by Primobius with support from globally recognized engineers and plant builders, SMS.









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

Neometals is exploring opportunities to commercially apply its sustainable proprietary vanadium recovery processing flowsheet on stockpiles of vanadium bearing steel manufacturing by-product. The project team is currently pursuing two distinct partnership opportunities in Scandinavia and has ambitions to build a pipeline of suitable feedstock sources to increase future production:

- 1. VRP 1 (SSAB feedstocks, Pori Finland location); and
- 2. VRP 2 (H2GS feedstock, Boden Sweden location).

The VRP offers a compelling business case for Neometals which is underpinned by:

- Access to very high-grade vanadium feedstocks without upstream mining costs/risk;
- Potentially robust economics (VRP1 AACE Class 4 (pre-feasibility) study ("PFS") outcomes highlighted a first quartile position on the cost curve (for full details refer to ASX announcement entitled "Vanadium Recovery Project – Outstanding PFS Results" released on 4<sup>th</sup> May 2021);
- Processing flowsheet utilises conventional equipment at atmospheric pressure mild temperatures and non-exotic materials of construction; and
  - Likely very low or net zero greenhouse gas footprint given:
    - a. the absence of mining and a processing route requiring the use and potential capture CO<sub>2</sub>; and
    - b. potentially saleable carbonate by-product which sequesters CO<sub>2</sub>;



Figure 9 - Map showing potential Vanadium Recovery Plants (Pori (SSAB Feed) and Boden (H2GS Feed)) and SSAB Slag stockpiles

The two current opportunities are outlined in further below:

## VRP 1 (SSAB)

Neometals and unlisted Scandinavian-focused explorer, Critical Metals Ltd ("**Critical**"), are jointly evaluating the feasibility of recovering high-purity vanadium pentoxide ( $V_2O_5$ ) 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 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 entitled "High-Grade Vanadium Recycling Agreement" released on 6<sup>th</sup> April 2020*). Slag is a by-product of SSAB's steel making operations. The Slag Supply Agreement is for 2 million tonnes of Slag and 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.

Critical is responsible for advancing government and environmental approvals for the VRP and managing the SSAB and H2GS relationships.

## VRP 2 (H2GS)

During the period, Neometals announced its collaboration partner in the VRP, Critical (via its wholly owned subsidiary, Recycling Industries Scandinavia AB ("**RISAB**")), entered into a non-binding memorandum of understanding with H2 Green Steel AB ("**H2GS**")("**H2GS MoU**"). The H2GS MoU outlines an evaluation framework on a potential new source of vanadium bearing Slag that could underpin a second, larger vanadium production operation ("**VRP2**") capable of processing 400,000tpa of Slag. The H2GS MoU also outlines key commercial terms for a potential Slag supply agreement.

H2GS is a limited liability Swedish company planning a fully integrated and automated green steel manufacturing plant to be located at Boden in Northern Sweden (located 35km from Luleå). This opportunity compliments the existing agreement between Neometals and Critical for planned vanadium production in Finland to recycle Slag generated by SSAB ("VRP1"). The H2GS MoU is a significant opportunity as it represents another potential source of valuable feed and highlights the growth profile for application of the sustainable Neometals Vanadium Recovery Process.



Figure 10 - Aerial schematic showing location for the proposed VRP processing plant at Tahkoluoto port, Pori, Finland Pilot Plant

## **Project Development Progress**

## Evaluation Studies

Being the most advanced opportunity, evaluation studies are currently focussed on VRP1. Positive Pre-feasibility study outcomes from 2021 supported the initiation of an AACE Class 3 Feasibility Study with expected accuracy of +/- 15% ("FS").

Following a formal tendering process, the FS contract was awarded to Sweco Industry Oy ("**Sweco**"). Being a Nordic based engineering group, Sweco has significant domestic insights with project management activities to be run out of Pori and the study team split between Pori and Helsinki.

During the period, the VRP team developed an engineering process data package supporting the FS. The package was based on the results of an integrated continuous large scale Pilot Plant campaigns operating on the Slag in the 3<sup>rd</sup> quarter of 2021 ("**VRP1 Pilot**"). The Process Package and results from the VRP1 Pilot have been supplied to Sweco to support the process plant design



Figure 11 - VRP Indicative Timeline

## Commercial Partnerships

The VRP1 Pilot significantly de-risked the project and generated samples for product evaluation which will enable the acceleration of commercial offtake discussions. Feedback on evaluation sample gives the Company confidence regarding process performance. Similar to the opportunity uncovered with H2GS, Neometals continues to pursue other growth opportunities where the VRP process could be applied.

## Offtake

Multiple dialogues are maturing with potential offtake counterparties and a formal process will commence in 2022 including sample delivery of chemicals generated in the VRP1 Pilot for evaluation by potential end users.

In addition to vanadium, several workstreams are targeting potential users of the by-products which will be generated via the VRP process. Of note, encouraging progress is being made on the stabilised slag material ("**SSM**") which is generated as part of the carbonate leach. This SSM is presently being investigated as a potentially useable material in various construction industry applications, as a paper filler and as a neutralizing agent for damaged soils.

## CO2 capture and sequestration

Neometals technology relies upon carbon dioxide (" $CO_2$ ") as a reagent in the process. Neometals is currently evaluating a number of options for  $CO_2$  supply and is also developing opportunities to qualify its SSM as a carbon removal media. Neometals technology seeks to utilise  $CO_2$  captured from emission generators proximal to the VRP sites. As such,  $CO_2$  is essentially neutralised via sequestration in the SSM and re-used in industrial applications. As a potential market participant in the voluntary carbon trading market, Neometals will investigate the steps required to register a methodology to generate valuable approved carbon offsets.

## Permitting and Approvals

Permitting activities are being managed by Critical and its local team of consultants. The initial 'Environmental Impact Assessment' program is with the Finnish regulators with feedback expected Q1 2022. The separate 'Environmental Permit' was submitted to the authorities in late November 2021. Neometals provides ongoing support to Critical as it relates to environmental permitting activities.



ELi® Lithium Process Project (Neometals 70% / Mineral Resources 30%)

Neometals, through a 70% owned subsidiary, has developed a proprietary process to produce lithium hydroxide from lithium chloride solutions using electrolysis to avoid costly and carbon intensive reagents used by incumbents (ELi® Processing Technology ("ELi®")). The subsidiary, called Reed Advanced Materials Pty Ltd ("RAM"), is 30% owned by leading mining services provider Mineral Resources Limited (ASX: MIN) ("MIN" – via its wholly owned subsidiary Process Minerals International).

RAM developed the ELi® process from concept through to semi-pilot scale testing during the past 8 years with a view to having a competitive and reliable low carbon footprint method of large-scale lithium hydroxide and carbonate production to decarbonise lithium supply to the LIB supply chain. Sourcing lithium chemical units with a reduced CO<sub>2</sub> footprint is a high priority for the electric vehicle industry. ELi® has the potential to provide a sustainable long-term cost advantage for lithium chemical production with a reduced carbon footprint. The process has been tested on synthetic and actual lithium sources, both hard rock and brine. A number of sources from South American continental brines have generated promising technical results with strong potential economics highlighted in cost studies.

ELi® development aims include:

- Building sustainable long-term cost advantage for lithium hydroxide and lithium hydroxide production;
- Adapting conventional chlor-alkali process to produce high-purity lithium hydroxide as primary product with flexibility to
  produce high purity lithium carbonate at low additional cost;
- Reducing carbon footprint from processing at source with renewable electricity;
- Minimising use (and transport) of high manufacturing carbon footprint reagents; and
- Commercialise in Portugal in cooperation with Bondalti, and elsewhere as principal or with other partners, and generate revenue from either toll processing of lithium raw materials, sale of lithium chemicals and securing royalties from technology licensing arrangements

## **Technical Work to Date**

ELi® is a process for purifying an aqueous lithium chloride solution to produce lithium hydroxide in conventional chlor-alkali (electrolysis) cells. ELi® uses commercially available chlor-alkali and purification process equipment and has been tested for reliability in 100 and 200hr duration continuous mini-pilot scale trials. The process has been tested on synthetic and actual lithium sources, both hard rock and brine. A pre-feasibility study was completed in 2012 and a feasibility study for the application of the ELi® technology in a Malaysian plant was completed in 2016 (*for further details see Neometals announcement titled "Positive Lithium Downstream Processing Feasibility Results" dated 11th July 2016*). Under the assumptions for both studies, the ELi® project was shown to be technically feasible and economically viable. The project and intellectual property surrounding it have been maintained and for a period ELi® has required an industrial partner to build pilot facilities and test the process under real world conditions.



**Figure 12** - Schematic showing the similarities between Traditional Chlor-Alkali (Sodium Salt) electrolysis and ELi's Lithium Salt electrolysis and the ELi's adaption to directly convert salar lithium feedstocks into lithium hydroxide.

## **Cooperation Agreement with Bondalti**

In December 2021, RAM entered into a binding Co-operation Agreement ("**Co-operation**") with Portugal's largest chemical producer Bondalti Chemicals, S.A. ("**Bondalti**").





The Co-operation contemplates the co-funding of certain evaluation activities required for a decision to form a 50:50 incorporated joint venture ("JVCo") to construct and operate a lithium refinery ("Refinery") at Bondalti's extensive chlor-alkali operations in Estarreja, Portugal. The evaluation activities will include the construction and operation of a pilot plant in Portugal and completion of an AACE Class 2 Front End Engineering and Design Study ("FEED Study"). Completion is targeted for 30 June 2023 at a shared cost of approximately US\$4 million. Under the Co-operation RAM and Bondalti have established a Steering Committee with equal representation from both parties to oversee the conduct of the evaluation activities and establishes a framework of terms for JVCo formation.

The proposed Refinery will be the first commercial operation to use RAM's ELi® Process, which has successfully produced battery-quality lithium hydroxide from operating spodumene and brine operations. This Co-operation is a significant step towards ELi® commercialisation with an industry-leading partner that operates similar equipment for producing sodium hydroxide at industrial scale. The technology, which radically reduces the requirement for (and transport of) reagents represents the opportunity for a step change in environmental sustainability, operating and capital costs for both spodumene and brine lithium projects. ELi® feedstock flexibility enables domestic production of lithium chemicals from the conversion of both European hard rock and imported brine concentrates ensuring an ethical and resilient local lithium supply chain for the EV battery industry.

## Activities Undertaken During the Period

During the period, Neometals engaged Primero to complete a full independent process review and upgrade of the process mass balance model. Additionally, Neometals has recommend to Bondalti the areas of focus for the future test work during the pilot program.

## Next Steps / Timeline

In the coming period, Neometals aims to complete the following activities:

- SysCAD model to be updated for specific Brine feed for the Bondalti project
- Primero to develop PDC with focus on Bondalti project.
- Engage contractors for pilot tests



Figure 13 - Bondalti Indicative Timeline

## **UPSTREAM – MINERAL EXTRACTION**



Barrambie Titanium/Vanadium Project (Neometals 100%)

The Barrambie Vanadium and Titanium Project in Western Australia ("Barrambie") is one of the largest vanadiferoustitanomagnetite ("VTM") Mineral Resources globally (280.1Mt at 9.18% TiO2 and 0.44% V2O5)\*, containing the world's second highest-grade hard rock titanium Mineral Resource (53.6Mt at 21.17% TiO2 and 0.63% V2O5)\* and high-grade vanadium resource (64.9Mt at 0.82% V2O5 and 16.9% TiO2) 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).

Table 1 – Barrambie Mineral Resource Estimate, April 2018

	Global Resource as at 17 April 2018 <sup>1</sup>					
	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> Resource (at 0.5% V <sub>2</sub> O <sub>5</sub> cut-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) <sup>2</sup>						
	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			
Refer to Neometal	s ASX release dated 17	<sup>1</sup> Based on Cut-off gi	rades of ≥0% TiO₂ or			

April 2018 titled "Updated Mineral Resource Estimate'

≥2% V<sub>2</sub>O<sub>5</sub>

<sup>2</sup> The high-grade titanium and vanadium figures are a sub-set of the total Mineral Resource. These figures are not additive and are reporting the same block model volume but using different cut-off grades

Barrambie is located approximately 80km north-west of Sandstone in Western Australia and the Mineral Resource is secured under a granted mining lease. Neometals has a granted mining proposal to extract approximately 1.2Mtpa of ore and has Ministerial Approval to construct a 3.2Mtpa processing plant.

In October 2019, Neometals entered a memorandum of understanding with Chinese research organisation, IMUMR, to jointly evaluate the development of Barrambie ("IMUMR MoU"). Notwithstanding that the IMUMR MoU outlines a potential pathway towards a 50:50 operating joint venture to bring Barrambie into production (for full details refer to ASX announcement entitled "MoU for JV to develop Barrambie" released on 4th October 2019), it should be noted that IMUMR has a Chinese national mandate that includes development of upstream supply chains for industries of strategic relevance to China. Specifically, IMUMR will have the right, subject to Neometals approval, to assign its interests under the MoU to a commercial Chinese chemical processing partner.

In addition to the relationship with IMUMR, Neometals also has a memorandum of understanding with Jiuxing Titanium Materials (Liaonging) Co. Ltd ("Jiuxing MoU") ("Jiuxing") (for full details refer to ASX announcement entitled "Barrambie - MOU for Cornerstone Concentrate Offtake" released on 16th April 2021). Jiuxing is one of the leading chloride-grade titanium slag producers and is the largest in north-eastern China. Importantly, the Jiuxing MoU builds on, and complements, the existing IMUMR MoU.

The Jiuxing MoU\* contemplates a path to a formal offtake agreement where Neometals supplies a mixed gravity concentrate or separate ilmenite and iron vanadium concentrate from Barrambie to Jiuxing. Specifically, the MoU outlines a product evaluation regime and contains the key commercial terms for a formal offtake agreement (i.e. pricing, volumes, price floor etc.), subject to product evaluation. Following satisfactory completion of testing and technical due diligence, the Jiuxing MoU contemplates the parties negotiating and entering into a binding formal offtake agreement for the supply of 800,000 dtpa of mixed gravity concentrate or 500,000 dtpa of ilmenite and 275,000 dtpa of iron-vanadium concentrate, on a take-or-pay basis for a period of 5 years from first production. If executed, it will potentially be the industry's largest individual offtake agreement.

The current business plan contemplates conventional open-cut mining, comminution and gravity concentration on site at Barrambie with a mixed titanium/vanadium/iron concentrate product being shipped to China for further processing.



Figure 14– Image showing potential for downstream processing of a Barrambie mixed gravity concentrate by smelting into separate ilmenite (titanium) and vanadium rich magnetite (iron) products

## **Project Development Activities**

## Pilot Trial and Offtake

Historical pilot trials outcomes established that a simple Barrambie gravity concentrate can likely be roasted and separated into two 'upgraded' high-quality saleable products (ilmenite and iron/vanadium concentrates). This processing path supports Neometals' goal to develop Barrambie as a capital-light concentrate operation.

During the period, Neometals completed the construction of, and commissioned a pilot beneficiation plant at the former Menzies State Battery to prepare and despatch approximately 150t of gravity concentrates to China pursuant to the Jiuxing MoU. Jiuxing will run validation trials on 100 tonnes of material using its commercial titanium smelters as a final stage of offtake due diligence. The remaining concentrate will be used to advance evaluation by other potential third-party off-takers.

\*The Jiuxing MoU is a memorandum of understanding to allow Jiuxing to conduct large scale test work and negotiate a binding offtake agreement. There is no guarantee that any binding formal agreement will result from the cooperation under the Jiuxing MoU or that any binding formal agreement will reflect the key commercial terms set out in the MOU given that these arrangements are subject to the testing and evaluation work to be completed under the Jiuxing MOU. This Jiuxing MoU is effective for 24 months



Figure 15- Overview of the Beneficiation Plant

Jiuxing and Neometals extended the term of the Jiuxing MoU and key milestone dates to reflect a more conservative and achievable timeline and are targeting execution of binding formal offtake agreements in October 2022. In parallel, evaluation activities are focussed on the completion of the PFS which is on schedule for completion in Q1 2022. These studies will provide a basis for the evaluation and negotiation of proposals for a complete mine-to-port solution under a 'build-own-operate' style arrangement for a mining and gravity concentration operation at Barrambie for export out of Geraldton. This is the same approach that was successfully adopted by Neometals and its partners to develop the Mt Marion Lithium Project in 2015.

Irrespective of whether Neometals supplies its offtake partners with a mixed gravity concentrate or separate ilmenite and iron vanadium concentrates from Barrambie, the purchasers will likely target contained ilmenite in a smelting process to produce a chloride-grade titanium slag as well as an iron vanadium product. Titanium slag is an intermediate product used to feed the fast-growing demands of the Chinese chloride pigment market as it switches towards this more environmentally sustainable product which requires high quality titanium feedstocks. The vanadium-rich iron (magnetite) concentrate is targeted for blending by steelmakers to obtain vanadium and iron units.

## Commercial

The Neometals Barrambie contractor engagement process continued during the period with leading service providers conducting due diligence to deliver proposals for the provision of a complete mine-to-port solution under a 'build-own-operate' style arrangement. Contractors have been engaged and are delivering a AACE Class 4 Engineering Cost Study ("**ECS**") that will precede the Barrambie Pre-feasibility Study ("**PFS**").

The Barrambie PFS will consider a capital light Australian mining and beneficiation operation with Chinese refining activities. The Barrambie PFS exercise will form a large component of the due diligence required by the successful 'build-own-operate' partner. This development model was used successfully by Neometals and its partners to advance the Mt Marion Lithium Project in 2015, which is now the world's second largest producer of spodumene (hard-rock lithium) concentrates (Neometals sold its final equity position in the project in 2019 and its offtake right in 2021).



Figure 16 – Barrambie Indicative Timeline

## CORPORATE

Neometals continued activity during the period preparing for admission of its shares to trading on the Alternative Investment Market ("AIM") market of the London Stock Exchange ("LSE"). Neometals was admitted to AIM on 28 February 2022.

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

As at 31 December 2021 Neometals held 845,086,264 ordinary fully paid shares (32.4% of the issued capital) in Hannans on an undiluted basis.

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

As at 31 December 2021 Neometals holds 19% of unlisted public company Critical Metals Ltd, a company which now houses the Scandinavian mineral assets previously held by Hannans and is collaborating with Neometals on Scandinavian LIB recycling and vanadium recovery opportunities.

## Other Investments

The market value of the Company's other investments as at 31 December 2021 totalled \$10.2 million.

## Finances

Cash and term deposits on hand as of 31 December 2021 totalled A\$72.8 million, including \$4.2 million in restricted use term deposits supporting performance bonds and other contractual obligations.

## **Divestment of Mt Edwards nickel assets**

During the period, Neometals Ltd shareholders approved the demerger of Widgie Nickel Limited ("Widgie Nickel"), a dedicated nickel exploration and development company holding Neometals' Mt Edwards nickel assets, via a capital reduction and in-specie distribution of 100% of Widgie Nickel's shares. Neometals distributed \$26 million in Widgie Nickel shares to eligible Neometals shareholders, pro rata to their shareholding in Neometals on the record date of 24 August 2021.

## **Issued Capital**

During the period 3,025,130 ordinary shares were issued to eligible employees, consultants and Non-executive Directors following the vesting of performance rights pursuant to the Neometals Ltd performance rights plan (2020: 834,353).

During the period 2,900,521 performance rights were issued to Neometals employees, consultants and Non-executive Directors (2020: 8,243,263) for nil cash consideration.

The total number of shares on issue at 31 December 2021 was 548,376,396.

## Dividends

Dividends issued during the half year period: nil (2020: nil).

## **Events Subsequent to Balance Date**

On 28 February 2022, Neometals confirmed the admission of its entire issued share capital to trading on the AIM market of the London Stock Exchange plc.

No other matters have arisen since 31 December 2021 that would be likely to materially affect the operations of the Group, or its state of affairs which has not otherwise been disclosed in this financial report.

## **COMPLIANCE STATEMENT**

The information in this report that relates to Mineral Resource and Ore Reserve Estimates for the Barrambie Vanadium/Titanium Project is extracted from the ASX Announcement listed below, which is also available on the Company's website at www.neometals.com.au

17/04/2018	Barrambie – Updated Barrambie 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 be en materially modified form the original market announcements.

## AUDITOR'S INDEPENDENCE DECLARATION

The auditor's independence declaration is included on page 19 of the half-year report.

Signed in accordance with a resolution of the directors made pursuant to s.306(3) of the Corporations Act 2001.

On behalf of the directors,

GReed.

**Christopher Reed** Managing Director Perth, 10 March 2022

# Deloitte.

Deloitte Touche Tohmatsu ABN 74 490 121 060

Tower 2 Brookfield Place 123 St Georges Terrace Perth WA 6000 GPO Box A46 Perth WA 6837 Australia

Tel: +61 8 9365 7000 Fax: +61 8 9365 7001 www.deloitte.com.au

The Board of Directors Neometals Ltd Level 1/1292 Hay Street West Perth WA 6005

10 March 2022

Dear Board Members

## Auditor's Independence Declaration to Neometals Ltd

In accordance with section 307C of the Corporations Act 2001, I am pleased to provide the following declaration of independence to the directors of Neometals Ltd.

As lead audit partner for the review of the half year financial report of Neometals Ltd for the half year period ended 31 December 2021, I declare that to the best of my knowledge and belief, there have been no contraventions of:

• The auditor independence requirements of the Corporations Act 2001 in relation to the review; and

• Any applicable code of professional conduct in relation to the review.

Yours faithfully

eloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

**Ian Skelton** Partner Chartered Accountants

Liability limited by a scheme approved under Professional Standards Legislation.

# Deloitte.

Deloitte Touche Tohmatsu ABN 74 490 121 060

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# Independent Auditor's Review Report to the members of Neometals Ltd

## Conclusion

We have reviewed the half-year financial report of Neometals Ltd (the "Company") and its subsidiaries (the "Group"), which comprises the condensed consolidated statement of financial position as at 31 December 2021, and the condensed consolidated statement of profit or loss and other comprehensive income, the condensed consolidated statement of cash flows and the condensed consolidated statement of changes in equity for the half-year period ended on that date, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration as set out on pages 22 to 36.

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half-year financial report of the Group is not in accordance with the *Corporations Act 2001*, including:

- Giving a true and fair view of the Group's financial position as at 31 December 2021 and of its performance for the half-year period ended on that date; and
- Complying with Accounting Standard AASB 134 Interim Financial Reporting and the Corporations Regulations 2001.

## Basis for Conclusion

We conducted our review in accordance with ASRE 2410 Review of a *Financial Report Performed by the Independent Auditor of the Entity.* Our responsibilities are further described in the *Auditor's Responsibilities for the Review of the Half-year Financial Report* section of our report. We are independent of the Group in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (including Independence Standards) (the Code) that are relevant to our audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the Corporations Act 2001, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's review report.

## Directors' Responsibilities for the Half-year Financial Report

The directors of the Company are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with Australian Accounting Standards and the Corporations Act 2001 and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

## Auditor's Responsibilities for the Review of the Half-year Financial Report

Our responsibility is to express a conclusion on the half-year financial report based on our review. ASRE 2410 requires us to conclude whether we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the Corporations Act 2001 including giving a true and fair view of the Group's financial position as at 31 December 2021 and its performance for the half-year period ended on that date, and complying with Accounting Standard AASB 134 Interim Financial Reporting and the Corporations Regulations 2001.

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## Deloitte.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

eloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

Ian Skelton Partner Chartered Accountants Perth, 10 March 2022

## Directors' declaration

The directors declare that:

- (a) in the directors' opinion, there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable;
- (b) in the directors' opinion, the attached financial statements and notes thereto are in accordance with the *Corporations Act* 2001, including compliance with accounting standards and giving a true and fair view of the financial position and performance of the consolidated entity.

Signed in accordance with a resolution of the directors made pursuant to s.303(5) of the Corporations Act 2001.

On behalf of the Directors

GReed.

Christopher Reed Managing Director 10 March 2022

## Condensed consolidated statement of profit or loss and other comprehensive income for the half-year ended 31 December 2021

		31 Dec 2021	31 Dec 2020
		\$	\$
Continuing operations			
Foreign exchange loss		(14,105)	(55,800)
Other income	4	687,006	2,695,580
Administration expenses	4	(3,979,034)	(1,535,657)
Employee expenses		(3,568,432)	(2,648,788)
Depreciation expenses		(203,405)	(322,999)
Finance costs		(31,430)	(51,267)
Occupancy expenses		(104,032)	(211,645)
Marketing expenses		(229,426)	(214,188)
Other expense		(9,214)	(32,162)
Research and development		(2,368,224)	(1,472,197)
Impairment reversal in associate	7	6,663,304	29,773
Write-off expense		-	(193,156)
Share of loss in associates	7	(48,100)	-
Share of loss in Joint Venture	8	(277,043)	-
Loss before income tax		(3,482,135)	(4,012,506)
Income tax benefit		613,287	-
Loss for the period from continuing operations		(2,868,848)	(4,012,506)
Discontinued operation			
Profit / (loss) for the period from discontinued operation	3	12,812,409	(24,739)
Profit / (loss) for the period		9,943,561	(4,037,245)
Profit / (loss) attributable to:			
Owners of the Company		9,943,561	(4,037,245)
Total comprehensive income attributable to:			
Owners of the Company		9,943,561	(4,037,245)
Profit / (loss) per share			
From continuing operations:			
Basic (cents per share)	10	(0.52)	(0.74)
Diluted (cents per share)	10	(0.52)	(0.74)
From continuing and discontinued operations:			
Basic (cents per share)	10	1.81	(0.74)
Diluted (cents per share)	10	1.80	(0.74)

The condensed consolidated statement of profit and loss and other comprehensive income should be read in conjunction with the accompanying notes.

## Condensed consolidated statement of financial position

## as at 31 December 2021

		Noto	31 Dec 2021	30 Jun 2021 د
	urrant assats	NOLE	φ	φ
	ash and cash equivalents		68 570 640	93 897 137
т Т			679 483	542 201
ı c	ther financial assets		6.747.366	1.938.368
Т	otal current ordinary assets		75.997.489	96.377.706
A	ssets classified as held for sale		-	11.494.537
т	otal current assets		75,837,489	107,872,243
) N	lon-current assets			
Т	oan to joint venture		140,000	70,000
) _ P	roperty, plant and equipment		600.627	590.715
1 E	xploration and evaluation expenditure	6	38.731.244	36.318.834
) Ir	ntangible assets		926,131	755,079
Ir	nvestment in joint ventures	8	6,054,133	2,811,339
l Ir	ivestment in associates	7	13,522,827	4,869,566
c	ther financial assets		4,270,577	7,811,000
R	light of use assets	12	411,131	563,574
т	otal non-current assets		64,656,670	53,790,107
т	otal assets		140,654,159	161,662,350
c	current liabilities			
т	rade and other payables		1,059,508	5,245,188
Р	rovisions		1,613,818	1,272,684
L	ease liability	12	350,074	363,512
L	iabilities associated with the assets classified as held for sale		-	452,489
т	otal current liabilities		3,023,400	7,333,873
N	lon-current liabilities			
D	Peferred Tax Liability		6,155,047	6,768,334
Р	rovisions		-	455,476
L L	ease liability	12	169,668	336,398
т	otal non-current liabilities		6,324,715	7,560,208
т	otal liabilities		9,348,115	14,894,081
N	let assets		131,306,044	146,768,269
E	quity			
ls	ssued capital		155,367,513	154,634,997
R	leserves		(17,096,902)	9,041,400
A	ccumulated losses		(6,964,567)	(16,908,128)
т	otal equity		131,306,044	146,768,269

This condensed consolidated statement of financial position should be read in conjunction with the accompanying notes.

## Condensed consolidated statement of changes in equity

## for the half-year ended 31 December 2021

	Share					
	Issued Capital \$	investment revaluation reserve \$	otner equity reserve \$	based payments reserve \$	Accumulated losses \$	Total \$
Balance as at 01/07/20	154,437,267	1,019,637	300,349	7,048,145	(33,251,301)	129,554,097
Loss for the period	-	-	-	-	(4,037,245)	(4,037,245)
Other comprehensive income, net of tax	-	-	-	-	-	-
Total comprehensive income for the period	-	-	-	-	(4,037,245)	(4,037,245)
Recognition of share-based payments	-	-	-	319,954	-	319,954
Recognition of issue of shares under the employee rights plan	200,250	-	-	(200,250)	-	-
Share issue costs, net of tax	(2,520)	-	-	-	-	(2,520)
Balance at 31/12/20	154,634,997	1,019,637	300,349	7,167,849	(37,288,546)	125,834,286
Balance as at 01/07/21	154,634,997	1,019,637	300,349	7,721,414	(16,908,128)	146,768,269
Profit for the period	-	-	-	-	9,943,561	9,943,561
Other comprehensive income, net of tax	-	-		-	_	-
Total comprehensive income for the period	-	-	-	-	9,943,561	9,943,561
Recognition of share-based payments	-	-	-	601,236	-	601,236
Issued/(bought) during the year	-	-	-	-	-	-
Recognition of issue of shares under the employee rights plan	739,537	-	-	(739,537)	-	-
In-specie distribution	-	-	(26,000,000)	-	-	(26,000,000)
Share issue costs, net of tax	(7,022)	-	-	-	-	(7,022)
Balance at 31/12/21	155,367,512	1,019,637	(25,699,651)	7,583,113	(6,964,567)	131,306,044

This condensed consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

## Condensed consolidated statement of cash flows

## for the half-year ended 31 December 2021

	31 Dec 2021 \$	31 Dec 2020 \$
Cash flows from operating activities		
Payments to suppliers and employees	(12,765,317)	(7,585,730)
Net cash used in operating activities	(12,765,317)	(7,585,730)
Cash flows from investing activities		
Payments for exploration and evaluation	(2,498,195)	(2,456,896)
Payments for exploration and evaluation – discontinued operations	(505,680)	-
Payment of GST from disposal of Mt Marion offtake rights	(3,000,000)	-
Payments for intangible assets	(171,052)	(74,461)
Payment for property, plant & equipment	(60,876)	(76,455)
Payments for equity investments	(2,583,418)	(1,419,871)
Proceeds from equity investments	1,777,788	2,965,572
Interest received	140,961	369,580
Capital contributions to joint venture	(3,659,838)	-
Shares purchased in associate	(2,038,056)	-
Net cash used in investing activities	(12,598,366)	(692,531)
Cash flows from financing activities		
Interest and other finance costs paid	(30,000)	(299,939)
Share issue costs	(7,021)	-
Net cash used in financing activities	(37,021)	(299,939)
Net decrease in cash and cash equivalents	(25,400,703)	(8,578,200)
Cash and cash equivalents at the beginning of the period inclusive of discontinued operations	93,984,074	77,043,016
Effects of exchange rate changes on the balance of cash held in foreign currencies	(12,730)	(55,800)
Cash and cash equivalents at the end of the period	68,570,640	68,409,016

This condensed consolidated statement of cash flows should be read in conjunction with the accompanying notes.

## Index to notes to the condensed consolidated financial statements

Contents
Significant accounting policies
Segment information
Gain on demerger
Other income
Dividends
Exploration and evaluation expenditure
Investment in associates
Investment in joint venture
Share capital
Earnings per share
Commitments
Leases
Events subsequent to balance date

## Notes to the condensed consolidated financial statements

## 1. Significant accounting policies

## Statement of compliance

The half-year financial report is a general purpose financial report prepared in accordance with the Corporations Act 2001 and AASB 134 'Interim Financial Reporting'. Compliance with AASB 134 ensures compliance with International Financial Reporting Standard IAS 34 'Interim Financial Reporting'. The half-year financial report does not include notes of the type normally included in an annual financial report and shall be read in conjunction with the most recent annual financial report.

## **Basis of preparation**

The condensed consolidated financial statements have been prepared on the basis of historical cost, except for the revaluation of certain non-current assets and financial instruments. Cost is based on the fair values of the consideration given in exchange for assets. All amounts are presented in Australian dollars, unless otherwise noted.

The accounting policies and methods of computation adopted in the preparation of the half-year financial report are consistent with those adopted and disclosed in the company's 2020 annual financial report for the financial year ended 30 June 2020. These accounting policies are consistent with Australian Accounting Standards and with International Financial Reporting Standards.

## New accounting standards

The Group has adopted all of the new and revised Standards and Interpretations issued by the Australian Accounting Standards Board that are relevant to their operations and are effective for the current financial reporting period. These standards did not have any significant impact on the Group's financial statements.

## 2. Segment information

## Basis for segmentation:

AASB 8 Operating Segments requires the presentation of information based on the components of the entity that management regularly reviews for its operational decision making. This review process is carried out by the chief operating decision maker ("**CODM**") for the purpose of allocating resources and assessing the performance of each segment. The amounts reported for each operating segment is the same measure reviewed by the CODM in allocating resources and assessing performance of that segment.

For management purposes the Company operates under three reportable operating segments comprised of the Company's lithium, titanium and vanadium and 'other segments'. The lithium, titanium and vanadium and other operating segments are separately identified given they possess different competitive and operating risks, and meet the quantitative criteria as set out in AASB 8. The 'other segments' category is the aggregation of all remaining operating segments given sufficient reportable operating segments have been identified.

## For the six months ended 31 December 2021

Reportable operating segments	Lithium	Titanium & Vanadium	Other	Corporate	Total
	\$	\$	\$	\$	\$
Other income	-	75,000	472,945	139,061	687,006
Gain on demerger	-		-	14,061,039	14,061,039
Impairment reversal on associate	-	-	6,663,304	-	6,663,304
Total Expenses	(1,480,302)	(2,394,109)	(81,586)	(8,125,078)	(12,081,075)
Profit/(loss) before tax	(1,480,302)	(2,319,109)	7,054,663	6,075,022	9,330,274
Income tax benefit	-	-	-	613,287	613,287
Consolidated loss after tax	(1,480,302)	(2,319,109)	7,054,663	6,688,309	9,943,561

## 2. Segment information (continued)

## As at 31 December 2021

Reportable operating segments	Lithium	Titanium & Vanadium	Other	Corporate	Total
	\$	\$	\$		\$
Total segment assets	6,734,207	39,512,995	20,576,167	73,830,790	140,654,159
Total segment liabilities	(674,959)	(51,748)	1,250	(8,622,658)	(9,348,115)
Consolidated net assets	6,059,248	39,461,247	20,577,417	65,208,132	131,306,044

## For the six months ended 31 December 2020

Reportable operating segments	Lithium	Titanium & Vanadium	Other	Corporate	Total
	\$	\$	\$	\$	\$
Other income	78,874	5,780	2,244,744	366,182	2,695,580
Total Expenses	(1,384,388)	(1,570,549)	(26,474)	(3,751,414)	(6,732,825)
Profit/(loss) before tax	(1,305,514)	(1,564,769)	2,218,270	(3,385,232)	(4,037,245)
Income tax benefit	-	-	-	-	-
Consolidated loss after tax	(1,305,514)	(1,564,769)	2,218,270	(3,385,232)	(4,037,245)

## As at 31 December 2020

Reportable operating segments	Lithium	Titanium & Vanadium	Other	Corporate	Total
	\$	\$	\$		\$
Total segment assets	535,764	36,794,997	17,136,782	75,037,577	129,505,120
Total segment liabilities	(1,111,935)	(115,240)	(415,201)	(2,028,458)	(3,670,834)
Consolidated net assets	(576,171)	36,679,757	16,721,581	73,009,119	125,834,286

## 3. Gain on demerger

	31 December 2021
	\$
Shares issued on demerger – in specie distribution <sup>1</sup>	26,000,000
Less: net assets disposed <sup>2</sup>	(11,938,961)
Less: demerger costs	(1,248,630)
Gain on demerger <sup>3</sup>	12,812,409

- 1. On 18 August 2021, Neometals Ltd shareholders approved the demerger of Widgie Nickel Limited ("Widgie Nickel"), a dedicated nickel exploration and development company holding Neometals' Mt Edwards nickel assets, via a \$26 million capital reduction and in-specie distribution of 100% of Widgie Nickel's shares. Neometals distributed the Widgie Nickel shares to eligible Neometals shareholders, pro rata to their shareholding in Neometals on the record date of 24 August 2021. The \$26 million was the fair value of the shares distributed to shareholders and has been accounted for in accordance with interpretation 17. It is currently being classed as an equity reserve pending the finalisation of the associated tax treatment for the return of capital component.
- 2. Expenditure incurred by the demerged entities for the period up to the time of the demerger amounted to \$197,750. This amount is included within the consolidated statement of profit or loss.
- 3. Per Class Ruling 2021/72, demerger rollover relief applied such that any capital gain from Capital Gains Tax (CGT) event A1 on the disposal of shares in Widgie Nickel Limited is disregarded for the Neometals Tax Consolidated Group. Furthermore, an exit allocable cost amount ("ACA") calculation was prepared, with the exit ACA being a positive balance such that CGT event L5 did not arise. Accordingly, there were no CGT implications for Neometals Ltd.

## 4. Other income and administration expenditure

## a) other income

	31 December 2021	31 December 2020
	\$	\$
Net fair value gain on financial assets	462,945	2,244,744
Interest income	140,961	361,581
Gas commodity charges recovered	-	78,874
Other income	83,100	10,381
Total other income	687,006	2,695,580

## b) administration expenditure

	2021	2020
	\$	\$
AIM listing fees	(1,808,836)	-
Other administration expenditure	(2,170,198)	(1,535,657)
Total administration expenditure	(3,979,034)	(1,535,657)

21 December

21 December

## 5. Dividends

No dividends were paid to the holders of fully paid ordinary shares during the half-year period (31 December 2020: nil).

## 6. Exploration and evaluation expenditure

	31 December 2021	30 June 2021
	\$	\$
Opening carrying value	36,318,834	44,058,921
Balance transferred to asset held for sale	-	(11,399,352)
Additions	2,412,410	3,659,265
Closing carrying value	38,731,244	36,318,834

The recovery of exploration expenditure carried forward is dependent upon the discovery of commercially viable mineral and other natural resource deposits, their development and exploration, or alternatively their sale.

## 7. Investment in associates

Name of operation	Principal activity	Inte	Interest		
		31 December 2021 %	30 June 2021 %		
		70	70		
Hannans Limited <sup>(i)</sup>	Exploration of nickel and lithium	32.43	31.74		

The Consolidated Entity's interest in assets employed in the above associates is detailed below.

## (i) Hannans Limited

The associate is accounted for using the equity method in this consolidated financial report.

Summarised financial information for the associate:

	31 December 2021	30 June 2021
	\$	\$
Opening carrying value of investment in associate	4,869,566	3,531,048
Shares sold	-	(239,725)
Shares purchased	2,038,056	-
Share of profit/(loss) of associate recognised in profit or loss <sup>(i)</sup>	(48,100)	(99,967)
Impairment reversal <sup>(ii)</sup>	6,663,305	1,678,210
Closing carrying value of investment in associate	13,522,826	4,869,566

(i) The equity accounted share of the associate's loss is credited against the carrying value of the investment in the associate.

(ii) The market value of the underlying shares has increased over the last six months as compared to the carrying value on a per share basis. Accordingly, the investment in associate has been adjusted with the resulting impairment reversal of \$6.7M capped to previous impairments net of share of loss in accordance with the accounting standards.

Shares held in associate are set out in the table below.

31-Dec-21	30-Jun-21
No.	No.
845,086,264	764,164,028

## 8. Investment in joint venture

Prim	ohius	GmhH
FIIII	opius	GIIIDH

Name of operation	me of operation Principal activity		Interest	
		December 2021 %	June 2021 %	
Primobius GmbH <sup>(i)</sup>	Lithium Battery Recycling	50	50	

The above joint venture is accounted for using the equity method in this consolidated financial report.

## (i) Primobius GmbH

On 31 July 2020, the execution of 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 will commercialise Neometals' proprietary lithium-ion battery ("LiB") recycling technology, which offers a unique and sustainable method for recovering valuable lithium, nickel, cobalt and other materials from spent and scrap electric vehicle and consumer electronic LiB's. Recovered and refined product materials will be in a form that can be reused in the battery supply chain.

Summarised information for the joint venture:

	31 December 2021	30 June 2021
	\$	\$
Carrying value of investment in the joint venture	6,331,176	2,811,339
Share of Loss of joint venture recognised in profit or loss	(277,043)	(85,525)
Closing carrying value of investment in joint venture	6,054,133	2,725,814

31 December 2021 No.	30 June 2021 No.
1	1

Shares held in Primobius GmbH

## 9. Share capital

During the half-year reporting period, Neometals Ltd issued the following share capital:

## 6 months to 31 December 2021:

During the 6 months to 31 December 2021 the Company issued 3,025,130 ordinary shares to eligible employees, consultants and Non-executive Directors following the vesting and exercise of performance rights pursuant to the Neometals Ltd performance rights plan (2020: 834,353).

During the 6 months to 31 December 2021 no share options over the company's ordinary shares were issued during the reporting period (2020: Nil).

During the 6 months to 31 December 2021 the Company issued 2,900,521 performance rights to Neometals employees, consultants and Non-executive Directors (2020: 8,243,263) for nil cash consideration. These performance rights may result in the issue of a total of 2,900,521 shares if the applicable vesting and performance criteria are satisfied over the vesting period.

During the 6 months to 31 December 2021 no performance rights were cancelled relating to Neometals employees (2020: nil). 598,142 performance rights lapsed relating to Neometals employees (2020: 2,490,828).

## 6 months to 31 December 2020:

During the 6 months to 31 December 2020 the Company issued 834,353 ordinary shares to eligible employees, consultants and Non-executive Directors following the vesting and exercise of performance rights pursuant to the Neometals Ltd performance rights plan (2019: 542,644).

During the 6 months to 31 December 2020 no share options over the company's ordinary shares were issued during the reporting period (2019: Nil).

During the 6 months to 31 December 2020 the Company issued 8,243,263 performance rights to Neometals employees, consultants and Non-executive Directors (2019: 5,366,515) for nil cash consideration. These performance rights may result in the issue of a total of 8,243,263 shares if the applicable vesting and performance criteria are satisfied over the vesting period.

During the 6 months to 31 December 2020 no performance rights were cancelled relating to Neometals employees (2019: nil). 2,490,828 performance rights lapsed relating to Neometals employees (2019: nil).

## 10. Earnings per share

	2021	2020
	Cents per share	Cents per share
Basic earnings per share:		
Continuing operations	(0.52)	(0.74)
Continuing and discontinued operations	1.81	(0.74)
Diluted earnings per share:		
Continuing operations	(0.52)	(0.74)
Continuing and discontinued operations	1.80	(0.74)

## Basic and diluted profit / (loss) per share

The profit / (loss) and weighted average number of ordinary shares used in the calculation of basic and diluted profit / (loss) per share are as follows:

	2021	2020
Profit / (loss) <sup>(a)</sup>	\$	\$
Continuing operations	(2,868,848)	(4,012,506)
Continuing and discontinued operations	9,943,561	(4,037,245)
	No.	No.
Weighted average number of ordinary shares for the purpose of basic profit / (loss) per share	548,285,227	545,351,266
Weighted average number of ordinary shares for the purpose of diluted profit / (loss) per share	550,375,191	545,351,266
(a) Profit / (loss) used in the calculation of profit / (loss) per share reconciles to profit / (loss) for the period		

Profit / (loss) used in the calculation of profit / (loss) per share reconciles to profit / (loss) for the period. (a)

#### 11. Commitments

#### (a) Exploration and evaluation and associate commitments

Tenement commitments for the group total \$583,581 (2020: \$2,120,947).

#### (b) Other

As referred to in Note 16 (i) to the Annual Financial Report for the year ended 30 June 2021, Neometals Energy Pty Ltd (formerly Barrambie Gas Pty Ltd), a wholly owned subsidiary of the Company, previously entered into a gas transmission agreement with DBNGP (WA) Transmission Pty Ltd for the Barrambie Project. As part of the agreement the Group was required to procure a "blocked" term deposit for \$4.0 million (30 June 2020: \$4.0 million) as security a bank guarantee, which represented the present value of the Group's commitment under the agreement. The obligations under the gas transmission agreement commenced on 1 July 2010.

## 12. Leases

## Leasing arrangements

Leases relate to the lease of commercial premises in West Perth, Welshpool and a photocopier. The lease agreement for the Company's West Perth premises was entered into on 1 July 2019 for a 48 month period expiring on 30 June 2023. The lease of a photocopier is for a period of 48 months expiring in June 2022. Lease payments are fixed monthly amounts.

	31 D	ecember 2021	
Right-of-use assets	Buildings	Equipment	Total
	\$	\$	\$
Cost	554,836	8,737	563,572
Accumulated Depreciation	(148,073)	(4,368)	(152,442)
Carrying Amount	406,762	4,368	411,131
Lease liability	Buildings	Equipment	Total
	\$	\$	\$
Current	345,512	4,561	350,074
Non-current	169,668	-	169,668
Total	515,181	4,561	519,742
	30	) June 2021	
Right-of-use assets	Buildings	Equipment	Total
	\$	\$	\$
Cost	850,982	17,473	868,456
Accumulated Depreciation	(296,146)	(8,737)	(304,883)
Carrying Amount	554,836	8,736	563,572
Lease liability	Buildings	Equipment	Total
	\$	\$	\$
Current	354,468	9,044	363,512
Non-current	336,398	-	336,398
Total	690,867	9,044	699,910
		31 Dec 2021	30 Jun 2021
		\$	\$
Amounts recognised in profit and loss		450.440	440 500
Depreciation expense on right-of-use asset		152,442	440,566
interest expense on lease liabilities		10,937	33,259
		103,378	4/3,825

## 13. Events subsequent to balance date

On 28 February 2022, Neometals confirmed the admission of its entire issued share capital to trading on the AIM market of the London Stock Exchange plc.

No other matters have arisen since 31 December 2021 that would be likely to materially affect the operations of the Group, or its state of affairs which has not otherwise been disclosed in this financial report.