

30 October 2019







QUARTERLY ACTIVITIES REPORT

For the quarter ended 30 September 2019

HIGHLIGHTS

CORPORATE

- Significant commercial activity culminating in partnership agreements signed during and post the quarter; and
- Cash \$107.1 million, receivables and investments at \$9.4 million.

CORE DEVELOPMENT ACTIVITIES

Lithium-ion Battery Recycling Project

- September quarter negotiations formalised post the period end MOU with global processing plant manufacturer, SMS Group, granting an exclusivity period over JV to commercialise Neometals' recycling technology;
- Recycling pilot test-work nearing completion with key cathode metals being recovered and upgraded to chemical products for the battery supply chain; and
- Commercialisation and market evaluation running in parallel with preparations for European demonstration trial plant at SMS Group facilities.

Lithium Refinery Project

- Commencement of jointly funded evaluation pursuant to MOU with leading Indian power conglomerate for the development of the first lithium refinery in India using Neometals annual offtake option from Mt Marion;
- MOU contemplates the production of primarily lithium chemicals (predominantly lithium hydroxide ("**LiOH**") at a minimum rate of 10,000tpa LiOH equivalent; and
- Successful production of multiple types of commercial quality synthetic zeolite products from various sources
 of lithium refinery residue. Production of synthetic zeolite could eliminate significant disposal costs and
 generate significant co-product revenue from a market multiple times larger than the lithium market.

Barrambie Titanium and Vanadium Project

- MOU signed post the period end with China's IMUMR which defines joint milestones ahead of a potential 50:50 operating JV to develop the project;
- Successful preliminary metallurgical test-work has defined the optimal flowsheet for pilot scale beneficiation test-work to commence in the December quarter; and
- Beneficiation pilot plant output will be supplied to IMUMR for demonstration plant test-work in China.

EXPLORATION ACTIVITIES

- Mt Edwards exploration highlights include high grade massive sulphide nickel assay results from small drilling campaigns over existing and newly acquired deposits. Drill programs have successfully tested high grade nickel sulphide near and within existing Mineral Resources; and
- A systematic program is underway to build / realise value from Mt Edwards via geophysics guiding targeted drilling together with acquisitions and applications to grow the project size.



COMPANY OVERVIEW

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

Neometals has three core projects:

- Lithium-ion Battery Recycling a proprietary process for recovering cobalt and other valuable materials from spent and scrap lithium batteries. Pilot plant testing currently underway with plans established to conduct demonstration scale trials with potential JV partner SMS Group;
- Lithium Refinery Project Progressing plans for a lithium refinery development to supply lithium hydroxide to the battery cathode industry, underpinned by a binding life-of-mine annual offtake option for 57,000 tonnes per annum of Mt Marion 6% spodumene concentrate; and
- Barrambie Titanium and Vanadium Project one of the world's highest-grade hard-rock titanium-vanadium deposits, working towards a development decision in mid-2021.



Figure 1 – Location map of Neometals' JORC 2012 Mineral Resource Estimates



CORE PROJECTS

<u>Lithium Battery Recycling Project</u> (Neometals 100%)

Neometals has developed a process flowsheet targeting the recovery of greater than 90% of all 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 energy-intensive pyrometallurgical recovery circuits. Neometals' process flowsheet 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 flowsheet is designed to recover cobalt, nickel, lithium, copper, iron, aluminium and manganese into saleable products and is being validated currently in a pilot plant at SGS Lakefield in Ontario, Canada (Pilot).

A scoping study, based on previous bench scale test-work, highlighted robust economics. Data from the current Pilot will feed next stage engineering and feasibility studies.

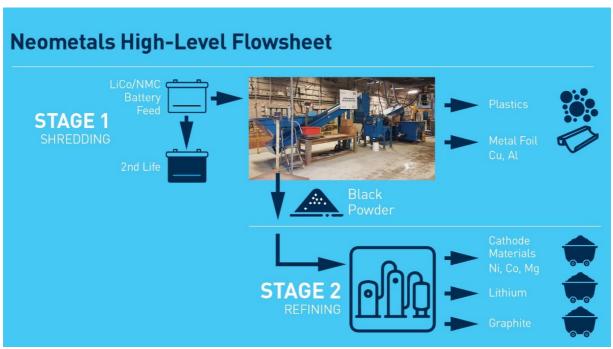


Figure 2 - High level flowsheet showing the materials generated from Feed Preparation and Hydrometallurgical Processing stages

The recycling plant flowsheet, which is being optimised at Pilot, comprises two sections:

- 1. Shredding and removal of metal casings and plastics in the feed preparation facility ("Feed Preparation"); and
- 2. Leaching, recovery and refining to deliver chemical products via the hydrometallurgical processing facility ("Hydrometallurgical Processing").

MOU with SMS

To accelerate commercialization development of the recycling project, Neometals entered a binding Memorandum of Understanding ("MOU") subsequent to the end of the September quarter with leading global processing plant manufacturer SMS Group ("SMS").



Successful completion of the Pilot program will precede a decision to form a 50:50 joint venture ("**JV**") to design and construct a demonstration plant and complete a Class 3 Engineering Cost Study. The MOU contemplates SMS constructing and operating multiple commercial-scale lithium ion battery plants on behalf of the JV.

Pilot Plant

During the quarter, Pilot development of the processing flowsheet and associated mass and energy balance development was advanced by SGS in Lakefield, Canada and Strategic Metallurgy, Perth respectively.

Neometals successfully commissioned the Feed Preparation stage of its Pilot in February 2019 which saw approximately 2 tonnes of spent LIBs shredded ready for subsequent leaching in the Hydrometallurgical Processing facility. Neometals has been busy during the quarter advancing Hydrometallurgical Processing, namely, sequentially recovering cathode metals via a solvent extraction process for refining into high purity chemical products suitable for the LIB supply chain. The Company has established the process conditions at bench scale for the imminent cobalt and manganese recovery at bulk scale (copper successfully preceded this, nickel and lithium will follow).

Pilot activities are expected to be substantially complete at the end of December 2019. Subsequent assessment of Pilot results will drive the decision to form a JV with SMS for next stage development and eventual commercial deployment.



Figure 3 - Pilot leach test-work in Lakefield

Market Development

Neometals continued to advance its engagement with potential partners to commercialise its recycling technology. Dialogues with brand name plant operators have been run in parallel with maturing feed supply dialogues with electric vehicle and battery manufacturers who have scrap and end of life LIBs to recycle now. The key takeaway from Neometals discussions with industry and extensive due diligence is that consensus forecasts on LIB demand, predominantly from electric vehicle applications, continue to predict sustained strong growth. Furthermore, LIB materials supply side deficits are predicted to be the major constraint on growth. With internal combustion engine powered vehicles predicted to be phased out, the increase in LIB-powered electric vehicles means:

- Sustained increase in production scrap and end of life cells that will require mandated disposal through recycling; and
- Future demand for battery minerals/materials that will need to be complemented by non-traditional mining extraction.

During the quarter Neometals utilised its Montreal laboratory facilities to evaluate more than 70 commercial LIB types, spanning the full spectrum of cathode chemistry, format, applications etc. Data from this evaluation has been digitised and a comprehensive database has been created for internal modelling.



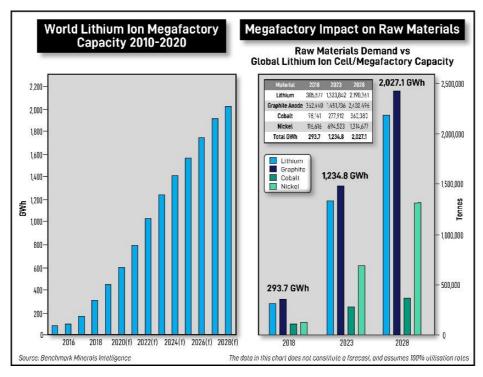


Figure 4 - Graph showing LIB cell capacity predictions (left) against the corresponding impact on raw material markets to supply the growth (right)

With the Pilot targeting high purity chemical products, end user product evaluation can soon commence with delivery of samples for partner testing. This is an important inflection point for Neometals and validation on the quality of its high purity chemical products (as distinct from intermediates for third party refining) will support deeper industry engagement.

It is important to note that since the 2018 Neometals scoping study was published, the chemical product pricing estimates used for modelling remain relevant and conservative.

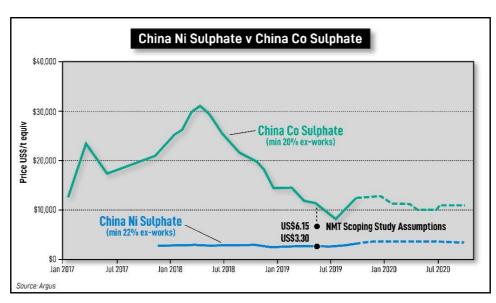


Figure 5 – Graph showing the relationship of scoping study chemical product pricing estimates to todays prices for key chemicals.



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

The key driver of the lithium refinery Project ("LR") is to realise value from the conversion of future spodumene concentrates purchased under the Company's Mt Marion Spodumene Concentrate Offtake Option ("Offtake Option"). The annual Offtake Option provides a fixed volume of up to 57,000tpa of 6% spodumene concentrate for conversion into battery grade lithium hydroxide (LiOH) and lithium carbonate (LC) for supply to LIB cathode and cell makers. The LR has been designed to produce lithium hydroxide and lithium carbonate in a plant with capacity of approximately 10,000tpa lithium hydroxide equivalent.

MOU with Manikaran Power

Neometals and Manikaran Power Limited ("Manikaran") have agreed to contribute their respective skills, resources and know-how to evaluate development of a LR in India and to share the costs of the evaluation equally. Upon completion of feasibility study analysis, 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 (i.e. up to 57,000t per annum of 6% spodumene concentrate). Additional spodumene feed would be sourced as required from external sources to meet the LR's needs depending on its 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.

The Manikaran MOU represents a significant step forwards for the Neometals downstream lithium processing strategy. It allows the realisation of value from its Offtake Option to participate in higher value, higher margin lithium chemical production for electric vehicles, stationary energy storage applications and a more sustainable future. Development timelines have been designed to align with projected supply deficits forecast from ~2025.

September quarter activities associated with the Manikaran MOU included:

- Evaluation of potential project locations (including a visit by senior management to India) that will culminate in a recommended location for the feasibility study;
- Evaluation of proposals from suitably qualified contractors to conduct and deliver the Class 3 engineering study; and
- Evaluation of proposals for Class 3-level design and estimates for major equipment packages and test work for integration into the above study.

It is estimated that the proposed feasibility study, which needs to be completed irrespective of site, will take approximately 18 to 24 months, with an FID on whether to proceed with a potential JV likely to be considered thereafter.

Zeolite

Zeolites are advanced industrial materials used for water treatment, gas adsorption and green chemistry applications. Zeolites are produced as both naturally occurring and synthetic materials. Synthetic zeolites, including the types now produced by Neometals at bench-scale, are typically used in demanding industrial applications such as molecular sieving for air and hydrocarbon purification. According to Markets and Markets (2017), the global zeolite market was approximately 2.4Mtpa with a total estimated value in excess of US\$13B per annum.

Via its patent pending technology, Neometals initially synthesized a 'Type A' zeolite product in 2018 using LR waste. Feedback from early engagement with zeolite market participants led to bench-scale optimisation and the subsequent manufacture of an additional, higher value, 'Type X' zeolite product. Commercial grade samples of 'Type X' zeolite were



then synthesized from both Mt Marion and third-party sourced spodumene leach residue. Internal benchmarking studies on the material indicated Neometals' product quality to be comparable to industry leading zeolite products from a leading Japanese manufacturer. A preliminary sample of 'Type X' product is now the subject of third-party commercial evaluation.

In demonstrating that 'Type A' and 'Type X' zeolites can be produced from various sources of lithium refinery residue (at or close to commercial benchmarks), Neometals achieved a proof of concept breakthrough.

In addition to potentially minimising the waste footprint from the Company's proposed LR, zeolite manufacture creates an opportunity for co-product revenue to improve the LR competitive cost position. Neometals' zeolite development work is running in parallel with continued evaluation of the optimal design scale for its LR. Neometals has engaged global engineering company Exyte to complete a Class 4 Engineering Cost Study ("ECS") (pre-feasibility level) based on the current bench scale test-work being managed by Queensland University of Technology ("QUT").

Activities during the quarter revolved around ongoing QUT process testing, validation, pilot testing preparation and continued work on the ECS. Exyte targets ECS completion at the end of March 2020 and a Class 3 Engineering Cost and Feasibility Study is planned to follow successful completion of the pilot demonstration of the process. The pilot plant will also generate larger volumes of customer evaluation samples.

Lithium Market Commentary

The demand side of the lithium market is continuing to grow in line with consensus forecasts, driven by the sustained construction of new and large capacity battery LIB Gigafactory's in China, Europe and North America. Notwithstanding pressure on the broad lithium market in the near term, the longer-term outlook remains robust. This is primarily due to the world's motor vehicle industry transitioning to electric powerplants with LIB technology being the most suitable technology for this industry. Motor vehicle and stationary energy storage supply chain participants are making large investments and changing strategy to position for this transition.

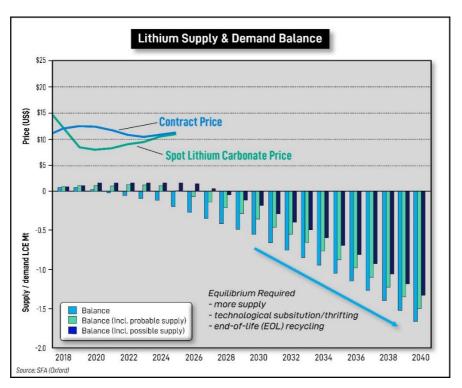


Figure 6 – Below the x-axis, projected lithium market supply/demand showing material supply deficit across all scenarios from ~2025. Above the x-axis, current declining spot lithium carbonate (proxy for lithium chemicals generally) price against flattening contract price with future convergence and a rising trend as the supply deficit appears in ~2025.



In the near term, the high rate of growth on the supply side through conversion capacity expansions and committed new production facilities for raw materials and lithium compounds has temporarily exceeded the rate of demand growth. As a result, the global lithium market is reported to be currently oversupplied and is forecast to remain oversupplied until ~2024 due to the cumulative capacity of new conversion plants, particularly those under construction in Australia.

However, a supply deficit from 2025 is probable due to a lack of new medium-term conversion capacity in the planning and design phases. From that time, market conditions are anticipated to once again support and stimulate the commissioning of new production capacity (with all the positive knock-on effects to battery supply chain feedstock demand).

<u>Barrambie Titanium/Vanadium Project</u> (Neometals 100%)

The Barrambie Vanadium and Titanium Project in Western Australia ("Barrambie") is one of the largest vanadiferous-titanomagnetite ("VTM") resources globally (280.1Mt at 9.18% TiO_2 and 0.44% V_2O_5)*, containing the world's second highest-grade hard rock titanium resource (53.6Mt at 21.17% TiO_2 and 0.63% $V2O_5$)* and high-grade vanadium resource (64.9Mt at 0.82% V_2O_5 and 16.9% TiO_2) subsets 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 2018¹ 0.46 Indicated 187.1 9.61 Inferred 93.0 8.31 0.40 Total 280.1 9.18 0.44 High Grade V₂O₅ Resource (at 0.5% V₂O₅ cut-off)² Indicated 49.0 16.93 0.82 Inferred 15.9 16.81 0.81 Total 64.9 16.90 0.82 High TiO₂ Resource (14% TiO₂ cut-off)² Tonnes (M) 39.3 21.18 0.65 Indicated 14.3 21.15 0.58 Inferred Total 53.6 21.17 0.63 Based on Cut-off grades of ≥0% TiO₂ or ≥.2% V₂O₅ (2) The high-grade litanium and vanadium figures are a sub-set of the total Mineral Resource. These figures are not additive and are reporting the same block mode volume but using different cut-off grades. fer to Neometalsi ASX release dated 17 April 2018 title "Updated Barrambie Mineral Resource Estimale" available at nx neometals.com.au/reports/2018-04-17-5645-Barrambie/P.pdf

Barrambie is located approximately 80km Northwest of Sandstone in Western Australia (see Figure 1), has a granted mining permit and has been the subject of approximately AUD\$30 million in Neometals exploration and evaluation expenditure since 2003.



IMUMR MOU

During the quarter Neometals was busy formalising a project development cooperation with a Chinese counterparty that was announced subsequent to the end of the quarter. Neometals has entered a memorandum of understanding ("MOU") with Chinese research organisation IMUMR to jointly advance development of Barrambie. The MOU will commence with evaluation activities, including a hydrometallurgical processing demonstration plant, and outlines a potential pathway towards a 50:50 joint venture to advance Barrambie's commercial exploitation.

IMUMR is among the top Chinese metallurgical institutes and has extensive experience in mineral processing and smelting of VTM concentrates. Importantly, IMUMR also has acknowledged expertise and deep relations with China's titanium and vanadium chemical processing industry. IMUMR has previously conducted beneficiation and pyrometallurgical test-work for Neometals on bulk-ore samples from Barrambie and from those studies is intimately familiar with the Barrambie orebody.

Under the MOU, Neometals' current pilot test work program (to produce high-purity titanium and vanadium chemicals from the titanium-rich Eastern Band of Barrambie) will continue with beneficiation occurring in Australia. Subject to pilot study results, and subject to a decision to proceed with a Chinese demonstration plant, Neometals will ship up to 10 tonnes of Eastern Band concentrate which is currently being prepared. IMUMR will fund the demonstration plant at its extensive test work facilities in China and subject to satisfactory results, the parties will jointly fund a Class 3 Engineering Cost Study ("ECS") to evaluate a mining and concentrating operation at Barrambie with subsequent downstream processing in China. Following completion of the ECS, the parties will review the results to determine whether to proceed to a financial investment decision and negotiate in good faith the terms of the 50:50 production JV.

The MOU is significant as the partnership sets the stage for value realisation at Barrambie and has the potential to reduce Neometals' development costs considerably. 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.

Test-work

Neometals is focused on evaluating metallurgical processing routes to determine how best to realise value from both titanium and vanadium mineralisation which is concomitant (albeit in demarcated grade bands) in the project. More than 95% of the contained metal in the Barrambie resource is titanium and as a result, it is important to determine how best to extract value from it.

Test-work metallurgical activities progressed well during the quarter and have been scoped to align with evaluation steps in the MOU. The test-work can be considered in two parts. The first relating to beneficiation to produce high quality mixed titanium and vanadium concentrate which is suitable as feed to a range of 'downstream processing flowsheets' (i.e. all processing steps after beneficiation). The second part of the metallurgical test-work program relates to design and trialling of the downstream processing flowsheet to make titanium and vanadium chemical products.

Beneficiation

Neometals completed extensive bench scale beneficiation work on Eastern Band feed material with the aim of equalling or improving recoveries from historic test work and substantially reducing contained silica. Early indications suggest promising improvements in silica reduction. This is encouraging because irrespective of the final downstream flowsheet, the reduction of silica is critical for minimising operating costs and improving operability of the circuit. The Company expects to be able to report on these improvements in the December quarter when final test-work outcomes have been interpreted.



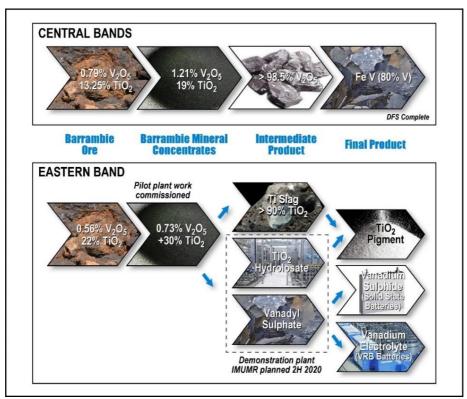


Figure 7 - Barrambie Processing Options, split between high grade vanadium in the Central Bands and high-grade titanium in the Eastern Bands. Downstream Processing Flowsheets

Staged pilot work on the base case hydrometallurgical flowsheet was completed at Neometals' laboratory facilities in Montreal. Eastern Band concentrates were successfully leached to produce:

- 1. Iron and vanadium pregnant leach solution (~ 2,200L) for solvent extraction ("SX") test-work and potential future Australian vanadium pilot work to recover high purity vanadium chemicals, suitable for us in stationary energy storage systems and the next generation of solid-state lithium-ion batteries. SGS Lakefield has completed bench scale vanadium SX process development work and after result evaluation, the reported outcomes from this work will guide a decision to build and operate a pilot plant to produce vanadyl sulphate; and
- 2. ~500kg of titanium leach residue to recover a high purity titanium hydrolysate chemical suitable for the production of titanium pigment, titanium metal and the emerging lithium-ion battery anode material, lithium titanate. The leach residue has arrived at Strategic Metallurgy in Perth and work has commenced to optimise the production process. When final parameters are confirmed, a small pilot scale facility will demonstrate the production of high-purity titanium hydrolysate to IMUMR executives in early December.

At completion of the proposed IMUMR demonstration plant and subsequent ECS, Neometals will have a complete and extensive data set to choose the best processing path from which to base a FEED study.

Approvals and Permits

The Barrambie resource is contained on a Mining Lease granted in 1989. In addition, in 2012 Neometals received an environmental approval from the then Environmental Protection Authority to develop an open-cut vanadium mine and processing plant at Barrambie via Ministerial Statement 911 (the "MS"). An application (Section 46) was made by Neometals in September 2018 to extend the time limit for implementation of the MS. In September the EPA recommended to the Minister for Environment that such a time extension be granted. The Minister for Environment is now consulting with other Ministers regarding implementing the EPA recommendation.



Market Commentary

Vanadium

Vanadium pricing has normalised in 2019 and is off the highs experienced in 2018. This is partly attributed to increased 2019 production of strengthened reinforcing steel ('rebar') being offset with substitution of ferro-vanadium by ferro-niobium and non-compliance with rebar standards by small Chinese steel mills.

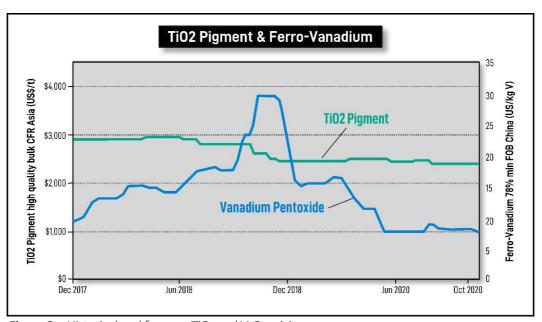


Figure 8 – Historical and forecast TiO_2 and V_2O_5 pricing

More than 90% of vanadium is used in steel to increase strength, reduce weight and provide corrosion and abrasion resistance. Roughly 50% of global steel production comes from China and Chinese production of steel rebar accounts for 30% - 40% of vanadium consumption globally. Therefore, changes in rebar production in China have a significant effect on global vanadium demand. Chinese steel production, including vanadium enhanced rebar, has increased in CY2019 with the latter jumping 20.5% to the end of August. Despite predicted year end slowing, rebar production is expected to be up 10% in 2019 resulting in commensurate increase in vanadium consumption.

Titanium

In the case of TiO₂, the market declined materially in late 2018 and through 1H 2019 after a period of inventory building by pigment buyers. In late 2018 and through Q1 2019, the weakness was largely attributed to de-stocking due to rising pigment prices and supply concerns in 1H2018. However, continued demand weakness in 2019 appears to have resulted from global economic weakness and the continuing trade dispute between the US and China. Chinese demand has been affected materially by the trade dispute, whilst pigment demand in Europe has also been weak due to lower auto sales, concerns about Brexit, inventory drawdown and reduced consumer confidence.

TiO₂ pigment prices in the US and Europe have held firm, largely as a result of producer cutbacks to avoid a build up of excess inventory. Prices in Asia have been trending lower.

Nm

On the supply side, short term growth is likely to be minimal over the next five years, with an estimated compound annual growth rate of 0.6%. Higher chloride slag (titanium pigment intermediate) supply during this period is offset by a decline in sulfate ilmenite supply. Longer term however, a government mandated closure of the privately owned heavy mineral sand operations in India has removed about $300,000\,\text{TiO}_2$ units from the supply chain and in the absence of new supply coming online there is potential for a significant TiO_2 feedstock supply deficit of almost 1 million TiO_2 units by 2023.

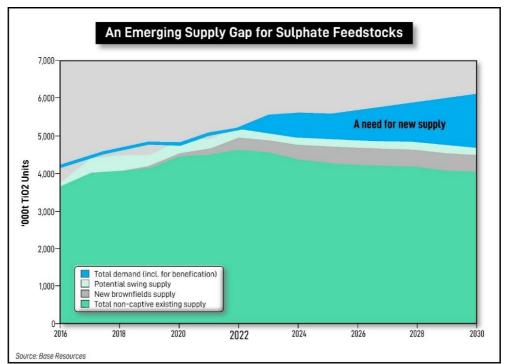


Figure 9 – Forecast production of TiO_2 showing a need for new sulphate feedstock supply from ~2022

EXPLORATION PROJECTS

Mt Edwards Lithium and Nickel Project
(Neometals 100% through Mt Edwards Lithium Pty Ltd)

The Mt Edwards project is located 90km south of Kalgoorlie and 35km west of Kambalda in Western Australia. The tenements cover an area of 240km² across the historic Widgiemooltha Dome nickel sulphide belt and host more than 123,000 tonnes of contained nickel estimated across ten nickel sulphide Mineral Resources held by Neometals (for full details refer to ASX announcement entitled "Mt Edwards Project Mineral Resource Over 120,000 Nickel Tonnes" released on 22 June 2018).

During the quarter Neometals has been engaged with soil sampling, geological mapping, geophysical interpretation and targeted nickel drilling campaigns. The exploration program also continues to target fertile Lithium-Caesium-Tantalum ("LCT") pegmatites.

The Company announced assay results from a 15-hole (2,705m) reverse circulation ("RC") infill drill and sample program that was conducted in June quarter on three tenements (for full details refer to ASX announcement entitled "Mt Edwards Nickel – Drill Results" released on 5 August 2019):



1. E15/989 (Lake Eaton)

Neometals holds Nickel minerals rights in the exploration licence; all other mineral rights are held by Mincor Resources NL. Eight RC holes drilled at Lake Eaton area, focussed on the ultramafic—basalt contact located along strike from the Mincor's Cassini Nickel Mineral Resource (Cassini);

2. M15/97 (Zabel prospect)

Three holes were drilled at Zabel to confirm targeting infill areas of the nickel Mineral Resource; and

3. M15/96 (a regional area west of the Mandilla gold prospects) Four holes were drilled on M15/96 to test geophysical anomalies.

Significant nickel sulphide intercepts at the Zabel prospect confirmed the high-grade tenor of mineralisation contained within a large, moderate grade nickel inventory at Mt Edwards, while the drilling at Lake Eaton showed elevated nickel grades on and near the ultramafic – basalt contact along strike of Mincor Resources' high-grade Cassini nickel deposits.

Assay results at the Zabel Mineral Resource included:

- 11 metres @ 2.6% Nickel from 108 metres including 4 metres @ 6.3% Nickel; and
- 3 metres @ 2.0% Nickel from 88 metres including 1 metre @ 5.1% Nickel.

In mid-September 2019, Neometals carried out a separate 15-hole RC drill and sample program for a total of 2,749 metres at M15/94 (Widgie South Trend) and E15/989 (Lake Eaton). Drilling at the Lake Eaton prospect was based on geophysical interpretation from the prior drilling in May that intercepted low-grade isolated nickel mineralisation (for full details refer to ASX announcement entitled "Mt Edwards Nickel — Drill Results" released on 5 August 2019). Drilling at the Widgie South Trend area has focussed on the ultramafic-basalt contact along strike from Gillet Nickel Mineral Resource and Widgie 3 Nickel Mineral Resource.

The September drill program confirmed the strike extension of mineralisation at the Gillet Nickel Sulphide Mineral Resource and Widgie 3 Nickel Sulphide Mineral Resource on Mining Lease M15/94. Down hole Electromagnetic (DHEM) geophysical surveys of the holes are in progress.

In late September, Neometals also announced assay results from diamond core drilling at the recently acquired Munda deposit ("**Munda**"), which now forms part of the Mt Edwards Project (for full details refer to ASX announcement entitled "Further Nickel Drill Results at Mt Edwards" released on 9 October 2019). The assay results confirmed an 8.3 metre (down hole width) zone of nickel sulphide mineralisation from 93 metres down hole, with an enriched zone of 2.3m @ 6.11% nickel from 99 metres which coincides with the base of the ultramafic unit.

Table 2 – Significant nickel intercepts for drill holes from the Munda diamond core drill program

Prospect	Hole ID	Intercept Length (m)	Ni %	Cu ppm	As ppm	From metre	To metre	Tenement	Depth metre
Munda	EMD002	8.3	2.29	816	10	93	101.3	M15/87	171.2
Munda	Including	2.3	6.11	1,708	9	99	101.3	M15/87	171.2

Note: Significant intercepts are contiguous samples with assay results greater than 0.3% nickel, with an average grade greater than 1% nickel. Up to 1 metre internal dilution (less than 0.3% nickel) may be included in the intercept.

The nickel sulphide intersection in EMD002 comprised 6m of disseminated nickel sulphide (93.0m-99.0m), 1.6m of matrix sulphide (99.0m-100.6m), 0.4m of semi-massive sulphide (100.6m-101.0m) and 0.3m of massive sulphide (101.0m-101.3m) on the basal contact with the underlying basalt. EMD001 intersected 3m of disseminated and minor remobilised sulphides (between 124.0m-127.0m) above the basal contact. Going forward the Company will work towards estimating a Mineral Resource at the Munda nickel deposit.





Figure 10 – Photo of diamond core from drill hole EMD002. Massive Nickel Sulphide (grading 6.11% Nickel) is clearly identifiable above a sharp contact with the underlying basalt.

In addition, the company entered into an option agreement for two tenements (E15/1553 and P15/6092) near the Lake Eaton prospect. The Exploration Licence E15/1553 is directly north of Mincor's Cassini deposit. Approvals permitting, Neometals will carry-out drilling and sampling on these tenements in the December quarter.

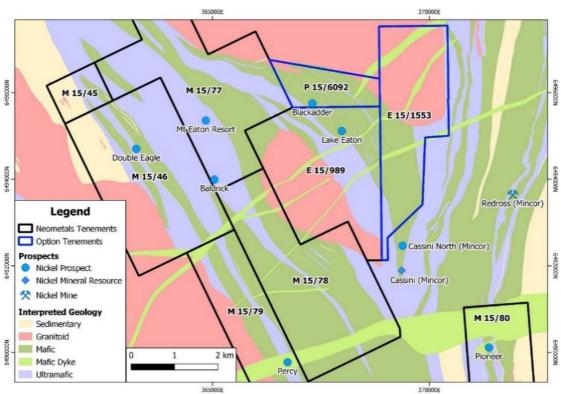


Figure 11 – Mt Edwards Lithium Pty have an Option to acquire E15/1552 and P15/6902, shown in blue in the figure above

Neometals is highly encouraged by 2019 nickel exploration program progress, particularly the results generated in the September quarter. The Munda acquisition supports a theme where Neometals is increasing Mineral Resource confidence, evaluating high grade zones while identifying new targets and testing them in a historically fertile nickel sulphide area. The Company is methodically validating and improving the drill-hole database as it drill tests the Mineral Resources and prospects across the project, while modern 'geophysics' techniques offer scope to create targets over larger areas with far greater accuracy.



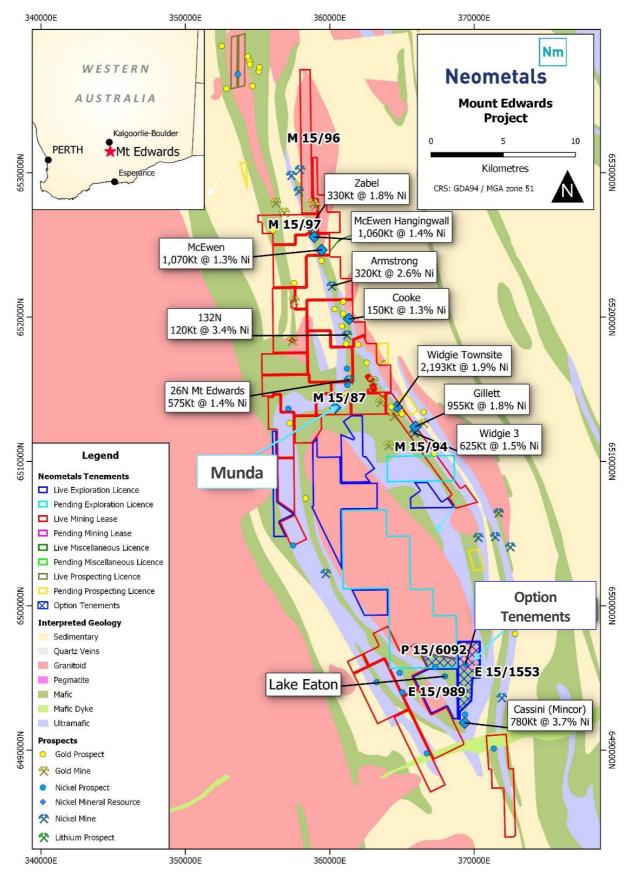


Figure 12 – Mt Edwards Project tenure including Munda deposit on M15/87. Nickel exploration reported or drilled on tenements M15/87, M15/94, M15/96, M15/97 and E15/989 during the quarter



CORPORATE

Corporate Strategy

The Neometals strategy remains focused on de-risking and developing long-life projects with strong partners and integrating down the value chain to increase margins and return value to shareholders. The Company does this by developing opportunities specific to minerals and advanced materials exposed to the battery and energy storage supply chain.

The September quarter has seen significant inroads in terms of delivery on this strategy. Neometals diversified opportunities offer 'security' and 'growth' and are linked by a common and consistent project development approach. Specifically, Neometals' project development skills revolve around its ability to build, and apply, an ecosystem of expertise to grow and realise commercial value with partners. The aim being to fast-track returns, minimise Neometals' capital outlay and mitigate financial and operating risks.

In quick succession (during and just post the period end), Neometals has announced three formal partnering agreements with large and reputable global partners for each of its three core projects. Subdued capital market newsflow during feasibility and piloting programs can belie commercial maturity. These recent Neometals commercial developments help convey exploitation progress against the Company's growing track record and proven model to crystallise value in the early stages of new developments.

Human Resources

During the quarter, Neometals appointed two experienced mining executives. Matthew Read was appointed as General Manager – Lithium Projects. Matt is responsible for driving the Company's feasibility and engineering studies in its core lithium related projects. Andy Robb was appointed as General Manager – Recycling Project. Andy will be responsible for driving the Company's feasibility and engineering studies in its core recycling project.

Financial

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

As at 30 September 2019 Neometals holds 706,209,483 ordinary fully paid shares (36% of the issued capital) in Hannans on an undiluted basis. At 30 September 2019, Hannans' shares closed at 1c implying a value of \$7.1M.

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

Neometals holds 15.7% of unlisted public company Critical Metals Ltd, a company which now houses the Scandinavian mineral assets previously held by Hannans. Neometals will assist Critical Metals to realise lithium, cobalt and carbon opportunities in Scandinavia through a technical assistance arrangement.

Other Investments

The market value of the Company's other investments as at 30 September 2019 totaled \$1.7M.

Finances (unaudited)

Cash and term deposits on hand as of 30 September 2019 totalled A\$107.1 million, including \$4.2 million in restricted use term deposits supporting performance bonds and other contractual obligations. The Company's has net receivables and listed securities totalling approximately \$9.4 million.



Issued Capital

On 8 July 2019 the Company issued 463,948 ordinary fully paid shares to employees, consultants and non-executive directors following vesting and exercise of Performance Rights pursuant to the Neometals Ltd Performance Rights Plan.

During the quarter the Company granted a total of 4,782,162 Performance Rights to management personnel pursuant to annual invitations made in accordance with the terms of their employment contracts and the Company's Performance Rights Plan. These performance rights may vest on 30 June 2022 or 31 December 2022 on the satisfaction of certain performance conditions, based on the Company's relative and absolute total shareholder return performance and percentile ranking relative to comparator companies and overall business plan performance.

In addition, the Company also granted a total of 536,678 Performance Rights to non-executive directors pursuant to fee sacrifice invitations made in accordance with the Company's Performance Rights Plan. These Performance Rights may vest on 30 June 2020 on the satisfaction of certain vesting criteria.

The total number of shares on issue at 30 September 2019 was 544,438,217.

ENDS

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Compliance Statement

The information in this report that relates to Mineral Resource and Ore Reserve Estimates and updated DFS Results and start of Titanium Pilot 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

9/10/2019	Further Nickel Drill Results at Mt Edwards	
05/08/2019	Mt Edwards Nickel – Drill Results	
21/05/2019	Barrambie Vanadium DFS Results and Start of Titanium Pilot	
25/06/2018	Mt Edwards Project Mineral Resource Over 120,000 Nickel Tonnes	
17/04/2018	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 been materially modified form the original market announcements.

About Neometals Ltd



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

Neometals has three core projects:

- Lithium-ion Battery Recycling a proprietary process for recovering cobalt and other valuable materials from spent and scrap lithium batteries. Pilot plant testing currently underway with plans established to conduct demonstration scale trials with potential JV partner SMS Group;
- Lithium Refinery Project Progressing plans for a lithium refinery development to supply lithium hydroxide to the battery cathode industry, underpinned by a binding lifeof-mine annual offtake option for 57,000 tonnes per annum of Mt Marion 6% spodumene concentrate; and
- Barrambie Titanium and Vanadium Project one of the world's highest-grade hard-rock titanium-vanadium deposits, working towards a development decision in mid-2021.



APPENDIX 1: TENEMENT INTERESTS

As at 30 September 2019 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 P15/5905 100% Mt Edwards L15/397 50% Pe Mt Edwards P15/5906 100% I Mt Edwards E15/1505 100% I Mt Edwards E15/1507 100% I	Live Live Ending Live Live Live Live
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Mt Edwards E15/1507 100%	Live
	_
Mt Edwards E77/2397 100% Pe	ending
' '	-
Mt Edwards E15/1562 100% Pe	ending
Mt Edwards E15/1576 100%	Live
Mt Edwards E15/1583 100%	Live
Mt Edwards E77/2427 100% Pe	ending
Mt Edwards E15/1679 100% Pe	ending
Mt Edwards P15/6362 100% Pe	ending
Mt Edwards P15/6387 100% Pe	ending
Mt Edwards E15/1665 100% Pe	ending
Mt Edwards E15/1711 100% Pe	ending
Mt Edwards P15/6408 100% Pe	ending
Mt Edwards P15/6539 100% Pe	ending
Mt Edwards P15/6902 100% Option	to Acquire
Mt Edwards E15/1553 100% Option	to Acquire

[^]Nickel Mineral rights only

Changes in interests in mining tenements

Interests in mining tenements acquired or increased

Project Name	Licence Name	Acquired Or Increased
Mt Edwards	P15/6539	Application
Mt Edwards	P15/6902	Option to Acquire
Mt Edwards	E15/1553	Option to Acquire
Mt Edwards	M15/87	Acquired Nickel Rights

Interests in mining tenements relinquished, reduced or lapsed

Project Name	Licence Name	Relinquished, Reduced Or Lapsed
Barrambie	G57/111	Withdrawal

^{**}Lithium and Nickel Mineral rights only

[#] No gold interest