

QUARTERLY ACTIVITIES REPORT

For the quarter ended 31 December 2019

HIGHLIGHTS

CORPORATE

- MOU's signed with globally recognised partners across battery recycling and titanium/vanadium projects;
- Successful execution of corporate strategy with partners now secured across all core development projects to co-fund final evaluation studies through to development decisions and potential operating joint ventures; and
- Cash \$100.7 million, receivables and investments at \$9.9 million and no debt.

CORE DEVELOPMENT ACTIVITIES

Lithium-ion Battery Recycling Project

- MOU with global processing plant manufacturer, SMS Group, granting an exclusive due diligence period to form 50:50 incorporated JV to commercialise Neometals' recycling technology;
- Recycling pilot test-work outcomes surpass earlier study assumptions – strongly supporting technical and economic feasibility. Very high recovery rates achieved on the key payables (cobalt and nickel) with excellent purity on the sulphate chemical products generated for the battery supply chain; and
- Commercialisation and market evaluation running in parallel with preparations for European JV showcase demonstration plant trial at SMS Group facilities.

Barrambie Titanium and Vanadium Project

- MOU signed with China's IMUMR which defines jointly funded evaluation milestones preceding a potential 50:50 operating JV to develop Barrambie;
- Successful completion of bench and pilot scale hydrometallurgical test-work programs which produced very high purity titanium chemicals (with high recoveries) used as an intermediate in pigment production, vanadium recovery pilot scale test work to commence imminently; and
- Renewal of EPA approval for construction and operation of an integrated processing operation extended until October 2022.

Lithium Refinery Project

- Ongoing jointly funded evaluation activities for the development of the first lithium refinery in India under an MOU with leading Indian power trading conglomerate, Manikaran Power; and
- Successful production of multiple commercial quality synthetic zeolite products (molecular sieves) from lithium refinery residue recognised by the award of a Innovative Manufacturing CRC Grant to co-fund a pilot scale manufacturing plant project with Queensland University of Technology

EXPLORATION ACTIVITIES

- Acquisition, additional drilling and re-estimation of the geological and mineralisation models at the Munda deposit has seen the total Mt Edwards Nickel Mineral Resources exceed 130,000 tonnes of contained nickel;
- Targeted drilling intercepted nickel sulphides in a recognised nickel camp that hosts four historic mines; and
- Nickel exploration at Mt Edwards continues to increase the quantity and quality of the Mineral Resources.

For personal use only

COMPANY OVERVIEW

Neometals innovatively develops opportunities in minerals and advanced materials essential for a sustainable future. With a focus on the electric vehicle and energy storage megatrends, the strategy focuses on de-risking and developing long-life projects with strong partners and vertically 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;
- 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 with potential JV partner IMUMR; and
- Lithium Refinery Project – co-funding evaluation studies for the development of a lithium refinery to supply lithium hydroxide to the lithium battery industry with potential JV partner Manikaran Power, underpinned by a binding life-of-mine annual offtake option for 57,000 tonnes per annum of Mt Marion 6% spodumene concentrate.



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

For personal use only

CORE PROJECTS

Lithium Battery Recycling Project (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 high-emission 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.

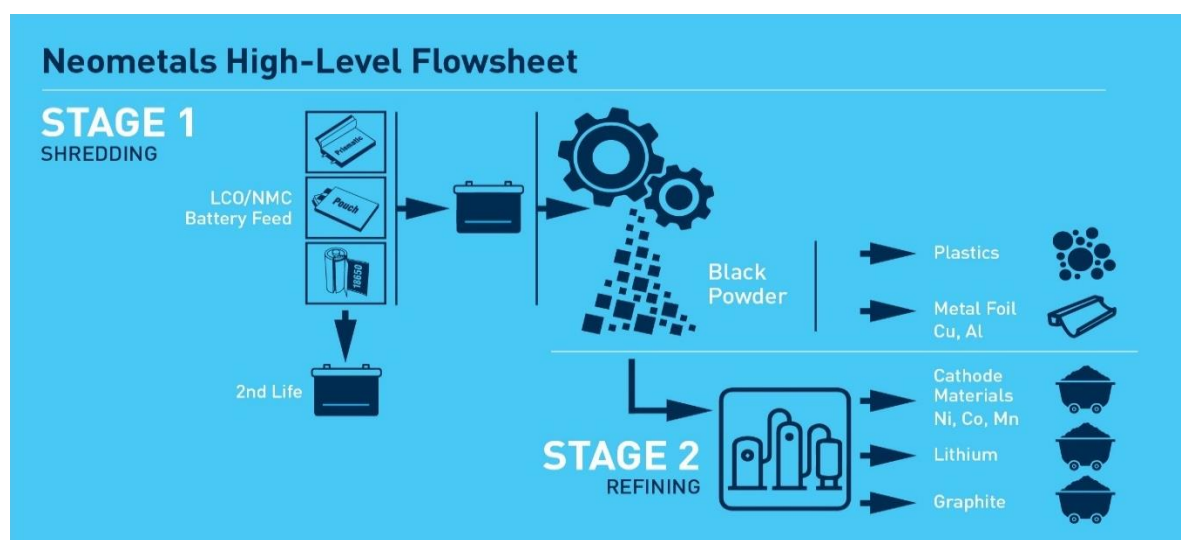


Figure 2 - High level flowsheet showing the materials generated from Feed Preparation and Hydrometallurgical Processing stages

The recycling 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**").

Pilot Plant

During the quarter, a working committee was formed comprising representatives from both companies and discussions were held to advance preparation for the potential JV, including facilitating access to interim pilot test information and demonstration plant preliminary designs.

The Pilot and associated mass and energy balance development was continued by SGS in Lakefield, Canada with substantial input from NMT technical staff, Primero and Strategic Metallurgy, Perth. The Pilot program moved into its final phases with the majority of cathode metals successfully recovered and refined into high purity chemical products suitable for the LIB supply chain.

Specifically, Neometals reported successful piloting of the recovery processes for cobalt, manganese and nickel. High purity solutions of cobalt, manganese and nickel sulphate were prepared in readiness for final solution "polishing" and crystallisation tests from which chemical product evaluation samples will be prepared. Pilot recovery rates were high and exceeded expectations.

Neometals has established, and successfully tested, the process conditions for the cobalt, manganese and nickel recovery at pilot scale, and the final process testing for the extraction of lithium has begun. Test work was commenced to polish the chemical product solutions prior to producing crystallised products for evaluation by potential partners.

Pilot activities were substantially complete at the end of December 2019 and will be concluded early in the March Quarter 2020.



Figure 3 - Pilot nickel recovery circuit, SGS Lakefield

MOU with SMS

To accelerate commercial development of the recycling project, Neometals announced during the quarter that it had entered a binding memorandum of understanding (“**MOU**”) with leading global processing plant manufacturer SMS Group (“**SMS**”). SMS has an exclusive due diligence period in which it will evaluate the results of the Neometals Pilot.

Successful completion of the Pilot will precede a decision to form a 50:50 joint venture (“**JV**”), to design and construct a demonstration plant at SMS sites in Germany and Austria. A Class 3 Engineering Cost Study will be completed concurrently. A final investment decision (“**FID**”) will follow to construct the first commercial-scale operation.

A positive FID would involve Neometals contributing technical and commercial know how to the JV and SMS contribute to the engineering design, fabrication, operation and maintenance of future recycling plants. SMS would also, on a best endeavours basis, procure debt financing for no less than 50% of the capital expenditure required.

Market Development

Neometals advanced raw material supply and off take dialogues as part of its market evaluation and marketing activities.

The first commercial recycling plant will require sufficient volume of feed material to support a commercial operation that has viable economy of scale, nominally 50t per day or 18,000t per annum. During the quarter, further additions in European and North American cell-making capacity were announced with 2-5 year production lead-times. Of particular interest to Neometals and its German partners is that Germany had the largest percentage cell capacity growth. The Benchmark Mineral Intelligence image in Figure 4 depicts this development in cell production capacity. Neometals has strong confidence that together with its partner, it can source cell production scrap from the proposed battery megafactories in quantities sufficient to support its initial operations. The longer-term source of feed material for recycling comes from end-of-life cells from current electric vehicle and energy storage applications.

For personal use only

Megafactory Capacity by Region

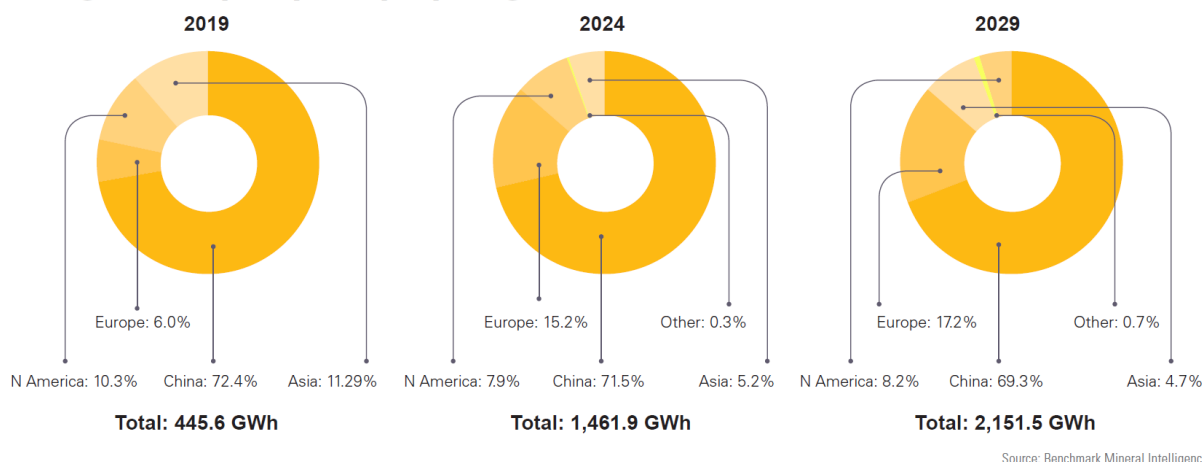


Figure 4 – Developments in cell production capacity

Barrambie Titanium/Vanadium Project (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% TiO₂ and 0.44% V₂O₅)*, containing the world’s second highest-grade hard rock titanium 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 ¹			
	Tonnes (M)	TiO ₂ (%)	V ₂ O ₅ (%)
Indicated	187.1	9.61	0.46
Inferred	93.0	8.31	0.40
Total	280.1	9.18	0.44

High Grade V ₂ O ₅ Resource (at 0.5% V ₂ O ₅ cut-off) ²			
	Tonnes (M)	TiO ₂ (%)	V ₂ O ₅ (%)
Indicated	49.0	16.93	0.82
Inferred	15.9	16.81	0.81
Total	64.9	16.90	0.82

High TiO ₂ Resource (14% TiO ₂ cut-off) ²			
	Tonnes (M)	TiO ₂ (%)	V ₂ O ₅ (%)
Indicated	39.3	21.18	0.65
Inferred	14.3	21.15	0.58
Total	53.6	21.17	0.63

⁽¹⁾ Based on Cut-off grades of ≥0% TiO₂ or ≥2% V₂O₅

⁽²⁾ 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.

Refer to Neometals' ASX release dated 17 April 2018 titled "Updated Barrambie Mineral Resource Estimate" available at www.neometals.com.au/reports/2018-04-17-3645-BarrambieP.pdf

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

For personal use only

IMUMR MOU

During the quarter, Neometals 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 and piloting occurring in Australia. Subject to pilot study results, and subject to a decision to proceed with a Chinese demonstration plant, Neometals will deliver up to 10 tonnes of Eastern Band concentrate which is currently being prepared. IMUMR proposes to 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 establishes a pathway to enhance and realise value through the development of Barrambie with a potential partner to considerably reduce Neometals funding requirements and project risk. It should also be recognised that IMUMR has a Chinese national mandate that includes development of upstream supply chains for industries of strategic relevance to China. IMUMR will have the right, subject to Neometals approval, to assign its interests under the MOU to a commercial Chinese chemical processing partner.

Test-work

Neometals is focused on evaluating metallurgical processing routes to determine how best to realise value from both titanium and vanadium which are coincident in the mineral resource. More than 95% of the contained metal in the Barrambie resource is titanium and as such, its successful extraction is the primary driver of project economics.

Metallurgical test-work 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:

1. beneficiation to produce high quality concentrates which are suitable feedstocks for conventional downstream processing into titanium and vanadium products (metal slag and chemicals); and
2. design and trialling of an all hydrometallurgical downstream processing flowsheet to make high-purity 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 specifically reducing contained silica. Early indications suggest promising improvements in silica reduction. This is encouraging because irrespective of the final flowsheet, silica reduction is critical for minimising downstream operating costs and improving operability of the processing circuit.

In addition, bench scale review of beneficiation options for Eastern Band ore suggested similar concentrate grades and recovery could be obtained from either a gravity or magnetic beneficiation circuit. As a result, it was decided to compare the performance of these two beneficiation routes at pilot scale. To allow the collection of variability data, each pilot will be fed with three different ore feed batches and the concentrates generated will go towards fulfilling the Companies commitment to supply bulk Barrambie concentrate for the proposed IMUMR demonstration plant.

A beneficiation test-work results update is planned for the March quarter 2020.

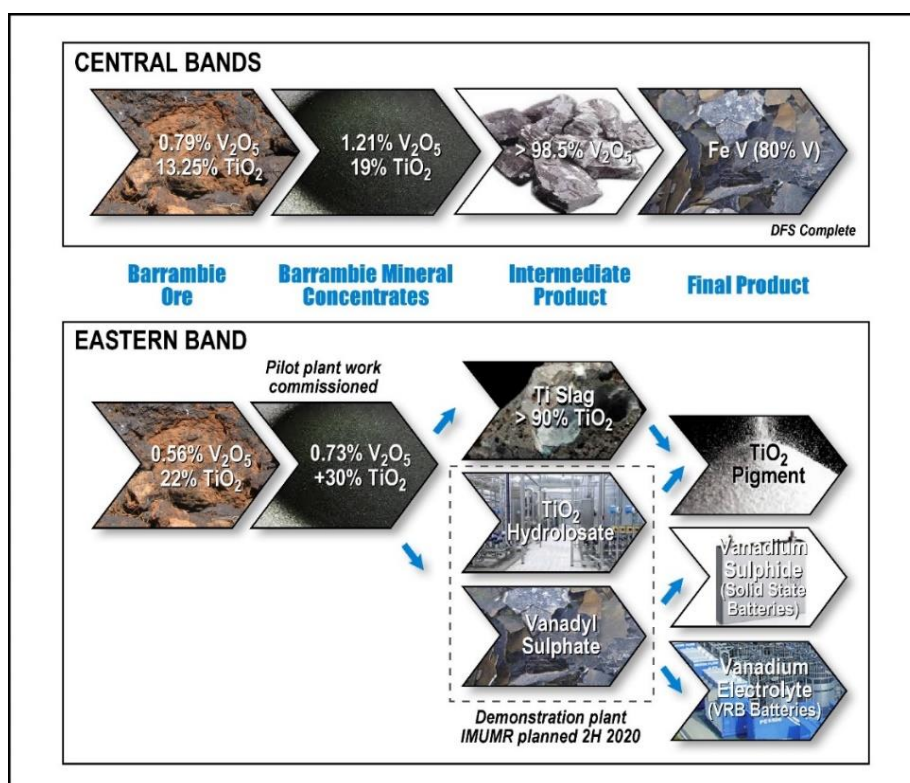


Figure 5 - Barrambie Processing Options, split between high grade vanadium in the Central Bands and high-grade titanium in the Eastern Bands.

Downstream Processing Flowsheets

During the September 2019 quarter, downstream test-work (hydrometallurgy) was completed on Eastern band concentrates to:

- i) extract and recover the vanadium values; and
- ii) produce feed for pilot processing of titanium chemicals in Perth.

In addition, independent lab scale test-work generated high purity (+99%) titanium chemical at high recovery rate (+89%). This work, together with subsequent optimisation work, was undertaken as a prelude to the pilot test program. (for full details refer to ASX announcement entitled "Barrambie – Outstanding Titanium Test Work Results" released on 20 November 2019)

During the December quarter Neometals, constructed and operated its titanium pilot plant. The pilot has generated titanium chemical samples (titanium hydrolysate) and a site visit has been conducted by IMUMR. As reported subsequent to the end of the quarter, the pilot plant recovered high purity (>98%) titanium hydrolysate (hydrated titanium dioxide - $TiO_2 \cdot 2H_2O$) with titanium recoveries from Barrambie concentrate exceeding 90% (for full details refer to ASX announcement entitled "Barrambie – Successful Titanium Pilot and Project Update" released on 23 January 2020).

This represents a key milestone towards recovering value from both titanium and vanadium minerals at Barrambie and demonstrates the ability to make a high-purity intermediate chemical that is commonly produced by prospective titanium pigment customers, and can be readily benchmarked for value in use,

Barrambie titanium hydrolysate has also been shown to have very favourable morphology and chemical properties that offer numerous advantages for the pigment industry. They also support investigations by potential partners who will look to add value to titanium and vanadium/iron bearing concentrates prepared in Australia. With the commencement of the beneficiation pilot plant, and delivery of titanium chemical samples (from the Titanium pilot

plant) to end users in China, in the coming quarter we expect IMUMR should be in a position to formalise its scope of work in relation to the proposed Chinese demonstration facility. At completion of the proposed IMUMR demonstration trial 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.

The downstream processing (post beneficiation) focus will now shift to pilot scale extraction of a vanadium by-product from solutions produced during the leaching section of titanium piloting.

Approvals and Permits

During the quarter Neometals has received a five-year extension to its Ministerial Approval 911 to develop a fully integrated mine, concentrator and chemical processing facility. In January Neometals received approval of a Mining Proposal for a ~1Mtpa mining, crushing and screening operation. Neometals’ strategy is to have Barrambie development ready as it enters the final stage of demonstrating the significant value-in-use of its Barrambie mineral concentrates to the largest titanium pigment market, China.

Market Commentary

Titanium

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

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 TiO₂ units from the supply chain and in the absence of new supply coming online there is potential for a significant TiO₂ feedstock supply deficit of almost 1 million TiO₂ units by 2023.

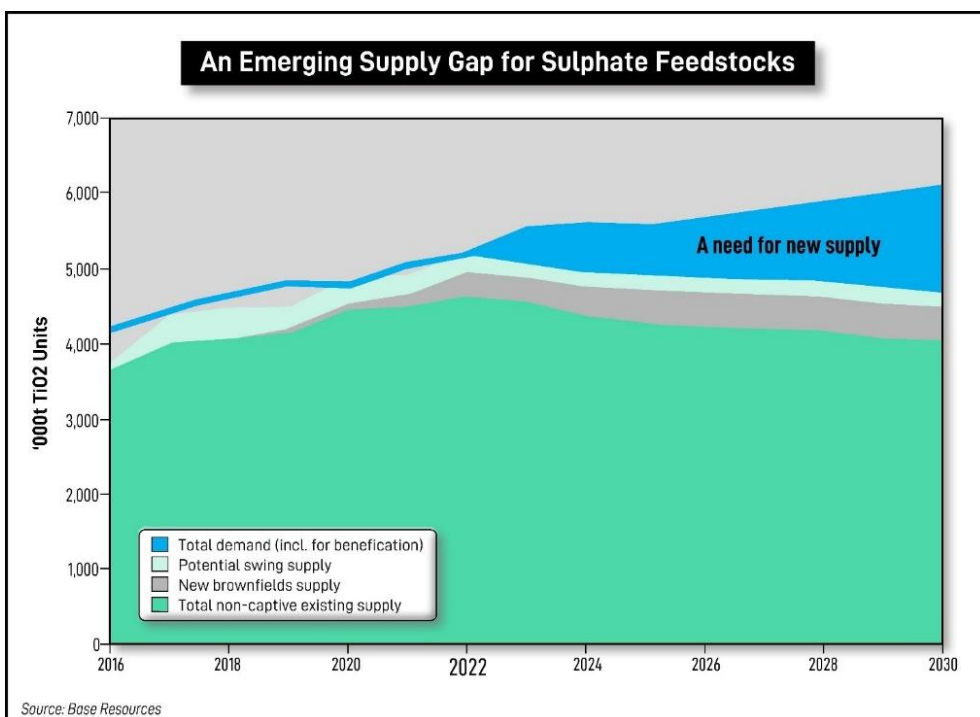


Figure 6 – Forecast production of TiO₂ showing a need for new sulphate feedstock supply from ~2022

For personal use only

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.

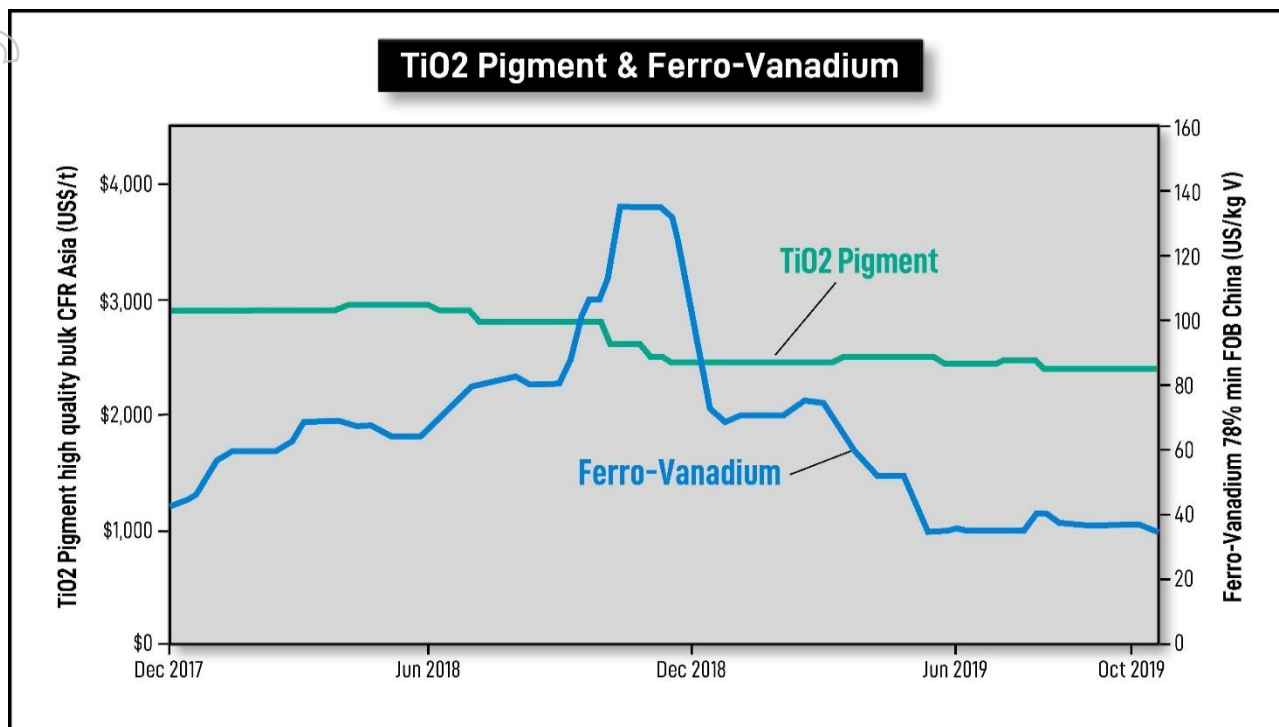


Figure 7 – Historical and forecast TiO_2 and V_2O_5 pricing

Lithium Refinery Project (Neometals 100%)

The key driver of the lithium refinery project (“**LR**”) is to realise value by 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**) 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.

The LR represents a strategic option for Neometals that will allow it to be prepared when the lithium market returns to a position of strength. Development timelines have been designed to align with projected supply deficits forecast from ~2025.

MOU with Manikaran Power

Pursuant to the MOU between the parties, Neometals and Manikaran Power Limited (“**Manikaran**”) have agreed to contribute their respective skills, resources and know-how to co-fund evaluation studies of the development of a LR in India and to share the costs of the evaluation equally. Upon completion of evaluation studies, and subject to agreement on terms, a final investment decision (“**FID**”) will be considered for a 50:50 joint venture (“**JV**”) to progress and develop the LR in India.

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

December quarter activities associated with the Manikaran MOU included:

- Evaluation of potential project sites that has identified Gujarat State as the recommended location for the feasibility study;
- Commercial terms and detailed geotechnical data for the preferred locations has been sought;
- Proposals evaluated for delivery of a Class 3 engineering cost study; and
- Proposals for design and estimates for major equipment packages and test work for integration into the above study were discussed and appointments proposed.

It is estimated that the engineering cost study will take approximately 12 months, with a decision on whether to form the JV and commence the detailed design to be considered thereafter.

Synthetic Zeolite from Lithium Refinery Residue

Zeolites are advanced industrial materials (naturally occurring and synthetically produced) used for water treatment, gas adsorption and green chemistry applications. Synthetic zeolites, including the types now produced by Neometals at bench-scale, are typically used in demanding industrial applications such as molecular sieves for air and hydrocarbon purification.

Using 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 LR waste. 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 on-going third-party commercial evaluation. In demonstrating that 'Type A' and 'Type X' zeolites can be produced from various sources of LR waste (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. Lithium refinery residue (LR waste) is topical at present and the potential to convert the largest waste stream into a valuable by-product makes not only economic sense, but more importantly, mitigates significant environmental challenges in disposal.

Neometals' zeolite development work is running in parallel with continued evaluation of the optimal design scale for its LR. Neometals 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 QUT.

During the quarter, Neometals was awarded joint funding from IMCRC. IMCRC will jointly-fund a \$2.57 million collaborative research project with Queensland University of Technology ("QUT") to set up a synthetic zeolite manufacturing plant (the "Pilot Project"). QUT will make in-kind contributions valued at approximately \$730,000 and will lead the research into the two-year Pilot Project, which will be established at QUT's Banyo pilot plant facility. The Pilot Project is scheduled to commence in February 2020 with commissioning in September 2020. Successful Pilot Project outcomes will drive a subsequent Class 3 Engineering Cost Study.

Activities during the quarter included ongoing QUT process testing, validation, preparation for pilot testing with ordering of long lead-time items and continued work on the ECS. Exyte delivered a draft of the capital cost results at the end of the quarter for review, operating costs are expected to be received by the end of February 2020. 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 commercial evaluation samples.

Commercial product evaluation will be undertaken in parallel with the Pilot Project, with product sent to zeolite manufacturers and end-users for independent product endorsement. The NMT Technology has successfully processed residues from multiple feedstock sources to support the potential to commercialise with third party lithium refiners.

For personal use only

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 and prepare for this transition.

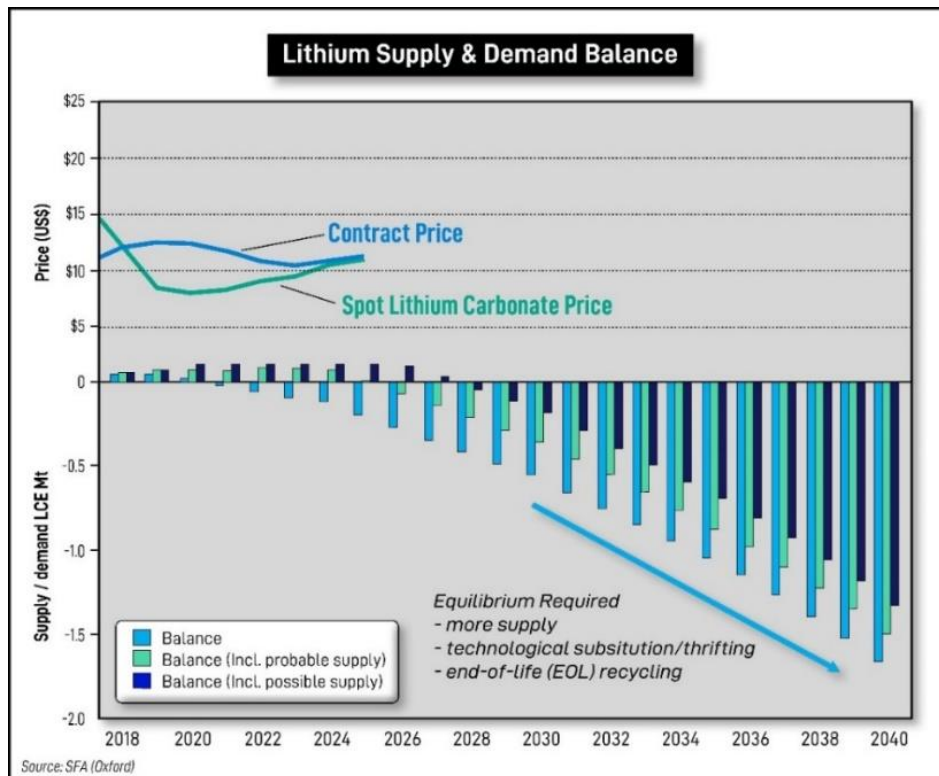


Figure 8 – Below the x-axis, projected lithium market supply/demand showing material supply deficit across all scenarios from ~2025. Above the x-axis, current declining spot lithium carbonate (proxy for lithium chemicals generally) price against flattening contract price with future convergence and a 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 ~2023 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).

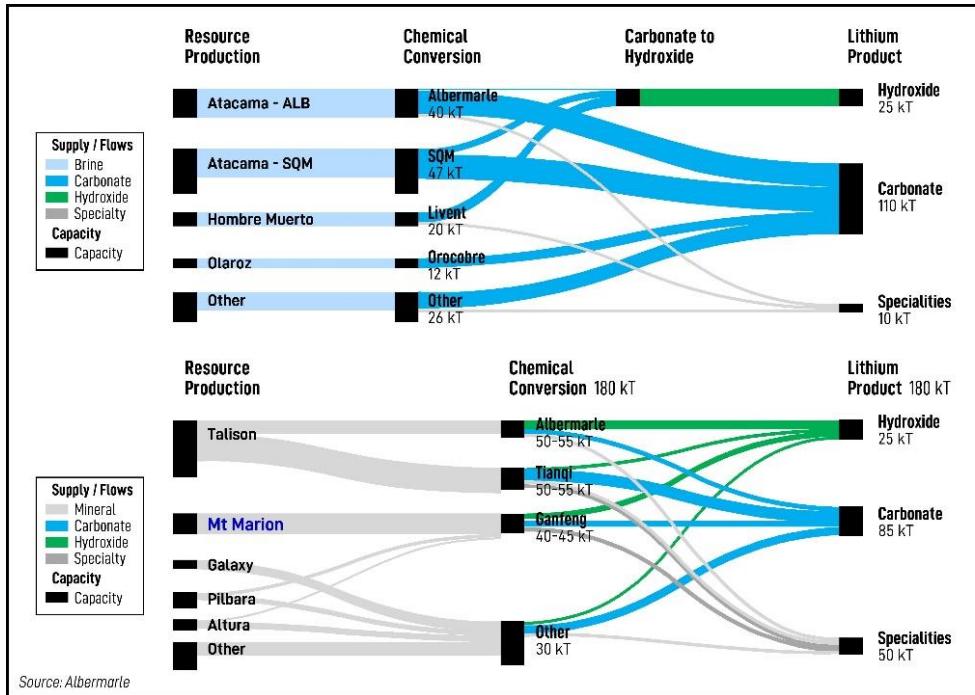


Figure 9 - Lithium Feedstock and Chemical Supply Flows

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 130,000 tonnes of contained nickel estimated across eleven nickel sulphide Mineral Resources held by Neometals (for full details refer to ASX announcement entitled “Additional Nickel Mineral Resource at Mt Edwards” released on 13 November 2019).

During the quarter, Neometals has been actively engaged in multiple drilling and exploration programs across the Mt Edwards project. Campaigns have included 2,545 metres for 13 holes of reverse circulation (“RC”) drilling, and 3,303 metres of air core drilling completed and sampled. With the acquisition of the nickel mineral rights for the Munda deposit in September, Neometals used new drill and sample information to re-interpret and update the Nickel Mineral Resource.

Neometals is methodically validating and improving the drill-hole database, and in turn re-interpreting the geology and the Mineral Resources. Exploration results to date, coupled with predicted material growth for nickel demand from the lithium-ion battery sector, give the Company strong encouragement regarding its alternatives to realise value for shareholders from Mt Edwards.

For personal use only

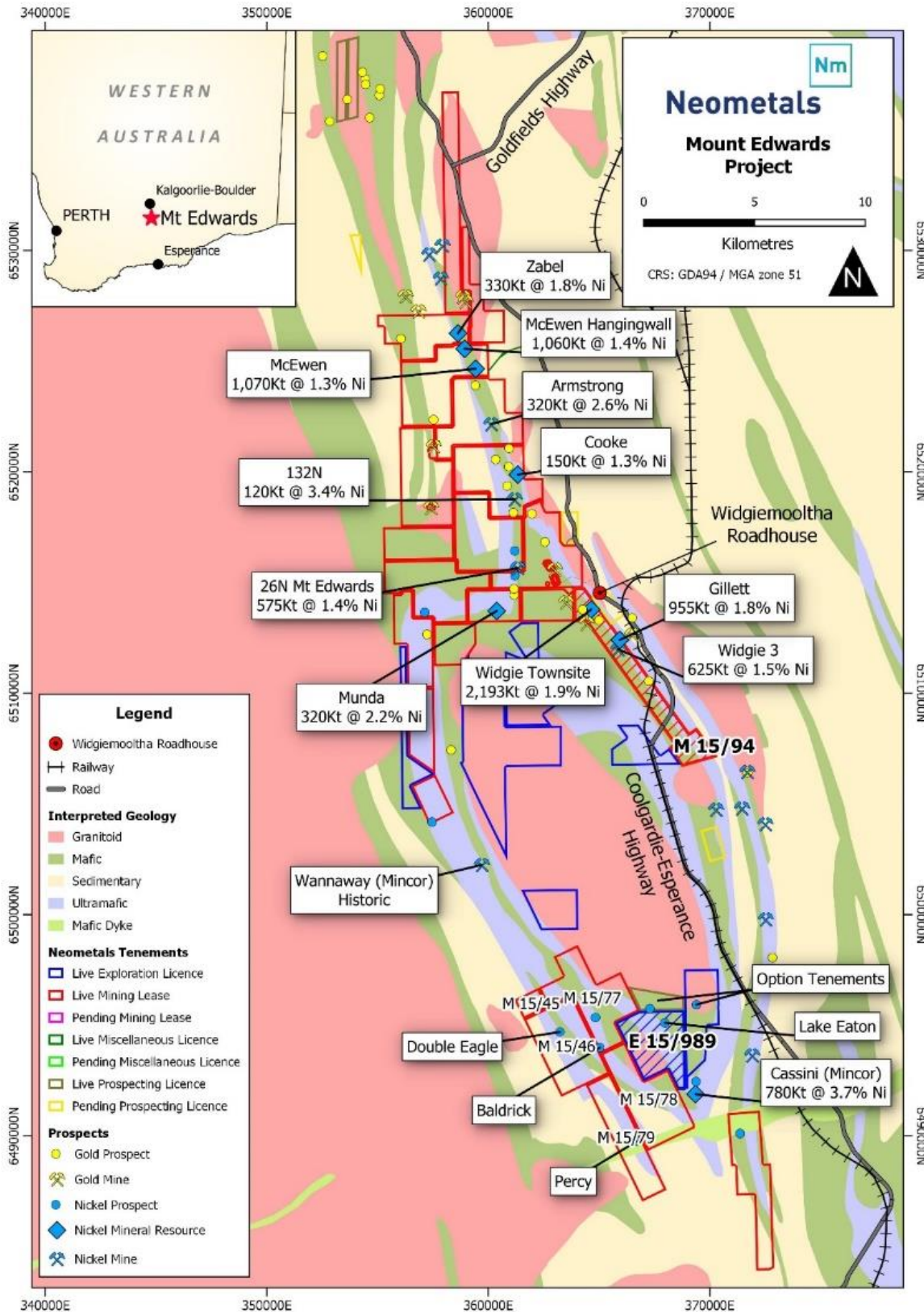


Figure 10 – Mt Edwards Project tenure including the Widgie South Trend on mining lease M15/94 (red diagonal stripes), and the Lake Eaton Prospect on exploration licence E15/989 (blue diagonal stripes). Nickel exploration was reported on or drilled on tenements, M15/45, M15/46, M15/77, M15/79, M15/94, M15/99, M15/102, E15/989 and E15/1553 during the quarter.

For personal use only

Exploration developments during the quarter can be summarised as follows:

Drill Results at the Munda Deposit

Following the September 2019 acquisition of the nickel mineral rights on Mining Lease M15/87, which includes the Munda deposit, Neometals arranged for diamond core drilled by the previous owners to be cut, sampled and submitted for assay. High grade results were returned which confirmed an 8.3 metres @ 2.29% nickel (down hole width) zone of nickel sulphide mineralisation from 93 metres down hole, with an enriched zone of 2.3m @ 6.11% nickel at the base of the ultramafic unit. This was the first drilling conducted for nickel exploration at the Munda deposit since 2007 (*for full details refer to ASX announcement entitled “Further Nickel Drill Results at Mt Edwards” released on 9 October 2019*).

Mineral Resource at the Munda Deposit

An Inferred Nickel Mineral Resource was estimated for Munda comprising 320,000 tonnes at 2.23% nickel for 7,140 tonnes of contained nickel.

Table 2 - Munda Inferred Mineral Resource Estimate

	Tonnes	Ni%	Fe%	Cu ppm	Mg %	As ppm	Co ppm	S %	Nickel tonnes
1% Nickel cut-off	508,000	1.85	10.9	1,020	15.8	40	420	3.9	9,398
1.5% Nickel cut-off	320,116	2.23	11.7	1,130	16.2	37	500	4.4	7,139
2% Nickel cut-off	197,000	2.54	12.2	1,250	15.8	25	440	4.6	5,004

Source: ASX announcement entitled “Additional Nickel Mineral Resource at Mt Edwards” released on 13 November 2019

Updated Total Mineral Resource at Mt Edwards

The Munda Nickel Mineral Resource has bolstered the global Mineral Resources at Mt Edwards to 7.7 Million tonnes at 1.7% nickel for circa 130,400 tonnes of contained nickel (*for full details refer to ASX announcement entitled “Additional Nickel Mineral Resource at Mt Edwards” released on 13 November 2019*).

Widgie South Trend Drilling

During the quarter the company completed a 13 hole, 2,419 metre RC drill and sample program across the prospects and deposits comprising the ‘Widgie South Trend’. High grade nickel sulphide assay results were returned including:

- 16 metres @ 1.45% nickel including 2 metres @ 4.79% and 5 metres @ 1.81% nickel;
- 21 metres @ 1.05% nickel including 4 metres @ 2.42% nickel; and
- 7 metres @ 1.37% nickel including 3 metres @ 2.39% nickel.

Drilling, sampling and down-hole electromagnetic (“DHEM”) surveys were conducted across the Widgie 3 and Gillett deposits and the Widgie 3 North, Rhona and Widgie 3 South prospects within the Widgie South Trend. Assay results support the interpretation of thick disseminated nickel sulphide intercepts (up to 21 metres down-hole width) with smaller high-grade zones of matrix, semi-massive to massive nickel sulphide. The results also confirm strike extension of nickel mineralisation at Gillett, both to the North (~110 metres) and to the South (~275 metres), supporting at least a 50% increase in known strike length beyond the current Gillett Mineral Resource (*for full details refer to ASX announcement entitled “Mt Edwards Nickel – Drill Results from Widgie South Trend” released on 11 December 2019*).

For personal use only

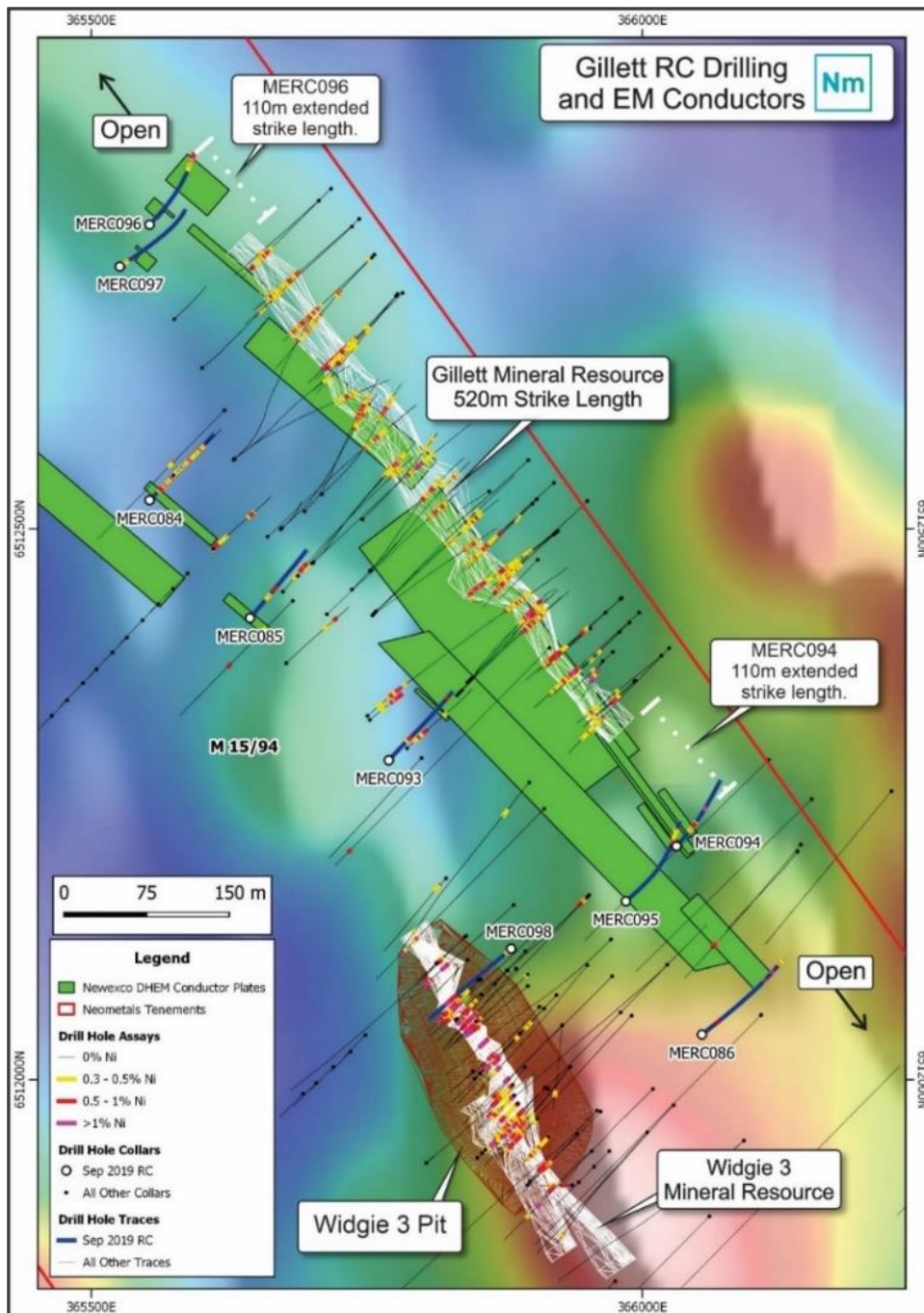


Figure 11 - Map showing potential strike extension of the Gillett Mineral Resource and the location of the Widgie 3 Mineral Resource and historic pit. Historic drill traces and collars in black. Recent drilling is labelled with traces in blue. Modelled EM conductor plates are the green polygons.

Neometals is encouraged by the potential extension of mineralisation from the Gillett Mineral Resource. In addition to the positive assay results, Neometals has conducted DHEM surveys on the 13 drill holes completed at the Widgie South Trend which show several conductors considered to be strong targets for nickel sulphide mineralisation.

DHEM surveys of historical drill holes at Widgie South Trend

As a further advance in the exploration of the area, 10 historical diamond holes (up to 621 metres depth) across the Widgie South Trend area have been cleaned out using a diamond drill rig and 40 or 50 mm PVC casing has been installed to enable DHEM surveying to test for conductors.

The DHEM surveying of more than 4,000 metres of historic drill holes was carried out in late December and interpretation of the results is underway.

Future Planned work at Widgie South Trend

The Company now has confidence that additional work in the area is justified and is keen to realise the potential of the Widgie South Trend. Work planned for Q1 2020 includes infill drilling to improve the understanding of the Gillett, Widgie 3 and Widgie Townsite deposits, and to test the modelled electromagnetic (“EM”) targets. Development studies and site permitting work is planned to commence in the March quarter.

Other Nickel Exploration at Mt Edwards

In addition, Neometals completed a 3,303 metre air core drill program across the Baldrick, Percy and Double Eagle prospects located on Mining Leases M15/45, M15/46, M15/77 & M15/79. The areas investigated are on the western side of the Widgiemooltha dome and south of Mincor’s Wannaway Nickel mine. Results from the air core drill and sample program are pending.

Neometals has recently exercised its option to acquire Exploration Licence E15/1553 and Prospecting Licence P15/6092. An 8-hole RC drill program was recently completed for 1,257 metres on Exploration Licence E15/1553, located less than 2 kilometres north of Mincor’s Cassini Mineral Resource (1.25Mt @ 4.0% nickel). Assay results from the RC drill and sample program on Exploration Licence E15/1553 are pending.

An additional 3 holes of RC drilling for 826 metres was carried out on Mining Lease M15/99 in December to test for nickel sulphide mineralisation. Results from this program are also pending.

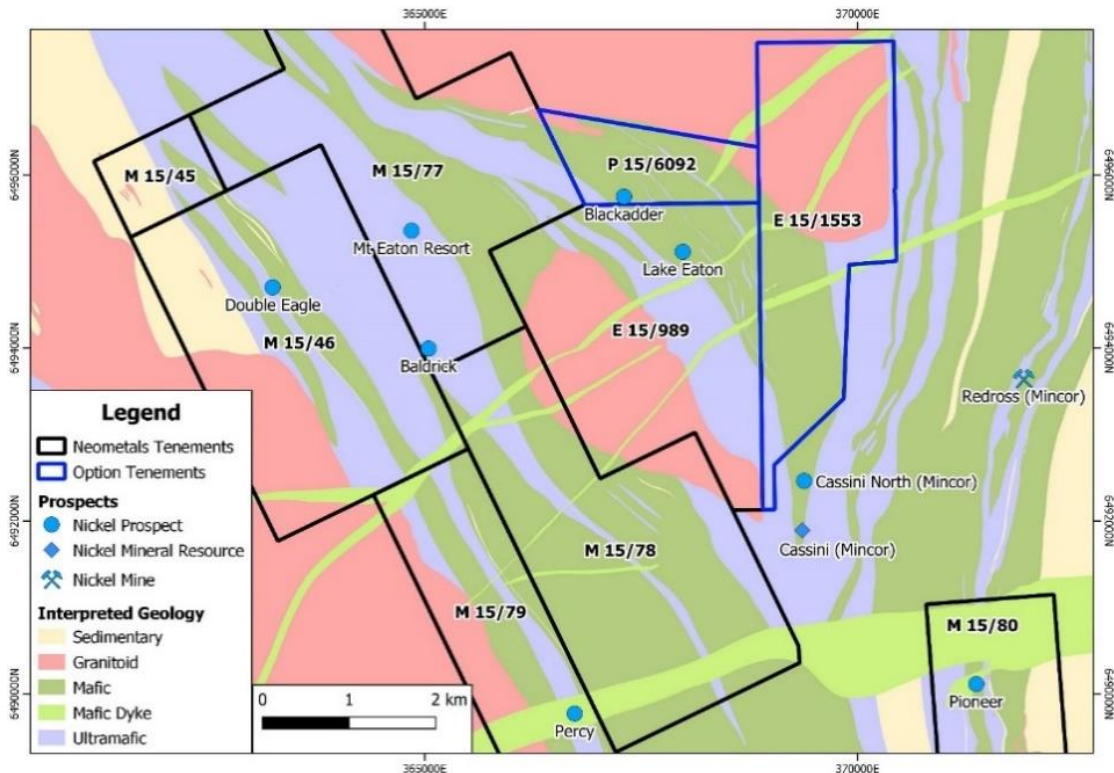


Figure 12 – Neometals has exercised an option to acquire E15/1553 and P15/6092, shown in blue in the figure above, and carried out an 8-hole RC program in late November. A 93 hole, 3,303 metre Air Core program has also been carried out on the adjacent Double Eagle, Baldrick and Percy prospects on M15/45, 46, 77 & 79.

For personal use only

CORPORATE

Commercial

During the quarter, Neometals concluded two partnering agreements relating to the LIB recycling and Barrambie projects. These developments follow a similar partnering agreement for the lithium refinery project in the September quarter, with all three projects now co-funded through to JV decisions with the respective partners.

Financial

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

As at 31 December 2019 Neometals holds 706,209,483 ordinary fully paid shares (36% of the issued capital) in Hannans on an undiluted basis. At 31 December 2019, Hannans' shares closed at 0.9c implying a value of \$6.4M.

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 31 December 2019 totaled \$1.5M.

Finances (unaudited)

Cash and term deposits on hand as of 31 December 2019 totalled A\$100.7 million, including \$4.2 million in restricted use term deposits supporting performance bonds and other contractual obligations. The Company has net receivables and listed securities totalling approximately \$9.9 million.

Issued Capital

The total number of shares on issue at 31 December 2019 was 544,438,217.

ENDS

Authorised on behalf of Neometals by Christopher Reed, Managing Director

For further information, please contact:

Chris Reed

Managing Director
Neometals Ltd
T: +61 8 9322 1182
E: info@neometals.com.au

Jeremy Mcmanus

General Manager - Commercial and IR
Neometals Ltd
T: +61 8 9322 1182
E: jmcmanus@neometals.com.au

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

23/01/2020	Barrambie – Successful Titanium Pilot and Project Update
11/12/2019	Mt Edwards Nickel – Drill Results from Widgie South Trend
20/11/2019	Barrambie – Outstanding Titanium Test Work Results
13/11/2019	Additional Nickel Mineral Resource at Mt Edwards
9/10/2019	Further Nickel Drill Results at Mt Edwards
21/05/2019	Barrambie Vanadium DFS Results and Start of Titanium Pilot
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 from the original market announcements.

About Neometals Ltd

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

Neometals has 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;
- 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 with potential JV partner IMUMR; and
- Lithium Refinery Project – co-funding evaluation studies for the development of a lithium refinery to supply lithium hydroxide to the lithium battery industry with potential JV partner Manikaran Power, underpinned by a binding life-of-mine annual offtake option for 57,000 tonnes per annum of Mt Marion 6% spodumene concentrate.

APPENDIX 1: TENEMENT INTERESTS

As at 31 December 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	L15/397	50%	Pending

For personal use only

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

^Nickel Mineral rights only

**Lithium and Nickel Mineral rights only

No gold interest

Changes in interests in mining tenements

Interests in mining tenements acquired or increased

Project Name	Licence Name	Acquired or Increased
Mt Edwards	E15/1749	Application
Mt Edwards	P15/6092	Acquired
Mt Edwards	E15/1553	Acquired

Interests in mining tenements relinquished, reduced or lapsed

Project Name	Licence Name	Relinquished, Reduced or Lapsed
Mt Edwards	E15/1562	Withdrawal

For personal use only