

Greener Battery Materials

Corporate Presentation | May 2022

ASX Code: **NMT** | AIM Code: **NMT** | Frankfurt: **9R9** | OTC Code: **RDRUY**

Authorised for release by Christopher Reed,

Managing Director of Neometals

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Summary information:

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Financial data:

All figures in this document are in Australian dollars (AUD) unless stated otherwise.

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Compliance Statement:

The information in this document that relates to the Mineral Resource Estimate for the Barrambie VTM Project has been extracted from the ASX Release set out below, which is available at www.neometals.com.au

17/04/2018

Barrambie Project – Mineral Resource Update

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 Person’s findings are presented have not been materially modified from the original market announcements.

EXECUTIVE SUMMARY



Neometals

Neometals is an emerging, sustainable battery materials producer.



3 business units supporting energy transition in the EV / ESS supply chains:

1. Li-ion Battery Recycling (Ni/Co)
2. Vanadium Recovery
3. Lithium Chemicals



Underpinned by proprietary, green, processing technologies

- 16 Granted Patents
- 54 Patents Pending



ESG commitment. Recycling and recovery minimise reliance on mined materials and reduce carbon footprint



Focus on continuous development and innovative commercialisation with strong partners



Strong, growing team with track-record of value creation, project execution and shareholder return.


CORE BUSINESS SNAPSHOT

TWO PROJECTS REACHING FID IN 2022





Technology

Partners

Projects

**Lithium-ion
Battery
Recycling**


50:50 Incorporated JV **Primobius**



Mercedes-Benz




FID: 50tpd – SepQ 22

CAPEX: US\$165m⁽¹⁾

OPERATIONS:
2H 2023

**Vanadium
Recovery**

Evaluating a 50:50 JV



H₂green steel


FID: End 2022

CAPEX: US\$184M⁽²⁾
(200ktpa capacity)

OPERATIONS:
1H 2025

**Lithium
Chemicals**

Evaluating a 50:50 JV via RAM
(70% NMT/30% MIN)




FID: End 2023

CAPEX: TBA

OPERATIONS:
End 2025

⁽¹⁾ For further information, refer to ASX release dated 7th May 2021 – “Lithium Battery Recycling - Outstanding Cost Estimates” and the assumptions set out therein.

⁽²⁾ For further information, refer to ASX release dated 4th May 2021 – “Vanadium Recovery Project - Outstanding PFS Results” and the assumptions set out therein.

GREEN BATTERY MATERIALS PORTFOLIO

FOCUS ON EUROPE AND NORTH AMERICA

EMERGING AS WORLDS 2ND AND 3RD BIGGEST BATTERY PRODUCING REGIONS



EXPERIENCED AND GROWING TEAM



Steven Cole
Chair



Chris Reed
Managing Director /
CEO



Dr Natalia Streltsova



Doug Ritchie



Dr Jennifer Purdie



Les Guthrie



Jason Carone
Company Secretary /
CFO



Paul Wallwork
GM – Marketing and
Product
Development



Michael Tamlin
COO/Lithium



Darren Townsend
CDO/Vanadium



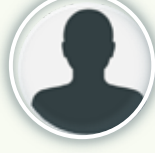
Giuliano Giordani
Financial Controller



Jeremy Mcmanus
GM – Investor
Relations and
Commercial



Dirk Kotzee
Manager – Project
Services



TBA
Head of Recycling



Gavin Beer
GM – Lithium
Processing



Irena Ivanova
GM – Evaluation
Studies



David Robinson
GM – Metallurgy and
R&D



Greg Hudson
GM – Geology



Casper Adson
GM – Barramie
Project



Pablo Carabajal
Manager - Finance



Anél Joubert
Manager - ESG



Matthew Carter
Manager - Data



Matthew Read
GM – Lithium
Projects



Adam Farghaly
Metallurgist



Rihanna Vanin
Project Engineer



Eric Taarland
GM – Vanadium
Marketing



Owen Casey
Senior Project
Geologist

NEOMETALS TRACK RECORD

ASX: NMT | OTC:RDRUY | AIM: NMT

Shares on Issue	m	548.4
Share Price ⁽¹⁾	A\$	1.40
Market Cap	A\$m	768
Cash ⁽⁴⁾	A\$m	65.2
Debt	A\$m	-
Investments ⁽⁴⁾	A\$m	46.5
Shareholders	#	~14,349

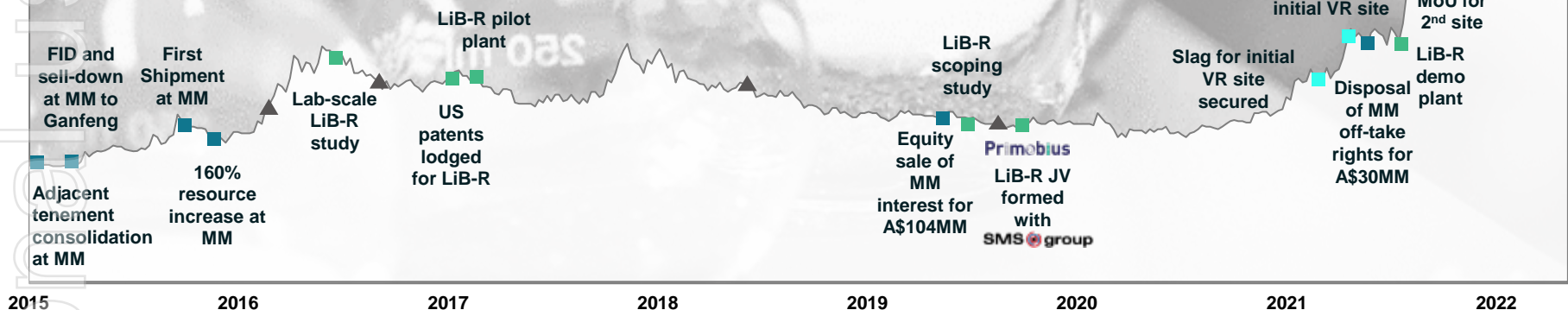
~A\$768MM
market capitalisation⁽²⁾

2022

70% p.a. TSR since 2015⁽³⁾ when Neometals transitioned its focus to battery materials

2015

~A\$19MM
market capitalisation⁽¹⁾



Note: Weekly average share price shown on chart.

1. Based on market close 1 January 2015. Sourced from CapIQ.

2. Based on market close 13 May 2022. Sourced from CapIQ.

3. Compound annual growth rate in Total Shareholder Returns (TSR) assuming dividend re-investment between 1 January 2015 and 5 May 2022. Sourced from Bloomberg

4. As at 31 March 2022.

- Mount Marion "MM"
- Vanadium Recovery "VR"
- ▲ Dividend Announced
- Battery Recycling
- ELi® Lithium Process
- Other NMT Event



ASX: NMT
neometals.com.au



LITHIUM-ION BATTERY RECYCLING

Intellectual Property Holding Company
100% Neometals (SMS group earning 50%)

Primobius GmbH – Commercialisation
Incorporated 50:50 JV with SMS group

Primobius

Battery recycling without limits

ISSUE

PARTICIPANTS IN THE BATTERY VALUE CHAIN ARE SEEKING SOLUTIONS TO REDUCE CO₂ AND SATISFY REGULATORY / MORAL OBLIGATIONS



Fire Risk



Pollution (GHG)



Landfill



Material Shortages / \$

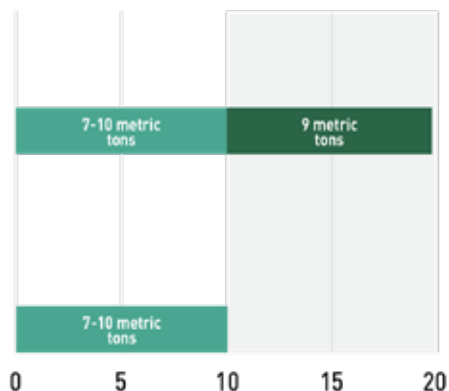


Circular Economy

Vehicle Manufacturing CO₂ Emissions

Vehicle Production

Battery Production
(raw materials & cell making)



Electric car



Internal combustion engine car

Source: Duesenfeld

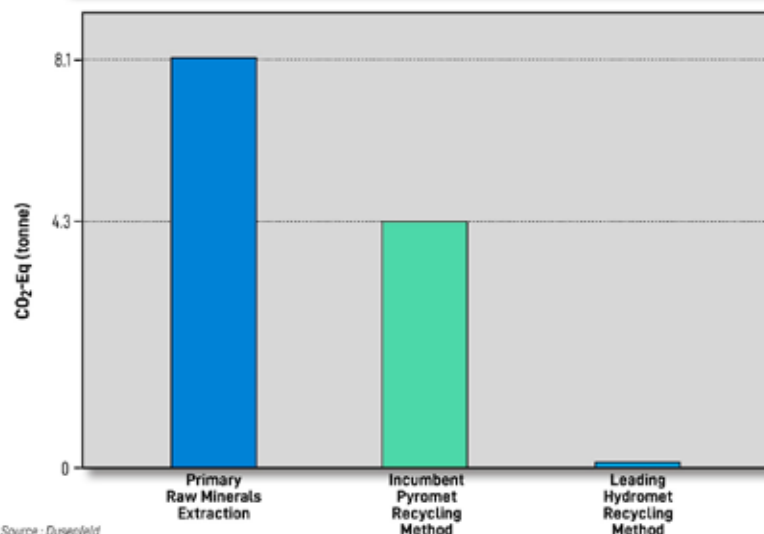
NEED



LARGE OPPORTUNITY FOR SUNRISE HYDROMETALLURGICAL RECYCLING PROVIDERS

- Solution to OEM's needing to meet proposed regulations
- Strategic supply chain resilience
- Support to circular economy
- Compelling total addressable market ("TAM")

Raw Material CO₂ Savings - Traditional Mining vs Battery Recycling



Source: Duesenfeld

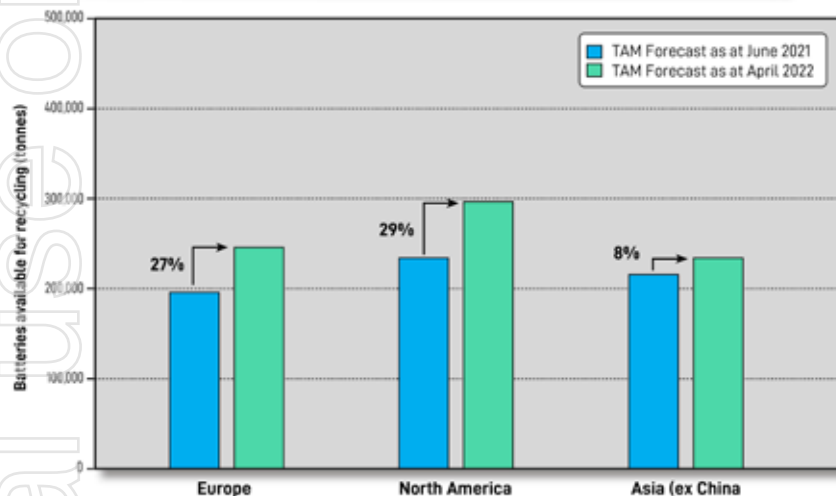
MARKET – REQUIRES ST CAPACITY AND LT SCALE



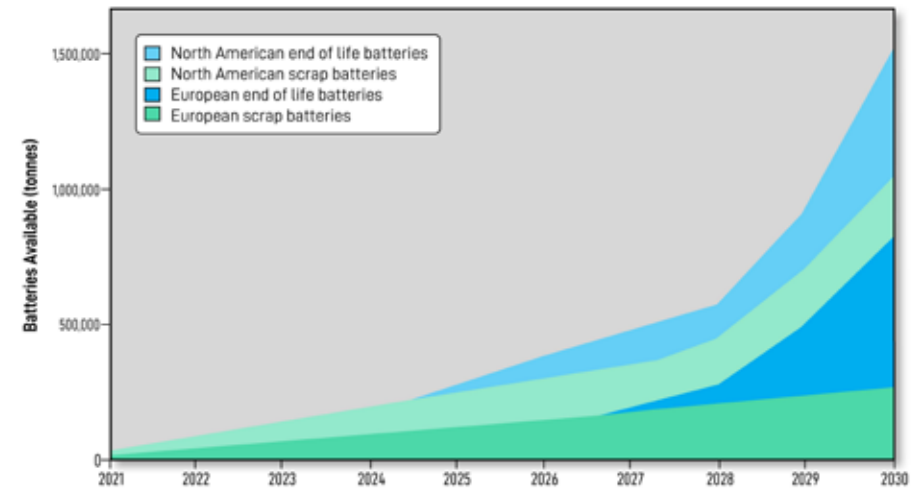
PRIMOBIOUS' DEVELOPMENT READINESS DOVETAILS WITH AN EXPLOSION OF EV AND CELL MANUFACTURING PLANTS AND LARGE VOLUMES OF END-OF-LIFE EVS MID-DECADE

NEED MORE PLANTS AND BIGGER PLANTS

Lithium-ion Batteries Available for Recycling by Region in 2026



European/North American Battery Availability



Source: Benchmark Mineral Intelligence

Source: Benchmark Mineral Intelligence (Gigafactory cell capacity, June 2021 & Apr 2022) and Neometals Management (utilisation rate 75%, scrap rate 15%, 8 year battery life, and cell weight 4.5g/Wh)

PRIMOBIUS SOLUTION



NEOMETALS PROCESSING TECHNOLOGY BACKED BY LEADING
GERMAN PLANT BUILDER, SMS GROUP

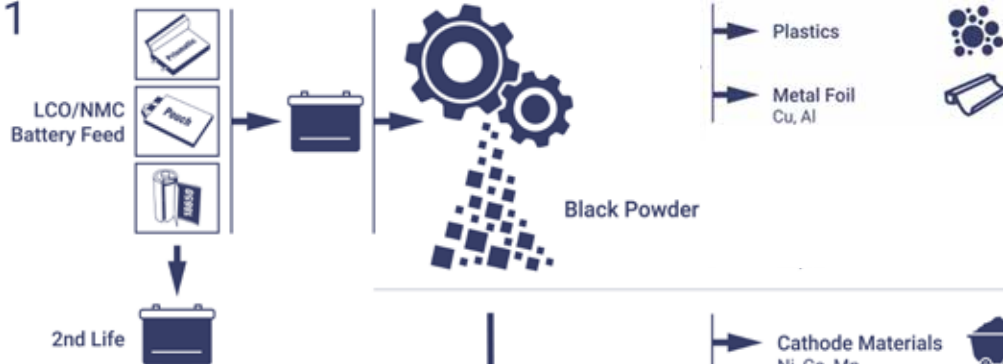
SAFE, ENVIRONMENTALLY-FRIENDLY PROCESS PRODUCING HIGH
PURITY, LOW CARBON BATTERY MATERIALS

Primobius
Battery recycling without limits

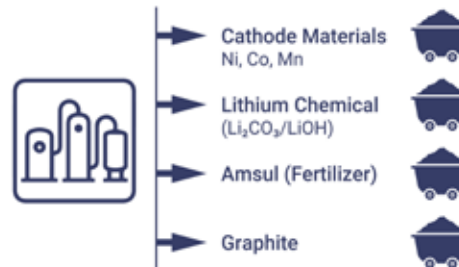
SMS  **group**

Neometals High-Level Flowsheet

STAGE 1 SHREDDING & SORTING



STAGE 2 REFINING

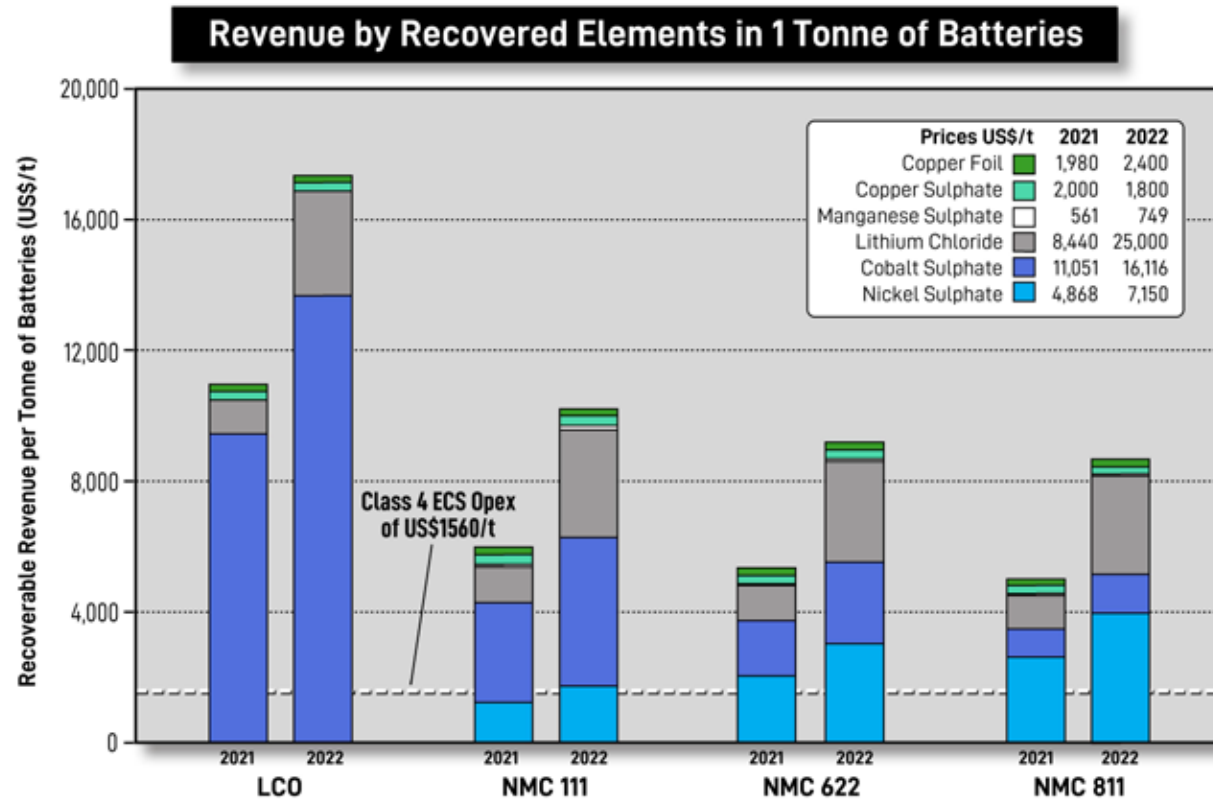




FINANCIAL METRICS

AACE CLASS 4 ENGINEERING COST STUDY ESTIMATES, $\pm 25\%$ ACCURACY, MAY 2021

US\$165M CAPEX FOR 50 TONNE PER DAY* – 18,250 TONNE PER ANNUM BATTERY CAPACITY



Source : Pricing - Fastmarkets (Cobalt, Nickel, Manganese - Spot Feb. 2022),
Neometals Mangement (Lithium - 2022 Forecast), Class 4 Study (2021 Prices)
Battery cell composition and product recovery - Class 4 Engineering Cost Study (May 2021)

*For further information, refer to ASX release dated 7th May 2021 – “Lithium Battery Recycling - Outstanding Cost Estimates” and the assumptions set out therein.



FLEXIBLE BUSINESS MODELS

MULTIPLE REVENUE GENERATION OPPORTUNITIES VIA FLEXIBLE OPERATING MODEL

- Target industrial-scale feed volumes direct from OEMs
- Primobius JV to execute global rollout
- Primobius underpinned by large delivery partner (SMS group) with ability to guarantee plant performance

1



Principal

Primobius to responsibly process production scrap or EOL batteries for a fee. Customer option to purchase all products under offtake agreement.

2



Partnership

Primobius to build and operate recycling plant(s) both share economic returns – JV etc. Partner option to purchase all products under offtake agreement.

3



License

License IP directly for royalty and potentially EPC recycling plant(s).

STATUS - COMMERCIAL PIPELINE



FIRST SHREDDING COMMERCIAL OPERATIONS PENDING H1 2022.
PIPELINE OF ADDITIONAL COMMERCIAL OPPORTUNITIES MATURING

		Commercial Operations				
		 Battery recycling without limits		 The Steel Company of Canada	 Battery recycling without limits	
		 10tpd Shredder	 10tpd Integrated*	 50tpd Integrated	 50tpd Integrated	 50tpd Integrated
 Plant Type		Shredding	Shredding/Refining	Shredding/Refining	Shredding/Refining	Shredding/Refining
 Product/s		Black Mass	Black Mass & BGMS ⁽¹⁾	Black Mass & BGMS ⁽¹⁾	Black Mass & BGMS ⁽¹⁾	Black Mass & BGMS ⁽¹⁾
 Status		Production Ready	Front End Engineering FEL 1	Front End Engineering FEL 2 (Shredder)	Class 3 Engineering Cost Study	Demonstration Trials
 Location/s		Hilchenbach Germany	Kuppenheim Germany	Hamilton Works Canada	Germany	Japan
 Business Model		Principal	Limited Royalty-Free R&D License	License & JV Option	Principal/JV	MOU for JV

1. BGMS = Battery Grade Metal Sulphates

*For full details refer to Neometals ASX release dated 13th May 2022 titled "Cooperation with Mercedes-Benz "

MERCEDES-BENZ



COOPERATION AGREEMENT WITH MERCEDES-BENZ (LICULAR GMBH)*

- Primobius selected to provide LICULAR engineering, supply and installation of equipment for a 2,500tpa Recycling Plant;
- Primobius will enter into a long-term research and development collaboration to recycle next generation cell formats and chemistries;
- Primobius to provide a non-exclusive technology licence, know-how, staff training, engineering support and plant management support to LICULAR; and
- Primobius and LICULAR to jointly evaluate an industrial-scale operation using Primobius' recycling technology and during the Recycling Plant operations period.

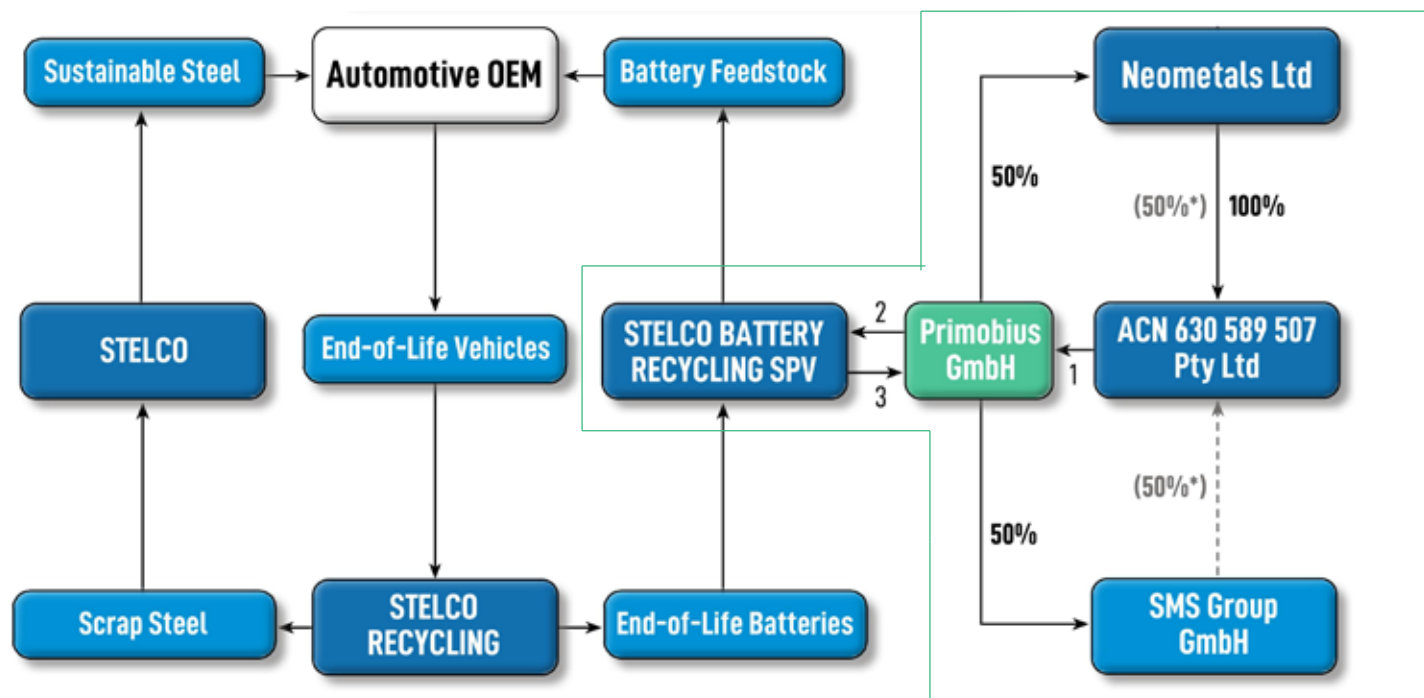
*For full details refer to Neometals ASX release dated 13th May 2022 titled "Primobius Executes Cooperation Agreement with Mercedes-Benz"

STELCO



TECHNOLOGY LICENSE AND JV OPTION (≤50%) WITH STELCO IN NORTH AMERICA*

- Steel Company of Canada (Stelco) transitioning to EAF production (greener steel)
- EAF needs scrap steel, EOL vehicle recycling is key source of scrap feed for Stelco
- More EOL vehicles are EV, lithium batteries require recycling, OEM's want to close the loop



1. ACN 630 grants limited Commercial licence
2. Primobius to sublicense to Stelco Battery Recycling SPV (10% GSR)
3. SPV grants Primobius option to acquire 25-50% of SPV in consideration for GSR 0% + reimbursement (sunk costs to date - evaluation costs etc)

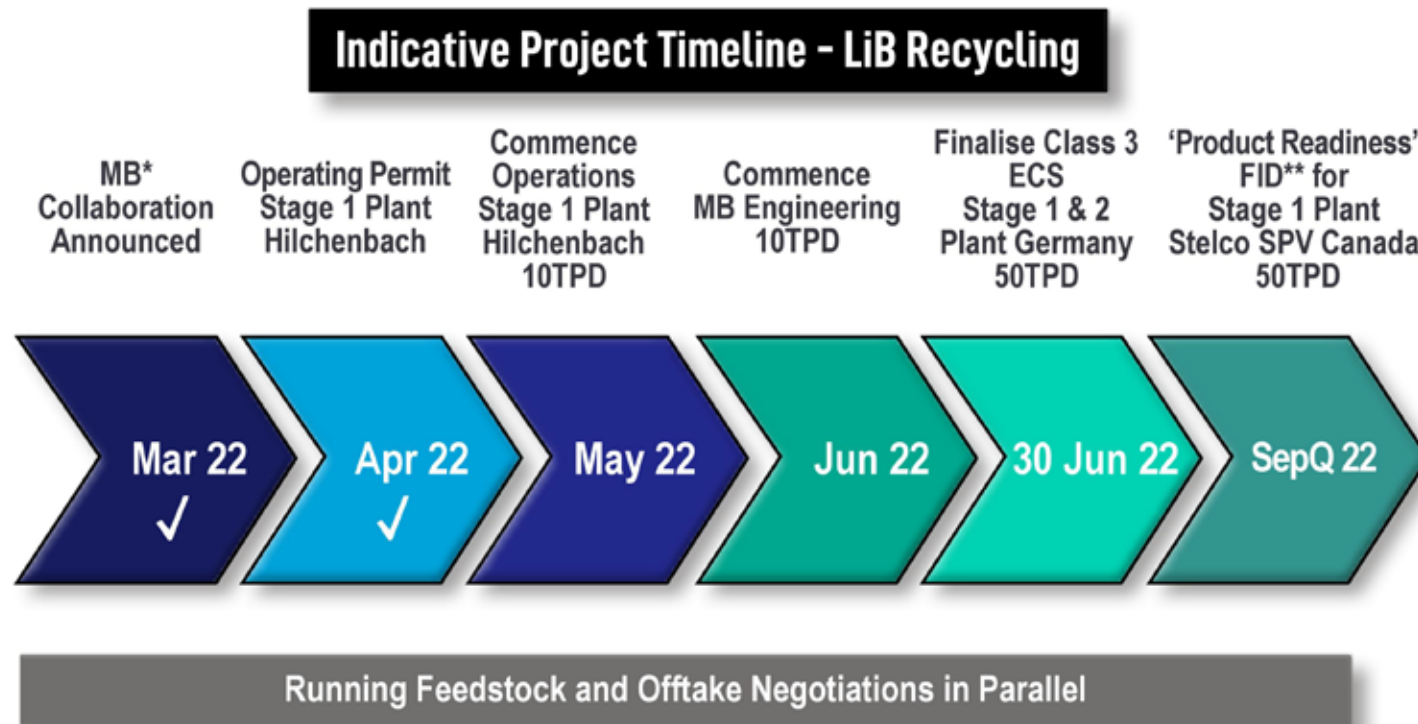
* SMS will be issued new shares upon 'Commercial Operations' by Primobius

*For full details refer to Neometals ASX release dated 31st December 2021 titled "Battery Recycling - Binding Agreements with Stelco for NA"



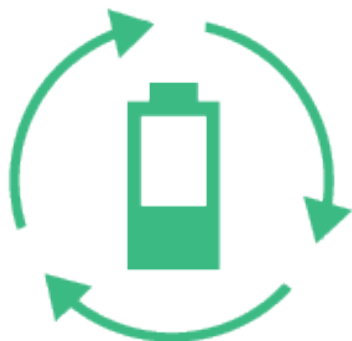
INDICATIVE TIMELINE

DEMONSTRATION TRIALS FOR FEASIBILITY COMPLETE AND AACE CLASS 3 ENGINEERING COST STUDY FOR 50TPD INTEGRATED (STAGE 1 & 2) OPERATION ON TRACK FOR COMPLETION BY END OF JUNE 2022



*Mercedes-Benz, Licular GmbH Project ** Subject to Board Approval and Primobius Board Approvals.

INVESTMENT CASE



LITHIUM-ION BATTERY RECYCLING

1

Auto OEMs and Batterymakers Require a LiB Recycling Solution

Global volume of 'end of life' LiBs available for recycling expected to grow at 18.8% per annum over the next ~10 years⁽¹⁾. Highlighted by Stelco whole of vehicle recycling business model.

2

Environmentally Friendly Process Differentiated from Incumbent Technology –16 National Phase Patents pending

Hydromet process has a negligible CO₂ emission footprint compared to primary minerals extraction or the incumbent pyromet recycling process for Li-B batteries

3

Flexible and Robust LiB Recycling Technology

Multiple battery chemistries, formats and types can be processed with lower emissions and less transport required than pyrometallurgical incumbents.

4

Attractive Economics and Exposure to Battery Metal Prices

High purity chemicals not intermediates for ethical supply to the cathode producer supply chain with better recovery and lower emissions than pyrometallurgical incumbents

5

SMS Partnership and Flexible Business Plan Attracting OEM Partners

SMS operational and manufacturing capability applied to a flexible business model provides a material speed to market advantage. Technology and business model validation from brand names like Mercedes and Stelco

1. Source: Circular Energy Storage 'The Lithium Battery Life-cycle Report 2021'



VANADIUM

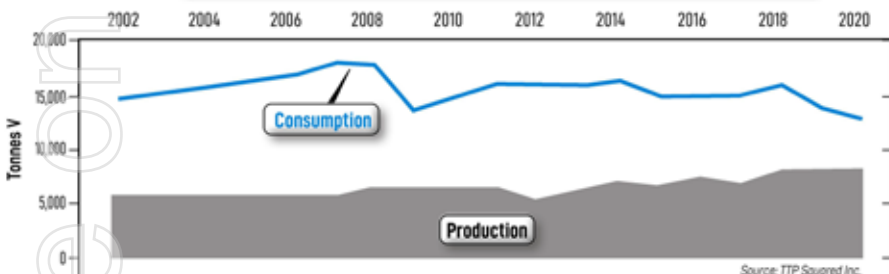
Vanadium Recovery Process Technology
100% Neometals

Vanadium Recovery Project 1 - Finland
Evaluating a 50:50 Incorporated
JV with Critical Metals Ltd

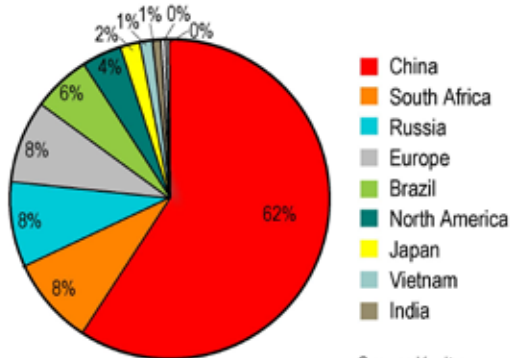
ISSUE

- EU in supply deficit and totally reliant on Russian feedstock
- World reliant on Chinese production but it is a net importer!

Annual Vanadium Production & Consumption, Europe (excl Russia)



Vanadium Production by Country 2020

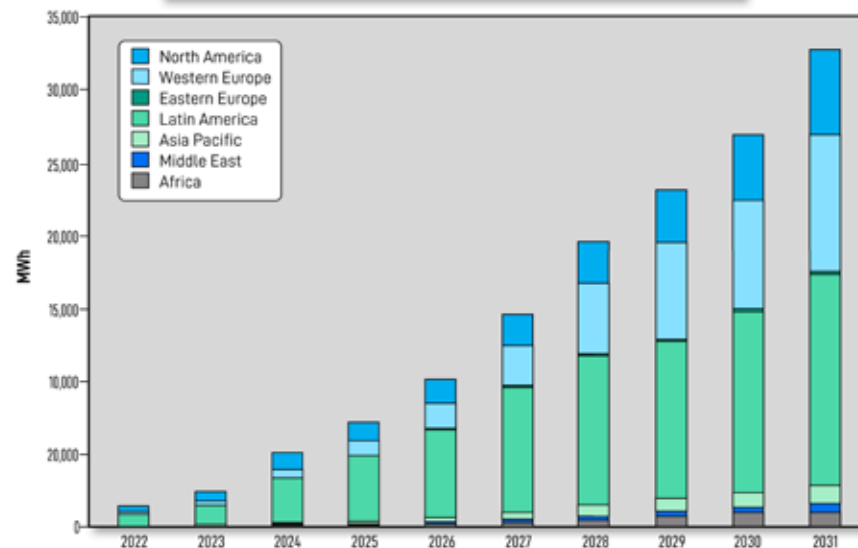


NEED



- EU domestic sustainable sources of this critical battery material
- Low or zero carbon supply footprint required by EU
- High purity material in volumes for VRB and LiB applications

Annual Installed VRFB Utility-Scale & Commercial & Industrial Battery Deployment Energy Capacity by Region

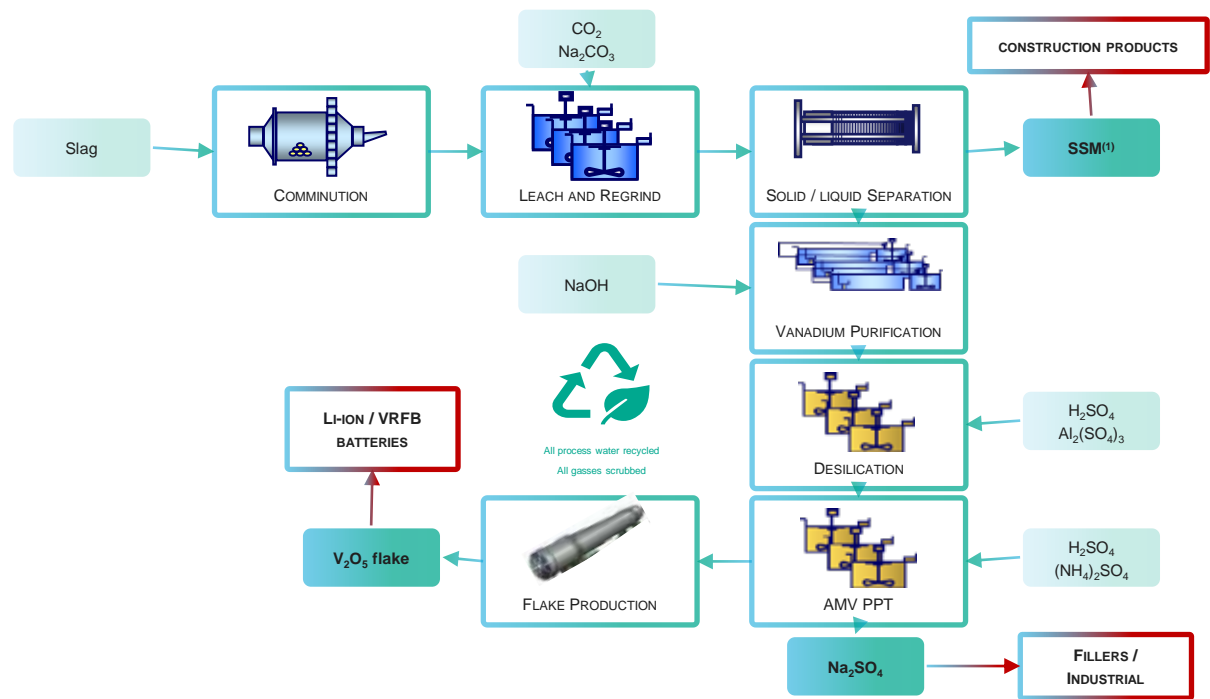




NEOMETALS SOLUTION

UNIQUE VANADIUM RECOVERY PROCESSING TECHNOLOGY TO SUSTAINABLY PRODUCE HIGH-PURITY GRADE VANADIUM WITH LOWEST CARBON FOOTPRINT

- Utilise stockpiled by-product of the Scandinavian steel industry
- Unique (EU patent pending) hydrometallurgical process which can utilise captured CO_2 from local emitters as primary leaching reagent
- Can permanently chemically sequester CO_2 in tailings product, potential for use in building products as inert filler.
- Potential for negative/zero carbon production of battery-grade material
- Conventional equipment configured in a fully piloted novel process





CURRENT STATUS

SUCCESSFUL PILOT TRIALS COMPLETE, PROCESSING SITE SECURED,
FEASIBILITY STUDY NEARING COMPLETION, MOU FOR BY-PRODUCT OFFTAKE

PROJECT 1 – PORI, FINLAND (VRP1)

- Neometals funding evaluation to FID for the recovery of vanadium using NMT's proprietary eco-friendly hydromet process and developing as a 50:50 Incorporated JV with Critical Metals Ltd
- Supply Agreement with Scandinavian steel giant SSAB for $\geq 2\text{Mt}$ of high-grade vanadium-bearing by-product ("Slag")

PROJECT 2– BODEN, SWEDEN (VRP2)¹

- MoU⁽¹⁾ with H2 Green Steel (future green steel producer) to evaluate second, larger, vanadium production operation



⁽¹⁾ H2GS MoU is non-binding. For full details refer to ASX release dated 13th September 2021 titled "H2GreenSteel MOU for 4 Mt High-Grade Slag"



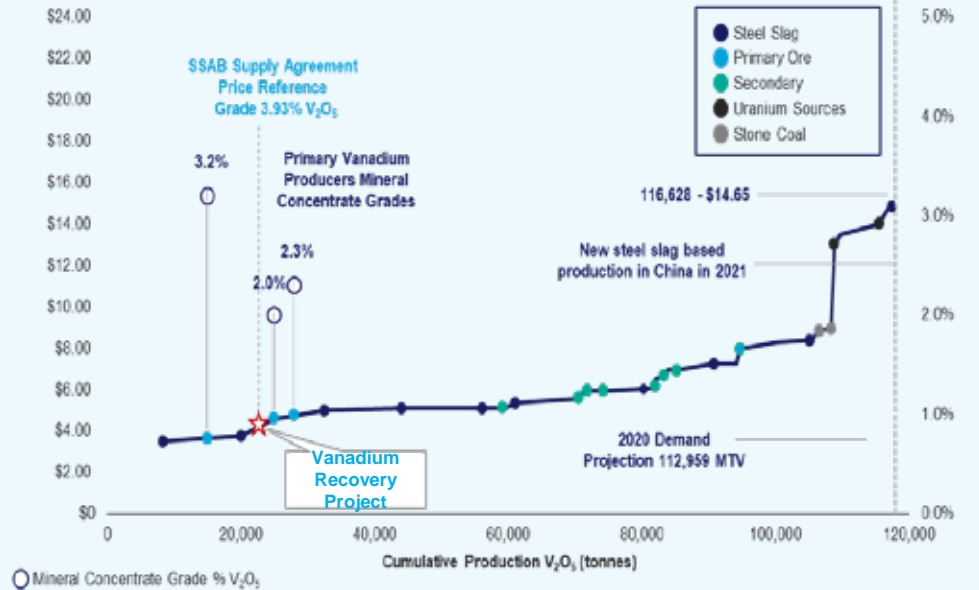
ROBUST FINANCIAL METRICS – NO MINING RISK

SALE OF HIGH PURITY V TO BATTERY INDUSTRY PLUS BY-PRODUCTS TO INDUSTRIAL APPLICATIONS. SUPPORTED BY LOWEST QUARTILE COSTS AND ESG CREDENTIALS



Vanadium Cost Curve 2021

Operating Cost US\$/lb V_2O_5



○ Mineral Concentrate Grade % V_2O_5

Source: TTP Squared – Cost Curve, Neometals Management – Mineral Concentrate grades for select vanadium producers market as “O”

⁽¹⁾ All figures expressed on a 100% ownership and pre-tax basis. For further information, refer to ASX release dated 4th May 2021 – “Vanadium Recovery Project - Outstanding PFS Results” and the assumptions set out therein. Page 3 of the announcement contains the financial summary which is the source of the throughput rate, production rate, operating costs (“OPEX”), initial capital costs, pre-tax net present value using a 10% discount rate (“NPV10”) and pre-tax payback period. The internal rate of return was calculated by Neometals Management.

BUSINESS / REVENUE MODEL



FLEXIBLE GROWTH MODEL WITH MULTIPLE POTENTIAL REVENUE STREAMS

1



Produce high-purity Vanadium Pentoxide (V_2O_5) targeting EV/ESS supply chain from SSAB, H2 Green Steel and other third-party feeds

2



LOI with Betolar to offtake SSM for 'Geoprime' building products, carbon credits from permanently sequestered CO_2 and small volume sales of sodium sulphate by-product

3



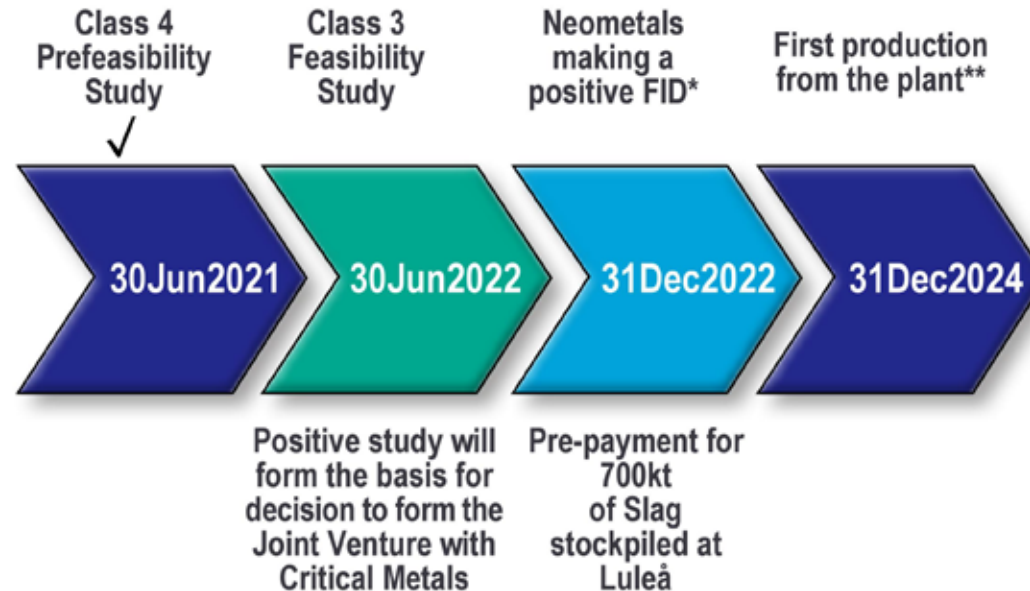
Licensing IP directly for royalty to Critical Metals JV and third-party steelmakers



INDICATIVE TIMELINE

FUNDED TO FID. CLASS 3 FEASIBILITY AND CUSTOMER PRODUCT TRIALS
UNDERWAY IN PARALLEL WITH ENVIRONMENTAL PERMITTING IN FINLAND

Indicative Project Timeline - Vanadium Recovery Project



* Subject to successful studies and Neometals/Critical Metals Board Approval. ** Subject to FID, approvals, finance

INVESTMENT CASE



VANADIUM RECOVERY

1

Strong Fundamentals for low-carbon Vanadium in EU

Forecast supply / demand imbalance for Vanadium with demand upside from new lithium vanadium battery cathode chemistries and Vanadium redox flow batteries

2

Piloted, environmentally-friendly Technology – PCT/EU patents pending

Pilot plant produced high-grade V₂O₅ powder (exceeding 99.5%) using a process which utilises carbon as major reagent and can sequester carbon in by-product.

3

Secure Feedstock for first commercial operation

10 year, minimum 2 million tonne purchase agreement with leading Scandinavian steel maker SSAB.

4

Robust Economics and Cost Position

PFS incorporating an AACE Class 4 engineering confirms superior project economics and the projects 1st quartile cost of production. Economics strongly supported by vanadium grades in Slag stockpiles


5

Significant Future Growth Potential from Additional Sites

MoU signed with H2GS AB for a second larger Vanadium Recovery Project – Boden, Sweden. Testing third party feedstocks ex-EU

KEY CATALYSTS

NEOMETALS IS APPROACHING MULTIPLE FID'S WITH BUSY PERIOD OF CATALYSTS


**Lithium-ion
Battery
Recycling**

2H22:


- ECS 50tpd integrated
- 10tpd Mercedes shredder PO
- 50tpd Stelco shredder FID* (inc. option exercise)

1H23:

- 10tpd Disposal Plant at full capacity
- 10tpd Mercedes refinery PO*
- 50tpd Stelco SPV refinery FID*

2H23**:

- Mercedes 10tpd shredder operational
- 50tpd Stelco shredder operational


**Vanadium
Recovery**

2H22:


- Feasibility Study Results
- FEED Study
- Offtake/Debt Term Sheets
- VRP1 FID* and Slag prepayment

1H23:

- Detailed Design Study
- Commence site works
- Order lead items
- Complete Slag Storage Facilities

2H23**:

- Commence Slag Shipping
- Commence construction


**Lithium
Chemicals**

2H22:

- Class 3 ECS
- Pilot Plant Engineering & Procurement

1H23:

- Install Pilot Plant
- Commence Pilot Trials
- Decision to commence Class 2 FEED Study

2H23**:

- Complete Class 2 FEED Study
- FID to formalise Bondalti JV*

Note: partner negotiations, offtake and feed arrangements will be run in parallel with the above

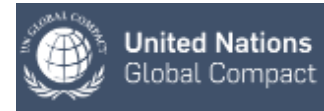
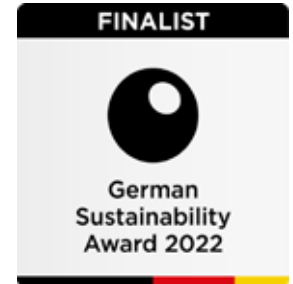
** Subject to successful studies and Neometals/partner Board Approvals*

*** Subject to FID, approvals and finance*

SUSTAINABILITY

Neometals is committed to optimising finite resources with circular practices to benefit society and the environment for a sustainable future.

- Focus on production of sustainable battery materials - reducing reliance on mining with recovery and recycling
- Commercialising internationally recognised sustainable processing technologies
- Transparent reporting to GRI, SASB, TCFD..
- 3rd report in progress



COMPANY HIGHLIGHTS

NEOMETALS IS AN ATTRACTIVE INVESTMENT



Growing portfolio of **ESG-aligned, sustainable** battery materials businesses with near-term decision points



Proprietary green processing technologies underpin low-cost, low-carbon product



Clear **strategy** to commercialise with proven partnering business model



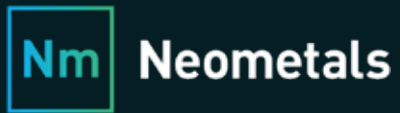
Strong balance sheet, fully funded to key investment decisions



Strong team with **track record** and commitment to **green circular economy** principles



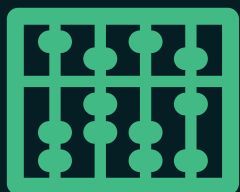
Strong organic **growth** potential (size and scale) from pipeline of opportunities to deploy as principal, partner or technology licensor – whatever customer needs



ASX Code: **NMT**
AIM Code: **NMT**
neometals.com.au

Thank you.





APPENDICES

CORPORATE DASHBOARD

NEOMETALS HAS SIGNIFICANTLY OUTPERFORMED THE ASX200, A\$82M RETURNED VIA DIVIDENDS AND BUY BACKS IN THE LAST ~5 YEARS

ASX: NMT OTC:RDRUY

Shares on Issue ⁽¹⁾	m	548.4
Share Price	A\$	1.40
Market capitalisation	A\$m	768
Cash (31-Mar-22) ⁽²⁾	A\$m	65.2
Debt	A\$m	-
Investments (31-Mar-22) ⁽³⁾	A\$m	46.5

MAJOR SHAREHOLDERS

David Reed (Founder, Former Non-Executive Director)	6.6%
Clearstream/Deutsche Börse	3.87%
Top 20	37.89%
No of Shareholders	~14,349

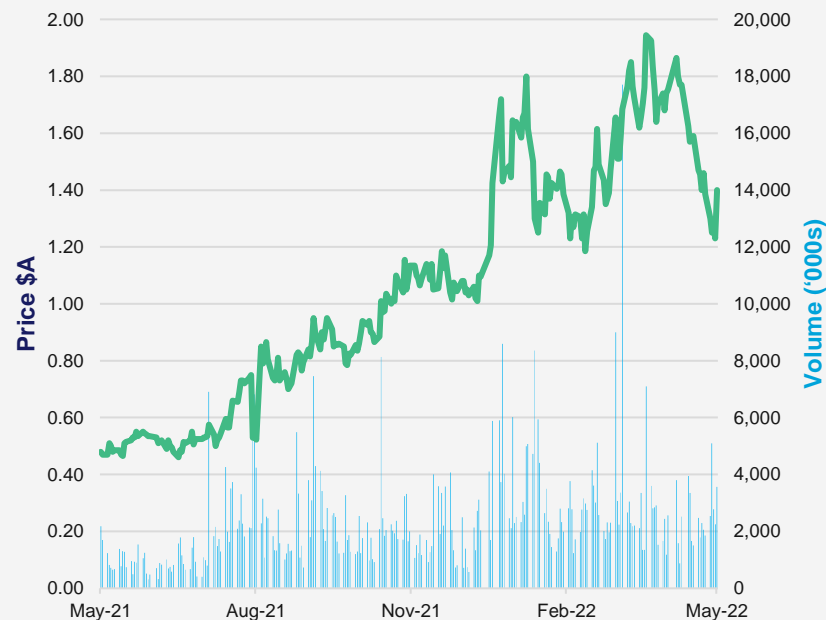
Notes: Market data as at 13 May 2022.

⁽¹⁾ Excludes 15.3M performance rights

⁽²⁾ incl A\$4.2M restricted term deposits

⁽³⁾ Loan receivables and investments

12 MONTH SHARE PRICE PERFORMANCE





LITHIUM CHEMICALS

ELi[®] Processing Technology

Reed Advanced Materials ("RAM")

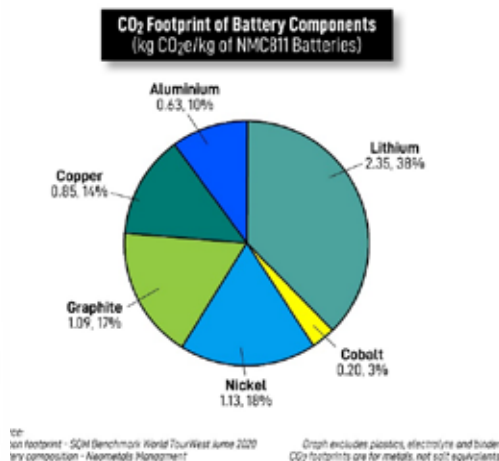
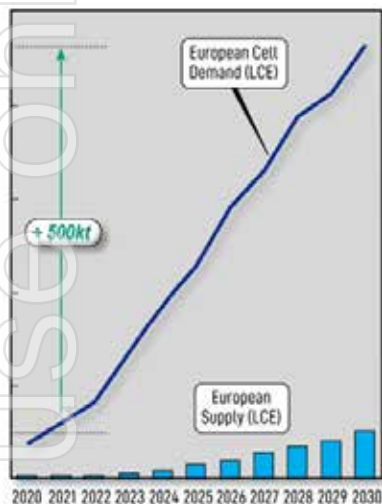
70% Neometals / 30% Mineral Resources Ltd

Lithium Chemicals Project - Portugal

Co-funding evaluation of 50:50 JV with
Bondalti Chemicals SA using ELi[®] Process

NEED

LITHIUM NON-SUBSTITUTABLE IN LIB
EU HAS NO OPERATING LITHIUM DEPOSITS
LARGEST CONTRIBUTOR TO CO2 FOOTPRINT OF LIB

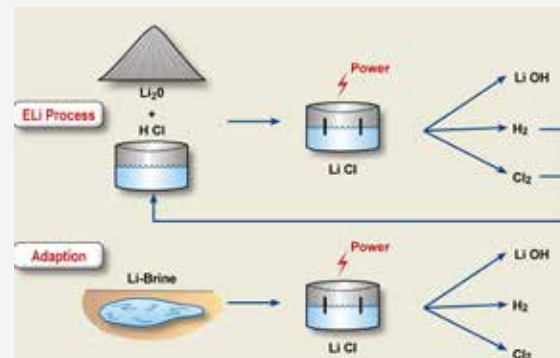
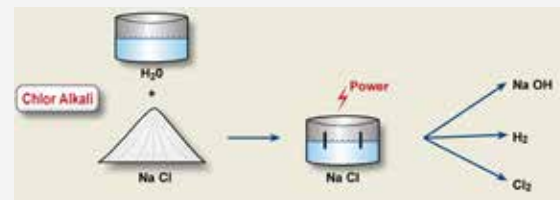


OPPORTUNITY



DEPLOY PROPRIETARY PATENTED ELI PROCESS
INTO EUROPE WITH STRONG LOCAL PARTNER

- Grow global lithium production from lithium chloride (brine) deposits in South America, largest known resources and lowest carbon intensity
- ELi Process uses electrolysis to convert lithium chloride into battery-quality lithium hydroxide, replaces traditional carbon-intensive reagents with electricity in conventional chlor-alkali cells



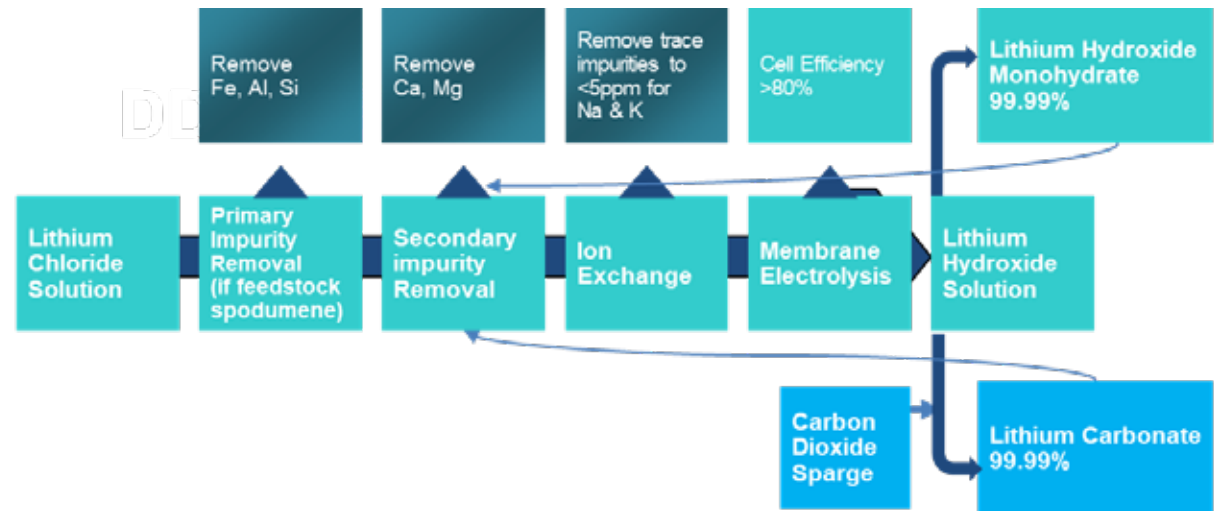
SOLUTION

UTILISES OFF-THE-SHELF
CHLOR-ALKALI ELECTROLYSERS

BATTERY QUALITY LITHIUM
CHEMICALS, NO IMPORTED
SODA ASH/CAUSTIC SODA

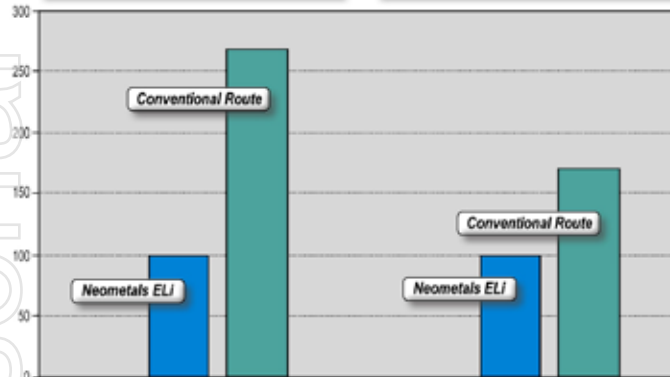
CAN UTILISE RENEWABLE
POWER AND SEQUESTER
CARBON

SIGNIFICANT OPERATING AND
CAPITAL COST ADVANTAGES



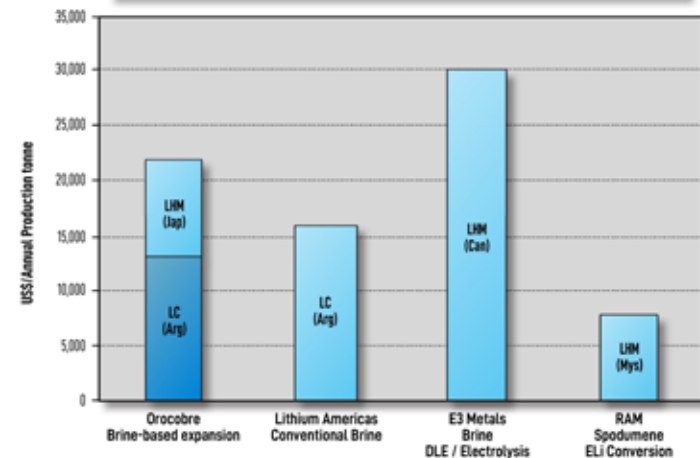
Relative LiOH Conversion Costs from LiCl Brine
(US\$ per tonne LiOH.H₂O) - Argentina basis
ELI Process = Base 100

Relative LiOH Conversion Costs from Spodumene Leach Solution
(US\$ per tonne LiOH.H₂O) - Malaysia basis
ELI Process = Base 100



Source: Valtra (2018)

Capital Efficiency (US\$/production tonne LHM per annum)



Source: Orocobre, Lithium Americas, E3 Metals Company Reports, Eyte CL3 Engineering Cost Study (2018)

BONDALTI PARTNERSHIP



LEVERAGE BONDALTI'S STRONG EXPERIENCE IN CHLOR-ALKALI

EXTENSIVE INFRASTRUCTURE ENABLES FAST-TRACK EVALUATION AND PILOTING AT THEIR ESTARREJA CHEMICAL SITE

Bondalti:

- Largest Portuguese chemical producer - based in Estarreja chemical cluster
- Seeking entry into LiOH production using its chlor-alkali process infrastructure
- Production synergy for ELi[®] to ship H₂ and Cl₂ by-products "over the fence"
- Experienced and competent industrial operator of same type of chlor-alkali plant used for ELi[®]

Cooperation*:

- Binding cooperation to pilot ELi[®] and evaluate future 50:50 JV to produce LiOH for European auto value chain
- RAM would issue the JV a royalty free license to the technology
- Equal co-funding on pilot and evaluation activities



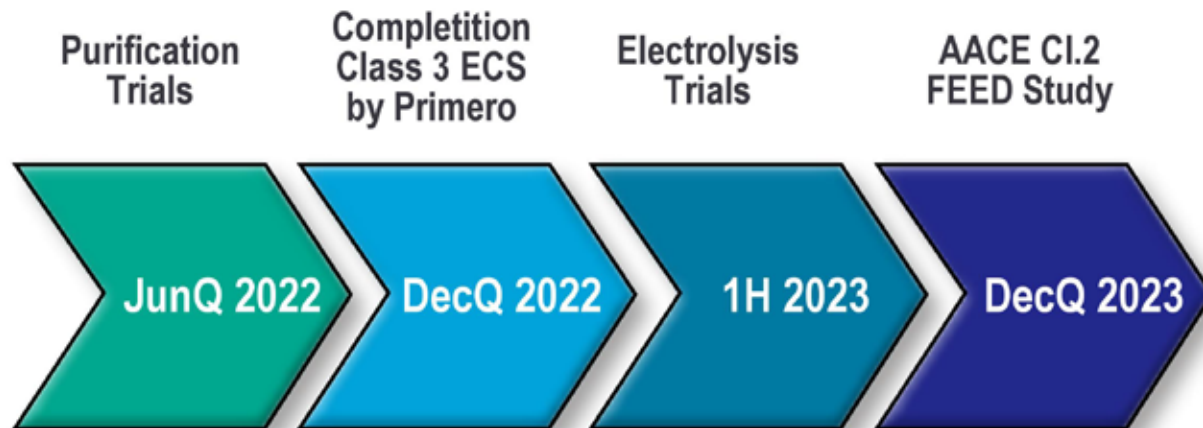
*For further information, refer to ASX release dated 13th December 2021 – "Agreement to Commercialise ELi Lithium Process in EU"



STATUS / NEXT STEPS

FUNDED THROUGH PILOT PLANT TO CLASS 2 FEED STUDY

Indicative Timeline - Bondalti ELi[®] Cooperation



** Subject to Steering Committee approvals*

INVESTMENT CASE



ELi[®] LITHIUM PROCESS

- 1 Unique Technology with 12 granted patents and 18 pending**
Technology well guarded. Importantly the process has been proven at semi-pilot scale and supported by Feasibility Study economic evaluation.
- 2 Significant operating and capital cost advantage**
Recovery and regeneration of key reagents on site eliminates expensive imports
- 3 Compelling environmental benefits to reduce CO₂ footprint**
Potential for significant reduction carbon footprint due to shift in primary reagent to electricity and elimination of carbon intensive transportation of feedstocks and reagents, potential for additional savings with renewable power
- 4 Strong partner to scale up and commercialise in EU**
Bondalti is Portugal's largest chemical business in with extensive chlor alkali experience, and plant that can be repurposed to produce lithium hydroxide,
- 5 Flexible business models that can be replicated globally**
Neometals (through RAM) can deploy globally (ex-EU) as principal, in partnership with, or licence to lithium developers/producers for royalty stream



BARRAMBIE TITANIUM AND VANADIUM

Barrambie Titanium and Vanadium Project
100% Neometals

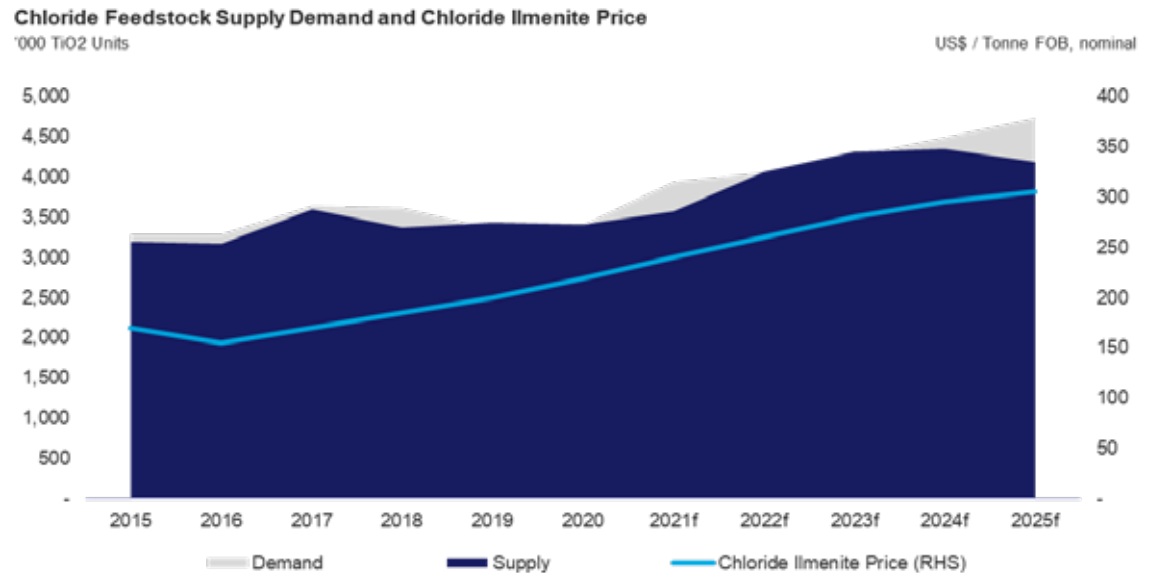


NEED & OPPORTUNITY

CHINA IS HALF WORLD MARKET AND SWITCHING TITANIUM PIGMENT PRODUCTION TO MORE SUSTAINABLE CHLORIDE PROCESS

WORLD SUPPLY OF QUALITY CHLORIDE FEEDSTOCKS IN DECLINE, PRICES STEADILY INCREASING FOR LAST 5 YEARS

- Chloride Pigment production requires high-grade feedstocks such as rutilites, high quality ilmenites and high-grade titanium slags
- Primary mineral sands (rutile, ilmenite) deposits are being depleted, smelting of hard-rock titanium concentrates from Rio and China set benchmark prices
- Barrambie is one of the highest-grade hard rock Titanium assets globally¹
- Key mining/construction permits in place
- Working with Chinese partners to realise and optimise value² from production



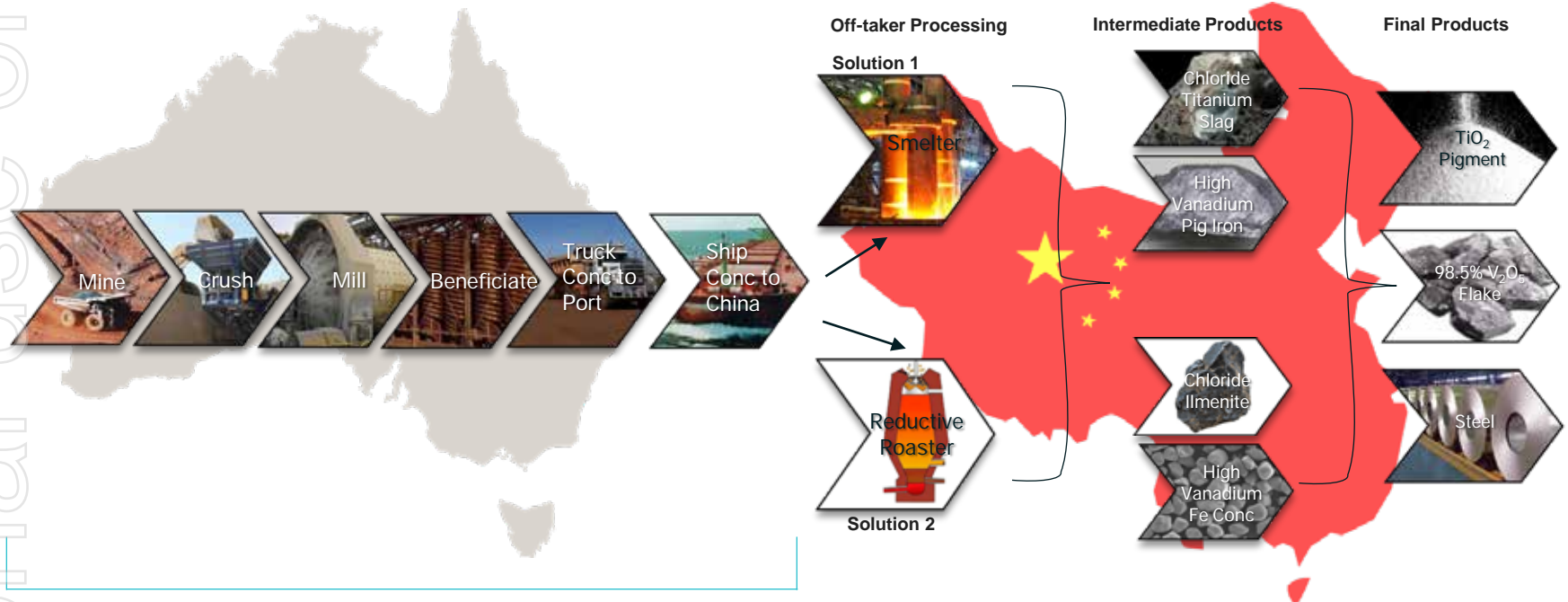
Source: TZMI Price Forecast May 2021; TZMI Supply Demand Forecast August 2021

1. See Barrambie Mineral Resource Estimate on slide 44.
2. For further details of commercial partnerships via MOU please see:
ASX release of 16/4/2021 titled "Barrambie - MOU for Cornerstone Concentrate Offtake" and
ASX release of 4/10/2019 titled "MOU for JV to develop Barrambie"



NEOMETALS SOLUTION

SIMPLE TRUCK AND SHOVEL MINING FOLLOWED BY GRAVITY SEPARATION TO PRODUCE MIXED CONCENTRATES FOR EXPORT TO CHINA FOR SMELTING OR FURTHER REDUCTION TO PRODUCE SEPARATE ILMENITE AND VANADIUM CONCENTRATES



Neometals activities to prepare mineral concentrates for sale



STATUS / NEXT STEPS

MOU FOR POTENTIAL 50:50 JV OPERATING JV WITH IMUMR¹ (CHINA)

MOU FOR OFFTAKE WITH TITANIUM SLAG PRODUCER JIUXING TITANIUM²

COMPLETING PFS TO BENCHMARK NEGOTIATIONS FOR BUILD-OWN-OPERATE CONTRACTORS

Indicative Project Timeline - Barrambie Mixed Gravity Concentrate Route



* Subject to successful Jiuxing trial, positive PFS and Board approval

1. for full details refer to ASX announcement entitled "MOU for JV to develop Barrambie" released on 4th October 2019

2. for full details refer to ASX announcement entitled "Barrambie - MOU for Barrambie Concentrate Offtake" released on 16th April 2021

INVESTMENT CASE



BARRAMBIE PROJECT

1

Strong Demand/Supply Fundamentals for Titanium

China is transitioning from sulphate to more environmentally friendly and sustainable chloride titanium production, so securing access to cleaner, higher grade chloride feedstock is a strategic imperative.

2

Large, High-Grade Resource¹ in Tier 1 Jurisdiction

One of the World's highest grade hard-rock titanium assets¹ with revenue upside from vanadium rich iron by-products. \$37M spent over +15 years.

3

'Mine-ready'

Granted mining proposal and Ministerial Approval to construct 3.2Mtpa concentrator MoUs with Chinese partners for potential operating JV and separate take-or-pay offtake

4

Capital Light Development Strategy

Potential BOO/T mining and concentration in Australia with intermediate product exported to China

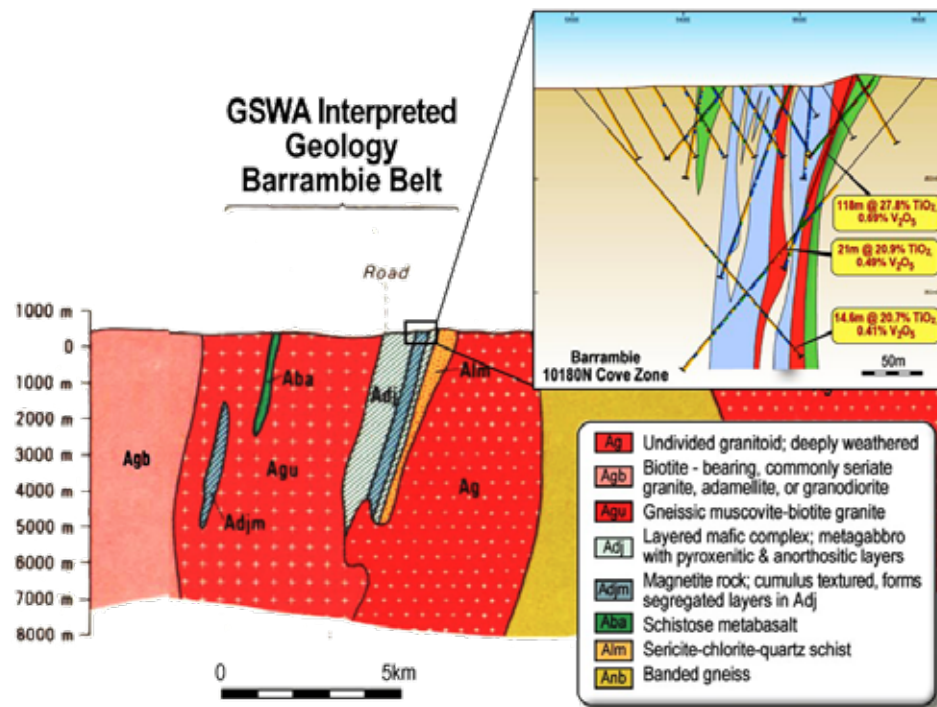
5

Proven Partnering Business Model

Track record of working with partners to de-risk and deliver project execution outcomes with strong returns to shareholders (Mt Marion & Widgie Nickel examples)

1. For full details refer to Neometals ASX release dated 17th April 2018 titled "Barrambie Project - Mineral Resource Update" and Appendix: Barrambie Mineral Resource Estimate on slide 44

MINERAL RESOURCE ESTIMATE



MINERAL RESOURCE ESTIMATE



Global Mineral Resource as at 17 April 2018 ¹			
Classification	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 Mineral Resource at (0.5% V ₂ O ₅ cut-off) ²			
Classification	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 Grade TiO ₂ Mineral Resource at (14% TiO ₂ cut-off) ²			
Classification	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 ≥10% TiO₂ or ≥0.2% 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

For full details refer to Neometals ASX release dated 17th April 2018 titled "Barrambie Project - Mineral Resource Update"