LOWER-COST, LOWER-CARBON, SUSTAINABLE NICKEL SULFATE

Euroz Nickel Day Presentation

September 16, 2021 ASX Code: NMT OTC/Nasdaq Intl: RDRUY Frankfurt: R9R

Authorised for release by Christopher Reed, Managing Director of Neometals Ltd

Neometals

DISCLAIMER

Summary information: This document has been prepared by Neometals Ltd ("Neometals" or "the Company") to provide summary information about the Company and its associated entities and their activities current as at the date of this document. The information contained in this document is of general background and does not purport to be complete. It should be read in conjunction with Neometals' other periodic and continuous disclosure announcements lodged with the Australian Securities Exchange, which are available at www.asx.com.au.

Forward-looking information: This document contains, opinions, projections, forecasts and other statements which are inherently subject to significant uncertainties and contingencies. Many known and unknown factors could cause actual events or results to differ materially from the estimated or anticipated events or results included in this document. Recipients of this document are cautioned that forward-looking statements are not guarantees of future performance.

Any opinions, projections, forecasts and other forward-looking statements contained in this document do not constitute any commitments, representations or warranties by Neometals and its associated entities, directors, agents and employees, including any undertaking to update any such information. Except as required by law, and only to the extent so required, directors, agents and employees of Neometals shall in no way be liable to any person or body for any loss, claim, demand, damages, costs or expenses of whatever nature arising in any way out of, or in connection with, the information contained in this document.

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

Not financial product advice: This document is for information purposes only and is not financial product or investment advice, nor a recommendation to acquire securities in Neometals. It has been prepared without taking into account the objectives, financial situation or needs of individuals. Before making any investment decision, prospective investors should consider the appropriateness of the information having regard to their own objectives, financial situation and needs and seek legal and taxation advice appropriate to their jurisdiction.

Investment risk: An investment in securities in Neometals is subject to investment and other known and unknown risks, some of which are beyond the control of Neometals. The Company does not guarantee any particular rate of return or the performance of Neometals. Investors should have regard to the risk factors outlined in this document.

EXECUTIVE SUMMARY

C Neometals innovatively develops opportunities in minerals and advanced materials essential for a sustainable future 55

- Innovative ASX-listed project developer
- Focus integrated minerals/materials for EV and ESS sectors
- 3 core projects co-funded with partners all reaching FID's in 2022
- Pivoting from hard-rock mining to circular, sustainable materials recovery
- Team with growing track record in delivering project outcomes – Mt Marion
- Strong balance sheet to fund all projects through to FID's ~ A\$111M* in cash and investments – no debt
- A\$87M in dividends/buyback/return of capital** in last 5 years

OPERATIONAL FOCUS ON ADVANCED PROJECTS

Vanadium Recovery

LiB Recycling





Lithium-Ion Battery Recycling Project (Feasibility / Demo Plant Stage, 50:50 Incorporated JV)

Vanadium Recovery Project (Pre-Feasibility Stage, Co-operation Agreement for a 50:50 Incorporated JV)

Barrambie Titanium and Vanadium Project (Pilot-stage, 100% NMT, MOU for 50:50 Operating JV);

Titanium & Vanadium

Y



NEED TO DECARBONISE BATTERY (MATERIALS)

NEED TO ADDRESS THE EMERGING 'CARBON SHOCK' OF EV'S

Total CO₂ Emissions to Manufacture the Car

Battery Production

Nm

		7-10 metric tons		+	+9 metric tons	
Flectric Car						
/						
		7-10 metric tons				
Petrol Car	0	5	i	10	15	2

.......

Source: The Correspondent

NICKEL AND LITHIUM ARE THE LARGEST CONTRIBUTORS TO CO2 FOOTPRINT

CO₂ Footprint of Battery Components (kg CO₂e/kg of NMC811 Batteries) Aluminium 0.63,10% Lithium 2.35, 38% Copper 0.85, 14% Graphite 1.09, 17% Cobalt 0.20, 3% Nickel 1.13, 18%

Source:

Carbon footprint - SQM Benchmark World TourWest Jume 2020 Battery composition - Neometals Managment Graph excludes plastics, electrolyte and binder CO₂ footprints are for metals, not salt equivalents

.....

LITHIUM BRINE IS THE SOLUTION – WHAT IS NICKEL'S ?



ECO-FRIENDLY LIB RECYCLING IS A KEY SUSTAINABLE SOLUTION

HYDROMETALLURGICAL

RECYCLING

HAS THE LOWEST (BLUEST)

CARBON FOOTPRINT

Raw Material CO₂ Savings – Traditional Mining vs Pyromet and Hydromet Battery Recycling



NEW EU BATTERY REGULATIONS

- Legislation update to ensure more sustainable batteries
- Regulations focus on:
 - Transparency;
 - Ethical raw materials;
 - CO₂ cell footprint; and
 - Recycling

Staggered implementation:

- 100% collection target industrial and EV
- CO₂ footprint declaration from 2024
- Recycling efficiency to 65% from 2025 then 70% by 2030
- Carbon intensity labelling by 2026
- CO₂ footprint threshold by 2027
- Recycled content declarations 2027
- Minimum recycled content from 2030



European Commission





MORE ENVIRONMENTALLY SUSTAINABLE NICKEL PROCESS

OUR PROPRIETARY RECYCLING PROCESS

Successfully Piloted at SGS Canada in 2019/20







POTENTIALLY LOWEST COST NICKEL SULFATE PRODUCER

DEVELOPING EU'S LARGEST HYDROMET REFINERY FOR LIB CATHODE PRECURSORS



ROBUST ECONOMICS ON MAJOR EV BATTERY CHEMISTRIES

Recovered value of products of various cathode chemistries based on Pilot Plant Results



Source: Pricing - Fastmarkets (Cobalt, Nickel, Manganese - Spot), HIS Markit Trade Data (Lithium - Spot), Neometals Management (Copper Products - Forecast) Battery Cell Composition and Product Recoveries: Cobalt-82%, Nickel-83%, Lithium-82%, Copper-88% combined, Manganese-78% (Neometals Management)

Please refer to Slide 36 for full details of Operating Cost (Opex) breakdown

POTENTIAL LOWEST COST NICKEL SULFATE PRODUCER



Nickel sulphate production, tonnes Ni contained

Source: Cost Curve – Australian Mines/CRU (2019), Primobius Cost/Production – Neometals Management (2021) based on ASX Announcement:- Lithium Battery Recycling – Outstanding Cost Estimates (7 May 2021)

16

0

0



Primobius

Battery recycling without limits

LI ION BATTERY RECYCLING PROJECT

50:50 JV with SMS group – 'Primobius GmbH'

AIMING TO BE RECYCLER OF CHOICE FOR CELLMAKERS AND CARMAKERS

- Commercial operations starting in Europe, ROW to follow.



• •

EU FORECAST TO BE 2ND LARGEST EV PRODUCTION HUB GLOBALLY IN 2030



Nm

•

EU FORECAST TO BE 2ND LARGEST LIB PRODUCTION HUB GLOBALLY IN 2030

Announced annual LiB cell production capacity until 2030 (GWh/a) - By country, by companies



Source: Roland Berger, July 2021, from Press Releases, Company Announcements & Expert Interviews

1) Roland Berger estimate based on 100-200 in units of 21700 cells

•

• 0

AND GENERATE 2ND LARGEST VOLUME OF SCRAP AND END-OF-LIFE BATTERIES

New Battery Mega-factory Deployment Far Exceeding Expectations

+51% 1,400,000 1.267.700 1,200,000 1.000.000 841.000 800,000 600.000 +50% +65% 400,000 +24% 335,100 255,800 223,000 200,000 155,000 145,600 117.000 0 North America Europe Asia Pacific China (APAC) ex. China TAM Forecast as at April 2021 TAM Forecast as at September 2021 April 2021 vs. Sept. 2021 Total Addressable Market (TAM) Forecast. Units are tonnes of lithium-ion batteries available for recycling/year (1) Sources: Benchmark Mineral Intelligence ("BMI"), U-Cycle market intelligence and forecasting Source: Li-Cycle

Tonnes of Lithium-ion Batteries Available for Recycling – by Region in 2025^(1, 2)

GERMANY FORECAST TO BE LARGEST LIB PRODUCTION HUB GLOBALLY IN EU



22

Nm

_

EU NEEDS A LARGE, SCALABLE SOLUTION FROM A RELIABLE LOCAL

Major European EV Battery Recycling Facility Capacities



Source: Neometals Management (Sept 2021) Benchmark Minerals Intelligence (2020)

23

0

OUR COMMERCIALISATION PARTNER



SMS 🙆 group

50:50 JV WITH SMS group GmbH

- Incorporation of Primobius GmbH to evaluate and commercialise recycling technology
- Constructing a showcase demonstration plant in Germany, complete feasibility study and FID consideration MarQ22
- Evaluating both 20ktpa and 200ktpa plants
- SMS will build, operate and procure debt financing* on behalf of JV
- Global commercial roll out capitalising on the SMS global footprint / reputation (140 years old, 14,500 employees at 95 sites)
- *for 50:50 debt:equity on a best endeavours basis

DEMONSTRATION PLANT

25



Dedicated facility at SMS Manufacturing Headquarters Hilchenbach, Germany



FLEXIBLE BUSINESS MODELS



Principal

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



Partnership

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



License

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





DEMONSTRATING SPEED TO MARKET

• Primobius decision to fast-track commercial operations in Germany (Q12022)

28

- Demo plant ("DP") upgrade for commercial 10tpd 'black mass' commercial operation
 - Procurement and fabrication activities in progress and operating permit pending



PRIMOBIUS COMPETITIVE ADVANTAGE



)High share of recycled materials to high purity chemicals within regulatory requirements Flexible and robust technology 2 Multiple battery chemistries, formats and types can be processed without cell discharging **Environmentally friendly** 3 Better recovery, emissions and less transport than incumbents **Continuous improvement** Continuous optimization of existing processes with regards to product vield, quality and efficiency Ethical sourced high purity products 5) High purity chemicals not intermediates for ethical re-supply to the cathode producer supply chains Flexible business model

Safe process according to regulations

Service provision, shared economics in JV's, licensing

Industrial scale

 $^{\prime}$ Scalable plant from trusted brand with performance backstop





CORPORATE DASHBOARD

ASX: NMT OTC:RDRUY

Shares on Issue ¹	m	548.4
Share Price (15-Sep-21)	A\$	0.865
Market capitalisation (15-Sep-21)	A\$m	474
Cash (30-Jun-21) ²	A\$m	98.2
Debt	A\$m	-
Investments (30-Jun-21) ³	A\$m	12.4

Major Shareholders (7-Sep-21)

David Reed (Founder/Non-Executive Director)	6.9%
Clearstream/Deutsche Börse	2.9%
Тор 20	35.4%
No of Shareholders	~9,900

Note 1: Excludes 12.99M performance rights. Note 2: incl A\$4.2M restricted term deposits Note 3: Loan receivables and investments

31



OUR PEOPLE

NE Board Members





Steve Cole Chair

David

Reed

Dr Natalia Streltsova



Doug Ritchie



Dr Jennifer Purdie



Les Guthrie



Chris Reed Managing Director / CEO

Jason Carone Company Secretary / CFO



Michael Tamlin COO



Darren Townsend CDO



Irena Ivanova GM - Engineering



Paul Wallwork

GM - Marketing

and Product

Development

Jeremy Mcmanus GM – Commercial and Investor Relations



Gavin Beer GM – Lithium Processing



Matthew Read GM – Lithium Projects



David Robinson GM – Metallurgy and R&D



Greg Hudson GM – Geology

UNPARALLELED EXPOSURE TO THE NEW ENERGY (STORAGE) MEGATREND

Exposure to key commodities as the World transitions to low carbon:

• Li, Co, Ni, V, Cg

All the right elements[®]

2050 Annual Demand from Energy Technologies as Percentage of 2018 Production



COMPANY HIGHLIGHTS

SECURITY

Strong balance sheet, no debt - can fund developments to nearterm **FIDs**

Consistent strategy partnering to reduce risks and realise returns

Strong Board and management – project execution experience

History of cash and scrip returns to shareholders

...

Pivot to recycling and recovery removes mining risk conglomerate complexity disappearing



Green critical materials for Europe – big exposure to new energy megatrend

Resource efficiency for circular economy



Secure, ethical supply chain certainty



Multiple catalysts across portfolio



Transitioning to best practice ESG - 'sustainable investment'

OPPORTUNITY



ENGINEERING COST STUDY ESTIMATES MAY 2021 - AACE CLASS 4 (±25%)

Based on Pilot Plant at SGS Canada in 2019/20

36



Source: Neometals ASX Announcement:- Lithium Battery Recycling – Outstanding Cost Estimates (7 May 2021) Note: total numbers may not sum due to rounding 0

PRIMOBIUS 3D FLYTHROUGH



JULY 5, 2021

37

https://www.neometals.com.au/news-and-media/videos/

0

AMAMMMMMMMM

MOU WITH STELCO INC (TSX: SLTC) FOR NORTH AMERICA

Primobius

Battery recycling without limits



The Steel Company of Canada

- Stelco is a leading North American steel producer (market cap +C\$3B)
- Stelco plans to introduce scrap steel from end-of-life vehicles into feed stocks for steelmaking
- Proposed 50:50 incorporated JV contemplates processing lithium batteries arising from the vehicle/scrap steel operations
- Primobius will supply and construct a plant for the JV with an initial capacity of 20ktpa
- Stelco will arrange sufficient supply of battery packs to the JV at no cost
- Evaluating a potential hub and spoke model, centralised hydromet circuit fed by multiple shredding/beneficiation plants in North America

Full details refer to Neometals ASX Announcement entitled: "LI Battery Recycling – MoU Stelco for North America" released on 27 May 2021.

FORECAST BATTERY FEED VOLUMES, NTH AMERICA



39

MOU WITH ITOCHU CORPORATION OF JAPAN

Primobius

Battery recycling without limits





Itochu's stationary energy storage brand

- Itochu is one of Japan's largest trading houses (market cap +US\$50B
- Itochu strong footprint in the lithium-ion battery supply chain
- Itochu produces cathode and anode materials, also its own stationary storage battery systems (ESS)
- Itochu will supply second demonstration trial which will process solely ESS batteries
- Evaluating hub and spoke model, centralised hydromet circuit fed by multiple shredding/beneficiation plants not only in Japan but throughout Asia.

Full details refer to Neometals ASX Announcement entitled: "Lithium Battery Recycling – MoU with Itochu Corporation" released on 5 March 2021.

 \bigcirc

JAPAN HAS LARGEST VOLUME OF SCRAP AND EOL BATTERIES IN APAC

New Battery Mega-factory Deployment Far Exceeding Expectations

Tonnes of Lithium-ion Batteries Available for Recycling – by Region in 2025^(1, 2)



0

THANK YOU PLEASE VISIT NEONETALS.COM.AU