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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

Nm

Neometals

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EXECUTIVE SUMMARY

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

- 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



*As at 30 June 2021

**See NMT ASX release titled "Appendix 3A.5 – Notification of return of capital" dated 18 August 2021

OPERATIONAL FOCUS ON ADVANCED PROJECTS

- Vanadium Recovery
- LiB Recycling

Titanium & Vanadium •



Lithium-Ion Battery Recycling Project

*(Feasibility / Demo Plant Stage,
50:50 Incorporated JV)*



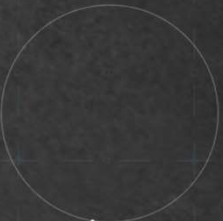
Vanadium Recovery Project

*(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);*



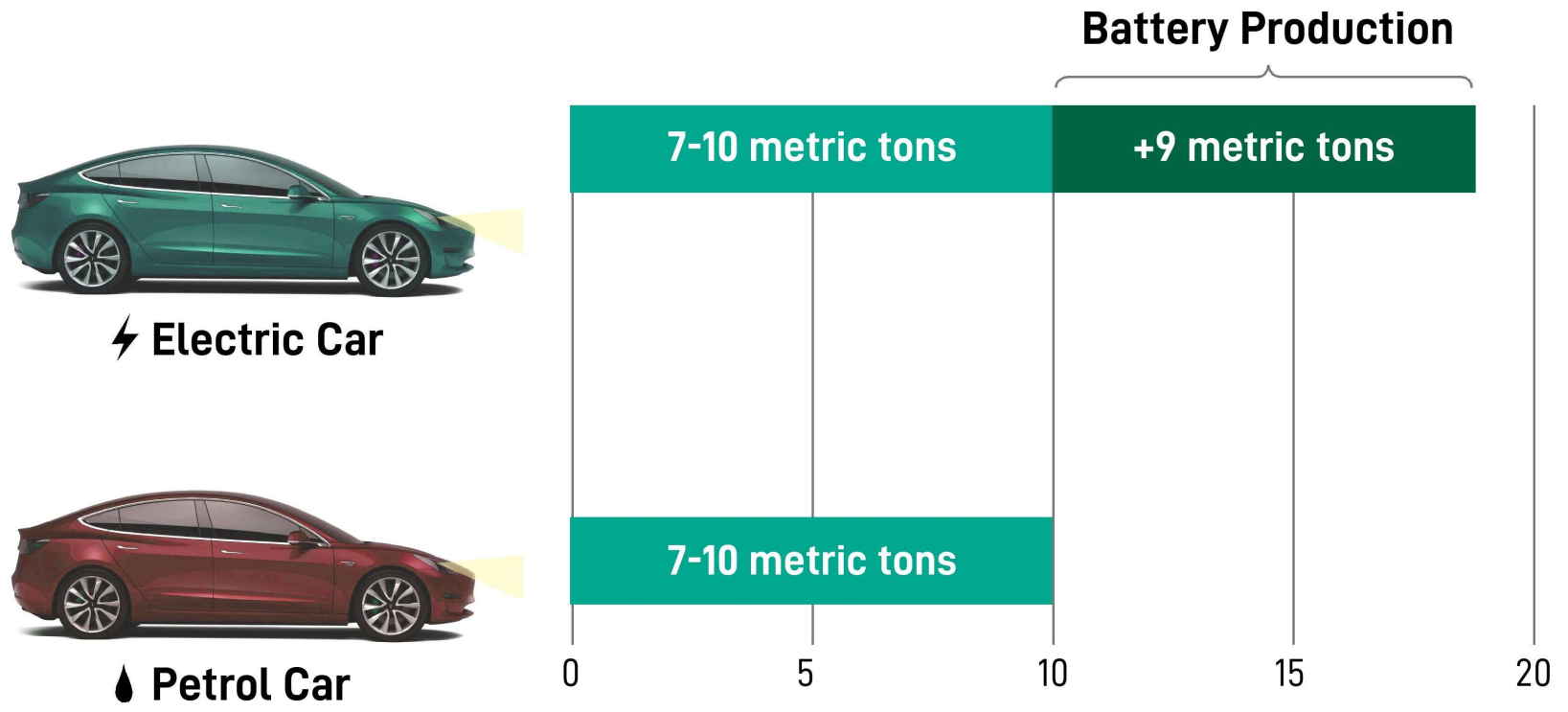
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NEED TO DECARBONISE BATTERY (MATERIALS)

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

Total CO₂ Emissions to Manufacture the Car



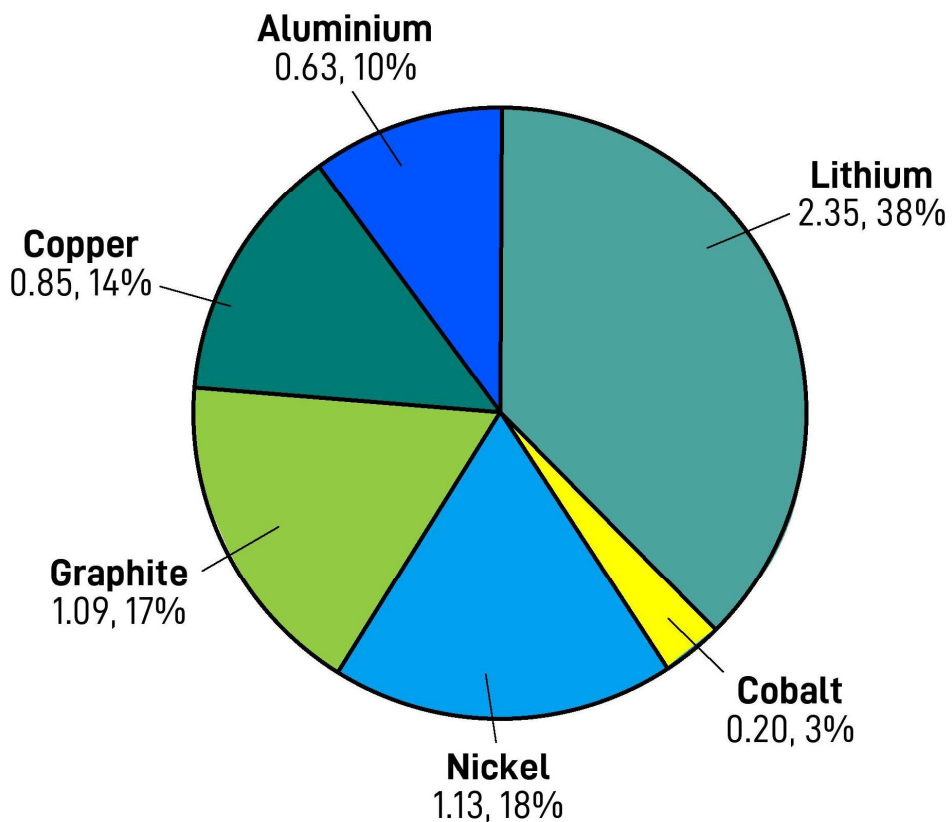
Source: The Correspondent

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NICKEL AND LITHIUM ARE THE LARGEST CONTRIBUTORS TO CO2 FOOTPRINT

CO₂ Footprint of Battery Components
(kg CO_{2e}/kg of NMC811 Batteries)



Source:
Carbon footprint - SQM Benchmark World TourWest June 2020
Battery composition - Neometals Management

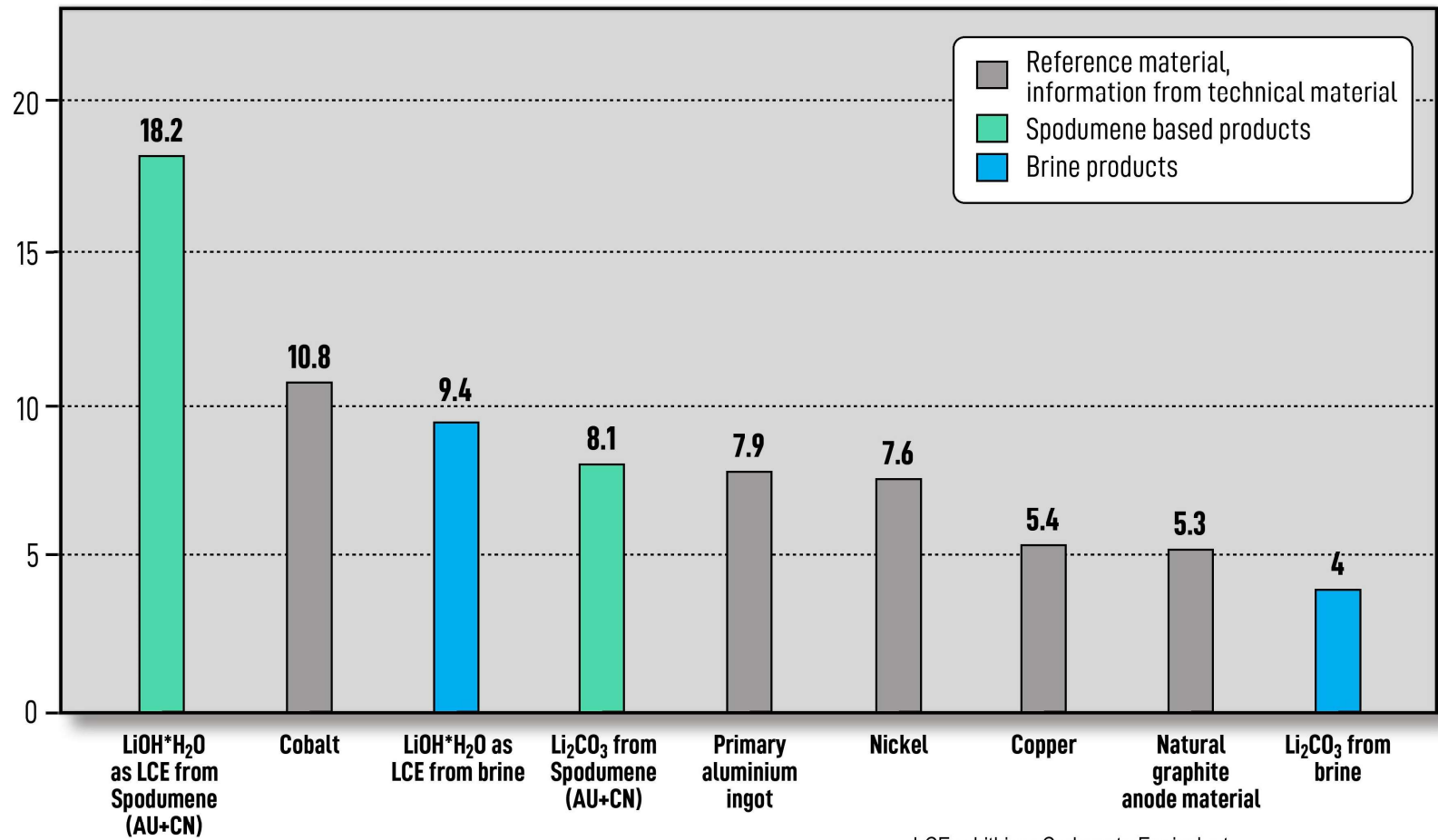
Graph excludes plastics, electrolyte and binder
CO₂ footprints are for metals, not salt equivalents



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

Comparison of CO₂e Emissions, kg CO₂e/kg Product



LCE = Lithium Carbonate Equivalent
 Li₂CO₃ Corresponds to 1 LCE
 0.88 / LiOH*H₂O corresponds to 1 LCE

AU / CN : Australia / China
 * Cradle-to-Gate

Source: SQM Benchmark World TourWest June 2020

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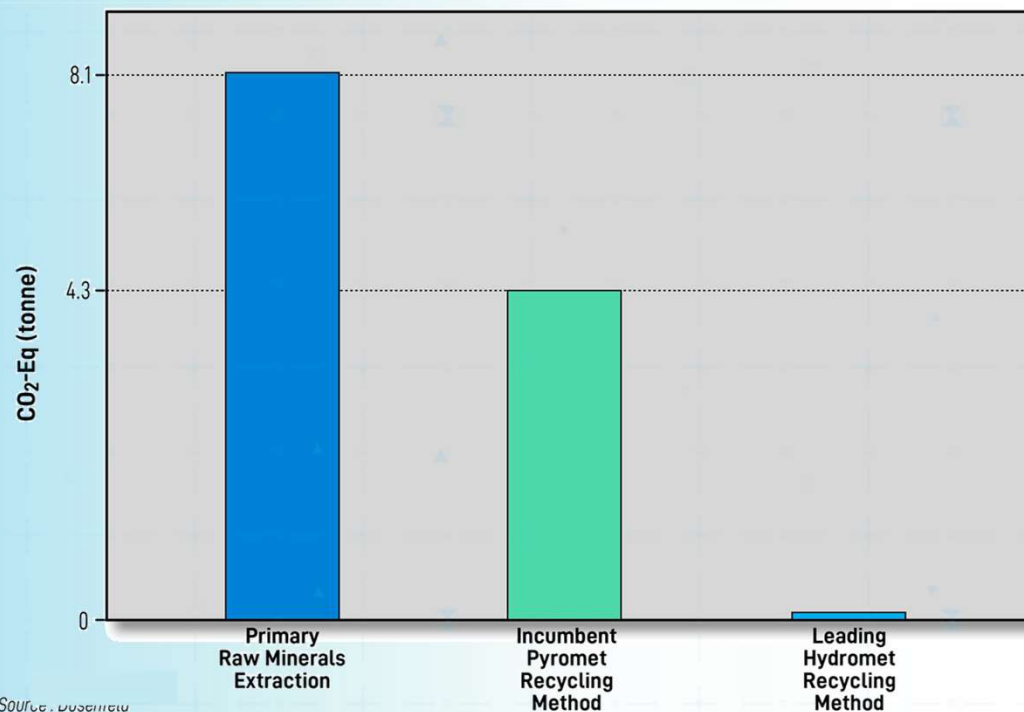


ECO-FRIENDLY LIB RECYCLING IS A KEY SUSTAINABLE SOLUTION

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HYDROMETALLURGICAL
RECYCLING
HAS THE LOWEST (BLUEST)
CARBON FOOTPRINT

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



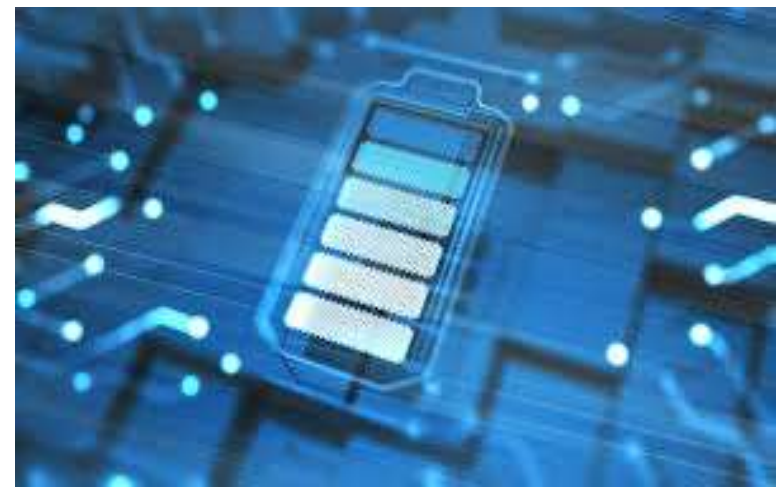
Source: Duesenfeld

Source: Duesenfeld



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



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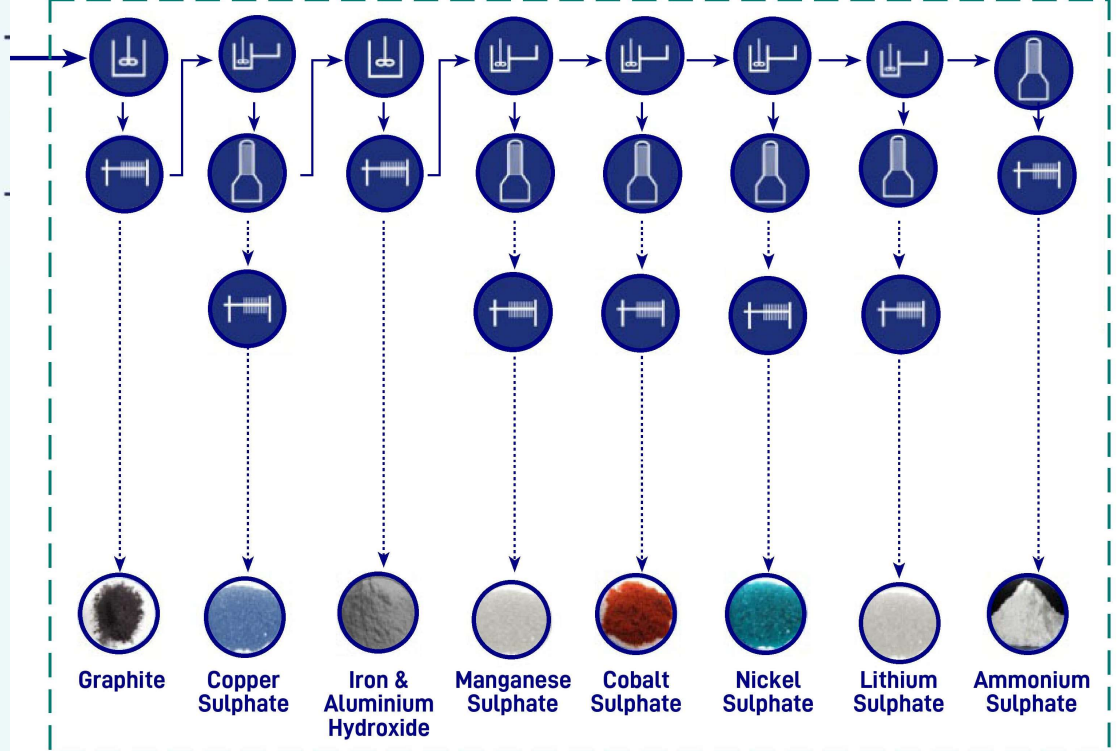
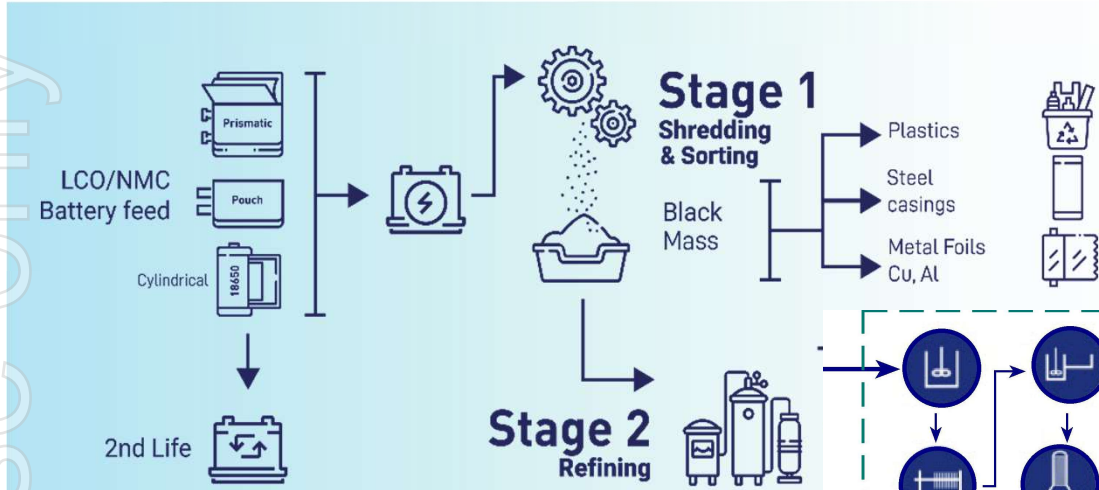


MORE ENVIRONMENTALLY SUSTAINABLE NICKEL PROCESS

OUR PROPRIETARY RECYCLING PROCESS

Successfully Piloted at SGS Canada in 2019/20

- 85% Recycling Efficiency to date aiming to improve
- Ni+Co Sulphates (+80% Rev\$) meet Chinese cathode specs
- Tailings is fertiliser feedstock



- ⚙️ Reaction Tank / Agitator
- 🧼 Filter Press
- 🔪 Solvent Extraction Mixer / Settler
- 🔬 Crystallization



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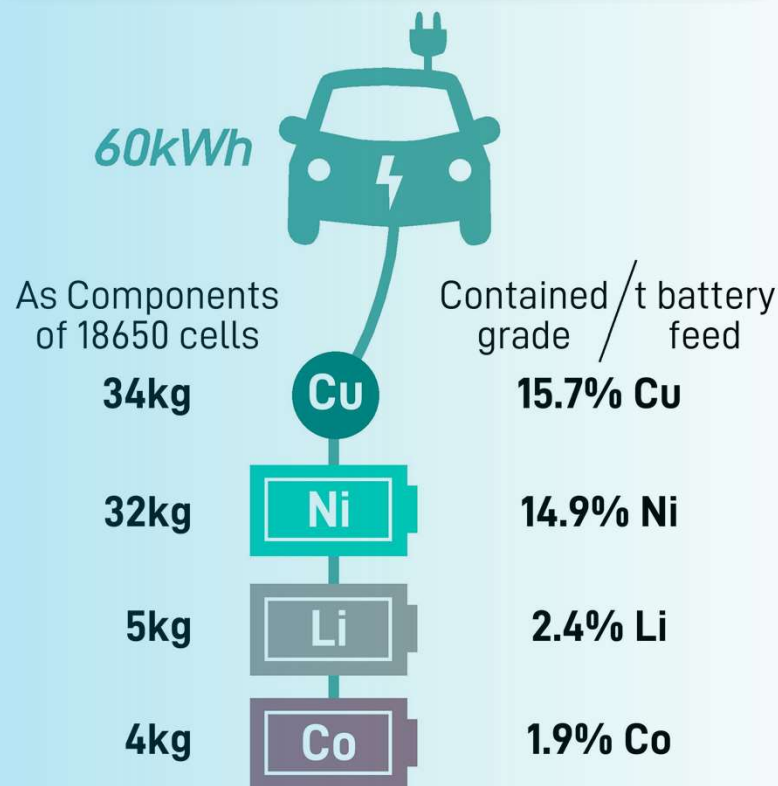
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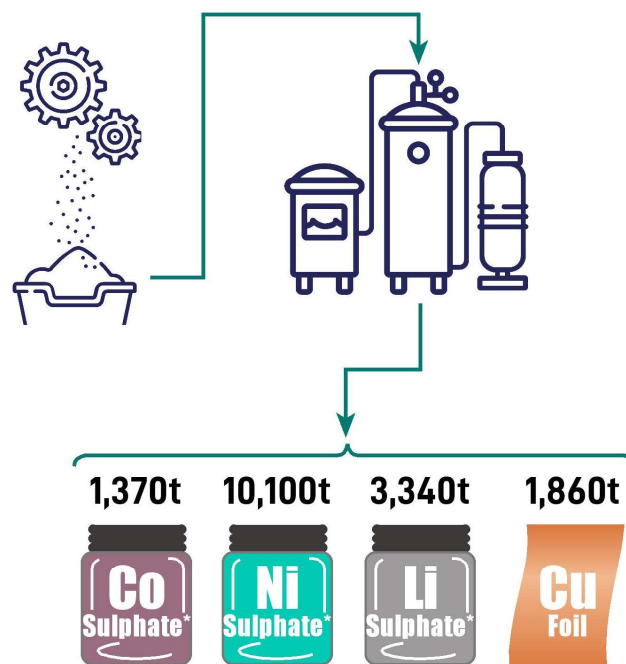
POTENTIALLY LOWEST COST NICKEL SULFATE PRODUCER

DEVELOPING EU'S LARGEST HYDROMET REFINERY FOR LIB CATHODE PRECURSORS

Typical BEV Battery Composition Using NCM 811 Chemistry



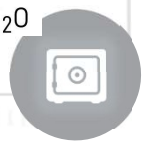
Annual Primobius Production @ 50 Tonnes per Day of Battery Cells



*CoSO₄ · 7H₂O, NiSO₄ · 6H₂O, LiSO₄ · H₂O

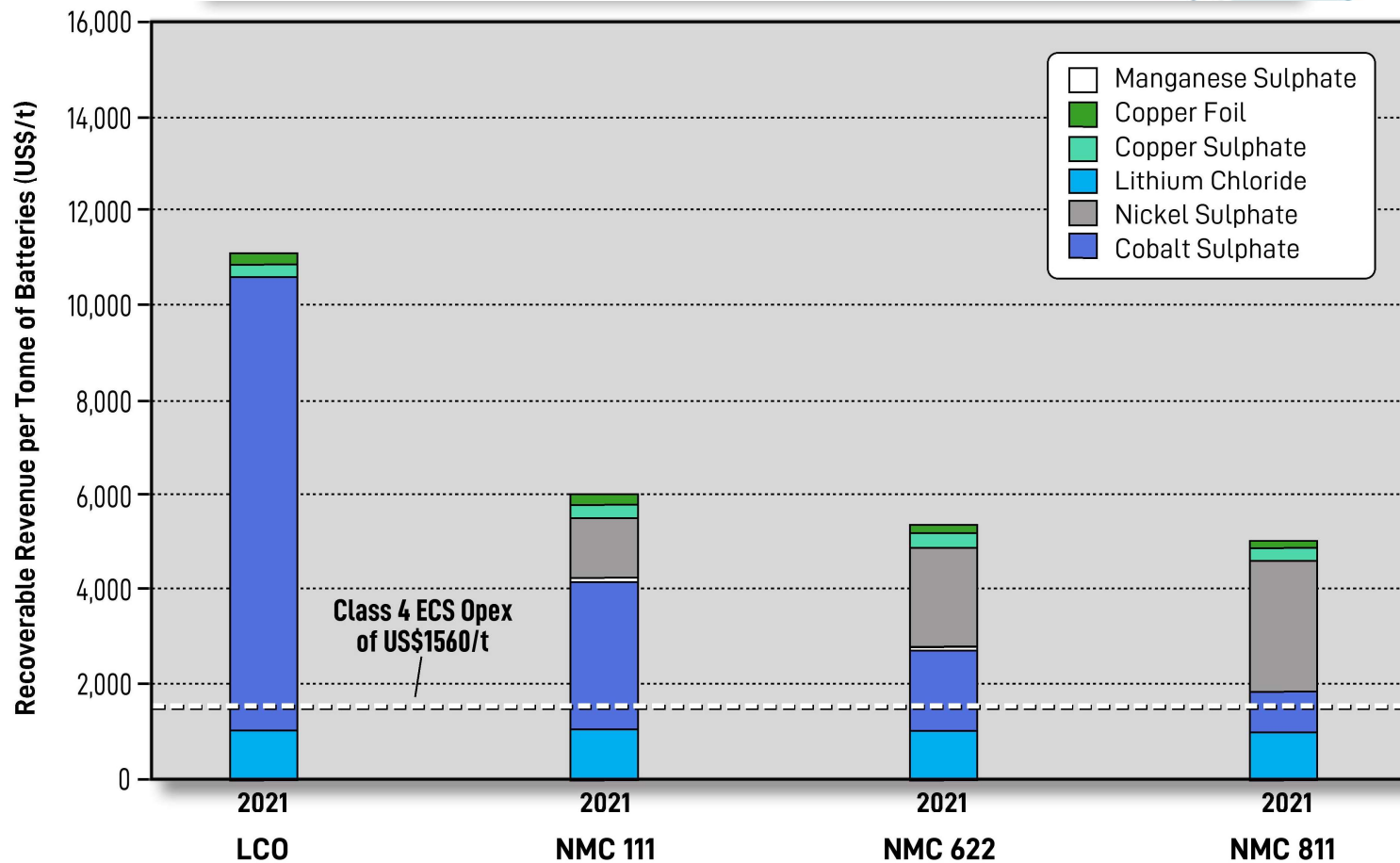
Source: Benchmark Minerals Intelligence

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ROBUST ECONOMICS ON MAJOR EV BATTERY CHEMISTRIES

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



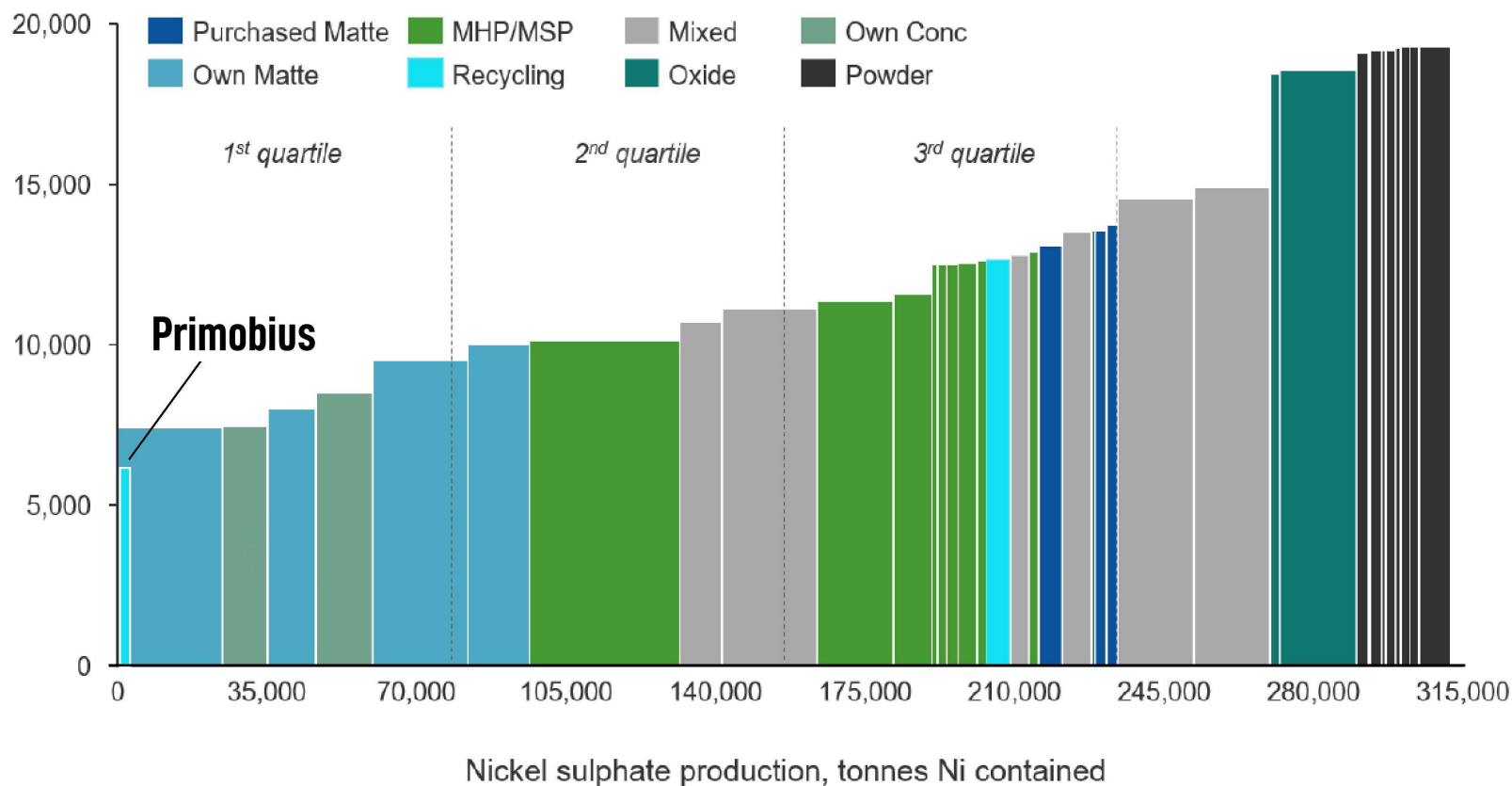
Source: Pricing - Fastmarkets (Cobalt, Nickel, Manganese - Spot), HIS Markit Trade Data (Lithium - Spot), Neometals Management (Copper Products - Forecast)
 Battery Cell Composition and Product Recoveries: Cobalt-82%, Nickel-83%,
 Lithium-82%, Copper-88% combined, Manganese-78% (Neometals Management)

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



POTENTIAL LOWEST COST NICKEL SULFATE PRODUCER

Nickel Sulfate Cost Curve 2025



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)



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Primobius

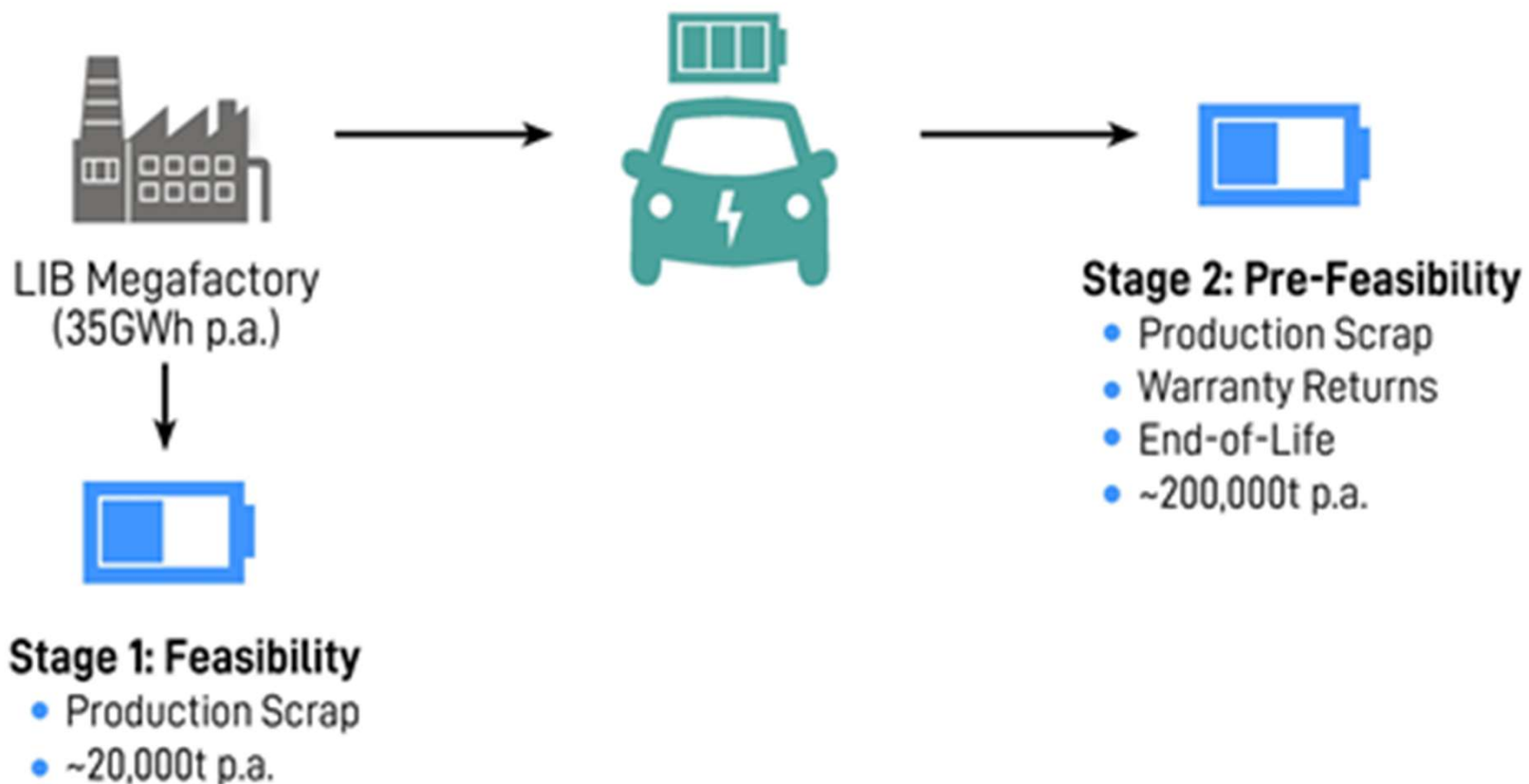
Battery recycling without limits

LI ION BATTERY
RECYCLING PROJECT

50:50 JV with SMS group – ‘Primobius GmbH’

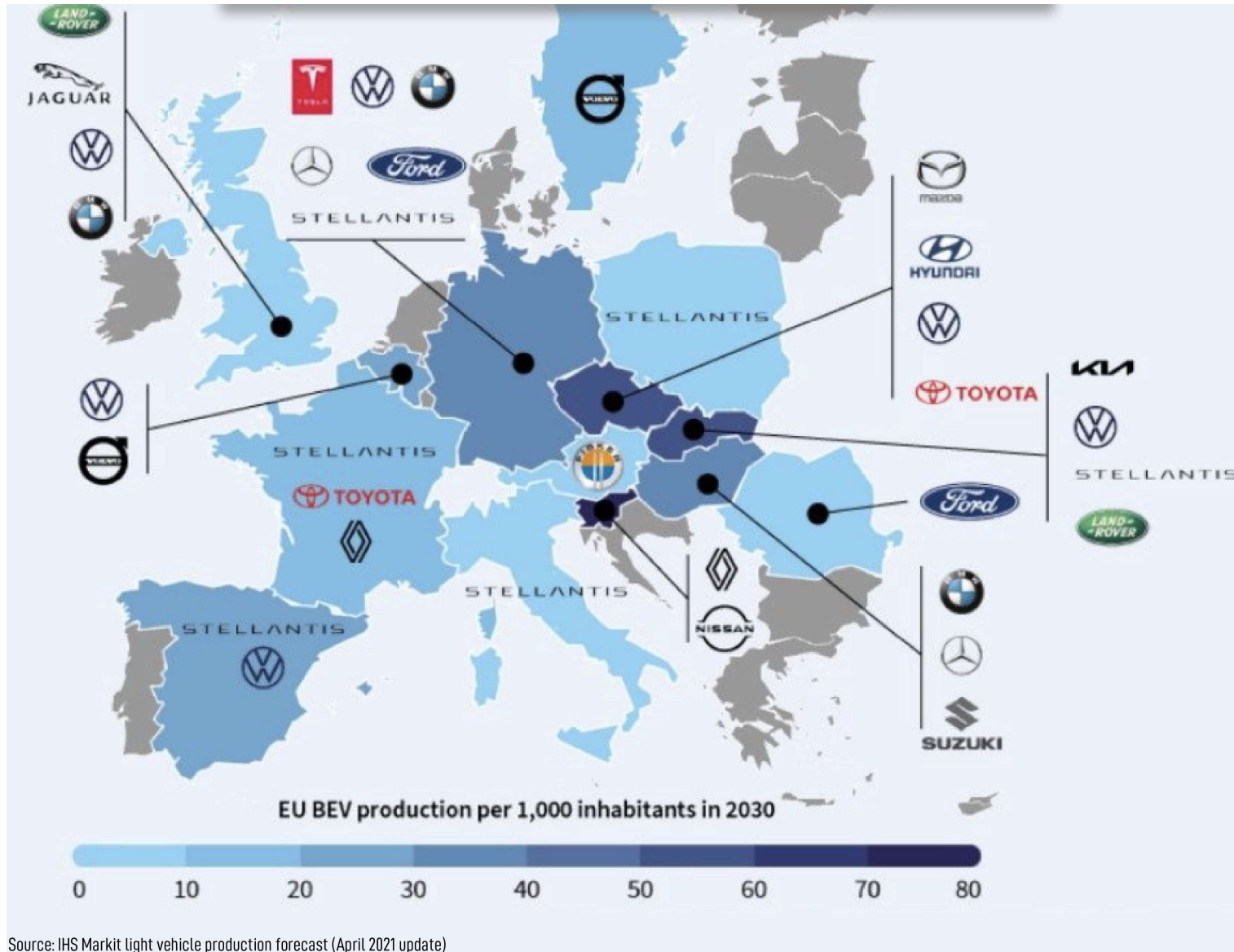
AIMING TO BE RECYCLER OF CHOICE FOR CELLMAKERS AND CARMAKERS

- Commercial operations starting in Europe, ROW to follow.



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

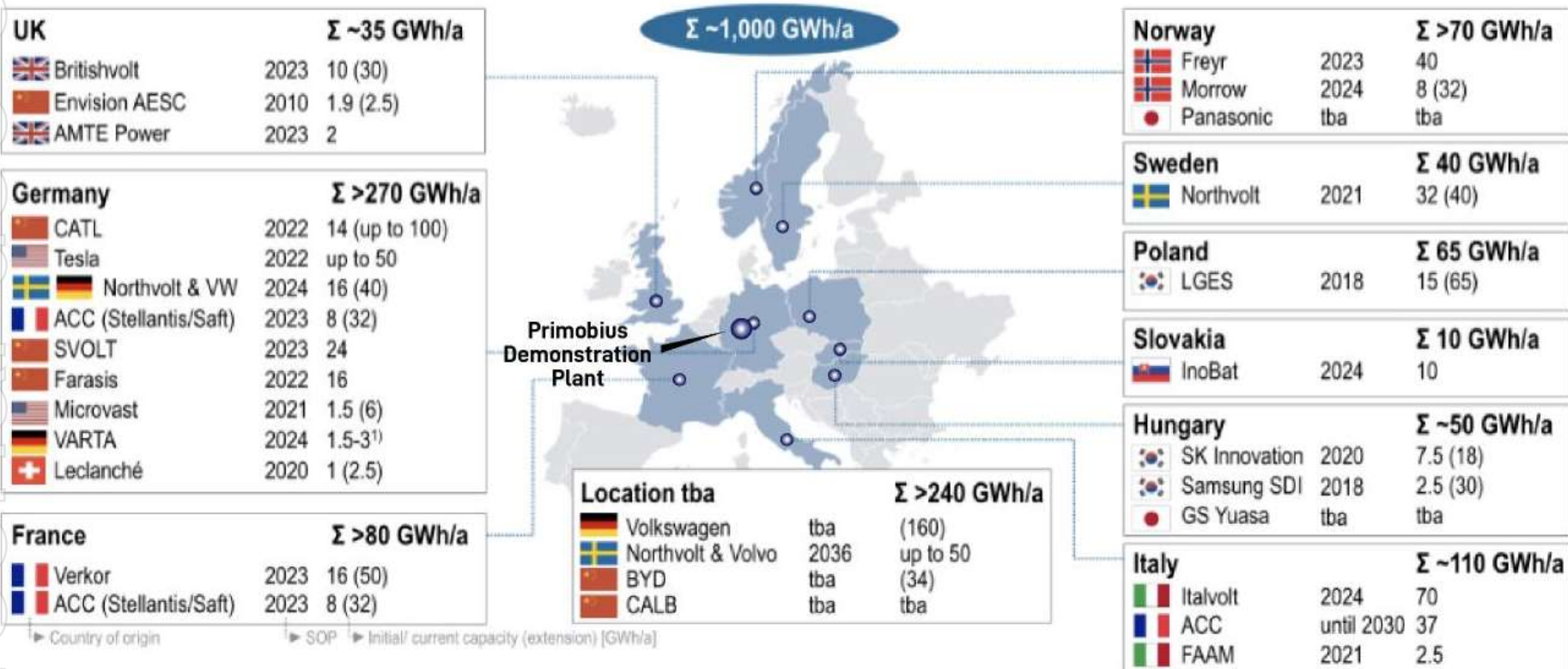


Source: IHS Markit light vehicle production forecast (April 2021 update)



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

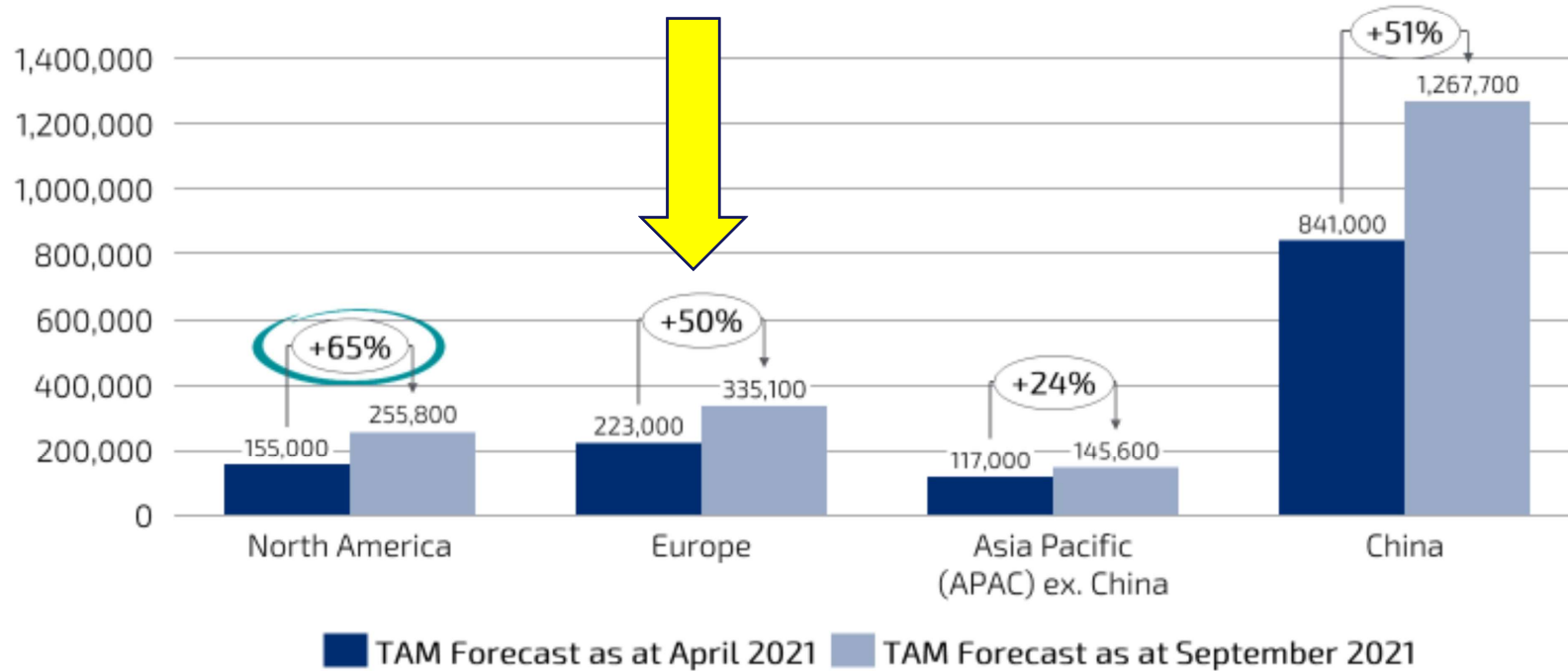


AND GENERATE 2ND LARGEST VOLUME OF SCRAP AND END-OF-LIFE BATTERIES

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New Battery Mega-factory Deployment Far Exceeding Expectations

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



Notes:
 (1) April 2021 vs. Sept. 2021 Total Addressable Market (TAM) Forecast. Units are tonnes of lithium-ion batteries available for recycling/year.
 (2) Sources: Benchmark Mineral Intelligence ("BMI"), Li-Cycle market intelligence and forecasting.

Source: Li-Cycle



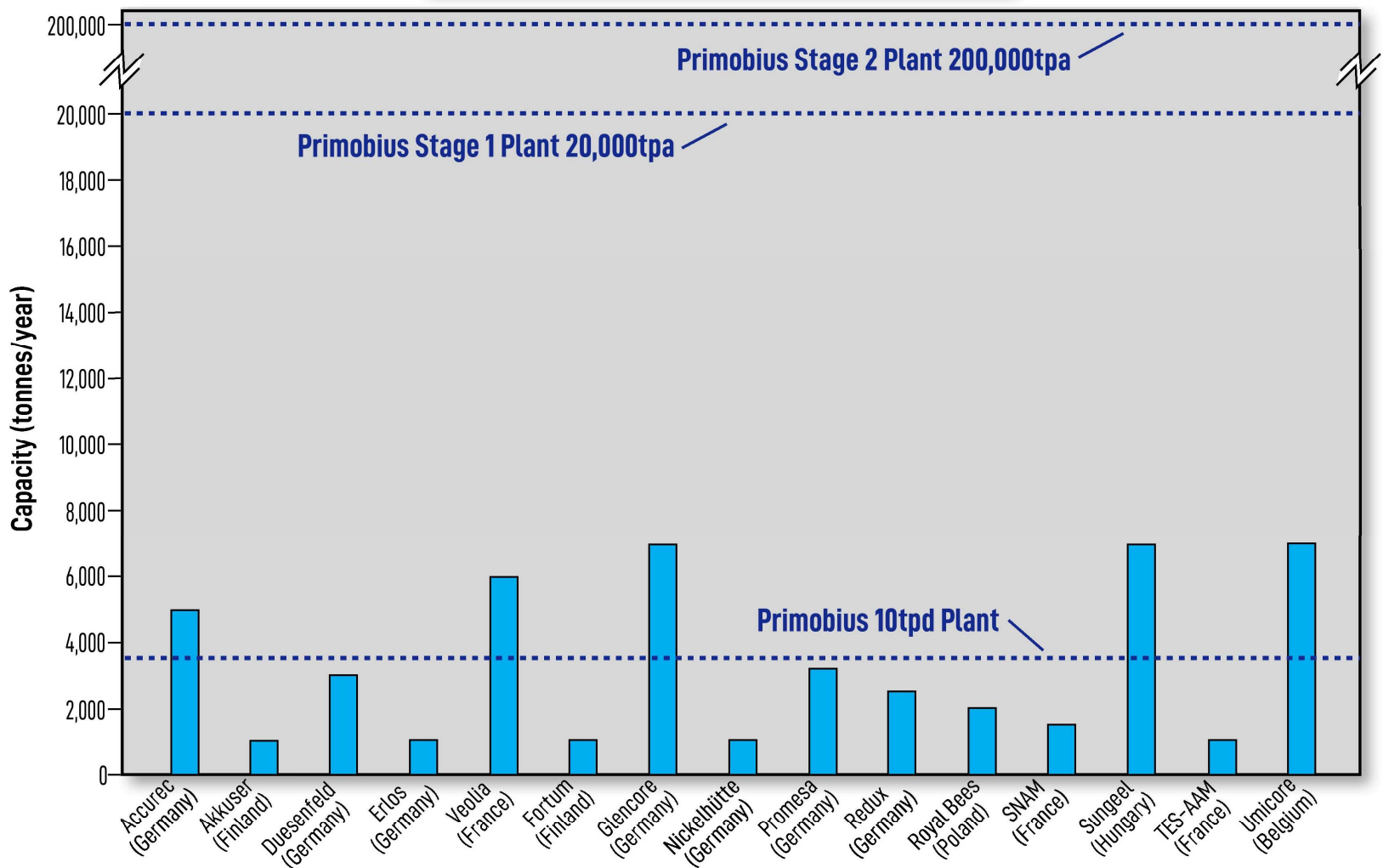
GERMANY FORECAST TO BE LARGEST LIB PRODUCTION HUB GLOBALLY IN EU

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EU NEEDS A LARGE, SCALABLE SOLUTION FROM A RELIABLE LOCAL

Major European EV Battery Recycling Facility Capacities

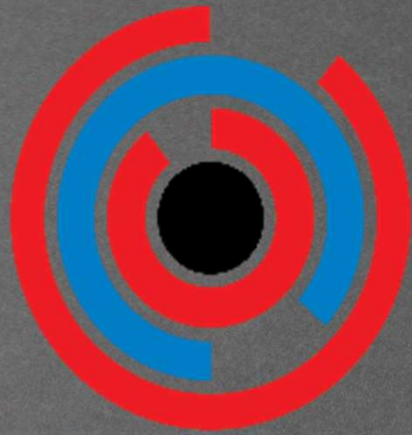


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Source: Neometals Management (Sept 2021) Benchmark Minerals Intelligence (2020)



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



Dedicated facility at SMS Manufacturing Headquarters Hilchenbach, Germany



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INDICATIVE TIMELINE FOR 50TPD PLANT



Running Feedstock, Offtake, Product Evaluation in parallel

* Subject to NMT and JV Board Approval.

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FLEXIBLE BUSINESS MODELS



Principal

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



Partnership

- Primobius to build and operate recycling plant(s) both share 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)
- Demo plant (“DP”) upgrade for commercial 10tpd ‘black mass’ commercial operation
- Procurement and fabrication activities in progress and operating permit pending



10tpd Shredder



50tpd Integrated 1



50tpd Integrated 2



50tpd Integrated 3



Plant Type



Product/s



Status



Location/s



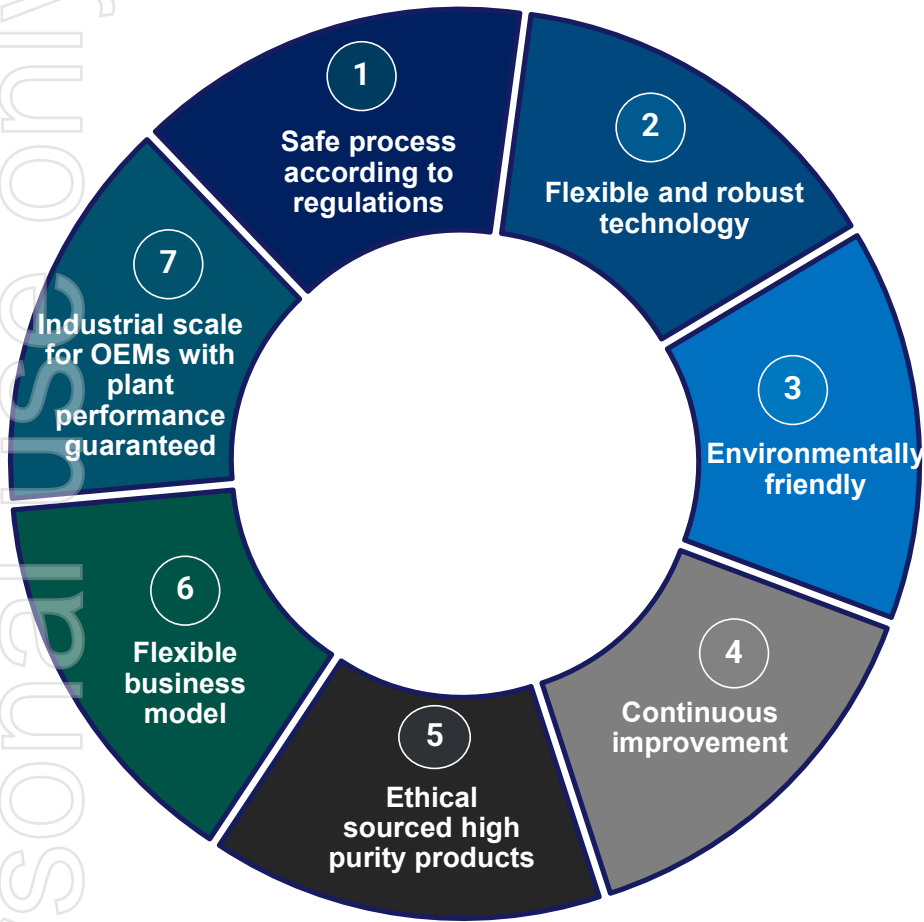
Business Model

	Primobius 10tpd Shredder	Primobius 50tpd Integrated 1	STELCO 50tpd Integrated 2	ITOCHU 50tpd Integrated 3
Plant Type	Shredding	Shredding & Refining	Shredding & Refining	Shredding & Refining
Product/s	Black Mass	PCAM	PCAM	PCAM
Status	Procurement & Fabrication	Demo Trial	MoU	MoU
Location/s	Hilchenbach	Germany	North America	Japan
Business Model	Principal	Principal	JV	JV

PCAM =
Pre-Cursor
Cathode
Active
Materials



PRIMOBIUS COMPETITIVE ADVANTAGE



1 Safe process according to regulations
High share of recycled materials to high purity chemicals within regulatory requirements

2 Flexible and robust technology
Multiple battery chemistries, formats and types can be processed without cell discharging

3 Environmentally friendly
Better recovery, emissions and less transport than incumbents

4 Continuous improvement
Continuous optimization of existing processes with regards to product yield, quality and efficiency

5 Ethical sourced high purity products
High purity chemicals not intermediates for ethical re-supply to the cathode producer supply chains

6 Flexible business model
Service provision, shared economics in JV's, licensing

7 Industrial scale
Scalable plant from trusted brand with performance backstop

USP = Unique selling proposition
JV = Joint Venture





CORPORATE

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%
Top 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

OUR PEOPLE

NE Board Members



Steve Cole
Chair



David Reed



Dr Natalia Streltsova



Doug Ritchie



Dr Jennifer Purdie



Les Guthrie

Management Team



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

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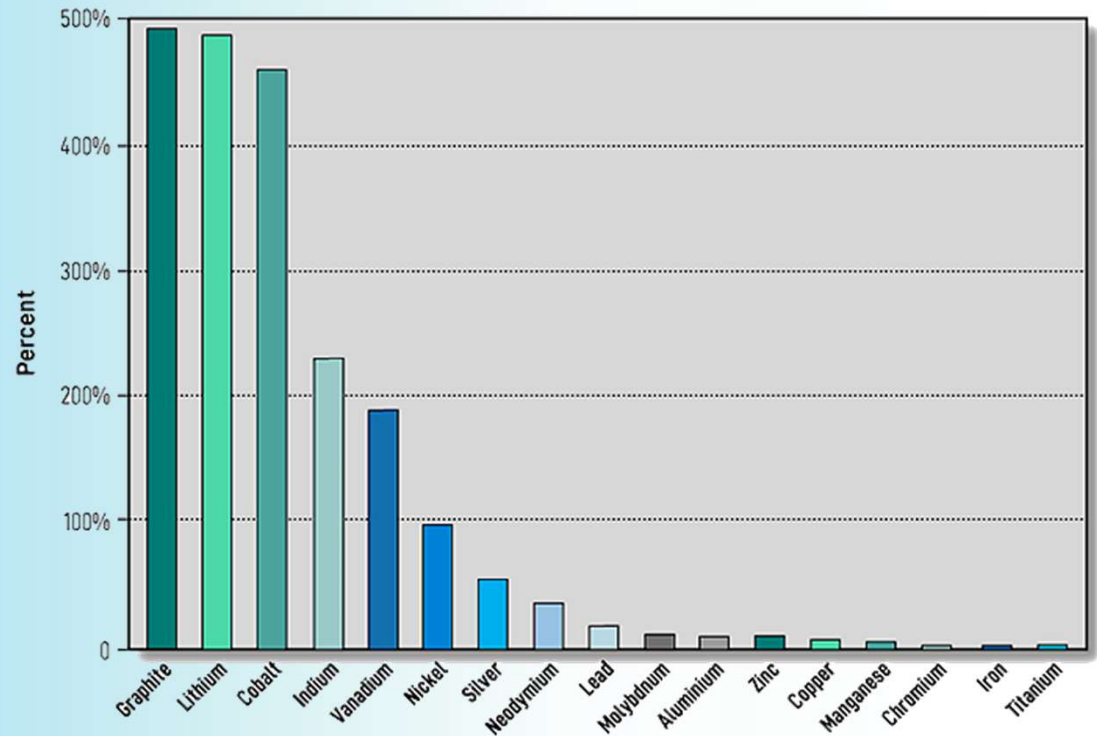
UNPARALLELED EXPOSURE TO THE NEW ENERGY (STORAGE) MEGATREND

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



Source: World Bank Group



COMPANY HIGHLIGHTS

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SECURITY



Strong balance sheet, no debt – can fund developments to near-term 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

OPPORTUNITY



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'





SUPPORTING INFORMATION

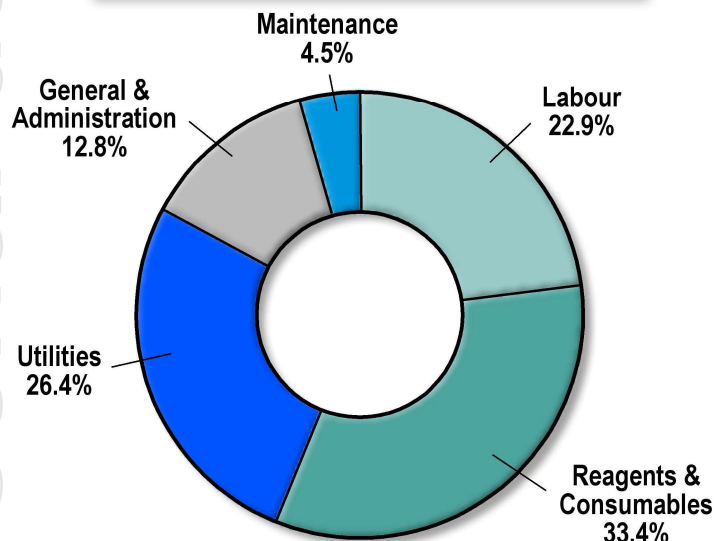
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ENGINEERING COST STUDY ESTIMATES MAY 2021 - AACE CLASS 4 (±25%)

Based on Pilot Plant at SGS Canada in 2019/20

Operating Costs
US\$ 1,560/t Feed

Battery Recycling Project - OPEX
(breakdown by area)



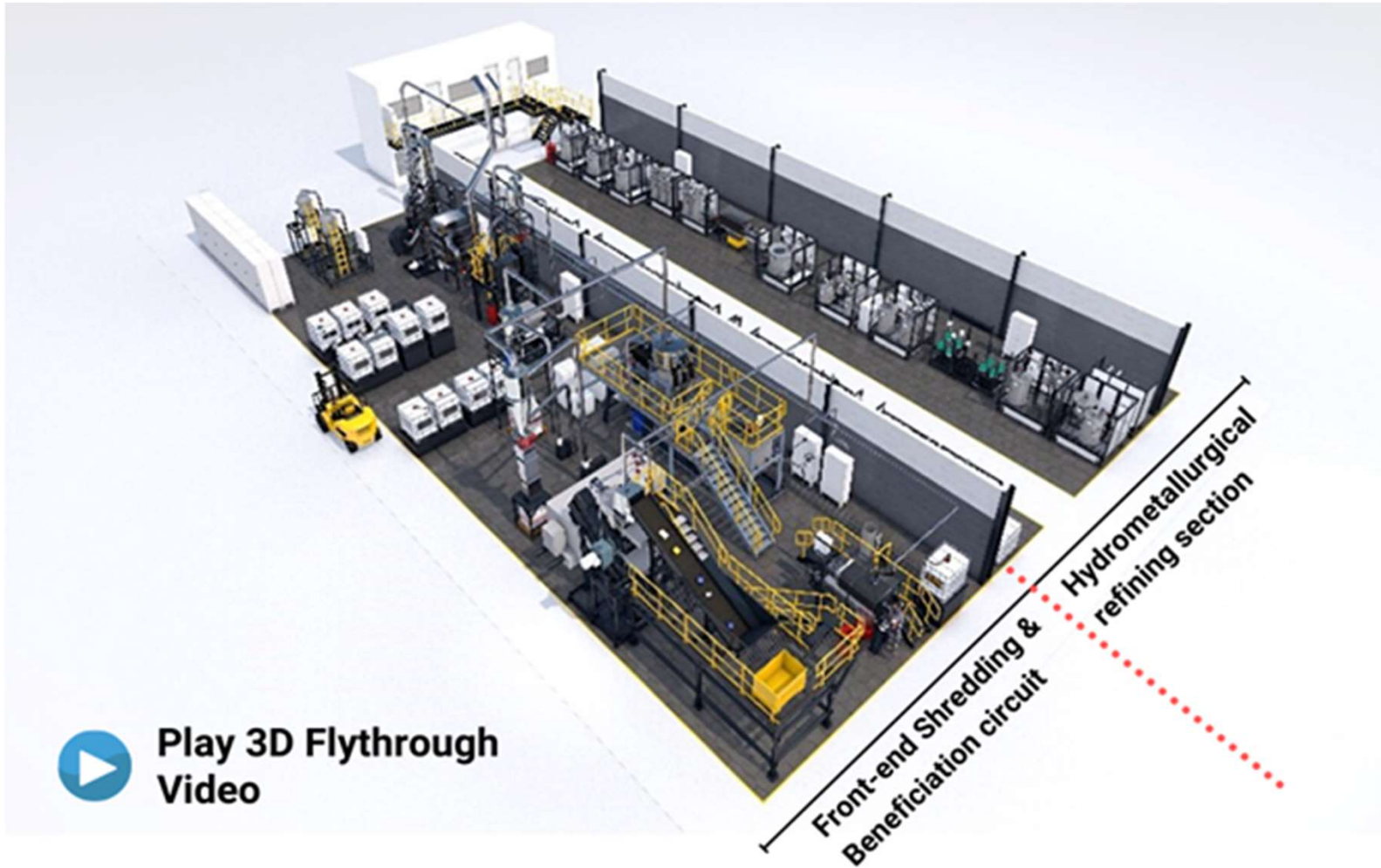
CAPITAL	US\$M
DIRECTS	
Infrastructure Civil	9
Land and Buildings	34
Front End	6
Hydromet	24
Utilities	12
Installation	11
Sub-Total Directs	96
INDIRECTS	
Engineering, Project Management and Owner's Costs	45
Insurance, Freight, Taxes and Interest	9
Sub-Total Indirects	54
CONTINGENCY (10%)	15
TOTAL	165

Source: Neometals ASX Announcement:- Lithium Battery Recycling – Outstanding Cost Estimates (7 May 2021)

Note: total numbers may not sum due to rounding



PRIMOBIUS 3D FLYTHROUGH



JULY 5, 2021

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

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

Primobius

Battery recycling without limits



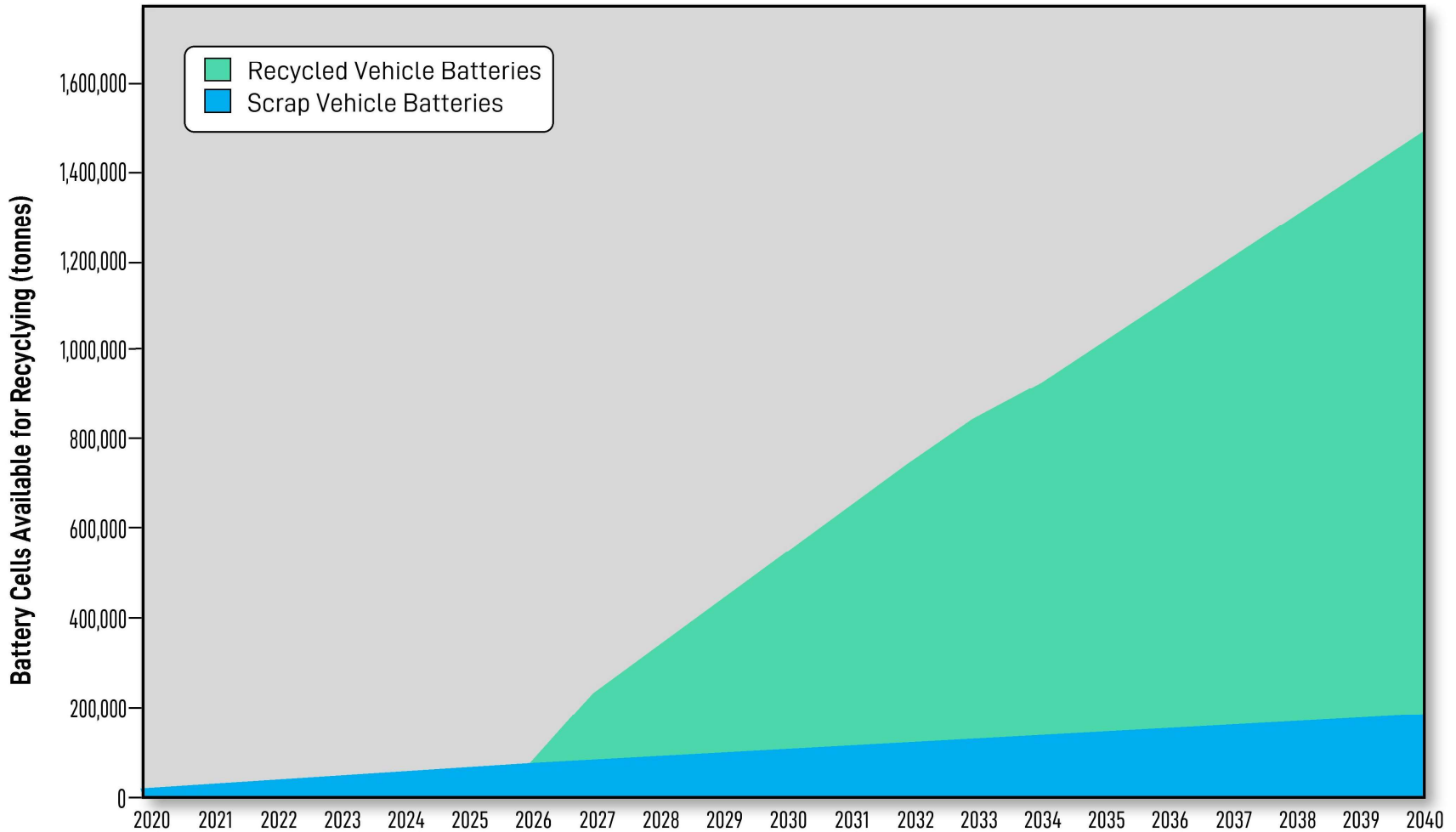
- Stelco is a leading North American steel producer (market cap +C\$3B)
- Stelco plans to introduce scrap steel from end-of-life vehicles into feed stocks for steelmaking
- Proposed 50:50 incorporated JV contemplates processing lithium batteries arising from the vehicle/scrap steel operations
- Primobius 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

North American Battery Availability



Source: Benchmark Mineral Intelligence (Battery Cell Capacity) and Neometals Management (Utilisation rate 75%, Scrap Rate 10% and Cell Weight 4.5a/Wh)



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.

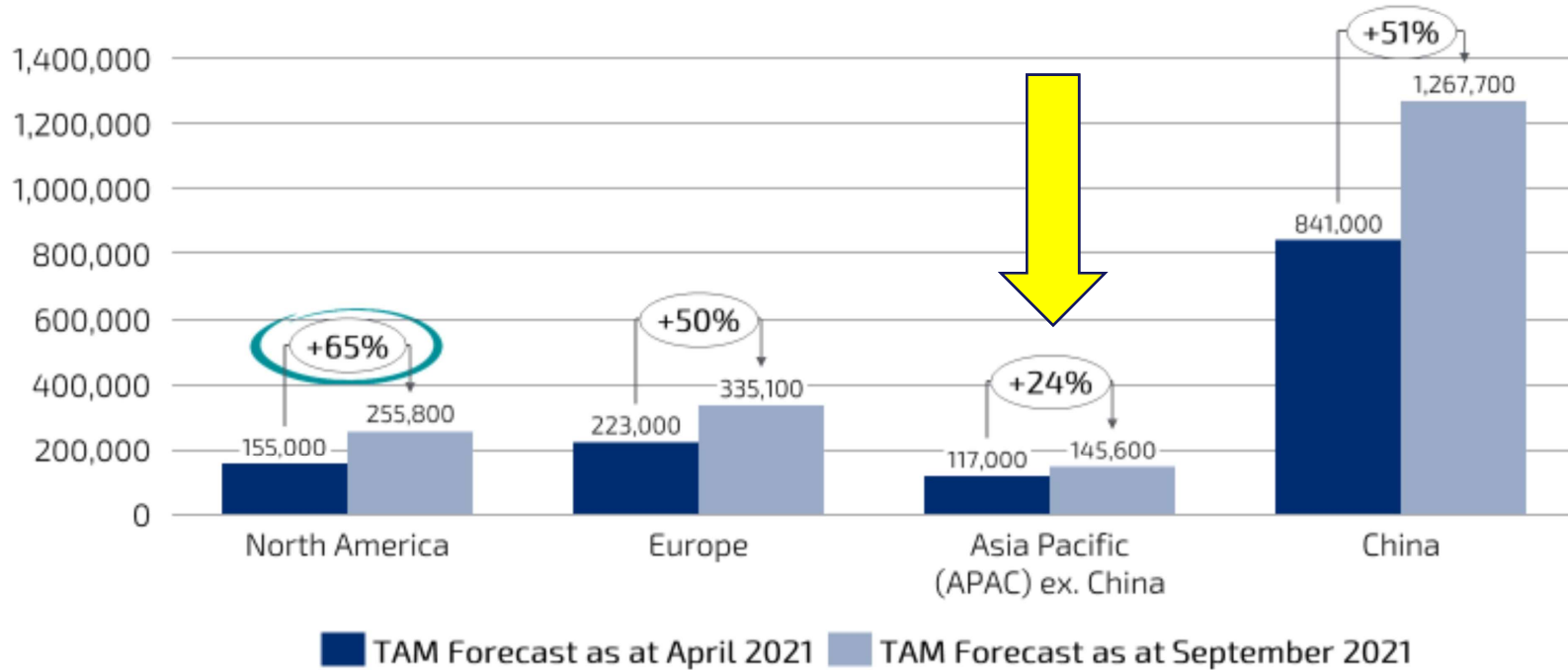


JAPAN HAS LARGEST VOLUME OF SCRAP AND EOL BATTERIES IN APAC

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New Battery Mega-factory Deployment Far Exceeding Expectations

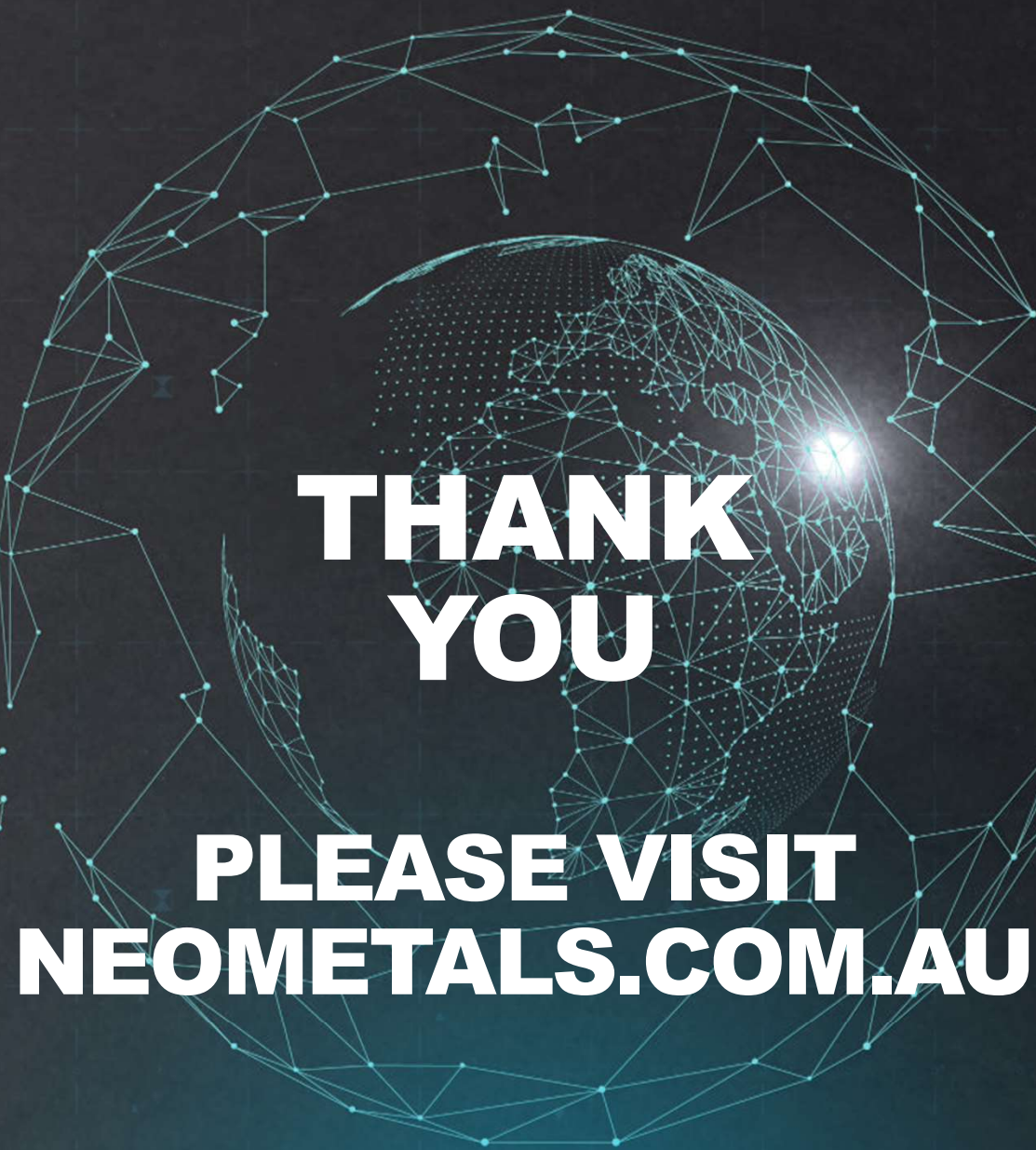
Tonnes of Lithium-ion Batteries Available for Recycling – by Region in 2025^(1,2)



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 (2) Sources: Benchmark Mineral Intelligence ("BMI"), Li-Cycle market intelligence and forecasting.

Source: Li-Cycle





**THANK
YOU**

**PLEASE VISIT
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