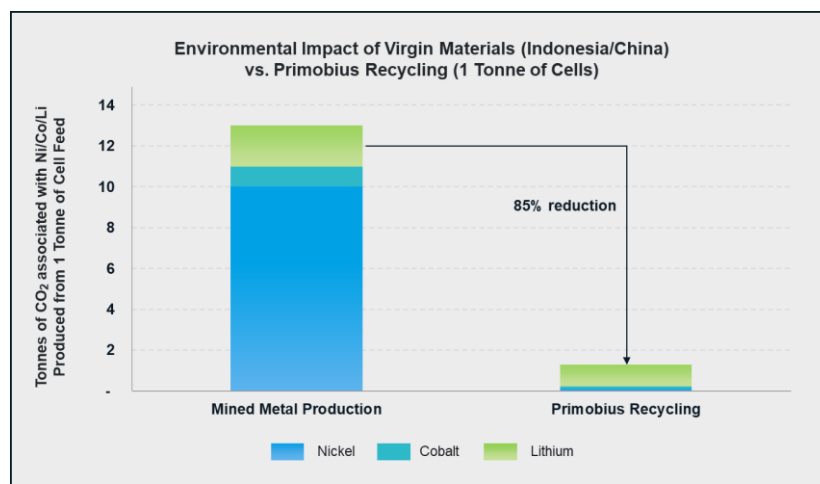


Primobius Recycling Process Achieves 85% Reduction in Carbon Emissions

Highlights

- Life cycle assessment (“**LCA**”) shows potential for Primobius’ lithium-ion battery (“**LiB**”) recycling plants to produce key battery materials with exceptionally low CO₂ footprint;
- Independent ISO-compliant cradle-to-gate LCA completed by Minviro Ltd using detailed engineering data from operations and demonstration trials; and
- Total ‘Global Warming Potential’ approximately 85% lower than comparisons with predominant EV supply chains that start with primary mined nickel, cobalt and lithium sources.

Innovative battery materials recycler, Neometals Ltd (ASX: NMT & AIM: NMT) (“**Neometals**” or “**the Company**”), is pleased to announce positive results from an independent LCA undertaken by its 50:50 LiB recycling incorporated joint venture, Primobius GmbH (“**Primobius**”). The LCA focused on Primobius’ production of the key battery materials, including lithium fluoride (“**LiF**”), nickel sulphate hexahydrate (“**NiSO₄·6H₂O**”) and cobalt sulphate heptahydrate (“**CoSO₄·7H₂O**”), (“**Primary Products**”). The LCA confirmed the Primobius’ integrated hydrometallurgical refining process to have a significantly lower carbon footprint than incumbent production pathways in terms of global warming potential (“**GWP**”).



Adapted from Minviro 2023 LCA Report by NMT. Excludes minor/by-product footprints.
Source: NMT ECS (battery composition) and Minviro 2023 LCA report.

Figure 1 – Comparison of GWP impact for producing key materials in Primobius’ hydrometallurgical product ‘basket’ versus those same refined chemicals that originated from primary mined extraction. Refining data for chemicals was derived using Chinese (cobalt and lithium) and Indonesian (nickel) operating benchmarks which represent the largest manufacturing jurisdictions for the respective primary products.

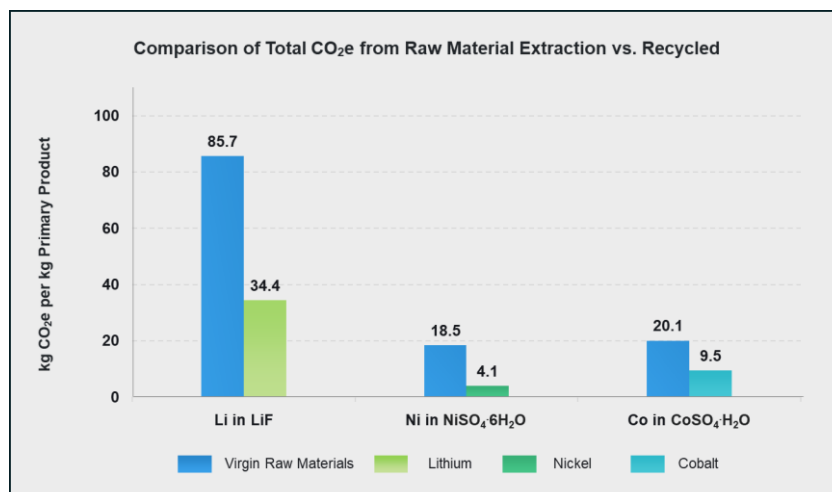
Chris Reed, Neometals Managing Director said:

“The LCA evidences the sustainability of Primobius’ recycling plants and their potential to largely remove embedded carbon from the battery materials supply chain. Our hydrometallurgical recycling plants can deliver customers a secure supply of low-cost, low-carbon battery materials to satisfy their environmental ambitions and meet legislative requirements for new batteries to utilise recycled content.”

Background

Primobius engaged Minviro Ltd (www.minviro.com) to conduct its cradle-to-gate LCA on the Primary Products produced from its integrated recycling process. The LCA has quantified Primobius’ environmental impact and compares against equivalent products produced via incumbent raw material extraction. The functional units of the LCA were 1kg of Li in LiF, 1 kg of Ni in NiSO₄·6H₂O and 1kg of Co in CoSO₄·7H₂O. The study was based on Primobius’ 2023 engineering cost study¹ and was conducted according to the requirements of the ISO-14040:2006 and ISO-14044:2006 standards. Scope 1, 2 and 3 emissions were included in the LCA which was subject to a third-party ISO-compliant critical panel review.

Traditionally, the production of Primary Products has been dominated by processing of mined raw materials. Courtesy of a simplified production process, the Minviro LCA comparison scenarios found that Primobius will have lower GWP to the equivalent manufacture of Primary Products via mined extraction with downstream Chinese and Indonesian refining. This is primarily due to reduced processing steps associated with targeting a feed source (i.e. batteries) with intrinsically higher grade (>15%Ni/Co; ~2.5% Li) than mined raw materials. By recycling LiBs locally, regional recycling reduces the high carbon footprint associated with the logistics of the mined battery material supply chain.



Source: LCA Report (2023)

Figure 2 – Comparison of GWP impact for producing key materials in Primobius’ hydrometallurgical product ‘basket’ versus those same refined chemicals that originated from primary mined extraction. Refining data for chemicals was derived using industry average operating benchmarks.

¹ For full details refer to Neometals ASX announcement headlined “Battery Recycling ‘Hub’ Engineering Cost Study Results” released on 01 August 2023.



Authorised on behalf of Neometals by Christopher Reed, Managing Director.

ENDS

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About Neometals Ltd

Neometals has developed and is commercialising three environmentally-friendly processing technologies that produce critical and strategic battery materials at lowest quartile costs with minimal carbon footprint.

Through strong industry partnerships, Neometals is demonstrating the economic and environmental benefits of sustainably producing lithium, nickel, cobalt and vanadium from lithium-ion battery recycling and steel waste recovery. This reduces the reliance on traditional mine-based supply chains and creating more resilient, circular supply to support the energy transition.

The Company's three core business units are exploiting the technologies under principal, joint venture and licensing business models:

- **Lithium-ion Battery ("LiB") Recycling (50% technology)** – Commercialisation via Primobius GmbH JV (NMT 50% equity). All plants built by Primobius' co-owner (SMS group 50% equity), a 150-year-old German plant builder. Providing recycling service as principal in Germany and commenced

plant supply and licensing activities as technology partner to Mercedes-Benz. Primobius targeting first commercial 21,000tpa plant offer to Canadian company Stelco in the DecQ 2023;

- **Lithium Chemicals (70% technology)** – Commercialising patented ELi™ electrolysis process, co-owned 30% by Mineral Resources Ltd, to produce battery quality lithium hydroxide from brine and/or hard-rock feedstocks at lowest quartile operating costs. Co-funding Pilot Plant trials in 2023 with planned Demonstration Plant trials and evaluation studies in 2024 for potential 25,000tpa LiOH operation in Portugal under a JV with related entity to Bondalti, Portugal's largest chemical company; and
- **Vanadium Recovery (100% technology)** – aiming to enable sustainable production of high-purity vanadium pentoxide from processing of steelmaking by-product ("Slag") at lowest-quartile operating cost. Targeting partnerships with steel makers and participants in the vanadium chemical value chain under a low risk / low capex technology licensing business model.