# ANNOUNCEMENT

*25 November 2022*

Neometals
All the right elements

# PRIMOBIUS OPERATIONS UPDATE

## HIGHLIGHTS

- **Primobius makes development timeline amendments to accommodate a new dedicated 'end-to-end' demonstration trial for customers commencing in December 2022;**
- **The trial will test refining 'Hub' process improvements using cells from discharged and disassembled customer EV modules that have been shredded in the Hilchenbach commercial 'Spoke' plant;**
- **Hub Engineering cost study paused to allow incorporation of metallurgical data from the trial;**
- **The trial will precede H1 2023 targets for execution of the Mercedes-Benz Spoke and Hub supply agreements, the Hub engineering cost study and execution of Stelco Spoke plant supply agreement; and**
- **Cornerstone battery feedstock requirements for the Hilchenbach 10tpd Spoke have been secured for 2023 from the German OEM supply chain.**

Emerging sustainable battery materials producer, Neometals Ltd (ASX: NMT & AIM: NMT) ("**Neometals**" or "**the Company**"), advises that Primobius GmbH ("**Primobius**"), the joint venture company owned 50:50 by Neometals and SMS group GmbH, has agreed development timeline amendments relating to the further commercialisation of its lithium-ion battery ("**LIB**") recycling technology ("**LIB Recycling Technology**"). Primobius is accommodating a new dedicated 'end-to-end' LIB recycling demonstration trial for customers commencing in December 2022 ("**Customer Demonstration Trial**" or **CDT**"). Metallurgical data from testing process improvements in the CDT will be incorporated into the engineering cost study for a commercial-scale hydrometallurgical refinery ("**Hub ECS**"). Consequently, the completion of the Hub ECS is now expected in late Q2 2023 with other commercial milestones aligned accordingly (see Indicative Timeline on page over).

Primobius was incorporated to commercialise Neometals' LIB Recycling Technology, which offers a unique and sustainable method for recovering valuable lithium, nickel, cobalt and other materials from spent and scrap electric vehicle and consumer electronic LIB's. Primobius is ramping up its commercial shredding and beneficiation operations in Hilchenbach, Germany ("**Hilchenbach Spoke**") to its permit limit of 10 tonnes per day ("**tpd**"). Primobius also operates a demonstration scale hydrometallurgical refinery 'Hub' plant in Hilchenbach for discrete trials with existing and potential customers. Primobius is advancing cooperation arrangements with two foundation customers, being Mercedes-Benz ("**MB**")* and Stelco Inc**, both of whom plan to operate fully integrated Spoke and Hub plants of 10tpd and 50tpd capacity respectively.

The 'end-to-end' CDT will test Hub process improvements using cells from discharged and disassembled customer EV modules that have been shredded in the Hilchenbach Spoke. A range of products including battery grade metal sulphates will be generated for ongoing internal and customer evaluation purposes.

The new CDT is a prerequisite for the MB Spoke, which is now expected to be offered in late Q1 2023 with each of the Hub ECS, MB Hub plant and Stelco plant supply agreements expected in late Q2 2023.

** for full details refer to Neometals ASX announcement titled "Cooperation Agreement with Mercedes Benz" released on 13th May 2022*
*** for full details refer to Neometals ASX announcement titled "Battery Recycling - Binding Agreements with Stelco for NA" released on 31st December 2021*

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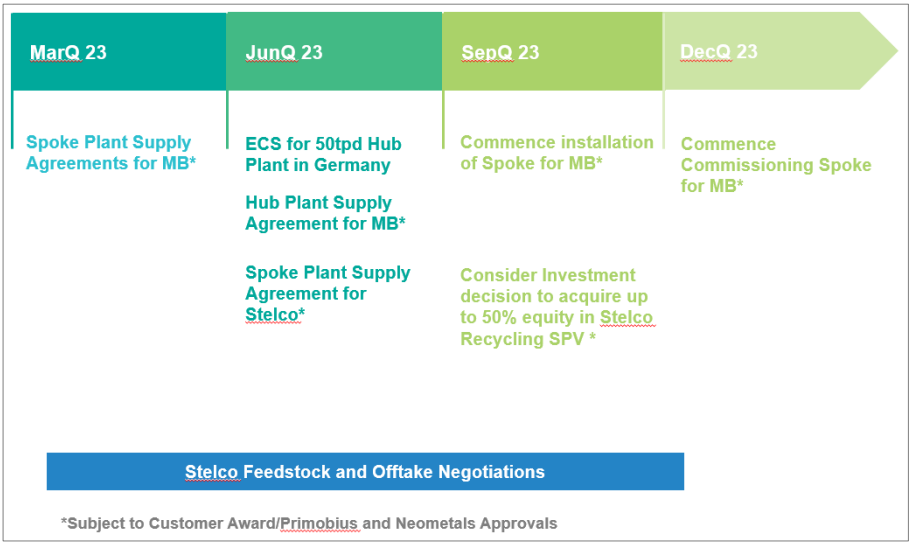
Chris Reed, Neometals Managing Director said:

*"2022 has been a transformative year for Primobius. We commenced commercial operations at our Hilchenbach Spoke plant, demonstrated our core* hydrometallurgical *refinery process, made R&D improvements and designed plants for our large brand name foundation customers. Our EV and module disposal service at the Hilchenbach Spoke continues to attract increasing volumes from the German OEM supply chains and 2023 operations are now underpinned by cornerstone LIB feedstocks arrangements.*

*Primobius' strategy to prioritise its foundation customer needs ahead of own plant building ambitions as principal has necessarily delayed finalisation of evaluation studies. The benefits of additional trials will be in the quality of the data, design and delivery of our recycling plants. The demand for our product is strong and our teams have built an enviable pipeline of new business opportunities with participants in every stage of the global lithium-ion battery supply chain."*

**Indicative Primobius Development Timeline**




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

**ENDS**

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## About Neometals Ltd

Neometals' focus is the continuous development and commercialisation of our proprietary innovative technologies with strong global partners to generate value through sustainable production of battery materials.

Decarbonisation, sustainability and resilient supply chains are the key challenges for the energy storage and electric vehicle supply chain. Our technologies, particularly those in battery materials recycling and recovery, reduce reliance on traditional mining and processing, and support circular economic principles.

Neometals has three core battery materials businesses commercialising proprietary, low-cost, low-carbon process technologies:

1. Lithium-ion Battery ("LIB") Recycling (50% equity)– to produce nickel, cobalt and lithium from production scrap and end-of-life LIBs in an incorporated JV with leading global plant builder SMS group. The Primobius JV is operating a commercial disposal service at its 10tpd Shredding 'Spoke' in Germany and is the recycling technology partner to Mercedes Benz. Primobius' first 50tpd operation will be in partnership with Stelco in Canada is expected to reach investment decision in SepQ 2023;
2. Vanadium Recovery (earning 50% equity) – to produce high-purity vanadium pentoxide via processing of steelmaking by-product ("Slag"). Finalising evaluation studies on a 300,000tpa operation in Pori, Finland and a potential JV with Critical Metals, underpinned by a 2Mt, 10-year Slag supply agreement (together with potential availability of a further 1.1Mt) with leading Scandinavian steelmaker SSAB. JV investment decision expected end Dec 2022. MOU with H2Green Steel for up to 4Mt of Slag underpins a potential second operation in Boden, Sweden; and
3. Lithium Chemicals (earning 35% equity)– to produce battery quality lithium hydroxide from brine and/or hard-rock feedstocks using RAM's patented ELi® electrolysis process. Co-funding pilot plant and evaluation studies on a 20,000tpa operation in Estarreja, Portugal in a 50:50 JV between RAM (70% NMT, 30% Mineral Resources Ltd) and Portugal's largest chemical producer Bondalti Chemicals S.A. Investment decision expected Mar 2023.