

## **NEO Battery Materials Signs MOU with Producer of High-Purity Silicon by Solar & Semiconductor Silicon By-Product Waste Recycling**

**Vancouver, British Columbia – December 29, 2022 - (TSXV: NBM) (OTCQB: NBMFF)**

- MOU with an Asia-Based Recycler of Silicon By-Product Waste from Solar and Semiconductor Manufacturing into High-Purity Silicon Powder
  - Due to Strategic Reasons and Sensitive Nature of Information, Recycler Will Remain Confidential until Disclosed
- Potential to Reduce Silicon Input Price by Up to 40% and Secure Long-Term, Stable-Priced Input Supply through Recycled Silicon Waste
- To Conduct Silicon Anode Sample Testing with Recycled High-Purity Silicon
- Discussed Potential Collaborative Opportunities to Enter North American Market

NEO Battery Materials Ltd. (“**NEO**” or the “**Company**”), a low-cost developer of silicon anode materials that enable longer-running, rapid-charging lithium-ion batteries, is pleased to announce that the Company has signed a Memorandum of Understanding (“**MOU**”) with an Asia-based producer of high-purity silicon powder through recycling silicon by-product waste from solar photovoltaic cell and semiconductor manufacturing (“**Recycler**”). Due to strategic reasons and the sensitive nature of the information, negotiation, and technology, the Recycler will remain confidential until officially disclosed.

Under the terms of the MOU, the purpose is to significantly enhance the price competitiveness of silicon anode materials for electric vehicle lithium-ion batteries by integrating the Recycler’s cost-reduced, recycled silicon input into NEO’s proprietary silicon anode materials, NBMSiDE™.

- Compared to the current metal silicon input for NBMSiDE™, the Recycler’s silicon waste recycling technology may enable NEO Battery Materials to realize a **substantial price reduction in the silicon input by 30% and up to 40%**
- In early January, the Company expects to **receive recycled high-purity silicon and conduct sample testing** to assess for performance, viability, and collaboration/research direction

Further silicon input price reductions will drastically enhance NBMSiDE™ price competitiveness compared to existing high-priced competitors, and the Company may also uniquely secure a long-term supply and stable price of silicon input through recycled silicon by-product waste from solar energy & semiconductor industries.

NEO has also discussed with the Recycler regarding collaborative opportunities to enter the North American market. With gigafactories being constructed in Canada and the U.S., the Company has the potential to provide cost- and environment-friendly silicon anodes through vertically-integrating silicon anode production with the Recycler’s silicon waste recycling. More collaboration and joint development activities with lithium-ion battery supply chain players are expected in the upcoming year, and corporate development activities will be discussed in detail on the January 3<sup>rd</sup> webinar.

### **High-Purity Silicon Recovery from Solar & Semiconductor Silicon By-Product Waste**

In the process of manufacturing polysilicon, silicon ingots, and wafers for solar cells and semiconductors, substantial amounts of by-product waste that contains silicon particles are produced. Thus far, this by-product waste has been disposed of due to the lack of secondary use through recycling.

The Recycler has developed its recycling technology and know-how for over 20 years to recover high-purity silicon from silicon by-product waste. This high-purity silicon can be used as input feedstock for silicon anode materials in lithium-ion batteries. As opposed to traditional, carbon-intensive methods to manufacture silicon particles, the Recycler offers a low-cost silicon recovery method that enables close-looped manufacturing of silicon anode materials.

#### ***About NEO Battery Materials Ltd.***

NEO Battery Materials Ltd. is a Vancouver-based company focused on electric vehicle lithium-ion battery materials. NEO has a focus on producing silicon anode materials through its proprietary single-step nanocoating process, which provides improvements in capacity and efficiency over lithium-ion batteries using graphite in their anode materials. The Company intends to become a silicon anode active materials supplier to the electric vehicle industry. For more information, please visit the Company's website at: <https://www.neobatterymaterials.com/>.

#### **On behalf of the Board of Directors**

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