

Korean Intellectual Property Office Issues Core Patent for NEO Battery Materials’ Silicon Anodes for High Performance Lithium-Ion Batteries

Vancouver, British Columbia – December 24, 2021 – NEO Battery Materials Ltd. (TSXV: NBM) (OTCQB: NBMFF) (“NEO” or the “Company”) is pleased to announce that the Korean Intellectual Property Office (“KIPO”) has issued a core patent of NEO’s silicon (Si) anode material technology following the Notice of Allowance announcement made on November 18, 2021.

Mr. Spencer Huh, President and CEO, commented, “We are glad to announce that the KIPO has issued one of the core patents related to NEO’s low-cost, single-step nanocoating technology for manufacturing silicon anode active materials. As South Korea stands as one of the largest battery manufacturing countries and an epicenter of battery innovation, NEO will continue to strategically establish its presence and development within this market.”

NEO will further submit this patent to the U.S. Patent and Trademark Office and the World Intellectual Property Organization to bolster and protect the proprietary manufacturing nanotechnology the Company possesses. With the issuance of this patent, NEO currently retains 3 issued patents and 2 which are pending issuance.

Recent Corporate Developments

NEO Battery Materials has signed and is under the process of signing 4 additional non-disclosure agreements (“NDA”) which include an established battery cell manufacturer and a European materials manufacturer with multi-billion sales per annum. The Company is accelerating its efforts to target all sections of the lithium-ion battery supply chain from materials to the end-product cell for electric vehicles through collaborative works to commercialization.

About NEO Battery Materials Ltd.

NEO Battery Materials Ltd. is a Vancouver-based company focused on battery metals and materials. NEO has a focus on producing silicon anodes 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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This news release includes certain forward-looking statements as well as management’s objectives, strategies, beliefs and intentions. Forward looking statements are frequently identified by such words as “may”, “will”, “plan”, “expect”, “anticipate”, “estimate”, “intend” and similar words referring to future events and results. Forward-looking statements are based on the current opinions and expectations of management. All forward-looking information is inherently uncertain and subject to a variety of assumptions, risks and uncertainties, including the speculative nature of mineral exploration and development, fluctuating commodity prices, the effectiveness and feasibility of technologies which have not yet been tested or proven on a commercial scale, competitive risks and the availability of financing, as described in more detail in our recent securities filings available at www.sedar.com. Actual events or results may differ materially from those projected in the forward-looking

statements and we caution against placing undue reliance thereon. We assume no obligation to revise or update these forward-looking statements except as required by applicable law.

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