Monthly Corporate Update: NEO Battery Materials Doubles Target Annual Production to 240 Tons for Silicon Anode Commercial Plant

written by Raj Shah | February 7, 2022 February 07, 2022 (Source) - NEO Battery Materials Ltd. (TSXV: NBM) (OTCQB: NBMFF) ("NEO" or the "Company") is pleased to share a month of January corporate update regarding the Company's commercialization development of its proprietary silicon anode materials (or "NBMSiDE") for electric vehicle lithium-ion battery applications.

Site Approval for Silicon Anode Commercial Plant by the Province of Gyeonggi ("Gyeonggi-do" or the "Province"), Korea's Largest Economic Province

As per the news release dated January 24, 2022, NEO Battery Materials Korea Co., Ltd, ("NBM Korea"), a wholly-owned subsidiary of NEO, had received final approval by Gyeonggi-do's Provincial Government and the Foreign Investment Review Board for the usage of 106,700 square feet or approximately 2.5 acreages of land to construct NEO's Silicon Anode Commercial Plant. The facility will be located within an industrial complex designated as a Foreign Investment Zone by the Province.

The Company has undergone a strict due diligence process with the Province to qualify as a foreign investment company and may access various tax incentives and provincial financial support for equipment purchases, employment subsidies, and favorable lease rates for the facility. NBM Korea has received a long-term agreement for the site usage from the Province for the first 10 years with an option to extend up to 50 years. NEO has furthermore submitted an intention to append another lot of 106,700 square feet for further expansion, but the Company will not have to undergo an additional review process to secure the additional land.

Target Annual Silicon Anode Production Doubled to 240 Metric Tons & Commercial Plant Construction Update with EPC Contracts Under Review

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On August 31, 2021, the Company announced the strategic decision to upscale the originally planned pilot plant to a semicommercial scale facility, effectively increasing production capacity by 12-folds from 10 tons to 120 tons per annum. Most recently, with the final site approval, NEO has additionally doubled the initial target annual silicon anode production capacity to 240 tons on the same mass-production lines and has consequently renamed the semi-commercial plant into a commercial-scale plant facility to accommodate for industry capacity standards. The full-fledged facility, after installing the maximum number of mass-production lines through expansion, will have the capacity to manufacture 2,000 tons of NBMSiDE per year.

The ability to expand can be attributed to a more lean and optimized manufacturing method with cost efficiencies to be realized through converting into a continuous process compared to batch processes. With a 5% loading of NEO's silicon into the anode material of the lithium-ion battery, which implies a 19-to-1 ratio between graphite and silicon, the initial capacity of the commercial plant will be able to supply to 160,000 electric vehicles.

Moreover, NEO has initiated the architecture and design process of the plant and has currently received proposals from multiple

architect offices in South Korea. The Company, concurrently, has been negotiating with a third-party for the EPC (Engineering, Procurement, and Construction) contract to both facilitate and accelerate the commercialization process as a turn-key basis.

3. Sample Tests and Third-Party Evaluation

NEO has shipped NBMSiDE samples to 3 parties in January and is preparing to supply additional NBMSiDE products with the same parties in February as mutually agreed. Simultaneously, work is underway to target the initial operation of NBM Korea's R&D Scale-Up Centre at Yonsei University by the second week of March. Upon commissioning the Centre, NEO will possess an increased output capability to better prepare the 3 prototype products, NBMSiDE-P100, NBMSiDE-P200, and NBMSiDE-C100, and provide continuous samples to any demands from NDA counterparties and incoming new parties.

The Company has also shipped NBMSiDE samples to a third-party institution in South Korea for evaluation testing and performance validation. The institution will be executing a full breadth of tests with stacked pouch cells by applying NBMSiDE to their standardized cell manufacturing process.

Mr. Spencer Huh, President and CEO of NEO, said, "At NEO, we retain the obligation to remain transparent through our commercialization developments and to provide necessary updates that we deem as significant to the progress of the Company. We are now planning to schedule webinars regularly to enhance our communication with shareholders and the global investment community."

In connection with the monthly update, NEO will be scheduling a live investor briefing in February, and Mr. Spencer Huh, President and CEO, and Dr. J.H. Park, Director and Chief Scientific Advisor, will be present at the briefing. The event

will be held in both an English and Korean session separately. More details on the webinar briefing will be announced as a subsequent news release.

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 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/.

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 forwardlooking 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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