

NEO Battery Materials Manufactures Pouch-Type Full Cell for Product Evaluation and Convenes NBMSiDE(TM) Commercial Plant Kick-Off Meeting

written by Raj Shah | April 5, 2022

April 5, 2022 ([Source](#)) – NEO Battery Materials Ltd. (TSXV: NBM) (OTCQB: NBMFF) (“NEO” or the “Company”) is pleased to announce that NBMSiDE™ pouch-type full cells have been manufactured to evaluate product performance, viability, and durability in genuine battery charging conditions. The Kick-Off Meeting for NBM Silicon Anode Plant Project has additionally been convened with the engineering design company to streamline terms and efforts for fast-track construction completion.

1. Pouch-Type Full Cell Manufacturing Completion and Performance Testing Conditions



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NEO Battery Materials Ltd. commissioned a third-party evaluation agency for a product performance and viability assessment of NBMSiDE™ through manufacturing and cycle-testing 500 mAh pouch-type full cells. To simulate an authentic battery charging/discharging environment, the pouch full cells utilize NMC cathode materials and a composite mixture anode material with 5% to 10% silicon loading of NBMSiDE™ and graphite.

Following the third party's charging protocols, the tested cells are subjected to a cycle test using a 1C rate (1-hour) charging protocol with dynamic stress tests (DST) and a 100% depth of discharge (DoD), and pouch full cells characterized as high-rate capable cells will be tested with a variety of ultra-fast charging C-rates such as 3C rate (20 minutes) or 5C rate (12 minutes). In addition, pouch cell electrochemical characteristic evaluations will be conducted in a variety of environments and conditions to confirm the robustness and durability of NBMSiDE™, and the third party will provide frequent feedback on progress results.

Through unbiased testing and assessments, NEO Battery Materials is making continuous efforts to ensure objective evaluation and to reserve the functional reliability of NBMSiDE™ silicon material development.

2. NBM Silicon Anode Plant Project Kick-Off Meeting



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With the approval of the 106,700 square foot site by the Gyeonggi Province, NEO Battery Materials, through its South Korean subsidiary, NBM Korea Ltd., started the NBM Silicon Anode Plant Project (“**NSAP Project**”) at Oseong International Investment Zone in Pyeongtaek City in March 2022. The contracted engineering process and design company for the NSAP Project will be employing a team of eight engineers that retain more than 20 years of individual experience for their respective functions, and the team is in the process of the Basic Design Stage for the project.

The Kick-Off Meeting, which marks the official collaborative initiation of the NSAP Project, was held at the Korea Press Foundation Center on April 5, 2022, with the engineering design company. The full-fledged mass-production process design had

been in progress since March of 2022, and the Kick-Off Meeting was convened to determine and define the fundamental terms of the project and to discuss detailed terms and processes apart from the basic agreement.

In a concurrent timeline, the design progress of the NSAP Project and the procurement/construction preparations for Long-Term Delivery (Long Lead Time) Items will be fulfilled. NEO Battery Materials will commence construction in June 2022 and will follow stringent timelines and protocols to aim completion in June 2023.

About NBMSiDE™

NBMSiDE™ is NEO Battery Materials Ltd.'s flagship silicon anode material for electric vehicle lithium-ion batteries. NBMSiDE comes in three variations, P100, P200, and C100, and is manufactured through the Company's proprietary nanocoating technology. All product lines are based on metallurgical-grade silicon microparticles and retain a high specific capacity of >2,500 mAh/g. Through the Company's South Korean intellectual property (IP) law firm, NBMSiDE™ is pending trademark approval.

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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