Nano One Successfully Completes Cathode Evaluation Project with Global Automotive Company, and Expands Collaboration with a New Agreement

written by Raj Shah | February 21, 2023

Highlights of project achievements:

- ***Successful completion of project objectives, advances relationship.***
- ***Demonstrates significant potential to reduce environmental footprint, capital costs, and operating costs for NMC materials.***
- ***Meets performance targets.***
- ***Increases confidence in long term strategic potential.***
- ***Led to a new evaluation agreement that adds LFP to the program and expands validation of Nano One's technology to meet specific needs of the OEM.***
- ***Parties developing a roadmap to execute on vision.***

February 21, 2023 (Source) – Nano One® Materials Corp. ("Nano One" or the "Company") (TSX:NANO)(OTC PINK:NNOMF)(Frankfurt:LBMB) is a clean technology company with a patented low carbon intensity process for the production of low cost, high-performance cathode materials used in lithium-ion batteries. Nano One announced today that it has achieved an important milestone by successfully completing the evaluation

and benchmarking of its process, cathode materials and techno-economic modeling, under a Cathode Evaluation Agreement with a global automotive manufacturer. Success has led the parties to a new Cathode Evaluation Agreement that adds LFP to the program and expands their collaboration to target performance, cost and environmental specifications of cathode materials to meet the needs of the OEM. Financial terms towards the project are confidential.

The parties jointly evaluated Nano One's NMC cathode materials for use in automotive lithium-ion batteries and demonstrated significant potential to reduce environmental footprint, capital costs and operating costs while meeting performance criteria.

As part of the initial evaluation project, a third-party study, conducted by engineering firm Hatch Ltd., outlined that Nano One's patented One-Pot and M2CAM® (metal to cathode active material) processes offer significant environmental benefits and cost advantages when compared to conventional cathode processes. The report also identified opportunities for further optimization and cost savings during scale-up and commercialization.

The successful outcome of this initial evaluation project has led to Nano One and its automotive partner entering a new phase of collaboration and a second Cathode Evaluation Agreement, during which the parties will expand their evaluation and focus on specific performance, cost and environmental parameters for NMC and LFP materials. In addition, Nano One and its automotive partner are developing a roadmap to execute on a joint vision to promote waste free high performing cathodes in world class cells. The joint vision aligns with Canadian and US government initiatives and the underlying objectives of the recent Inflation Reduction Act.

Nano One CTO, Dr. Stephen Campbell, said *“Nano One has successfully demonstrated that its unique M2CAM One-Pot process has the potential to significantly reduce process cost and eliminate waste while meeting performance targets for both its nickel rich and cobalt free materials. Our M2CAM technology can use lithium carbonate or lithium hydroxide and uses metals instead of metal sulfates. This makes it cost and capital competitive, it reduces steps in the supply chain, it lowers water usage by approximately 60% and it eliminates a large and environmentally wasteful amount of sodium sulfate by-product.”*

Nano One’s technology could prevent over 2 billion kilograms of wasteful sodium sulphate by-product, for every 15 million electric vehicles or for each terawatt-hour of battery production.

“Over the past 24 months our team has built a collaborative relationship with the automotive company,” said Andrew Muckstadt, VP of Business Development for Nano One, *“and it is rewarding to know that they are pleased with the results and looking to do more with us. Success in this project has given both parties added confidence in the long-term strategic potential of Nano One’s technology and led to the signing of an additional Evaluation agreement. We share a common vision with our automotive partner to drive down cost, complexity and environmental footprint in the EV cathode supply chain, and we are now developing a roadmap for our collaborative efforts to fulfill this vision.”*

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About Nano One®

Nano One Materials Corp (Nano One) is a clean technology company with a patented, scalable and low carbon intensity industrial process for the low-cost production of high-performance lithium-

ion battery cathode materials. It employs approximately 120 people at its innovation and commercialization hubs in British Columbia and Québec, including the only LFP plant and production team in North America. It has strategic collaborations and partnerships, that include Rio Tinto, BASF, Umicore, CBMM and various automotive OEMs.

Nano One's technology is applicable to electric vehicles, energy storage, consumer electronics and next generation batteries in the global push for a zero-emission future. Its One-Pot process, its coated single crystal materials, and its Metal to Cathode Active Material (M2CAM®) technologies address fundamental performance needs and supply chain constraints; they also reduce equipment and raw material costs, operating expenses, and carbon intensity; and they eliminate a significant waste stream for a much-improved environmental footprint.

The Company aims to pilot and demonstrate its technology as turn-key CAM production solutions for license, joint venture and independent production opportunities. This leverages Canadian talent, critical minerals, renewable energy, and a thriving ecosystem with access to large emerging markets in North America, Europe and the Indo-Pacific region. Nano One has received funding from SDTC and the Government of Canada and Government of British Columbia.

For more information, please visit www.nanoone.ca

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Certain information contained herein may constitute "forward-looking information" and "forward-looking statements" within the

meaning of applicable securities legislation. All statements, other than statements of historical fact, are forward-looking statements. Forward-looking information in this news release includes, but is not limited to, statements with respect to: next steps and development or continuations of a collaboration with the global automotive manufacturer, results of further optimization work, the development of technology, supply chains, and plans for construction, scale-up and operation of a multi cathode piloting hub (MCPH), achievement of industrial scale piloting, demo commercial production and revenues, successful current and future collaborations that may happen with OEM's, miners or others, including consortium partners, the execution of the Company's plans which are contingent on support and grants and the commercialization of the Company's technology and patents. Generally, forward-looking information can be identified by the use of terminology such as 'believe', 'expect', 'anticipate', 'plan', 'intend', 'continue', 'estimate', 'may', 'will', 'should', 'ongoing', 'target', 'goal', 'encouraged', 'projected', 'potential' or variations of such words and phrases or statements that certain actions, events or results "will" occur. Forward-looking statements are based on the current opinions and estimates of management as of the date such statements are made are not, and cannot be, a guarantee of future results or events. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements or forward-looking information, including but not limited to: next steps and development or continuations of a collaboration with the global automotive manufacturer; the results of further optimization work; the ability of the Company to obtain additional financing, including the receipt of total grant monies from SDTC; the receipt of all

necessary regulatory approvals; general and global economic and regulatory changes; next steps and timely execution of the Company's business plans; the development of technology, supply chains, and plans for construction, scale-up and operation of a multi cathode piloting hub (MCPH); achievement of industrial scale piloting, demo commercial production and revenues; successful current and future collaborations that may happen with OEM's, miners or others, including consortium partners; the execution of the Company's plans which are contingent on support and grants; , the Company's ability to achieve its stated goals; the commercialization of the Company's technology and patents; and other risk factors as identified in Nano One's MD&A and its Annual Information Form dated March 28, 2022, both for the year ended December 31, 2021, and in recent securities filings for the Companies which are available at www.sedar.com. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. The Company does not undertake any obligation to update any forward-looking statements or forward-looking information that is incorporated by reference herein, except as required by applicable securities laws. Investors should not place undue reliance on forward-looking statements.

SOURCE: Nano One Materials Corp.