

# LFP from Nano One's Commercial Size Reactors Lead to Fast-tracking Customer Samples

written by Raj Shah | September 14, 2023

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## Highlights:

- Commencing shipment of samples for partners to validate tonne scale LFP in Q4.
- Repeated One-Pot LFP trials demonstrates technology at commercial size reactors.
- Accelerated retrofit of Candiatic for continuous production of LFP.
- 200 tpa reactors installed and optimization underway.
- Building pipeline of potential customers for LFP product orders.

[Nano One](#)® Materials Corp. ("[Nano One](#)" or the "Company") is a clean technology company with patented processes for the production of lithium-ion battery cathode materials that enable secure and resilient supply chains by driving down cost, complexity, energy intensity, and environmental footprint. The Company is pleased to report that One-Pot trials over the past few months in the existing reactors at the Candiatic plant have produced lithium iron phosphate (LFP) at commercial scale with performance results consistent to lab scale. Nano One has leapfrogged to full commercial size reactors and its LFP can be shipped to select customers in Q4 for evaluation. Additionally, the 200 tonne per annum (tpa) reactors have been installed and

optimization is underway for scale-up.

“We are ready to send qualified LFP materials to our partners for evaluation at tonne scale from our commercial scale reactors.” said Nano One’s Chief Commercialization Officer Mr. Denis Geoffroy, “These reactors performing are an important milestone in our commercialization strategy, to provide tonne scale samples to strategic partners and boost the confidence in our technology’s scalability. I am very proud of our team who achieved these results in a very short timeframe.”

### **2,000 tpa Commercial Reactors [existing]:**

Nano One has continued to optimize trials in the existing commercial scale reactors, reproducing lab and development results. This demonstrates the One-Pot process can scale to commercial volumes and advances the de-risking of the technology at commercial scale. This rapid advancement allows commercial scale LFP samples to be sent to qualified customers, ahead of schedule, for thorough evaluation and validation for the purposes of entering binding offtake agreements for both the existing Candiatic plant and the first full commercial line to be built next door. Optimization will continue and the results have helped identify key processing parameters and will expedite the commercial scale-up process.

Successful repeatable LFP trials in the existing commercial scale reactors will lead to an accelerated refurbishment of the plant to automatize the use of the existing reactors for the One-Pot process. This will enable continuous production capabilities up to 2,000 tpa level toward the end of 2024.

### **200 tpa Pilot Reactors [new]:**

In parallel, the team has continued to work on the reception, installation, and commissioning of the 200 tpa One-Pot reactors.

These reactors will provide important information to improve the processes and support validation in a cost-effective manner as the Company continues to innovate. They also allow Nano One to have a baseline automated production capacity of 200 tpa, ready to deliver to customers once they have validated the product.

“The experience of our team has been invaluable in achieving these important milestones.” said Alex Holmes, COO, “Working concurrently with both the 200 tpa reactors and existing commercial scale reactors has fast tracked our commercialization efforts. We are setting the foundation for growth that can secure market share and enhance shareholder value. This couldn’t have been achieved without the unwavering dedication of our team and showcases the amazing talent we have at Nano One.”

“Being ahead of schedule and producing high-quality LFP cathode material is what we needed to fast-track Nano One’s progression to profitability.” said Andrew Muckstadt, VP Business Development, “While attending The Battery Show in Novi Michigan this week, we are able to talk to select customers about taking orders and potentially supplying them with LFP for their business plans in the future. As major players are still determining their supply chain and partners, we are demonstrating we have a viable product that can be produced in North America and replicated around the world.”

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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. With strategic collaborations and partnerships, including automotive OEMs and strategic industry supply chain companies like BASF,

Umicore and Rio Tinto. Nano One's technology is applicable to electric vehicles, energy storage, and consumer electronics, reducing costs and carbon intensity while improving environmental impact. The Company aims to pilot and demonstrate its technology as turn-key production solutions for license, joint venture, and independent production opportunities, leveraging Canadian talent and critical minerals for emerging markets in North America, Europe, and the Indo-Pacific region. Nano One has received funding from SDTC and the Governments of Canada and British Columbia.

For more information, please visit [www.nanoone.ca](http://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: the Company's future business and strategies; industry demand; incurrence of costs; competitive conditions; general economic conditions; the intention to grow the business, operations, revenues and potential activities of the Company; the functions and intended benefits of Nano One's technology and products; the development of the Company's technology, supply chains and products; results of trials and optimization for scale up to commercial production; current and future collaboration engineering, and optimization research projects; plans for construction, scale-up*

and operation of a multi cathode piloting hub; the successful and timely commencement of a commercialization phase; successful validation of LFP products; prospective partnerships with customers and the anticipated benefits of the Company's partnerships; the purpose for expanding its facilities; and the acceleration and execution of the Company's plans – which are contingent on support and grants. 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', '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: 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 cathode production facilities; achievement of industrial scale piloting, demo commercial production and potential revenues; successful current or future collaborations that may happen with OEM's, miners or others; 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 via license, joint venture and independent production; anticipated global demand and projected growth for LFP batteries; and other risk factors as identified in Nano One's MD&A and its Annual

*Information Form dated March 29, 2023, both for the year ended December 31, 2022, and in recent securities filings for the Company which are available at [www.sedar.com](http://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.