



NANO ONE MATERIALS CORP.

Annual Information Form

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2023

DATED MARCH 27, 2024

Unit 101B, 8575 Government Street
Burnaby, BC V3N 4V1

Telephone: 604-420-2041
Website: www.nanoone.ca

TABLE OF CONTENTS

INTRODUCTORY NOTES	3
GLOSSARY OF DEFINED TERMS	4
CORPORATE STRUCTURE	5
GENERAL DEVELOPMENT OF THE BUSINESS.....	8
DESCRIPTION OF THE BUSINESS.....	18
RISK FACTORS.....	30
DIRECTORS AND OFFICERS	42
LEGAL PROCEEDINGS AND REGULATORY ACTIONS	47
AUDIT COMMITTEE	48
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	50
MATERIAL CONTRACTS	50
NAMES AND INTERESTS OF EXPERTS	51
ADDITIONAL INFORMATION.....	51
SCHEDULE "A"	52

INTRODUCTORY NOTES

Date of Information

In this Annual Information Form (the “AIF”), unless the content otherwise requires, references to the “Company” or “Nano One” mean Nano One Materials Corp., and its subsidiaries, collectively. Unless otherwise specified, all information in this AIF is as at December 31, 2023, with subsequent events disclosed to March 27, 2024.

Currency

All dollar amounts are expressed in Canadian dollars unless otherwise indicated.

Cautionary Note Regarding Forward-Looking Information

Except for statements of historical fact, this AIF contains certain forward-looking statements and forward-looking information within the meaning of applicable securities law, which are based upon the Company’s current internal expectations, estimates, projections, assumptions and beliefs. Such forward-looking statements and information include, but are not limited to, statements or information with respect to: the Company’s business plans and strategies; requirements for additional capital and future financing; estimated future working capital, funds available, and uses of funds, and future capital expenditures and other expenses for specific operations, intellectual property protection; industry demand; ability to obtain employees, consultants or advisors with specialized skills and knowledge; anticipated joint development programs; incurrence of costs; competitive conditions; general economic conditions; the intention to grow the business, operations 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 and products; the commencement of a commercialization phase and entering into a definitive agreement with a party to plan, design, finance, construct and operate a cathode production facility; the Company’s research and development programs; collaboration with material producers; the Company’s short and long-term business objectives and milestones and the events that must occur to accomplish them; prospective partnerships and the anticipated benefits of the Company’s partnerships; the Company’s licensing, supply chain, joint venture opportunities and potential royalty arrangements; the purpose for expanding its facilities; and scalability of developed technology.

Forward-looking information is frequently characterized by words such as “plan”, “project”, “intend”, “believe”, “anticipate”, “estimate” and other similar words, or statements that certain events or conditions “may” or “will” occur. Although the Company’s management believes that the assumptions made and the expectations represented by such statement or information are reasonable, there can be no assurance that a forward-looking statement or information referenced herein will prove to be accurate. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated

in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include risks relating to: the impact of the coronavirus (“**COVID 19**”) or other public health crises; research and development; general economic, market and business conditions in Canada and the United States, including reduced availability of debt and equity financing generally; risks relating to the effective management of the Company’s growth; the Company’s intellectual property applications being approved; the Company’s ability to protect its proprietary rights from unauthorized use or disclosure; the ability of the Company to obtain additional financing or raise equity and/or debt financing on acceptable terms, and secure government assistance; the Company’s limited operating history; the Company’s ability to attract employees, consultants, or advisors with the necessary skills and knowledge; the need to comply with environmental and governmental regulations; the Company’s ability to attract and retain customers and partners; fluctuations in currency exchange and interest rates; operating hazards and risks; the competitive nature of the industries in which the Company operates; competition for, among other things, capital and skilled personnel and management; the possibility of adverse developments in the financial markets generally; the Company’s ability to obtain required regulatory approvals; geopolitical, political and economic conditions; the results of litigation or regulatory proceedings that may be brought against the Company; changes in income tax laws; the Company’s ability to effectively commercialize its technology; the ability for the Company to achieve broad market acceptance of its products; cybersecurity risks; the ability for the Company to continue as a going concern; corruption, bribery and sanctions, supply chain disruptions, industry risk; government grants; customer dependence; future revenue; and other risks and uncertainties. The Company undertakes no obligation to update forward-looking statements and information if circumstances or management’s estimates should change except as required by law. The reader is cautioned not to place undue reliance on forward-looking statements and information. More detailed information about potential factors that could affect results is included in the documents that may be filed from time to time with the Canadian securities regulatory authorities by the Company.

For a more detailed discussion of certain of these risk factors, see “*Risk Factors*”. The list of “*Risk Factors*” set out in this AIF is not exhaustive of the factors that may affect any of our forward-looking information.

GLOSSARY OF DEFINED TERMS

Unless otherwise defined herein, the following terms used in this AIF have the meanings set forth below:

“ Board ”	means the board of directors of Nano One
“ BCBCA ”	means the <i>British Columbia Business Corporations Act</i>
“ Common Shares ”	means the common shares in the capital of Nano One
“ HVS ”	means High Voltage Spinel

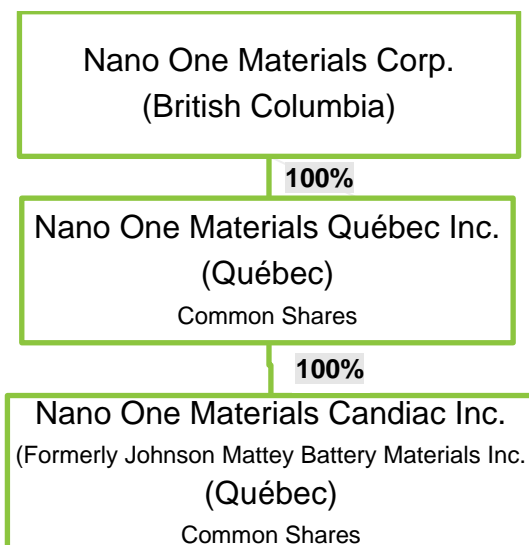
“LFP”	means lithium iron phosphate
“LNMO”	means lithium nickel manganese oxide
“M2CAM®”	means metal to cathode active material
“NI 51-102”	means National Instrument 51-102, <i>Continuous Disclosure Obligations</i>
“NMC”	means lithium nickel manganese cobalt
“NRC-IRAP”	means The National Research Council of Canada Industrial Research Assistance Program
“One-Pot process”	means Nano One’s patented manufacturing technology
“SDTC”	means Sustainable Development Technology Canada
“TSX”	means the Toronto Stock Exchange Inc.
“TSX-V”	means the Toronto Venture Exchange Inc.
“SEDAR+”	means the System for Electronic Document Analysis and Retrieval, the electronic filing system for the disclosure documents of public companies and investments funds across Canada, available at www.sedarplus.ca .

CORPORATE STRUCTURE

Name, Address, and Incorporation

The Company was incorporated under the laws of the Province of Alberta on November 5, 1987, and continued under the laws of the Province of British Columbia on September 8, 2004. On March 5, 2015, the Company completed a combination with Perfect Lithium Corp. (“**PLC**”), a private company incorporated in February 2011 under the laws of the Province of British Columbia, whereby it acquired all the issued and outstanding common shares of PLC in exchange for issuing Common Shares to the former shareholders of PLC. On July 1, 2015, the Company amalgamated with PLC and continued as one company under the name, Nano One Materials Corp.

On November 1, 2022, the Company closed the acquisition of Johnson Matthey Battery Materials Ltd. (“**JMBM Canada**”) from Johnson Matthey, PLC via a subsidiary located in Québec, Nano One Materials Québec Inc. (“**Nano One Québec**”). Following closing of the acquisition **JMBM Canada** was renamed Nano One Materials Candiac Inc. (“**Nano One Candiac**”).



The Company’s head office is located at Unit 101B, 8575 Government Street, Burnaby, British Columbia V3N 4V1 and its registered and records office is located at 2900 - 550 Burrard Street, Vancouver, British Columbia V6C 0A3.

The Company’s articles of incorporation were amended and ratified on October 14, 2021.

CAPITAL STRUCTURE

Authorized Capital

The Company has an authorized share capital consisting of an unlimited number of Common Shares without par value. As at the date hereof, the Company had outstanding 111,266,777 fully paid and non-assessable Common Shares without par value (December 31, 2023 – 111,266,777).

Common Shares

The holders of the Common Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Company and have one vote for each Common Share held at all meetings of the shareholders of the Company. All of the Common Shares rank equally within their class as to dividends, voting rights, participation in assets and in all other respects. None of the Common Shares are subject to any call or assessment nor pre-emptive or conversion rights. There are no provisions attached to the Common Shares for redemption, purchase for cancellation, surrender, or sinking or purchase funds. In the event of dissolution, liquidation or winding up of the Company, whether voluntary or involuntary, or any other distribution of assets of the Company among its shareholders for the purpose of winding up its affairs, holders of the Common Shares will be entitled to receive the remaining property and assets of the Company.

As at the date hereof, 2,255,513 Common Shares are reserved for issuance under stock options granted, with a weighted average exercise price of \$3.03 per share.

As of the date hereof, 1,290,512 Common Shares are reserved for issuance for the award of restricted and differed share units (“**RSUs**” and “**DSUs**”, respectively).

Market for Securities

Common Shares of Nano One are traded on the TSX under the symbol “NANO”. The following table outlines the share price trading range and volume of shares traded from January 1, 2023 to the date of this AIF.

Month	High	Low	Close	Volume
	(\$)	(\$)	(\$)	
January 1, 2023	3.32	2.32	3.32	3,534,497
February 1, 2023	3.96	2.77	3.75	5,543,631
March 1, 2023	3.94	3.08	3.17	4,155,357
April 1, 2023	3.30	2.77	2.86	2,243,464
May 1, 2023	2.97	2.62	2.62	1,572,055
June 1, 2023	3.01	2.57	2.98	3,109,305
July 1, 2023	3.52	3.00	3.36	3,085,253
August 1, 2023	3.43	2.46	2.60	2,645,061
September 1, 2023	3.40	2.31	2.97	3,199,747
October 1, 2023	3.05	2.52	2.68	1,359,607
November 1, 2023	2.84	2.4	2.44	1,772,952
December 1, 2023	2.68	2.29	2.41	2,741,673
January 1, 2024	2.48	1.78	1.82	3,622,033
February 1, 2024	1.86	1.52	1.73	2,047,139
March 1, 2024	2.11	1.60	1.96	2,398,782

Source: TMX InfoSuite

Reporting Issuer

Nano One is a reporting issuer or the equivalent in the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, and Nova Scotia.

Dividends

No dividends on the Common Shares have been paid by the Company to date and the Company does not currently have an established policy with respect to the payment of dividends or any immediate plans to issue dividends at present.

Transfer Agent and Registrar

The Company's transfer agent and registrar is Computershare Investor Services Inc. The register of transfers of the Company's Common Shares is maintained by Computershare at its offices located at 510 Burrard St, 3rd Floor, Vancouver, BC V6C 3B9.

GENERAL DEVELOPMENT OF THE BUSINESS

Three Year History

Fiscal Year 2021

M2CAM® Technology

In February 2021, Nano One announced the launch of its now patented M2CAM technology which reduces cost, reduces waste, and reduces the carbon footprint in the lithium-ion battery supply chain. A list of all the Company's issued patents can be found under the section "Patents and Proprietary Technology" in this AIF.

Nano One's patented One-Pot process forms durable single crystal cathode powders and protective coatings simultaneously and the process has been adapted for M2CAM, enabling these materials to be made directly from metallic powders. Metal powders are one-fifth of the weight of metal sulfates, avoiding the added costs, energy and environmental impact of converting to sulfate and shipping and handling of waste.

The One-Pot process is an aqueous process, using carbon neutral chemistry, that operates at room-temperature and atmospheric pressures, and it combines feedstock conversion, precursor formation, lithiation and coating steps into one reaction. This creates added value for metals and aligns Nano One with the environmental, sustainability and cost objectives of automotive companies, miners, investment communities and governmental infrastructure initiatives.

Financings and Government Funding

In September 2021, the Company announced the completion of Milestone 2 of the "Scaling Advanced Battery Materials" project jointly funded by SDTC and the British Columbia Innovative Clean Energy, Mines and Petroleum Resources ("BC-ICE") fund. Consequently, the advance funding for project Milestone 3, in the amount of approximately \$1,653,000 was received.

Within Milestone 2, Nano One strengthened its process for both LFP and NMC cathode materials. Nano One's capabilities and capacity have also significantly increased in this milestone through the addition of staff and equipment and additional laboratory space, pilot, and office facilities.

Partnerships and Technological Breakthroughs

Joint Development Agreement signed with Euro Manganese

In October 2021, the Company announced the signing of a JDA with Euro Manganese Inc. (“**Euro Manganese**”) to evaluate and develop applications of high-purity manganese as potential feedstock for cathode materials made using Nano One’s patented One-Pot process, coated nanocrystal and M2CAM technology.

Completion of 2019 Cathode Development Project with Global Automotive Company and New Agreement

In September 2021, the Company announced the completion of a project with a global automotive Original Equipment Manufacturer (“**OEM**”), that was first announced in June 2019 and the two parties have signed a Memorandum of Understanding (“**MOU**”) to evaluate performance, economic feasibility, and future collaboration on manganese-rich cathode materials for potential use in automotive scale battery cells.

Industrial Scale Engineering Study Added to Automotive Project

In August 2021, the Company announced that its Cathode Evaluation Agreement with a global automotive company had expanded in respect of the evaluation of NMC/LNMO cathode materials. The increased scope included an engineering report by Hatch Ltd. to model cathode manufacturing, preliminary economics and environmental benefits of Nano One’s patented One-Pot process, coated nanocrystal, and M2CAM technologies at an automotive scale.

Co-Development Agreement with CBMM

In May 2021, the Company announced the execution of an advanced lithium-ion battery cathode materials coating development agreement with CBMM, the global leader in the production and commercialization of niobium products and technologies. The objective of the agreement was optimization of Nano One’s patented One-Pot process for nickel-rich cathode materials using niobium from CBMM as a protective and performance enhancing coating (see “*Fiscal Year 2022 – Partnerships and Technological Breakthroughs*”, below).

Corporate Events

Graduation to the Toronto Stock Exchange

Effective June 8, 2021, Nano One commenced trading on the TSX under the symbol “NANO”. Nano One formerly traded on the TSX-V under the symbol “NNO”.

Expansion of Team and Advisors

In November and December 2021, the Company announced the engagement of Mr. Denis Geoffroy as a consultant (current Chief Commercialization Officer), the hiring of Mr.

Adam Johnson (current Senior Vice President External Affairs), the engagement of Dr. Yuan Gao (Strategic Advisor), and the engagement of Mr. Frank Fannon (Fannon Global Advisors, as a Strategic Advisor). Expansion of the Company's team of advisors strengthened Nano One's innovation, commercialization, North American scale-up programs, and strategic communications/external affairs with governments.

Changes in Board and Directors

During the year ended December 31, 2021, the Company made the following appointments to its Board of Directors:

- As announced September 7, 2021, Mr. Gordon Kukec was appointed as an independent Director; and
- As announced December 16, 2021, Ms. Carla Matheson was appointed as an independent Director.
- On November 30, 2021, Mr. John Lando retired from the Company's Board of Directors and resigned from his position as President of the Company.

Transition in LFP Strategy

In November 2021, the Company ceased joint development activities with China-based Pulead Technology Industry and announced a shift in its LFP strategy to North America to meet the emerging need for domestically integrated and cost effective supply chains with a low environmental footprint.

Other Events

In January 2021, the Company announced a proposal to demonstrate its technologies in the Chilean Clean Technology Institute, Instituto Chileno de Tecnologías Limpias (ICTL), as part of a joint project proposal with Associated Universities, Inc. (AUI).

In February 2021, Nano One announced that its proprietary HVS cathode materials were performing well in University of Michigan solid-state battery test programs.

Fiscal Year 2022

Financings and Government Funding

Funding to Advance M2CAM and Thermal Processing Initiatives

In March 2022, the Company announced funding from the NRC-IRAP (received) to advance cost optimization of the One-Pot process for the manufacture of cathode active material ("CAM"), specifically as it relates to use in metal feedstocks enabled by Nano One's M2CAM technology and innovations in the final stage of thermal processing.

SDTC and BC-ICE Funding of \$1.8M and Grant of 2 Patents

In August 2022, the Company announced the grant of two (2) additional patents in Japan and the receipt of approximately \$1,800,000 in non-dilutive, non-repayable contributions from SDTC and BC-ICE toward Milestone 4 (the final milestone) of the Scaling Advanced Battery Materials project, after completing Milestone 3 deliverables for economic modelling and scaled-up demonstration of both LFP and NMC.

Partnership and Technological Breakthroughs

Successful Completion of Phase One of Co-Development Agreement with Niobium Producer CBMM

In February 2022, the Company announced that it had successfully completed Phase 1 of its advanced lithium-ion battery cathode materials coating development agreement with CBMM, demonstrating that CBMM's niobium can be used to form a coating simultaneously with cathode material using Nano One's patented One-Pot Process to enhance durability on the resulting NMC CAM. These are applicable to both conventional liquid electrolyte cells and advanced solid state electrolyte cells.

Joint Development Agreement - BASF

In May 2022, Nano One announced the signing of a JDA with BASF SE ("BASF") to co-develop a process using Nano One's technology to reduce cost, by-products, energy consumption and environmental footprint for the potential production of BASF's proprietary CAM.

Strategic Investment by Rio Tinto

In June 2022, the Company entered a strategic partnership with Rio Tinto including a collaboration agreement and a US\$10,000,000 (\$12,536,500) investment into Nano One with proceeds directed to technology and supply chain development, commercialization, the acquisition of JMBM Canada, its conversion to One-Pot process LFP, and for working capital purposes.

Nano One issued 4,643,148 Common Shares to Rio Tinto, approximately 4.9% of the issued and outstanding Common Shares at the time of the share issuance, at \$2.70 per share in a non-brokered private placement. Nano One also issued 1,000,000 share purchase warrants to Rio Tinto in respect of a Strategic Collaboration Agreement executed between the parties. Each Warrant entitled Rio Tinto to purchase one common share at an exercise price of \$4.00, until June 16, 2023 (expired unexercised).

Provisions of the investment agreement with Rio Tinto include participation rights in any future equity financings to maintain pro rata ownership interest for a period of five years to June 16, 2027; a lock up on securities dispositions and a standstill for a period of 12 months, subject to certain exemptions.

Validation of Manganese Metal in M2CAM Process

In September 2022, the Company announced the successful validation of Euro Manganese's high-purity electrolytic manganese metal samples as feedstock for Nano One's One-Pot and M2CAM cathode production technologies, meeting the need for sustainably sourced critical minerals and environmentally superior supply chains in the automotive battery market in Europe and North America.

Joint Development Agreement with Umicore

In December 2022, the Company announced a non-exclusive JDA with Umicore to co-develop Nano One's patented M2CAM One-Pot process technology with Umicore's proprietary process technology for the purposes of increasing throughput, reducing costs, and reducing environmental impact in the production of high nickel NMC CAM for lithium-ion batteries.

Corporate Events

Acquisition of Johnson Matthey Battery Materials Ltd.

On November 1, 2022, the Company acquired 100% of the shares of JMBM Canada, a Canadian entity located in Candiac, Québec, for cash consideration of approximately \$16,000,000 including working capital adjustments. The acquisition included the team in Candiac, a 2,400 tonne per annum capacity LFP production facility, equipment, land, and other assets. The transaction was announced on May 25, 2022. Transaction costs of \$352,993 were also incurred for aggregate cash consideration of \$16,352,993.

Change in Executive Officers and Board and Directors

On November 1, 2022, Denis Geoffroy a consultant to Nano One since 2021, was appointed Chief Commercialization Officer (CCO) of Nano One.

During the year ended December 31, 2022, the Company had the following appointments to its Board of Directors:

- As announced June 15, 2022, Ms. Lisa Skakun was appointed as an independent Director.

Fiscal Year 2023

During fiscal 2023, the Company made significant achievements after the first full year of ownership of the Candiac LFP production facility. The Company recommissioned the Candiac facility to test and pilot the One-Pot process in commercial scale equipment to produce LFP. These activities have showcased the patented One-Pot process working at commercial scale, attracted investment partners, and have positioned Nano One to commercialize its cost competitive, environmentally superior CAM manufacturing

technology to supply LFP cathode materials for the emerging market in LFP batteries via production, licensing and joint venture opportunities. 2023 achievements include:

- Awarded \$10M in grant funds from SDTC.
- Successfully completed evaluations with global OEM and expanded collaboration to include LFP.
- Laid out commercialization plans for LFP and other materials.
- Signed JDA with Our Next Energy (“ONE”) to collaborate on the validation, qualification, and production of a North American supply of LFP CAM.
- Demonstrated, de-risked and fast-tracked tonne scale sampling of One-Pot LFP.
- Secured \$17M investment and collaboration with Sumitomo Metal Mining.
- Completed pre-feasibility study (FEL 2) of 12,500 tpa LFP production line.
- Showcased LCA study with 50% fewer GHGs and 80% less water.
- Preliminary OEM evaluation of Nano One LFP successful, kicking off tonne-scale evaluations.

New program funding from SDTC

On February 13, 2023, the Company announced an award of \$10,000,000 in non-dilutive, non-repayable contributions from SDTC. These funds support the conversion of Nano One’s Cadiac facility to the patented One-Pot process for industrial-scale pilot production of LFP and include financial support to advance Nano One’s One-Pot and metal-direct-to-CAM (M2CAM) processes for the industrial scale pilot production of next-gen LFP, NMC and LNM cathode active materials.

This project named, “Pre-Commercial Trial and Multi Cathode Piloting Hub”, will be multi-phase, multi-year, and milestone driven. This follows two other successful Nano One SDTC projects which assisted in demonstrating the One-Pot process at small pilot scale production volumes and advanced the technology to this point of pre-commercial trials. This project also leverages Nano One’s acquisition of JMBM Canada on November 1, 2022. It amplifies the opportunity for global LFP business expansion and is further validated by the support of the federal government and the project’s industrial consortium partners (Rio Tinto, Lithion Battery Inc., and undisclosed automotive OEM).

Completion of Cathode Evaluation Project & Expansion of Collaboration with Automotive OEM

On February 21, 2023, the Company announced the successful evaluation and benchmarking of the One-Pot process, CAM, and techno-economic modelling, under a Cathode Evaluation Agreement with a global automotive manufacturer (OEM). Success has led the parties to a new Cathode Evaluation Agreement that adds LFP to the program and expands the collaboration to target performance, cost, and environmental specifications of CAM to meet the needs of the OEM. The parties jointly evaluated Nano

One's NMC CAM for use in automotive lithium-ion batteries and demonstrated significant potential to reduce environmental footprint, capital costs and operating costs while meeting performance criteria.

The successful outcome of this initial evaluation project has led to Nano One and the OEM entering a new phase of collaboration and a second Cathode Evaluation Agreement.

New Patents Issued and Exercises of Expiring Warrants

On March 17, 2023, the Company announced three (3) additional patents issued thereby increasing its portfolio to a total of 27. Patent Application TW 202222679 will be for the One-Pot synthesis of lithium iron phosphate (LFP) being commercialized in Candiac QC. Patent KR 10-2443307 is for the One-Pot synthesis process of NMC and LNMO cathode materials. Patent US 11,616,230 will be for fine and ultrafine powders and nanopowders of lithium metal oxides for battery applications.

The Company also announced the receipt of approximately \$3,700,000 in proceeds from the exercise of warrants from January 1, 2023, in relation to warrants issued as part of a private placement completed in February 2020 and were due to expire on February 21, 2023.

Successful Completion of Phase Two of Co-Development Agreement with CBMM

On May 17, 2023, the Company announced the successful completion of phase two of the co-development work with CBMM demonstrating enhanced durability of high nickel NMC CAM when coated with CBMM's niobium using Nano One's One-Pot process and M2CAM technology.

Joint Development Agreement (JDA) with Our Next Energy (ONE)

On June 14, 2023, the Company announced a JDA with ONE to collaborate on the validation, qualification, and production of LFP CAM produced at Nano One's 200 tpa LFP pilot plant for validation in ONE's production LFP cells used in its Aries and Gemini batteries, with the goal of a binding offtake agreement and expansion into future production facilities.

New Patents Issued

On July 20, 2023, the Company announced the recent issuance of six (6) new patents that are approved for issuance, or have issued, in Canada, United States and Japan. In large part to ongoing support from Government of Canada programs, Nano One continues to extend the Canadian intellectual property landscape and its own protections, all while growing economic activity, summarized as follows: (i) High nickel cathode materials for improved battery performance; (ii) Nano One's proprietary process of cathode manufacturing; (iii) One-Pot sulfate free process for formation of LFP cathode

materials, and; (iv) The manganese stabilization technology which is particularly important in spinel based cathode materials such as high voltage spinel (HVS).

Completion of Second SDTC Project

On August 21, 2023, the Company announced successful completion of its second SDTC project which resulted in a final contribution by SDTC to the Company of approximately \$803,000 for total contributions over the course of the project from 2019 of \$8,250,000.

The funded project helped Nano One accelerate significant advances in scaling of its One-Pot process for lithium iron phosphate (“LFP”), specifically in preparation for pilot and industrial scale production at its recently acquired facilities in Candiac, Québec. The project enabled 10 kg batches of One-Pot LFP and greater for third party evaluation that have since led to trials in the company’s Candiac facility that are exceeding 1,000 kg (1 tonne).

LFP from Commercial Size Reactors and Customer Samples Delivered

On September 14, 2023, the Company announced that recent One-Pot trials in the existing reactors at its Candiac plant had produced LFP at commercial scale, with performance results consistent to lab scale.

By making LFP in commercial scale reactors, Nano One is demonstrating and de-risking the full scale capability of its process technology. This rapid advancement allows commercial scale LFP samples to be sent to qualified customers, for thorough evaluation and validation, and for the purposes of entering potential binding offtake agreements. Optimization will continue and the results have helped identify key processing parameters and will expedite the commercial scale-up process.

In parallel, Nano One installed a new LFP One-Pot 200 tpa LFP pilot plant and with commissioning (now complete) for a baseline automated production capacity of 200 tpa.

Collaboration Agreement with Sumitomo Metal Mining

On October 5, 2023 (as announced on September 25, 2023), Nano One and Sumitomo Metal Mining Co., Ltd. (“SMM”, together with Nano One, the “Companies”) closed a transaction whereby the Companies agreed to a strategic equity investment in Nano One by SMM of approximately \$17,000,000 and entered into a Collaboration Agreement under which the Companies will work together to accelerate the commercial production of LFP, CAM and nickel-rich CAM chemistries, such as NMC. SMM is a leading vertically integrated miner, refiner, and producer of CAM. Nano One is using the proceeds on its One-Pot 200 tpa LFP pilot plant, piloting activities, and for working capital purposes.

SMM and Nano One also entered into a Collaboration Agreement that encompasses various aspects primarily centred on supporting the development of battery ecosystems, with a particular focus on LFP and NMC production using the One-Pot process. The collaboration will support technical product optimization for both LFP and NMC, as well

as efforts to mitigate supply chain risks. These joint efforts are intended to strengthen and progress the development, design, construction, and operation of Nano One's 200 tpa LFP pilot plant, future piloting of other CAM formulations, and a future 25,000 tpa LFP commercial plant.

Further, the Companies will jointly explore business development opportunities, including future sales and technology licensing. The Companies intend to exchange relevant market information and technical expertise to improve the quality and cost of CAM produced by the One-Pot process at our facilities to meet SMM customer requirement. SMM is the first CAM producing investor in Nano One. SMM's investment builds on past investments in Nano One from mining companies and governments and could accelerate LFP adoption, demand, and business opportunities for the Companies.

Nano One and SMM also entered into an Investor Rights Agreement, providing SMM with participation rights in any future equity financings to maintain pro rata ownership interest for a period of up to three years to October 5, 2026. Under the agreement, SMM will agree to a standstill provision that, among other things, restricts SMM's ability to purchase additional shares without Nano One's consent for a period of 24 months and restricts SMM's ability to sell the Shares for 12 months, subject to certain exemptions.

Completion of FEL 2 (pre-feasibility) Study

On October 23, 2023, the Company announced the completion of a FEL 2 pre-feasibility study which estimates that the optimal capacity for a One-Pot LFP production line is 12,500 tpa and that two such lines (25,000 tpa LFP commercial plant) could be built at Nano One's site in Candiac, Québec, making it significantly more efficient in size, footprint, and capital cost than other commercial methods of making LFP.

Life Cycle Assessment (LCA)

On December 6, 2023, the Company announced the results of a third-party LCA report which showed that its One-Pot process could cut GHG emissions by up to 60% for NMC811 CAM, and up to 50% for LFP CAM, and significantly reduce water use for both CAMs when benchmarked against the complexity and energy intensity of conventional CAM processes operating in various jurisdictions. These environmental improvements are augmented by the other benefits of the One-Pot Process including reduced cost, complexity and dependency on foreign supply chains of concern.

Preliminary evaluation by Automotive OEM of Nano One LFP is successful and Kicks Off Tonne-Scale Evaluations

On December 19, 2023, the Company announced it had confirmed orders for approximately 1.3 tonnes of LFP samples made from its pilot plant for the purposes of commercial evaluation and collaboration. Key collaborators from the automotive, energy storage systems, defence, and industrial sectors are testing and validating Nano One LFP for the purposes of securing offtake agreements. Sample evaluation thus far has

generated significant interest in validating our LFP at scale for future potential offtake agreements.

Change in Executive Officers

Effective April 3, 2023, Adam Johnson was appointed Senior Vice-President of External Affairs.

Subsequent to December 31, 2023, effective January 15, 2024, the Company announced the appointment of Carlo Valente as CFO, replacing Dan Martino who remains with the Company as Vice President of Finance. Additionally, Leanne Likness Swanson became the Company's Corporate Secretary, replacing Pamela Kinsman.

Subsequent events

Feasibility Study (FEL 3)

On February 27, 2024, the Company announced the commencement of a feasibility study (FEL 3) for a 25,000 tpa LFP commercial plant to support securing customer offtake, feedstock supply, and future project funding. The plant design will form the basis of Nano One's turn-key Design-Once-Build-Many strategy to address the broader LFP market. The FEL 3 study will provide an optimal production line layout and maximum utility of key equipment. Furthermore, this study will address Nano One's mid-to-longer-term objective of deploying multi-line facilities under license or joint venture with partners in Asian, Indo-Pacific, North American and European jurisdictions. Progress at Nano One's pilot plant has helped de-risk, improve, and optimize the One-Pot process for LFP in commercial scale equipment while informing engineering plans and providing confidence to collaborators on the long-term competitive viability of Nano One's CAM production technology.

Commercialization Plans

A 25,000 tpa LFP commercial plant will require completion of the FEL 3 (see above), product validation and customer offtake, and feedstock supply agreements. These three items are fundamental for project financing and are a top priority for Nano One in 2024.

Nano One is in active dialogue with government agencies, project finance lenders, and strategic partners to secure funding for both growth activities, a commercial LFP plant, and ongoing innovations. A final investment decision will only be made following the securing of plant-specific funding.

As an integral part of the feasibility study, dialogue with governments and their agencies is focused on key factors that impact our ability to scale-up rapidly and meet market demands. Nano One is considering a broader set of site options that may be more suitable for future growth expansion beyond a 25,000 tpa LFP commercial plant. Key considerations include government incentives in the form of grants and forgivable loans, access to sufficient utilities (power, water, natural gas) and location preferences from

collaborating stakeholders. With the support of provincial and municipal governments Nano One has identified potential site options in Québec and Ontario. Nano One remains active in discussions with governments at all levels, and other strategic partners to narrow down site selection. Nano One is closely monitoring government incentive programs in North America and has been engaged in conversations with several levels of government to ensure alignment of Nano One's business plans and scale-up to meet emerging market needs in North America.

Significant Acquisitions

The Company has not completed any acquisitions during its most recently completed fiscal year for which disclosure is required under part 8 of NI 51-102.

DESCRIPTION OF THE BUSINESS

Corporate Summary

The Company has developed, patented, and is scaling up an innovative One-Pot process to produce CAM for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics. Nano One has proven its technology in the laboratory, at various pilot scales ranging from a 1 to 200 tonne per annum ("tpa"), and demonstrated it using full scale commercial equipment. The Company is partnering with key automotive OEMs, cell manufacturers, cathode manufacturers and the upstream miners and refiners. The acquisition and conversion of the Candiac facility in Québec to the One-Pot process has accelerated the Company's path to commercialization. Trials conducted in 2023 using the One-Pot process in the existing commercial scale reactors have successfully de-risked the production of LFP at full scale with performance results consistent to lab scale. This advancement has enabled commercial scale LFP samples to be sent to qualified customers in Q1 2024 for the purposes of evaluation, validation and entering into potential binding offtake agreements.

The Company is focused on meeting market demand while harnessing government support. It is the Company's intention to use its Candiac facility as an industrial production scale LFP pilot facility that supports the design, engineering, and construction of its first commercial LFP plant. This plant will have at least one production line and will serve as a blueprint for turn-key multi-line production facilities under a hybrid business model that includes licensing, joint venture and independent production in Canada, USA, Europe, Indo-Pacific region, and other emerging battery jurisdictions. This strategy is aimed at serving outsized demand from the energy storage, mobility, and electric vehicle markets.

Nano One's technology is intended to improve the performance and cost of cathode active materials, reduce complexity and excess waste in the supply chain, minimize carbon footprint, and to simplify production using environmentally sustainable processes while eliminating current market dependency on foreign supply chains of concern. It is a manufacturing platform suited to many types of lithium-ion CAM, and applies to

automotive, grid storage and consumer electronic batteries, including standard, advanced, next generation, and solid-state batteries.

The Company develops process technology and products using a system of New Product Introduction (“NPI”) that requires technology to follow 6 stages including (1) idea, (2) evaluate, (3) develop, (4) scale-up, (5) launch, and (6) close-out. Stages (1) - (3) are carried out at the Company’s Innovation Center in Burnaby, BC, and stages (4) - (6) at the Company’s Commercialization Center in Candiac, QC. The Company’s LFP process is at (4) scale-up stage, its NMC process is at (3) develop stage, and there are several projects related to recycling and thermal processing that are at (1) idea and (2) evaluation stage. Timing, as it relates to commercial production, varies greatly from project to project, partner to partner, and market maturity, however the Company’s One-Pot LFP process and Products are closest to commercialization, as described below.

The Company has re-commissioned the acquired JMBM facility to its One-Pot process and is currently evaluating its product with potential offtakers and developing the engineering feasibility plans needed for the construction of larger turn-key plants. The Company is seeking financial support and sales commitments from target customers who are looking to secure LFP cathode active materials from its existing facility and from the larger yet-to-be-built facilities, for applications in the automotive, energy storage and defense sectors. Initial volumes for validation sampling and potential smaller scale sample sales are anticipated from the existing facility in 2024. Success on this front could lead to larger offtake commitments and financial commitments to build larger higher volume facilities.

Addressable Markets

The size of the battery cathode materials market in North America., Europe and the Indo-Pacific region is projected to exceed 3 terrawatt-hours per year by 2030 and close to 6 terrawatt-hours by 2035 (*source: Bloomberg New Energy Finance 2022*). In another study, cathode demand is projected to reach 2.7 million tonnes of NMC and 3 million tonnes of LFP by 2035, for an LFP market value of approximately \$48 billion and a combined total market value of approximately \$146 billion (*source: Benchmark Mineral Intelligence Q2 2023 Lithium Ion Battery Database*).

Nano One intends to bring value, differentiation, competitiveness and growth to partners throughout the lithium-ion battery supply chain, through its process technologies and cathode materials. Nano One is aiming to monetize that value through licensing, joint venture or sale and to have its technologies adopted as industry leading methods of making advanced cathode materials with continuous innovation to preserve value, differentiation, competitiveness and sustainability.

To do this, Nano One is collaborating with material producers and jointly developing its processes for the production of cathode materials using Nano One’s technology. Nano One is also actively and jointly developing next generation cathode materials with automotive OEMs to create demand for its process and materials technologies.

By collaborating at both ends of the value chain, Nano One aims to create demand for its cathode materials through OEM partnerships and their battery innovation efforts, while partnering with leading materials manufacturers to adopt Nano One technology for the commercial scale production of cathode materials.

Process Developments

One-Pot process Technology

Nano One's patented "One-Pot process" is engineered to make cathode materials directly from non-sulfate forms of battery metals. This eliminates the need for intermediate metal sulphates, all sodium sulphate by-product, and all wastewater, which avoids permitting obstacles in jurisdictions with strict environmental regulations such as Canada, USA and Europe. The waste streams avoided can amount to three times the product stream, and the One-Pot process simplifications also reduces operating costs, capital equipment costs and greenhouse gas ("GHG") emissions. Furthermore, the process uses lithium feedstock in the form of carbonate rather than hydroxide which is costly, corrosive and harder-to-handle. The One-Pot process can also utilize lithium hydroxide and provides flexibility with other feedstock to enable improved optionality of sourcing of raw materials. The process also forms innovative coated nanocrystal cathode powders that are designed to be more durable than conventional cathode powders.

The One-Pot process is an aqueous process, using carbon neutral chemistry, that operates at room-temperature and atmospheric pressures, and it combines feedstock conversion, precursor formation, lithiation and coating steps into one reaction. This creates added value for metals and aligns Nano One with the environmental, sustainability and cost objectives of automotive companies, miners, investment communities and governmental infrastructure initiatives.

Nano One's process consists of three stages, and the major innovations lie in the first stage where a special mode of combining reactants controls crystal nucleation and growth of particles, while converting the input materials into a composite powder that readily fires in a downstream kiln to form coated nanocrystal cathode powders. Nucleation is the self-assembly of molecules into an organized structure. The desired nano-scale or superfine structure is formed in the first stage of the production cycle and eliminates many steps common to the incumbent industrial processes.

The desired crystal structure, morphology and performance enhancing coatings of the materials are formed readily and simultaneously in the final thermal processing steps, eliminating extra coating steps and the need for long and repeated kiln firings. The process produces crystalline material powders that are configurable to meet a variety of energy density requirements.

Coated Nanocrystal Technology

The coated nanocrystal innovation addresses a fundamental battery trade-off between energy density and durability. Increased durability would provide electric vehicle

manufacturers greater flexibility in optimizing range, charging rates, safety, and cost. The One-Pot process combines all input components: lithium, metals, additives, and coatings in a single reaction to produce a precursor that, when dried and fired, forms quickly into a single crystal cathode material simultaneously with its protective coating.

Furthermore, by increasing the ratio of nickel to cobalt in cathode materials, cobalt supply chain risks can be reduced; however, the shift to nickel-rich materials compromises cycle life and safety in the battery. Coated monocrystalline cathode powders can address these problems and the Company's coated nanocrystals provide similar improvements to durability as evidenced through the Company's published results and portfolio of intellectual property.

The coated nanocrystal technology applies to all the cathode materials and compositions under development by the Company, including:

- **(LFP):** Lithium Iron Phosphate;
- **(LNMO or HVS):** Lithium Nickel Manganese Oxide, also referred to as “High Voltage Spinel”; and
- **(NMC622, NMC811, and Ni>90% NMC):** Lithium nickel manganese cobalt oxide.

M2CAM® Technology

Nano One's M2CAM technology aims to reduce cost, waste, logistics and the carbon footprint in the lithium-ion battery supply chain.

Nano One's patented One-Pot process forms durable single crystal cathode powders and protective coatings simultaneously and the process has been adapted for M2CAM, enabling these materials to be made directly from nickel, manganese and cobalt metal powder feedstocks rather than metal sulfates or other salt powders. Metal powders are one-fifth of the weight of metal sulfates, avoiding the added costs, energy and environmental impact of converting to sulfate and shipping and handling of waste. The Company is also actively working with Rio Tinto to enable LFP production with the One-Pot process using iron metal powders produced at its iron metal powder refinery in Sorel-Tracy approximately 90 kilometres from the Company's facility in Candiac Québec. Work to date is encouraging and could unlock a significant supply of Québec produced battery metal for the growing LFP CAM market.

Nano One's technology also offers the flexibility to use either lithium carbonate or hydroxide as feedstocks. This is enabled by mixing lithium with all other metal inputs in Nano One's patented One-Pot process reaction to produce a lithiated mixed-metal intermediate powder that is neither carbonate nor hydroxide, allowing it to react and form finished cathode powder more rapidly than conventional methods when thermally processed in a furnace.

In contrast, conventional cathodes are made by first converting metals into metal sulfates and lithium into lithium hydroxide. The metal sulfates are then mixed in a chemical reaction

to produce a mixed metal nickel manganese cobalt precursor powder (“**PCAM**”), with the sulfate and water going to waste. This PCAM is then milled with lithium hydroxide powders prior to a prolonged firing that forms dense clusters of crystalline particles (polycrystalline). Protective coatings can then be formed by adding additional materials and firing again. However, crystals, within each grain of powder, contract and break apart from repeated charging, and this fractures the protective coatings and leaves individual crystals within the grains of powder exposed to side reactions. Extra time in the kiln can alleviate some of these issues, but also damages the crystal structures and adds cost.

Nano One’s technology aligns it with the sustainability objectives of automotive companies, investment communities and governmental infrastructure initiatives. It also offers an opportunity for metals refiners to provide environmentally, and sustainability mined sources of nickel ore to integrate and manufacture cost-reduced value-added cathode powders for direct supply to battery manufacturers.

Product Development

The Company conducts its own research and development, and its technologies and materials are currently in a pre-commercial stage.

LFP: LFP is the safest, longest lasting, and lowest cost cathode material for lithium-ion batteries and the latest generation of LFP battery packs compete effectively with NMC on energy density and EV range. The aggregate of these benefits has propelled LFP adoption in China to 60-70% market share for applications in energy storage systems, mass-market and heavy-duty electric vehicles, and lead-acid replacement.

The Company’s LFP process reduces the number of process steps and eliminates wastewater and by-products, while also reducing cost, energy intensity, GHG emissions and water usage product. Furthermore, it enables iron metal powder as direct input, simplifying supply and eliminating reliance on foreign supply chains of concern.

- The LFP process and product is being validated at commercial scales with potential customers. The Company is also advancing its engineering work to address commercial interest for full-scale production of LFP.
- The Company commissioned a 200 tpa LFP pilot plant in Q3 2023 and began commercial trials thereafter. Orders were confirmed for 1.3 tonnes of LFP samples in Q4 2023.
- The Company has also demonstrated and de-risked LFP production in full scale commercial equipment at its pilot plant.
- The piloting activities and extensive operational experience form the basis for an engineering feasibility study currently underway for the construction of a dual line 25,000 tpa production facility, to be sited in Canada.

NMC622 and NMC811: In 2017, the Company successfully piloted NMC622 with 60% nickel content and in 2018, completed a preliminary engineering study to determine

capital and operating expenses for a 3,300 tonne/year production unit. In 2018, the Company began efforts on NMC811 with 80% nickel content, which provides relatively high energy density and has applications in longer range electric vehicles.

- In 2020, the Company announced a breakthrough development of a coated nanocrystal cathode material for lithium-ion batteries that is providing up to four (4)-times improvement in longevity compared to its uncoated versions of the same material. This technology is applicable to various cathode materials but is especially relevant to nickel-rich NMC materials, where coatings on each nanocrystal protect against side-reactions when larger clusters of these crystals break apart from repeated charge and discharge cycles.
- NMC materials are further improved by the Nano One's M2CAM technology which reduces complexity, cost, waste, and carbon footprint in the lithium-ion battery supply chain by using class 1 metallic powders instead of metal sulphates, enabling local supply while eliminating reliance on foreign supply chains of concern. The Company is now working with various automotive manufacturers, cathode producers and cell producers to evaluate its patented One-Pot process and coated NMC based materials.
- NMC811 and other Ni-rich NMC equivalents are being developed at lab- and pre-pilot scale with techno-economic feasibility, engineering studies and third-party evaluations underway to validate commercial interest for pilot and full-scale production.

LNMO or HVS: The largest single challenge in solid state batteries is to design a stable and commercially viable interface between the solid electrolyte, of polymer, ceramic or glass composition, and the solid cathode and anode materials on either side of the electrolyte. Nano One's coating of LNMO (or HVS) stabilizes the interface between cathode and electrolyte because the coating prevents side reactions while allowing the rapid transfer of lithium-ions between the electrolyte and the cathode. In comparison to other cathode materials, HVS is faster charging and operates at higher voltage enabling increased power and energy densities. HVS is also free of cobalt and the associated supply chain risk.

- The Company first synthesized HVS in 2018, and has since validated its application in various lithium-ion battery cells, both internally and with third parties including automotive manufacturers, cathode producers and cell manufacturers and expects to see commercialization and adoption of HVS cells in the latter half of this decade.
- HVS is at pre-pilot and pilot-scale, has undergone third-party evaluations to validate commercial interest for pilot and full-scale production and awaits commercial market applications.

Business Objectives

In the near term (one to three years), Nano One intends to focus on:

- Designing, installing, and operating an industrial scale LFP pilot plant in the existing Candiatic facility to sample and validate LFP product to secure future customer offtake.
- Qualify and validate raw materials feedstocks for pilot and future commercial plant needs under offtake.
- Completion of a feasibility study (FEL 3) for a 25,000 tpa LFP commercial plant to support securing customer offtake, feedstock supply and future project funding.
- Commercial and pre-commercial plant funding from government agencies, project finance lenders and strategic partners.
- Developing, advancing and promoting its One-Pot, M2CAM and coated nano-crystal technologies through collaborative partnerships with OEMs, cell manufacturers, cathode producers and miners. The Company is aiming to disrupt the supply chain and make nickel-based cathode materials direct from metal powders and lithium carbonate. This will eliminate: (i) the conversion of metals to sulfates and lithium to hydroxide, (ii) the associated energy, GHG emissions, cost, and waste and (c) the unnecessary transport of water and sulfate.
- Advancing, and evaluating process technologies and product, at benchscale and small pilot scale in the Company's facilities in Burnaby to support evaluation, business development, joint development, partnership, and licensing activities.
- Continuously improving the One-Pot process for LFP on cost and efficiency, and continuously improving the quality of the LFP as per customer feedback.
- Identifying and validating additional joint development partners throughout the supply chain.
- Continuous innovation in NPI (1) and (2) stages in areas of thermal processing and recycling and next generation CAM such as Lithium Manganese Iron Phosphate (LMFP).

Nano One's long-term opportunities (three to five years), include:

- Generating revenues from the production of LFP and potential royalty and joint venture revenues from the production of LFP, NMC and HVS, as well as from joint development activities with various industry partners.
- LFP production in North America is the nearest-term opportunity driven by emerging renewable energy storage needs and 2, 3 and 4 wheeled EV adoption in the America's, Europe and the Indo-Pacific regions.
- Design-Once-Build-Many growth strategy supported by FEL 3 study for future licensing and joint venture plans as a mid-term opportunity in North America, Europe and the Indo-Pacific regions.

- Nickel-rich NMC is a mid-term opportunity being developed in partnership with automotive OEMs and global cathode producers to address the need for high energy density long range EVs and the long-term need for low-carbon, low-environmental footprint supply chains.
- HVS is a mid-term to long-term opportunity driven by fast charging needs and the emergence of higher voltage batteries expected mid- to late-decade.
- Continuous innovation to improve the environmental footprint, energy efficiency, scalability and competitiveness of high-volume CAM production in a terra-watt hour (“TWh”) world.
- Designing turn-key plants and systems to meet projected global cathode market demand leveraging the vast experience of the Québec operational team in Candiac and the innovation team in British Columbia, to demonstrate the benefits of the One-Pot process in the production of sustainable and efficient battery materials.

Electric Vehicle and Renewable Energy Stationary Storage Industry

The lithium-ion battery market is being driven, partly, by demands for lower-cost entry-level vehicles, long-range luxury vehicles, heavy-duty industrial vehicles, fast-charging applications and wide range of stationary energy storage applications. These batteries must be safe, reliable and cost-effective, using environmentally sustainable supply chains with an increasing importance on localization, diversification and security of supply.

Stationary energy storage, low-cost and heavy-duty EVs, including fleet vehicles, as well as start-stop, hybrid and mid-range EVs, are all battery applications that tend to favour technologies that can be charged and discharged more often, requiring the durability, low-cost and safety of LFP batteries.

Long-range electric vehicles tend to favour batteries with higher energy-densities of nickel cobalt aluminum oxide (“NCA”), NMC and hybrids (“NMCA”) with nickel content ranging anywhere from 33-95%. However, the latest generation of LFP battery packs, leverage its thermal stability, to crowd cells in tighter formation with LFP pack level energy density, and EV range that is now on par with some NMC.

It is also possible to use both LFP and NMC batteries in fast charging applications, however fast charging high voltage cells using HVS or LNMO CAM are projected to emerge as commercial alternatives where high speed low energy density charging plays a role.

These factors have increased the demand and supply chain development of iron-rich LFP, nickel-rich NMC and manganese-rich LNMO battery chemistries. There is an increasing need to develop independence and security with local supply chains that are environmentally and economically competitive, when compared to established supply chains in China and Asia. The Company’s One-Pot and M2CAM process technologies enable the use of battery-grade metal feedstocks that eliminates dependence on foreign

supply chains of concern while reducing environmental footprint and costs when compared to established industrial methods.

To date, the Company has demonstrated the synthesis of LFP, NMC, LNMO and other cathode materials with energy densities on par with industry standards. This demonstration underlines the opportunity of Nano One’s technology to reduce waste, cost and carbon footprint in the supply chain, and it enables a wider range of lithium and other battery metal inputs sourced locally or from free-trade partners for the rapidly growing stationary energy storage and electric vehicle market. This supplements other benefits of the Company’s technologies including improved cathode material durability, power, energy, and processing costs.

Specialized Skills and Knowledge

The Company requires the specialized skills and knowledge of public market specialists, operations managers, safety specialists, production experts, equipment operators, material scientists, electrochemists, thermal processing engineers, process engineers, hydro metallurgists, battery testers, technicians, business development, government liaison, and regional marketing expertise. Most of these skills are already in place and where gaps develop, the Company is readily able to identify individuals and companies in the Canadian talent pool as employees, consultants, and/or advisors.

Patents and Proprietary Technology

The Company believes that monetization of its technology is best pursued by protecting its proprietary position with patents and by pursuing a licensing strategy. This is seen as a capially efficient means to leverage the supply chain, manufacturing, distribution, and legal strengths of multinational materials producers, while allowing the Company and its collaborators to focus on core strengths in technology development.

As at the date of this AIF, the Company has been issued thirty-nine (39) patents which were issued by various jurisdictions including Canada, China, Japan, Korea, Taiwan, and the United States. The patents have expiries ranging between ten (10) to nineteen (19) years from the patent issuance date. The Company also has three (3) allowed patents and over fifty-five (55) pending patent applications throughout the world.

Patent Family	Short Description	Title
US9,136,534 CA2,906,009	Method of powder generation of a complexecelle	Complexometric precursor formulation for industrial production of high performance fine and ultrafine powders and nano-powders for specialized applications
CA2,905,525	Reactor designs for complexecelle formation	Reactor vessel for complexecelle formation
US10,374,232 KR10-1854798	Method of forming powder by	Complexometric precursor formulation for industrial production of high performance fine

Patent Family	Short Description	Title
	complexcelle generation for battery applications	and ultrafine powders and nano-powders for lithium metal oxides for battery applications
US9,698,429 US10,283763 TWI527487 JP6,271,599 KR10-1839000 CN105,594,023 CN106,848,231 CA2,905,519	Battery having a defined discharge capacity, defined porosity, low sodium content and low sulfur content.	Compexometric precursor formulation methodology for industrial production of fine and ultrafine powders and nano powders of layered lithium mixed oxides for battery production.
US9,159,999 US10,446,835 CA2,905,984	Method of forming powder by formation of a surface interface.	Compexometric precursor formulation methodology for industrial production of fine and ultrafine powders and nano powders of layered lithium mixed oxides for battery applications.
CA3,023,602 US11,329,284 US11,616,230	A method for making cathode materials for lithium-ion batteries	Fine and ultra-fine powders and nanopowders of lithium metal oxides for battery applications.
US11,018,331 TWI672852 US11,735,712	A method for stabilizing battery cathode materials by a phosphate treatment	Phosphate stabilized lithium batter cathode.
US11,121,370 JP7100648 KR10-2443307 CN1104950258 TW107101632 allowed	Formation of a precursor for a cathode active material using a digestible feedstock and a multi-carboxylic acid	One-pot synthesis for lithium ion battery cathode active material precursors.
US10,189,719 CA3,068,802	A process that uses metal acetates as a feedstock for making cathode materials	Improved process for the manufacture of lithium metal oxide cathode materials
TW107124658 US11,677,077	Novel method for LFP production	Improved synthesis of olivine lithium metal phosphate cathode materials
JP7090736 US11,811,056 CA3,093,557 KR 10-2631552	A process for fabrication of novel coated single crystal	One-pot synthesis of for LiNbO_3 coated spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$

Patent Family	Short Description	Title
IN512878 CN201980026685 8 allowed	cathode active materials	
TWI753429 JP7285275	A developed method for coating cathode active materials	Improved One-Pot Synthesis for LiNbO ₃ Coated Spinel
TW I705031	Novel method for making LFP cathode materials	Synthesis of Olivine lithium metal phosphate cathode materials
JP2022-565612 allowed	Method to make cathode materials using metal feedstocks	Alternative Method for Making Lithium Battery Cathode Materials
TW I832104	A cell design that provides high durability	Improved battery with spinel cathode

The intellectual property was developed and is wholly owned by the Company. The Company has filed other patent applications and may file additional patents at a later date to further strengthen its intellectual property and technology going forward, although no assurances can be given that it will be successful in such endeavours. The Company seeks to limit disclosure of its intellectual property by requiring employees, consultants, and partners with access to the technology to execute confidentiality agreements, non-competition agreements, and by restricting access to intellectual property and technology.

Competitive Conditions

The lithium-ion battery market is competitive, with significant barriers to entry, long paths to commercialization, complex supply chains and many technical and market uncertainties.

In response to these challenges, the Company is developing industrial process technology and materials for license to, or joint venture with, established industrial participants in cathode materials manufacturing, and more broadly, the lithium-ion battery, energy and chemical industries. LFP presents an opportunity for production by leveraging Nano One's One-Pot LFP technology, its deeply experienced LFP manufacturing team in Québec and the growing market interests in North America, Europe and the Indo-Pacific region from Automotive OEM's, battery grid storage and niche market end users requiring localized battery materials sourcing.

The lithium-ion battery market and the cathode production part of the supply chain are in a rapid multi-year growth phase that is expected to persist through the next decade or two, driven largely by the global transition to electric mobility and industrial energy storage. The Company has developed a cathode production platform technology, capable

of making a wide range of cathode materials and enabling the Company to shift, remain relevant, and compete with evolving technological and chemistry trends.

The Company has had very few direct competitors as most cathode producers use established production methods and are focused on manufacturing and expansion rather than disrupting supply chains and process innovation. With the global efforts to localize or near-shore supply chains, a few competitors have emerged to address the same needs as the Company has targeted, including the emergence of LFP outside of China.

The Company has been developing its cathode production technology, human resources, and know-how since February 2011. The Company has a growing portfolio of strategically relevant intellectual property to protect such from competitors, as well as trade secrets and engineering plans for full scale production facilities.

China, Korea, Japan, and Taiwan have dominated battery and cathode manufacturing over the last decade, but as jurisdictions such as the North America, Europe and India ramp up the adoption of electric vehicles and grid storage for renewable energy, the Company is pursuing opportunities to develop its business, license its technology, initiate joint ventures, and begin piloting, demonstration and commercial production activities in many diverse geographic areas. Post-COVID infrastructure spending, Environmental, Social, and Governance (ESG) investment strategy and re-patriation of critical supply chains are all expected to accelerate adoption of lithium-ion batteries and the required manufacturing base, to create a wider range of business opportunities for the Company. Further to this, the Company is positioning itself for opportunities in supply chain consolidation to further improve cost competitiveness and environmental sustainability.

The Company has developed significant interest from various industry segments looking for lower cost, lower supply chain risk, improved environmental sustainability, lower carbon footprint, and improved performance. The Company is working to create demand for its technologies through collaboration with OEMs (automotive, industrial, consumer electronic), cell manufacturers, miners and producers on the design of next generation batteries and alternative supply chain strategies.

The Candiatic facility has been converted to Nano One's patented One-Pot process to expedite the commercialization of LFP technology and is staffed by the most experienced LFP production team outside of Asia. The facility and team have extensive experience with ISO, IATF, health, safety and other programs essential to tier 1 customer relationships. Industrial scale samples are already being shipped out for evaluation and the Company believe it is years ahead of its competition and well positioned to license and expand the adoption of its technology with turn-key systems and partnerships designed to meet and serve the projected global LFP cathode market demand.

For LFP, the Company is also pursuing a production model, utilizing its operational and manufacturing know-how and pilot installation at its Candiatic facility to sample and validate to target customers for customer offtakes for both the smaller production capacity at Candiatic and for a future commercial demonstration plant. Success under the

production model will be dependent on getting “bankable” customer offtakes, securing additional capital for the commercial demonstration plant and securing raw materials supply agreements.

The Company also aims to fulfill demand for its technology through licensing, partnership, and integration with cathode and raw materials producers. This leverages the Company's strengths in process innovation and partners it with the supply chain management, production and sales channels of established OEMs, materials producers and miners.

Economic Dependence

Though the Company has various technology development agreements in effect and these development programs are integral to the Company's continued technological developments and process improvements, the Company's business is not substantially dependent on any single contract.

The adoption of the Company's technology for the commercial production of cathode materials depends on third party validation of its technology and product through materials testing, cost modelling, engineering planning, and joint development as precursors to commercial traction through licensing and/or joint venture. The Company has multiple joint development programs and collaborations underway, and as such, is not dependant on the success of any single arrangement to further its business objectives.

Environmental Matters

An obligation to incur environmental costs may arise from the future requirement to decommission its plant and dispose of related infrastructure and chemical materials. The Company has no known obligations of any significance to incur environmental costs, related to its research and development activities, as at December 31, 2023 and the date hereof.

Employees

As at December 31, 2023, the Company had 132 employees, inclusive of key management. The Company considers its employee relations to be amicable. In addition, the Company engages contractors and consultants from time to time for administrative, legal and other services as required. As at the date hereof, the Company had 132 employees.

RISK FACTORS

In addition to all other information set out in this AIF, the Company's Management's Discussion and Analysis and audited financial statements and related notes thereto for the fiscal year ended December 31, 2023, the following specific factors could materially adversely affect Nano One and/or the business, financial condition and results of operations. Other risks and uncertainties that the Company does not presently consider

to be material, or of which the Company is not presently aware, may also become important factors that affect the future business, financial condition and results of operations. The occurrence of any of these risks could materially and adversely affect the business, prospects, financial condition, results of operations or cash flow. This AIF also contains forward-looking statements that involve risks and uncertainties. Actual results achieved could differ materially from those anticipated in the forward-looking statements as a result of a number of factors including the risks described below. See “Cautionary Note Regarding Forward-Looking Information”.

Funding and Global Economy Risk

The volatility of global capital markets has generally made the raising of capital by equity or debt financing more difficult. The Company may be dependent upon capital markets to raise additional financing in the future. As such, the Company is subject to liquidity risks in meeting its operating expenditure requirements and future development cost requirements in instances where adequate cash positions are unable to be maintained or appropriate financing is unavailable. The Company seeks to manage its liquidity risk through a rigorous planning, budgeting and forecasting process to help determine the funding requirements to support its current operations, development and expansion plans. However, the factors described above may impact the ability to raise equity or obtain loans and other credit facilities in the future and on terms favourable to the Company and its management. If these levels of volatility persist or if there is a further economic slowdown, the Company's operations, the Company's ability to raise capital and the trading price of the Company's securities could be adversely impacted. As the Company's operations expand and reliance on global supply chains increases, the impact of pandemics, significant geopolitical risk and conflict globally may have a sizeable and unpredictable impact on the Company's business, financial condition and operations. The COVID-19 pandemic and the ongoing conflicts between Russia and Ukraine and between Hamas and Israel, including the global response to such conflicts as it relates to sanctions, trade embargos, export controls, military support and any restrictive actions in response thereto, have resulted in significant uncertainty as well as economic and supply chain disruptions, changes in commodity prices and implications in the financial markets. Should another significant variant of COVID-19 develop or the conflicts between Russia and Ukraine and between Hamas and Israel go on for an extended period of time or expand territorially, or should other geopolitical disputes and conflicts emerge in other regions, this could result in material adverse effects to the Company.

Dependence on Management and Key Personnel

The Company's success depends largely upon the continued services of its executive Officers and other key employees. From time to time, there may be changes in the Company's executive management team resulting from the hiring or departure of executives, which could disrupt its business. If the Company is unable to attract and retain top talents, its ability to compete may be harmed. The Company's success is also highly dependent on its continuing ability to attract, identify, hire, train, retain and motivate highly qualified personnel. Competition for highly skilled technical, research and development,

management, sales, and other employees is high in the Company's industry, and the Company may not be successful in attracting and retaining such personnel. Failure to attract and retain qualified executive Officers and other key employees could have a material adverse effect on its business, prospects, financial condition, results of operations, and cash flows.

Performance and Scalability

To be successful, Nano One will have to successfully scale its internally developed technology while maintaining high product quality and reliability. If Nano One cannot maintain high product quality on a large scale, the Company will be adversely affected. Nano One may encounter difficulties in scaling up cathode materials that are typically required to prototype full size battery cells. Even if Nano One is successful in developing its technologies, Nano One does not know whether the Company will do so in time to satisfy the requirements of the electric vehicle industry or other industries. Any new technology we develop might not be introduced in a cost-effective manner. The Company's current facility hosts a pilot plant and laboratory with limited production capacity.

Any interruption in operations at the current facility could result in the inability to successfully execute the business plan. A number of factors could cause interruptions, including, but not limited to, equipment malfunctions or failures, work stoppages or slow-downs, damage to or destruction of the facility, or regional power shortages. The success of the Company and its ability to compete are substantially dependent on its internally developed technologies.

Counterparty Risk

The Company may also be exposed to counter-party risk through its contractual arrangements with current or future collaborations, joint venture partners, offtake or licencing partners and other parties. In the event such entities fail to meet their contractual obligations, such failures could have a material adverse effect on the Company and its cash flow from operations.

Intellectual Property Protection

The Company cannot provide any assurance that any intellectual property applications will be approved. Even if they are approved, such patents, trademarks or other intellectual property registrations may be successfully challenged by others or invalidated. The success of the Company and its ability to compete are substantially dependent on its internally developed technologies and processes which the Company will need to protect through a combination of patent, copyright, trade secret and trademark law.

The trademark, copyright, and trade secret positions of the Company's business are uncertain and involve complex and evolving legal and factual questions. In addition, there can be no assurance that competitors will not seek to apply for and obtain trademarks and trade names that will prevent, limit or interfere with the Company's processes. There

can be no assurance that the Company will have the financial resources to defend its patents, trademarks, and copyrights from infringement or claims of invalidity. Litigation may be necessary in the future to enforce the Company's intellectual property rights, to protect the Company's trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement. Any such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's business, operating results, and financial condition. There can be no assurance that the Company's means of protecting its proprietary rights will be adequate or that competitors will not independently develop similar services or products. Any failure by the Company to adequately protect its intellectual property could have a material adverse effect on its business, operating results and financial condition.

The patent positions of emerging companies can be highly uncertain and involve complex legal and factual questions. Thus, there can be no assurance that any patent applications made by or on behalf of the Company will result in the issuance of patents, that the Company will develop additional proprietary products that are patentable, that any patents issued or licensed to the Company will provide the Company with any competitive advantages or will not be challenged by any third parties, that the patents of others will not impede the ability of the Company to do business or that third parties will not be able to circumvent the patents assigned or licensed to the Company. Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the Company's products or, if patents are issued and licensed to the Company, design around the patented product developed for the benefit of the Company.

Since patent applications are maintained in secrecy for a period of time after filing, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, the Company cannot be certain that the inventors of the patents were the first creators of inventions covered by pending applications, or that it was the first to file patent applications for such inventions. There can be no assurance that the Company's patents, if issued, would be valid or enforceable by a court or that a competitor's technology or product would be found to infringe such patents.

The Company is not currently aware of any claims asserted by third parties that the Company's intellectual property infringes on their intellectual property. However, in the future, a third party may assert a claim that the Company infringes on their intellectual property. If the Company is forced to defend against these claims, which may be with or without any merit or whether they are resolved in favour or against the Company, the Company may face costly litigation and diversion of management's attention and resources. As a result of such a dispute, the Company may have to develop costly non-infringement technology or enter into license agreements which may not be available at favourable terms.

Management of Growth

The Company could experience growth that could put a significant strain on each of the Company's managerial, operational and financial resources. The Company must

implement and constantly improve its operational and financial systems and expand, train, and manage its employee base to manage growth. In addition, the Company expects that its operational and management systems will face increased strain as a result of the expansion of the Company's technologies. The Company might not be able to effectively manage the expansion of its operations and systems, and its procedures and controls might not be adequate to support its operations. In addition, management might not be able to make and execute decisions rapidly enough to exploit market opportunities for the expansion of the Company's technologies.

There may be delays or unexpected developments in completing any future construction or expansion projects under consideration, which could cause the construction costs of these projects to exceed estimates or projections, result in substantial delays or prevent the project from commencing commercial operations. Various factors could contribute to construction cost overruns, construction halts or delays or the failure to commence commercial operations, including: delays in obtaining, or the inability to obtain, necessary land rights, permits and licences; delays and increased costs to integrate any potential new projects into the existing business structure; the inability to acquire or maintain land use and access rights; the failure to receive contracted third-party services; supply chain disruptions, including as a result of changes in international trade laws, regulations, agreements, treaties, taxes, tariffs, duties or policies of Canada, the US or other countries in which the Company's suppliers are located; work stoppages; labour disputes; weather interferences; unforeseen engineering, environmental and geological problems, including, but not limited to, discoveries of contamination, protected plant or animal species or habitat, archaeological or cultural resources or other environment-related factors; unanticipated cost overruns in excess of budgeted contingencies; lack of adequate supporting utilities and necessary infrastructure; and failure of contracting parties to perform under contracts.

If the Company is unable to manage its growth effectively, its business, results of operations, and financial condition will suffer. Failure to effectively manage growth could also result in difficulty in launching new processing technology or enhancing existing processing technology, declines in quality or end-user satisfaction, increases in costs or other operational difficulties, and any of these difficulties could have a material adverse effect on its business, prospects, financial condition, results of operations, and cash flows.

Competition

Despite efforts by the Company to protect its proprietary rights on which the Company's business is dependent, competitive products may be developed in the future. Competition could adversely affect the Company's ability to acquire market share.

Our technology may be unable to achieve broad market acceptance and, consequently, limit our ability to generate revenue and profits from new products.

Our ability to generate significant revenue and profits depends on the acceptance of our products by our customers and end users of the products, such as companies or

individuals purchasing vehicles incorporating our technology. The market acceptance of any product depends on a number of factors, including but not limited to awareness of a product's availability and benefits, the price and cost-effectiveness of our products relative to competing products, general competition, and the effectiveness of marketing and distribution efforts. Any factors preventing or limiting the market acceptance of our technology could have a material adverse effect on our business, results of operations and financial condition.

Execution of Business Plan

The execution of the Company's business plan poses many challenges and is based on a number of assumptions. The Company may not be able to successfully execute its business plan. If the Company experiences significant cost overruns on its programs, or if its business plan is more costly than it anticipates, certain research and development activities may be delayed or eliminated, resulting in changes or delays to its commercialization plans, or the Company may be compelled to secure additional funding (which may or may not be available) to execute its business plan. The Company cannot predict with certainty its future revenues or results from its operations. If the assumptions on which its revenues or expenditures forecasts are based change, the benefits of the Company's business plan may change as well. In addition, the Company may consider expanding its business beyond what is currently contemplated in its business plan. Depending on the financing requirements of a potential acquisition or new product opportunity, the Company may be required to raise additional capital through the issuance of equity or debt. If the Company is unable to raise additional capital on acceptable terms, it may be unable to pursue a potential acquisition or new product opportunity.

Currently, the Company has no history of profitable operations or material revenue. As such, the Company is subject to many risks including under-capitalization, cash shortages, and limitations with respect to personnel, financial, and other resources.

Technology may not be effectively commercialized

The Company's technology is currently in the commercialization phase. There is a risk that the technology and the Company's products will not perform as expected in certain applications and therefore, the Company may encounter delays to commercialization or may run the risk that the technologies will never be successfully commercialized. This means that the Company may never receive revenues or return on its technology development.

Technical Risks

Technical risks are inherent in the development and commercialization process, in that an immature technology could present unexpected challenges that exceed the planned time or financial resources to overcome. There can be no guarantee that the Company will be able to overcome technical risks associated with the development of its technology.

Information Technology Interruptions or Breaches

The Company's business operations are managed through a variety of information technology systems. These systems govern all aspects of its operations. While the Company has implemented a number of measures to keep its technology systems fully operational and to mitigate the risks associated with a failure of its systems, the Company's systems are subject to damage or interruption from power outages, computer and telecommunications failures, computer viruses, cyber-attacks, security breaches, catastrophic events such as fires, floods, earthquakes, tornadoes, hurricanes, acts of war or terrorism, and usage errors by its employees. If the Company's information technology systems are damaged or cease to function properly, the Company may have to make a significant investment to fix or replace them and the Company may suffer loss of critical data and interruptions or delays in its operations in the interim. Any material interruption in its information technology systems could have a material adverse effect on the Company's business, prospects, financial condition, results of operations, and cash flows.

Commodity Price, Raw Materials

Industrial chemicals used in Nano One's technologies are subject to market price fluctuations which may become more volatile as a result of global conflict or accompanying government actions in response to fluctuations and sensitivities. Market price fluctuations could have a material adverse effect on Nano One's business plan execution. There can be no assurance that the price of the raw materials will not increase in the future.

Supply Chain Disruptions

The Company may be affected by global supply chain disruptions. Prolonged disruptions to the procurement of equipment or the flow of materials, supplies and services to the Company could have an adverse impact on its operating costs, capital expenditures and production schedules. These disruptions may be the result of macroeconomic matters outside of the Company's control or ability to mitigate, such as from natural disasters, transportation disruptions, economic instability, global pandemics, and international sanctions, among others.

Access to specialized equipment

The ability of the Company to compete and expand will be dependent on the Company having access, at a reasonable cost, to equipment, parts, and components, which are at least technologically equivalent to those utilized by competitors and to the development and acquisition of new competitive technologies. Failure by the Company to do so could have a material adverse effect on the Company's business, financial condition, results of operations and cash flow.

Industry Risk

The profitability of the Company's technology depends in part on the demand for electric vehicles. Demand for electric vehicles is driven by a number of factors beyond the Company's control, including but not limited to consumer tastes and expectations, the availability of infrastructure to support electric vehicles, government subsidies, and environmental regulations, among others. There can be no assurance that demand for electric vehicles will be of a sufficient magnitude to warrant the kind of technological investment contemplated by the Company relating to the electric vehicle industry.

Economic Conditions

Current and future unfavourable economic conditions could negatively impact the Company's financial viability. Unfavourable economic conditions could also increase the Company's financing costs, decrease net income or increase net loss, limit access to capital markets, and negatively impact any of the availability of credit facilities to the Company. See "Public Health Crises, Including COVID-19" above.

Environmental Regulation

The Company's business and operations are subject to environmental regulation in the areas in which it operates. There is no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's business and operations. Additionally, applicable regulations may change, and additional government regulations may be enacted that could impact the Company. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action. If we are not able to maintain regulatory compliance, are slow or unable to adopt new requirements or policies, or effect changes to existing requirements, the Company may be adversely affected.

Climate Change Legislation

Global governments are increasingly addressing climate change by focusing on reducing greenhouse gases ("GHGs"). Climate change policies are rapidly developing at various levels, and political and economic developments could significantly influence these measures. The implementation of GHG reduction strategies by governments, either to meet international targets or other objectives, may materially affect the operations and finances the Company. The evolving regulatory landscape regarding climate change and GHG emissions presents uncertainties for the Company's operational and financial planning, especially in capital raising. Moreover, the potential adoption of climate change legislation could introduce operating restrictions or additional compliance costs, directly influencing the Company's production processes and market strategies.

Access to Proprietary Information

The Company generally controls access to and distribution of its technologies, documentation, and other proprietary information. Despite efforts by the Company to protect its proprietary rights from unauthorized use or disclosure, parties may attempt to disclose, obtain, or use its solutions or technologies. There can be no assurance that the steps the Company has taken or will be taking will prevent misappropriation of its solutions or technologies, particularly in foreign jurisdictions where laws or law enforcement practices may not protect proprietary rights as fully as in Canada or the United States.

Conflict in Ukraine and International Response

The recent conflict in Ukraine, and the accompanying international response including economic sanctions, has been disruptive to the global economy, with increased volatility in commodity markets, including higher material and supply prices, international trade and financial markets, all of which have a trickle-down effect on supply chains. There is substantial uncertainty about the extent to which this conflict will continue to impact global economic and financial affairs, as the numerous issues arising from the conflict are ever changing and there is the potential for escalation of the conflict both within Europe and globally. There is a substantial risk of market and financial turmoil arising from the conflict which could have a material adverse effect on the economics of the Company and the Company's ability to operate its business.

Volatility of Market Price of Common Shares

The market price of the Common Shares may be volatile. The volatility may affect the ability of holders to sell the Common Shares at an advantageous price. Market price fluctuations in the Common Shares may be due to the Company's operating results failing to meet the expectations of securities analysts or investors in any quarter, downward revision in securities analysts' estimates, governmental regulatory action, adverse change in general market conditions or economic trends, acquisitions, dispositions or other material public announcements by the Company or its competitors, along with a variety of additional factors, including, without limitation, those set forth under "Cautionary Note Regarding Forward-Looking Information". In addition, the market price for securities on stock markets, including the TSX, is subject to significant price and trading fluctuations. These fluctuations have resulted in volatility in the market prices of securities that often have been unrelated or disproportionate to changes in operating performance. These broad market fluctuations on the TSX may adversely affect the market price of the Common Shares.

Additional Capital Requirements

The Company has incurred annual losses since inception and it plans on continuing to make significant expenditures to support its business growth and may require additional funds to respond to business challenges, including the need to expand sales and marketing activities, develop new processing technologies to enhance its existing

technology, enhance its operating infrastructure, and acquire complementary businesses and technologies. Accordingly, the Company may need to engage in equity or debt financings to secure additional funds. If the Company raises additional funds through further issuances of equity or convertible debt securities, the Company's existing shareholders could suffer significant dilution, and any new equity securities the Company issues could have rights, preferences, and privileges superior to those of holders of the Company's Common Shares. Any debt financing secured by the Company in the future could involve restrictive covenants relating to its capital raising activities and other financial and operational matters, which might make it more difficult for it to obtain additional capital and to pursue business opportunities.

The Company can provide no assurance that sufficient debt or equity financing will be available on reasonable terms or at all to support its business growth and to respond to business challenges and failure to obtain sufficient debt or equity financing when required could have a material adverse effect on its business, prospects, financial condition, results of operations, and cash flows.

Negative Cash Flow from Operations

The Company had negative operating cash flows for the fiscal year ended December 31, 2023. Although the Company anticipates it will have positive cash flows from operating activities in future periods, the Company cannot guarantee it will have a cash flow positive status in the future.

Going Concern

The Company's annual financial statements for the fiscal year ended December 31, 2023, have been prepared on a going concern basis which contemplates the realization of assets and the discharge of liabilities and commitments in the ordinary course of business. Should the Company be unable to continue as a going concern, it may be unable to realize the carrying value of its assets and to meet its liabilities as they become due. The Company's ability to continue as a going concern on a long-term basis is primarily dependent upon new and continued government assistance programs, the ability to raise additional capital from equity or other markets and commencing commercial operations to generate future profitability. In the event the Company is at any point unable to continue as a going concern or if the Company is unable to raise financing to fund capital or operating expenditures, this would have an adverse impact on the Company's business, financial condition and operating results.

Government Grants

The Company has received various government grants, and it may seek to obtain government grants and subsidies in the future. Any of the Company's existing grants or new grants that may be obtained may be terminated, modified or recovered by the granting governmental body under certain conditions. The Company may also be subject to audits by government agencies as part of routine audits of its activities funded by

government grants. As part of an audit, these agencies may review the Company's performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants must be applied by the Company toward the research and development programs specified by the granting agencies, rather than for the Company's programs generally. If any of the Company's costs are found to be allocated improperly, the costs may not be reimbursed, and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to the Company's results of operations.

Forward-Looking Statements May Prove Inaccurate

Investors are cautioned not to place undue reliance on forward-looking statements. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking statements or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on the risks, assumptions and uncertainties are found in this AIF under the heading "Cautionary Note Regarding Forward-Looking Information".

Risks associated with mergers and acquisitions

The Company may in the future, seek to expand the business through acquisitions and investments.

Acquisitions will be in part dependent on management's ability to identify, acquire and develop suitable acquisition targets in both new and existing markets. In certain circumstances, acceptable acquisition targets might not be available. Acquisitions involve a number of risks, including: (i) the possibility that the Company, as successor owner, may be legally and financially responsible for liabilities of prior owners; (ii) the possibility that we may pay more than the acquired company or assets are worth; (iii) the additional expenses associated with completing an acquisition and amortizing any acquired intangible assets; (iv) the difficulty of integrating the operations and personnel of an acquired business; (v) the challenge of implementing uniform standards, controls, procedures and policies throughout an acquired business; (vi) the inability to integrate, train, retrain and motivate key personnel of an acquired business; (vii) the potential disruption of our ongoing business and the distraction of management from our day-to-day operations; and (viii) an inability to realize the full extent of, or any of, the anticipated benefits of a merger or acquisition transaction, including failure to realize projected revenue gains or achieve expected cost savings within the assumed timeframe.

The above risks and difficulties, if they materialize, could disrupt the ongoing business, distract management, result in the loss of key personnel, increase expenses and otherwise have a material adverse effect on our business, results of operations and financial performance.

International joint development agreements

Because we are a British Columbia corporation, and because we have joint development agreements with parties in other countries, there is a risk that the foreign governments will implement protective measures which make it more difficult to conduct business in these markets. There can be no assurance that the various government licenses, funding programs and approvals or amendments thereto that from time to time may be sought will be granted at all or with conditions satisfactory to the Company or, if granted, will not be cancelled or will be renewed upon expiry, or that income tax laws and government incentive programs relating to the Company's business, and the lithium ion battery industry generally, will not be changed in a manner which may adversely affect the Company. Further there is a risk that certain joint development agreements, ultimately, may not result in any business arrangements. Additionally, any joint development collaboration could be unsuccessful which could result in limiting revenues and product development.

Public Health Crises, Including COVID-19

A local, regional, national or international outbreak of a contagious disease, such as COVID-19, could have an adverse effect on local economies and potentially the global economy, which may adversely impact the price and demand for materials required all along the supply chain the Company currently relies upon and will rely upon for its development and expansion plans. COVID-19 could affect the Company's ability to conduct operations and may result in temporary shortages of staff to the extent the Company's work force is impacted. Such an outbreak, if uncontrolled, could have a material adverse effect on the business, financial condition, results of operations and cash flows.

Product liability lawsuits against us could cause us to incur substantial liabilities, and we may be subject to product recalls for product defects that are self-imposed or imposed by regulators.

In the event of a failure of a future product incorporating our technology, such as a recreational vehicle or truck, we may be subject to potential product liability lawsuits. Under certain circumstances, our customers may be required to recall or withdraw the products incorporating our technology. Even if a situation does not necessitate a recall or market withdrawal, product liability claims may be asserted against the Company. Even if a product liability claim is unsuccessful, the negative publicity surrounding any assertion that the products caused illness or physical harm could adversely affect the Company's reputation and brand equity.

Future Revenue

The Company's future revenue is difficult to forecast, likely to fluctuate and may not follow past trends or be indicative of the Company's future performance quarter to quarter. The Company's future revenue, if any, and results will be influenced a variety of factors, many

of which are outside of the Company's control, including, competitive conditions within the industry, including changes to technologies, new products or services, and pricing by competitors, and market acceptance of the Company's products. Any of such factors could have a material adverse effect on the Company's results of operations and financial condition.

Corruption, Bribery and Sanctions

The Company is required to comply with anti-corruption and anti-bribery laws, including the Criminal Code (Canada), the Corruption of Foreign Public Officials Act (Canada) and the U.S. Foreign Corrupt Practices Act and other applicable laws. The Company has implemented an Anti-Bribery & Corruption Policy, which all directors, officers and employees are required to comply. Further, the operations of the Company may also be impacted by anti-terrorism, economic or financial sanction laws, such as the United Nations Act (Canada), the Special Economic Measures Act (Canada), and the Freezing Assets of Corrupt Foreign Officials Act (Canada), among others. Such sanction laws and any regulations, orders or policies issued thereunder may impose restrictions and prohibitions on trade, financial transactions, investments, and other economic activities with sanctioned or designated foreign individuals or companies from a target country, industries, markets, countries or regions within countries. Although the Company does not believe that it is in contravention of such sanction laws, there is no guarantee that the Company is or will be in full compliance at all times and that there will not be a material adverse effect on the Company's reputation, business, results of operations, and financial condition.

DIRECTORS AND OFFICERS

The following table sets forth the name of each of our directors and executive officers, their province or state and country of residence, their position(s) with the Company, their principal occupation during the preceding five years, and the date they first became a director or officer of the Company as at the date of this AIF.

Name, Position(s) with the Company and Place of Residence ⁽²⁾	Principal Occupation ^{(1) (2)}	Date(s) Served as a Director or Officer Since	Ownership or Control Over Voting Shares Held ⁽²⁾
Paul Matysek Executive Chair & Director <i>British Columbia, Canada</i>	The Company's Chairman since March 2015.	January 29, 2012	2,480,430 ⁽³⁾

Name, Position(s) with the Company and Place of Residence ⁽²⁾	Principal Occupation ^{(1) (2)}	Date(s) Served as a Director or Officer Since	Ownership or Control Over Voting Shares Held ⁽²⁾
Dan Blondal CEO and Director <i>British Columbia, Canada</i>	The Company's CEO since March 2015.	March 5, 2015	1,672,970
Lyle Brown Director (independent) <i>British Columbia, Canada</i>	Partner of Culver & Co., an accounting firm.	March 5, 2015	257,102
Dr. Joseph Guy Director <i>North Carolina, USA</i>	Patent Agent since 1992. Patent Filing Specialists Inc. since 2018.	March 5, 2015	222,888
Gordon M. Kukec Lead Director (independent) <i>British Columbia, Canada</i>	Independent consultant and advisor.	September 7, 2021	433,903 ⁽⁴⁾
Carla Matheson Director(independent) <i>British Columbia, Canada</i>	Independent consultant and advisor.	December 15, 2021	8,400
Lisa Skakun Director (independent) <i>British Columbia, Canada</i>	Chief Legal, Regulatory and Corporate Affairs Officer at Coast Capital Savings Federal Credit Union since July 2018.	June 15, 2022	4,150
Stephen Campbell Chief Technology Officer <i>British Columbia, Canada</i>	The Company's CTO since October 2018. Principal Scientist of the Company from September 2015 to September 2018.	October 9, 2018	117,539
Dan Martino Former Chief Financial Officer <i>British Columbia, Canada</i>	The Company's CFO from January 2020 to January 15, 2024. Principal at Donaldson Brohman Martin, CPA Inc. (DBM CPA) since November 2018.	January 20, 2020 to January 15, 2024	14,490

Name, Position(s) with the Company and Place of Residence ⁽²⁾	Principal Occupation ^{(1) (2)}	Date(s) Served as a Director or Officer Since	Ownership or Control Over Voting Shares Held ⁽²⁾
Carlo Valente Chief Financial Officer <i>British Columbia, Canada</i>	The Company's CFO from January 15, 2024.	January 15, 2024	Nil
Alex Holmes Chief Operating Officer <i>British Columbia, Canada</i>	The Company's COO since February 2021.	January 31, 2021	116,299
Denis Geoffroy Chief Commercialization Officer <i>Québec, Canada</i>	The Company's Chef Commercialization Officer since November 1, 2022.	November 1, 2022	17,500
Kelli Forster SVP People and Culture <i>British Columbia, Canada</i>	The Company's SVP, People and Culture since August 2022.	August 2, 2022	Nil
Adam Johnson SVP External Affairs <i>British Columbia, Canada</i>	The Company's SVP, External Affairs since April 3, 2023	April 3, 2023	20,270
Pamela Kinsman Former Corporate Secretary Director Sustainability & Corporate Affairs <i>British Columbia, Canada</i>	The Company's Corporate Secretary from October 14, 2021 to January 15, 2024.	October 14, 2021 to January 15, 2024	25,382
Leanne Likness Swanson Corporate Secretary <i>Alberta, Canada</i>	The Company's Corporate Secretary from January 15, 2024.	January 15, 2024	Nil

Notes:

- 1) Unless otherwise stated above, any directors named above not elected at the last annual general meeting have held the principal occupation or employment indicated for at least five years.
- 2) The information as to province or state and country of residence, principal occupation, and number of shares beneficially owned by the directors and officers (directly or indirectly or over which control or direction is exercised) is not within the knowledge of the management of the Company and has been furnished by the respective directors and officers. The information is presented as of the date hereof.
- 3) Mr. Matysek holds 1,752,380 Common Shares directly. 728,050 Common Shares are held indirectly by Mr. Matysek through Bedrock Capital Corporation, a company controlled by Mr. Matysek.
- 4) Mr. Kukec holds 433,903 Common Shares directly and has control or direction over an additional 132,500 Common Shares, 74,000 of which are held jointly with Mr. Kukec's spouse and 58,500 which are held by solely by his spouse.

The directors of the Company are elected at each annual general meeting to hold office until the next annual general meeting or until their successors are elected or appointed. As of the date of this AIF, four of the Board's seven directors are independent. Independence is in part a legal and regulatory construct. It is formally assessed annually and considered continually throughout the year to ensure the directors can act objectively and in an unfettered manner, independent of management and free from any interest and any business or other relationship which could, or could reasonably be perceived to, materially interfere with their ability to act in the Company's best interests. Dr. Joseph Guy is considered "not independent" as his company, Patent Filing Specialists Inc., provides services to the Company in connection with the filing of its patent applications. Paul Matysek (Executive Chair) and Dan Blondal (CEO) are "not independent" because they are executives of Nano One.

As of the date hereof, the Board has established three committees: the Audit Committee and the Nominations and Governance Committee and the Human Resources and Compensation Committee. A copy of the Audit Committee Charter, which prescribes the duties and obligations of the Audit Committee, is annexed as Schedule "A" to this AIF. The composition of the Company's committees as at the date of this AIF is set out as follows:

Board Committee	Member	Status
Audit	Lyle Brown (Chair)	Independent
	Gord Kukec	Independent
	Carla Matheson	Independent
Nominations & Governance Committee	Lisa Skakun (Chair)	Independent
	Gord Kukec	Independent
Human Resources and Compensation Committee	Carla Matheson (Chair),	Independent
	Gord Kukec	Independent
	Paul Matysek	Non-independent

As at the date hereof, the current directors and executive officers of the Company, collectively, beneficially own, directly and indirectly, or exercise control or direction over 5,351,451 Common Shares, representing approximately 4.8% of the total number of Common Shares outstanding. The statement as to the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by the directors and executive officers of the Company as a group is based upon information furnished by the directors and executive officers.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

No director or executive officer of the Company is, or within ten years prior to the date hereof has been, a director, chief executive officer or chief financial officer of any company (including the Company) that (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or (ii) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Other than as set out below, no director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company (i) is, or within ten years prior to the date hereof has been, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (ii) has, within ten years prior to the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer, or shareholder.

On October 25, 2022, the Ontario Securities Commission (the “OSC” or “Commission”) approved a settlement agreement (the “Settlement Agreement”) among Staff of the OSC (“Staff”), Plateau Energy Metals Inc. (“Plateau”), Alexander Holmes and Philip Gibbs to settle allegations made by Staff in a Notice of Hearing and Statement of Allegations issued pursuant to sections 127 and 127.1 of the Ontario Securities Act (the “Act”). The allegations related to misleading and selective disclosure of Plateau, leading to breaches of Ontario securities laws and conduct contrary to the public interest, with respect to a decision by a Peruvian mining regulator that threatened Plateau’s mining

rights over certain properties in Peru. In March 2019, Plateau's Canadian directors and executives became aware of regulatory threats to Plateau's mining rights in Peru which it knew or reasonably ought to have known were material. Plateau did not inform the public until July 31, 2019. Mr. Holmes was Plateau's CEO at the relevant times of the allegations.

On November 2, 2022, the Capital Markets Tribunal issued an order (the "Order") approving the Settlement Agreement and reprimanding Plateau, Mr. Holmes, and Mr. Gibbs. Pursuant to the Order, in addition to reprimands of Plateau and Mr. Gibbs, Mr. Holmes is prohibited from acting as a director or certifying officer, as defined in National Instrument 52-109 - *Certification of Disclosure in Issuers' Annual and Interim Filings*, of any reporting issuer for a period of two years following the date of the Order and was ordered to pay an administrative penalty and a portion of costs of the OSC investigation. The Order is wholly unrelated to Nano One and is not expected to impact the Company's business operations. The Order does not impact Mr. Holmes' ability to perform his present role at Nano One.

Conflicts of Interest

Certain of the directors and/or executive officers of the Company serve (and may in the future serve) as directors and/or executive officers of other companies and therefore, it is possible that a conflict may arise between their duties as a director and/or executive officer or member of management of the Company and their duties as a director and/or executive officer of such other companies. The directors and executive officers of the Company are aware of the existence of laws governing accountability of directors and executive officers for corporate opportunity and requiring disclosures by directors of conflicts of interest and the Company will rely upon such laws in respect of any directors' and executive officers' conflicts of interest or in respect of any breaches of duty by any of its directors or executive officers. All such conflicts will be disclosed by such directors or executive officers in accordance with the BCBCA and they will govern themselves in respect thereof to the best of their ability in accordance with the obligations imposed upon them by law.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

To the best of Company's knowledge, there are no material legal proceedings by or against the Company or affecting any of its interests as at December 31, 2023 or the date hereof nor are we aware that any such proceedings are contemplated.

Furthermore, there are no: (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during its most recently completed fiscal year; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision in the Company; or (c) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority during its most recently completed fiscal year.

AUDIT COMMITTEE

The Audit Committee Charter

The Company's Audit Committee is governed by an Audit Committee Charter. A copy of the Company's Audit Committee Charter is attached hereto as Schedule "A".

Composition of the Audit Committee

The Company's Audit Committee is comprised of three independent directors: Lyle Brown (Chair), Carla Matheson and Gord Kukec.

All the Audit Committee members are "financially literate", as defined in NI 52-110, as all have the industry experience necessary to understand and analyze financial statements of the Company, as well as the understanding of internal controls and procedures necessary for financial reporting.

The Audit Committee is responsible for the review of both interim and annual financial statements for the Company. For the purposes of performing their duties, the members of the Audit Committee have the right at all times, to inspect all the books and financial records of the Company and to discuss with management and the external auditors of the Company any accounts, records and matters relating to the financial statements of the Company. Audit committee members meet periodically with management and annually with the external auditors.

Relevant Education and Experience of Members of the Audit Committee

Every member in the Audit Committee has sufficient education and experience to perform their responsibilities in relation to the Audit Committee, including:

- Understanding the accounting principles used by the Company to prepare its financial statements;
- Having the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions;
- Experience preparing, auditing, analyzing, or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising one or more individuals engaged in such activities; and
- An understanding of internal controls and procedures for financial reporting.

The relevant education and/or experience of each member of the Audit Committee is as follows:

- Mr. Brown, Chair of the Audit Committee, is a Chartered Professional Accountant. He has a clear understanding of the accounting principles used by the Company to prepare its financial statements; has the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves; has experience actively supervising one or more individuals engaged in preparing, auditing, analyzing, or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, and has an understanding of internal controls and procedures for financial reporting.
- Mr. Kukec currently sits on the boards of Intelligent City and Solshare Energy Corp. and has 30 years experience spanning a range of senior executive leadership roles which provides him with an understanding of the accounting principles used by the Company to prepare its financial statements, the ability to assess the general application of such accounting principles, and analyze or evaluate financial statements, and an understanding of internal controls and procedures for financial reporting. Mr. Kukec holds a BA, Economics from University of Calgary, an MBA from Queen's University.
- Ms. Matheson is a Chartered Professional Accountant (CPA, CA) with over ten years of experience in a variety of industries, specializing in business development, mergers and acquisitions and financial reporting for public and private corporations. Ms. Matheson is currently the Chief Financial Officer of Plank Ventures Ltd., an investment company targeting investments and business opportunities in the technology arena, with a focus on early-stage start-up companies that have developed a customer and revenue base and are seeking funding for expansion and serves as a director on the board at Tiny (formerly WeCommerce), which is listed on the TSX Venture Exchange. Additionally, Ms. Matheson completed the Institute of Corporate Directors (ICD) course on March 4, 2024.

Audit Committee Oversight

At no time since the commencement of the Company's most recently completed fiscal year was a recommendation of the Committee to nominate or compensate an external auditor (currently, Davidson & Company LLP) not adopted by the Board.

Pre-Approval Policies and Procedures

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as set out in the Audit Committee Charter of the Company. A copy of the Company's Audit Committee Charter is attached hereto as Schedule "A".

External Auditor Service Fees

In the following table, “audit fees” are fees billed by the Company’s external auditor for services provided in auditing the Company’s annual financial statements for the subject year. “Audit-related fees” are fees not included in audit fees that are billed by the auditor for assurance and related services that are reasonably related to the performance of the audit review of the Company’s financial statements. “Tax fees” are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning. “All other fees” are fees billed by the auditor for products and services not included in the foregoing categories.

The aggregate fees billed by the Company’s external auditor in the last two fiscal years, by category, are as follows:

Fiscal Year Ending	Audit Fees ⁽¹⁾	Audit-Related Fees ⁽²⁾	Tax Fees	All Other Fees
December 31, 2023	\$150,000	\$52,000	\$ -	\$ -
December 31, 2022	\$125,000	\$15,000	\$ -	\$ -

Notes:

- (1) Audit Fees relate to amounts paid or accrued in relation to the associated fiscal year.
- (2) Audit-Related Fees include consultations and attendances to matters other than the Company’s fiscal year end audits.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than disclosed elsewhere in this AIF, no director, senior officer or principal shareholder of the Company and no associate or affiliate of the foregoing have had a material interest, direct or indirect, in any transaction in which the Company has participated within the three-year period prior to the date of this AIF or will have any material interest in any proposed transaction, which has materially affected or will materially affect the Company.

MATERIAL CONTRACTS

Except for contracts entered into in the ordinary course of business, the Company has not entered into any material contracts during the most recently completed financial year or before the most recently completed financial year which are still in force and effect, and which may reasonably be regarded as presently material other than as follows:

1. Investor Rights Agreement, June 16, 2022, between the Company and Rio Tinto Western Holdings Limited (Rio Tinto), whereby Rio Tinto holds a participation right in any future equity financings to maintain its pro rata ownership interest until no later than June 16, 2027.
2. Investor Rights Agreement, October 4, 2023, between the Company and Sumitomo Metal Mining Co. Ltd. (“SMM”), whereby SMM holds a participation right

in in any future equity financings to maintain its pro rata ownership interest for a period of up to three (3) years from the effective date.

NAMES AND INTERESTS OF EXPERTS

The Company's auditors are Davidson & Company LLP of 1200 - 609 Granville St, Vancouver, BC V7Y 1G6. Davidson & Company LLP is independent of the Company according to its rules of professional conduct.

ADDITIONAL INFORMATION

Additional information relating to Nano One may be obtained from SEDAR+ at www.sedarplus.ca under the Company's profile.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities, and interests of insiders in material transactions, where applicable, are contained in the Company's information circular for its most recent annual meeting of securityholders as filed on SEDAR+ on May 31, 2023.

Additional financial information is provided in the Company's annual financial statements and Management's Discussion & Analysis for the fiscal year ended December 31, 2023.

SCHEDULE "A"

AUDIT COMMITTEE MANDATE

1.0 PURPOSE AND AUTHORITY

- 1.1 The purpose of the Committee is to advise and assist the Board of Nano One Materials Corp. (the "**Corporation**") in fulfilling its oversight responsibilities relating to, among other things:
- (a) the integrity of the Corporation's financial statements, financial disclosures and internal controls over financial reporting and disclosure controls and procedures;
 - (b) the Corporation's compliance with related legal and regulatory requirements;
 - (c) the qualifications, independence and performance of the Independent Auditor, together with the compensation of the Independent Auditor;
 - (d) the Corporation's ERM Program and the management and mitigation of significant risks identified thereunder;
 - (e) the related policies of the Corporation set out herein; and
 - (f) other matters set out herein or otherwise delegated to the Committee by the Board.
- 1.2 Consistent with this purpose, the Committee shall encourage continuous improvement of, and foster adherence to, the Corporation's policies, procedures and practices at all levels. The Committee shall also provide for open communication among the Independent Auditor, Management and the Board.
- 1.3 To perform its duties and responsibilities, the Committee has the authority to: (i) conduct investigations into any matters within its scope of responsibility; (ii) have unrestricted access to information, management and employees and books and records of the Corporation and its affiliates; and (iii) directly access and communicate with the Independent Auditor.

2.0 DEFINITIONS

2.1 In this Mandate:

- (a) "**Board**" means the board of directors of the Corporation;
- (b) "**Chair**" means the Chair of the Committee;
- (c) "**Committee**" means the audit committee of the Board;
- (d) "**Core Audit Services**" means services necessary to: (i) audit the Corporation's annual consolidated or non-consolidated financial statements; (ii) review the Corporation's condensed consolidated interim financial statements; and (iii) audit internal controls over financial reporting in accordance with the requirements of all applicable laws, regulations and professional standards;
- (e) "**Corporation**" means Nano One Materials Corp.;
- (f) "**CPAB**" means the Canadian Public Accountability Board or its successor;
- (g) "**Director**" means a member of the Board;
- (h) "**ERM Program**" means the Corporation's Enterprise Risk Management Program that incorporates an effective risk management framework to identify, evaluate, manage, monitor and communicate key corporate risks;
- (i) "**Financial Expert**" means an "audit committee financial expert" as defined in National Instrument 52-110 "Audit Committees";
- (j) "**Financially Literate**" means having the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be present in the Corporation's financial statements;
- (k) "**Nominations and Governance Committee**" means the governance and nominations committee of the Board;
- (l) "**Independent**" means, in the context of a Member and in accordance with all applicable laws and stock exchange requirements, being free from any direct or indirect material relationship with the Corporation and its subsidiaries which, in the view of the Board, could reasonably be expected to interfere with the exercise of a Member's independent judgment;
- (m) "**Independent Auditor**" means the firm of chartered professional accountants, registered with the CPAB and appointed by the shareholders to act as external auditor;

- (n) "**Management**" means the senior officers of the Corporation;
- (o) "**Mandate**" means this mandate of the Committee;
- (p) "**MD&A**" means the Corporation's management discussion and analysis prepared in accordance with the requirements of National Instrument 51- 102 in respect of the Corporation's annual consolidated and interim condensed consolidated financial statements;
- (q) "**Member**" means a Director appointed to the Committee;
- (r) "**Related Party Transactions**" means those transactions required to be disclosed under all applicable laws and stock exchange requirements which include, without limitation, transactions between: (i) executive officers, directors, principal shareholders or their immediate family members; and (ii) the Corporation or any of its subsidiaries; and

3.0 ESTABLISHMENT AND COMPOSITION OF COMMITTEE

- 3.1 The Committee shall be comprised of three (3) or more Directors, each of whom is Independent and Financially Literate. No Member may be a member of Management or an employee of the Corporation or of any affiliate of the Corporation. The Board shall appoint to the Committee at least one (1) Director who is a Financial Expert.
- 3.2 Members shall be appointed annually by the Board, or as otherwise necessary, provided, however, that each Director serving as a Member shall continue to serve until such Member resigns, is removed or has a successor appointed.
- 3.3 The Board may appoint a Member to fill a vacancy which occurs on the Committee between annual elections of Directors. If a vacancy exists on the Committee, the remaining Members shall exercise all of the powers of the Committee so long as at least three (3) Members remain in office.
- 3.4 Any Member may be removed from the Committee or replaced by a resolution of the Board.
- 3.5 No Member shall serve on more than three (3) public company audit committees (inclusive of the Corporation) without the prior approval of the Board.
- 3.6 The Board shall appoint a Chair on the recommendation of the Corporation's Nominations and Governance Committee, or such other committee as the Board may authorize. The Chair shall continue in that role until a successor is appointed. The Board shall periodically rotate the Chair and shall make reasonable efforts to rotate the Chair every four (4) years.

4.0 COMMITTEE MEETINGS

- 4.1 The Committee shall meet at least quarterly and such other times as it deems appropriate. Meetings of the Committee shall be held at the call of: (i) the Chair; (ii) any two Members; or (iii) the Independent Auditor.
- 4.2 The Chief Executive Officer, the Chief Financial Officer, and the Independent Auditor shall receive notice of and, unless otherwise determined by the Chair, shall be entitled to attend all meetings of the Committee. For clarity, the Independent Auditor must attend the Committee meetings at which the Corporation's annual audited consolidated and non-consolidated financial statements and unaudited condensed consolidated interim financial statements are reviewed.
- 4.3 A quorum at any meeting of the Committee shall be two (2) Members.
- 4.4 Each Member shall have the right to vote on matters that come before the Committee.
- 4.5 Matters to be determined by the Committee shall be decided by a majority of votes cast at a meeting of the Committee where such matter is considered. Actions of the Committee may also be taken by instruments in writing signed by all of the Members.
- 4.6 The Chair shall act as chair of all meetings of the Committee at which the Chair attends, otherwise the Members present at the meeting shall appoint one of their number to act as chair of the meeting.
- 4.7 Unless otherwise determined by the Chair, the Corporate Secretary of the Corporation shall act as secretary of all meetings of the Committee.
- 4.8 The Committee shall periodically meet separately with Management and the Independent Auditor to discuss any matters that the Committee or any of these persons or firms believes should be discussed privately. The Committee shall conduct *in camera* sessions without Management present at each meeting of the Committee.
- 4.9 The Committee may invite any Directors, officers or employees of the Corporation or any other person to attend the meetings of the Committee to assist in the discussion and examination of the matters under consideration by the Committee.
- 4.10 The Committee may delegate authority to individual Members or subcommittees, if deemed appropriate.

5.0 DUTIES AND RESPONSIBILITIES OF THE COMMITTEE

A. Independent Auditor

- 5.1 The Committee shall be directly responsible for the selection and appointment (through a recommendation to the Board for the appointment by the shareholders), compensation and retention of the Independent Auditor.
- 5.2 The Committee shall oversee the work of the Independent Auditor in connection with the Core Audit Services and any other services performed for the Corporation. The Independent Auditor shall report directly to the Committee and the Committee has the authority to communicate directly with the Independent Auditor.
- 5.3 The Committee shall oversee the resolution of any disagreements between Management and the Independent Auditor. The Committee shall discuss with the Independent Auditor matters relating to the conduct of the audit, including any problems or difficulties encountered and Management's responses thereto and any restrictions on the scope of activities or access to requested information.
- 5.4 The Committee shall pre-approve all services performed by the Independent Auditor. For any service, other than Core Audit Services, requiring specific pre-approval, the Committee may delegate pre-approval authority to one or more of its Members. Delegates must report all pre-approval decisions to the Committee at the next scheduled meeting.
- 5.5 The Committee shall use reasonable efforts, including discussion with the Independent Auditor, to satisfy itself as to the Independent Auditor's independence in accordance with Canadian generally accepted auditing standards and any other applicable regulations and professional standards. The Committee shall discuss any potential independence issues with the Board and recommend any action that the Committee deems appropriate.
- 5.6 The Committee shall review and evaluate the qualifications, independence and performance of the Independent Auditor and its lead engagement partner. Without limiting the foregoing, the Committee shall:
 - (a) review and discuss with Management and separately with the Independent Auditor the results of the Corporation's annual Independent Auditor assessment process; and
 - (b) at least annually, obtain and review a report from the Independent Auditor describing the firm's internal quality control processes and procedures, including any material issues raised by the most recent internal quality control review or peer review, or by any inquiry or investigation by governmental or professional authorities within the preceding five (5) years with respect to independent audits carried out by the Independent Auditor, and any steps taken to address such issues.

The Committee shall discuss any material issues identified with the Board and recommend

any action that the Committee deems appropriate.

- 5.7 The Committee shall ensure the rotation of the audit partner(s) as required by applicable law and consider the need for rotation of the Independent Auditor.
- 5.8 The Committee shall meet with the Independent Auditor prior to the audit to discuss the planning and staffing of the audit, including the general approach, scope, areas subject to significant risk of material misstatement, estimated fees and other terms of engagement.

B. Financial Reporting

- 5.9 In consultation with Management and the Independent Auditor the Committee shall review and satisfy itself as to: (i) the integrity of the Corporation's internal and external financial reporting processes; (ii) the adequacy and effectiveness of the Corporation's disclosure controls and procedures (including those pertaining to the review of disclosure containing financial information extracted or derived from the Corporation's financial statements) and internal controls over financial reporting; and (iii) the competence of the Corporation's personnel responsible for accounting and financial reporting. Without limiting the generality of the foregoing, the Committee shall receive and review:
 - (a) reports regarding: (i) critical accounting estimates, policies and practices; (ii) goodwill impairment testing; (iii) derivatives and hedges; (iv) any reserves, accruals, provisions and estimates that may have a material effect on the Corporation's financial statements; (v) any *pro forma*, adjusted or restated financial information, forecasts, or projections; and (vii) the effect of regulatory and accounting initiatives, as well as off-balance sheet arrangements, on the Corporation's financial statements;
 - (b) analyses by Management and the Independent Auditor regarding significant financial reporting issues and judgments made in connection with the preparation of the Corporation's consolidated financial statements including: (i) alternative treatments of financial information within generally accepted accounting principles related to material matters that have been discussed with Management, their ramifications and the treatment preferred by the Independent Auditor; (ii) major issues regarding auditing and accounting principles and presentations, including significant changes in the selection or application of auditing and accounting principles; and (iii) major issues regarding the adequacy of the Corporation's internal controls over financial reporting and disclosure controls and procedures and any specific audit steps adopted in light of material weaknesses or significant deficiencies in such controls; and
 - (c) other material written communication between Management and the Independent Auditor.
- 5.10 The Committee shall, prior to external release, if applicable, review and discuss with Management and with others as it deems appropriate:

- (a) the Corporation's annual audited consolidated and non-consolidated financial statements and unaudited condensed consolidated interim financial statements and the Independent Auditor's related attestation reports, as well as any related MD&As;
 - (b) Management's report and the Independent Auditor's audit report on internal controls over financial reporting;
 - (c) the Independent Auditor's quarterly review reports and annual audit results report summarizing the scope, status, results and recommendations of the quarterly reviews of the Corporation's condensed consolidated interim financial statements and of the audit of the Corporation's annual consolidated financial statements and related audit of internal controls over financial reporting, and also containing at least: (i) the communications with respect thereto between the Independent Auditor and the Committee required by any applicable regulations and professional standards, including without limitation schedules of corrected and uncorrected account and disclosure misstatements and significant deficiencies and material weaknesses in internal controls; (ii) the (at least) annual independence communication; (iii) the Management representation letter; and (iv) the documentation and communication required quarterly from the Independent Auditor;
 - (d) the report to shareholders contained in the Corporation's annual report; and
 - (e) any other document that the Committee determines should be reviewed and discussed with Management and the Independent Auditor or for which a legal or regulatory requirement in that regard exists.
- 5.11 The Committee shall, prior to external release, review and discuss with Management and with others as it deems appropriate, the financial information to be disclosed in the Corporation's interim and annual earnings releases or other news releases.
- 5.12 The Committee shall recommend the Corporation's annual audited consolidated financial statements together with the Independent Auditor's audit report thereon and on internal controls over financial reporting, Management's report on internal controls over financial reporting and disclosure controls and procedures, MD&As, earnings releases, and reports to shareholders for approval by the Board and subsequent external release, as well as inclusion of the noted financial statements in the Corporation's annual reports. The Committee shall approve the external release of the Corporation's unaudited condensed consolidated interim financial statements and related interim MD&As and earnings releases on behalf of the Board.
- 5.13 The Committee shall, prior to external release, review and discuss with Management and with others as it deems appropriate, and recommend for approval by the Board:
- (a) any future oriented financial information, financial outlooks, and

- earnings or dividend guidance to be provided by the Corporation;
- (b) the Annual Information Form and Management Information Circular to be filed by the Corporation;
 - (c) any prospectus or other offering documents and documents related thereto for the issuance of securities by the Corporation; and
 - (d) other disclosure documents to be released publicly by the Corporation containing or derived from financial information.
- 5.14 The Committee shall review, discuss with Management and with others as it deems appropriate, the disclosures made by the Chief Executive Officer and Chief Financial Officer of the Corporation pursuant to their certification of the Corporation's annual and quarterly reports regarding significant deficiencies or material weaknesses in the design or operation of internal controls over financial reporting and any alleged fraud involving Management or other employees.
- 5.15 The Committee shall use reasonable efforts to satisfy itself as to the appropriateness of the Corporation's material financing, capital and tax structures.
- 5.16 The Committee shall review, discuss with Management and with others as it deems appropriate, financial information provided to analysts and ratings agencies. Such discussions may be in general terms (i.e. discussion of the types of information to be disclosed and the types of presentations to be made) and need not occur in advance of each release of information.
- 5.17 The Committee shall prepare, or cause to be prepared, any reports of the Committee required to be included in the Corporation's public disclosures or otherwise required by applicable laws.
- 5.18 The Committee shall review, discuss with Management and with others as it deems appropriate, and approve all Related Party Transactions and the disclosure thereof.

C. Risk Management and Other

- 5.19 The Committee shall be responsible for the oversight of the ERM Program and shall report any actions or findings of the ERM Program to the Board.
- 5.20 The Committee shall review and discuss with Management and others as it deems appropriate Management's report regarding identifying, assessing, managing and mitigating significant risks and related matters identified pursuant to the ERM Program.
- 5.21 The Committee shall satisfy itself as to the appropriateness of the Corporation's internal controls and processes associated with the release of any sustainability disclosures.

- 5.22 The Committee shall review and discuss with Management and others as it deems appropriate the quarterly report prepared by Management regarding significant litigation and other material legal matters that could have a significant impact on the Corporation or its financial statements.
- 5.23 The Committee shall be responsible for the oversight of the Corporation's insurance programs, any renewals or replacements thereof, including in respect of directors' and officers' insurance and indemnification of Directors.

D. Policies and Mandate

6 The Committee is responsible for the oversight of the following policies:

6.0 Whistleblower Policy, including overseeing procedures for the receipt, retention, and treatment of complaints regarding accounting, internal controls, or auditing matters as well as procedures for confidential, anonymous submissions by employees regarding questionable accounting or auditing matters as required by applicable law;

6.1 Pre-Approval Policy for Independent Auditor Services;

6.2 Guidelines for Hiring Employees or Former Employees of the Independent Auditor;

6.3 Disclosure Policy; and

6.4 other policies that may be established from time-to-time regarding accounting, financial reporting, disclosure controls and procedures, internal controls over financial reporting, oversight of the external audit of the Corporation's financial statements, and oversight of the internal audit function.

6.5 The Committee shall periodically review this Mandate and recommend any necessary amendments to the Nominations and Governance Committee for consideration and recommendation to the Board for approval, as deemed appropriate.

7 REPORTING

7.0 The Chair, or another designated Member, shall report to the Board at each regular meeting on those matters that were dealt with by the Committee since the last regular meeting of the Board.

8 REMUNERATION OF MEMBERS

8.0 Members and the Chair shall receive such remuneration for their service on the Committee as the Board may determine from time to time, having considered the recommendation of the Nominations and Sustainability Committee.

9 GENERAL

- 9.0 This Mandate shall be posted on the Corporation's corporate website at www.nanoone.ca
- 9.1 The Committee shall annually review its own effectiveness and performance.
- 9.2 The Committee shall perform any other activities consistent with this Mandate, the Corporation's by-laws and applicable laws, that the Board or Committee determines are necessary or appropriate.
- 9.3 The Committee may, in its discretion and in circumstances that it considers appropriate, obtain advice and assistance from outside legal, accounting and other advisors and approve the engagement by the Committee or any Member of outside advisors or persons having special expertise, all at the expense of the Corporation. The Corporation shall provide appropriate compensation, as determined by the Committee, for the Independent Auditor, to any independent counsel or other advisors that the Committee chooses to engage, and for payment of ordinary administrative expenses of the Committee that are necessary and appropriate in carrying out its duties and responsibilities.
- 8.0 The Committee is not responsible for certifying the accuracy or completeness of the Corporation's financial statements or their presentation in accordance with generally accepted accounting principles, or for guaranteeing the accuracy of the attestation reports of the Independent Auditor. The fundamental responsibility for the Corporation's financial statements and reporting, internal controls over financial reporting and disclosure controls and processes rests with Management and, in accordance with its professional responsibilities, the Independent Auditor. Nothing in this Mandate is intended to modify or augment the obligations of the Corporation or the fiduciary duties of the members of the Committee or the Board under applicable laws.

Approved November 2023.