NANO ONE MATERIALS CORP.

Annual Information Form

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2021

DATED MARCH 28, 2022

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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. All information in this AIF is as at December 31, 2021, with subsequent events disclosed to March 28, 2022.

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. Such forward-looking statements and information include, but are not limited to, statements or information with respect to: the Company's future business 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 business plans and strategies; 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 continued expansion of the lithium iron phosphate market; 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 duration, extent and other implications of the coronavirus ("**COVID 19**") and any restrictions or suspensions with respect to our operations; 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 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; political and economic conditions; the results of litigation or regulatory proceedings that may be brought against the Company; changes in income tax laws; 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 *British Columbia Business Corporations Act*.
"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, *Continuous Disclosure Obligations*
"**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.sedar.com*.

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.

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

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

(i) 95,579,373 fully paid and non-assessable Common Shares without par value (December 31, 2021 – 95,528,103).

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.

As at the date hereof, 6,487,357 Common Shares are reserved for issuance under stock options granted, with a weighted average exercise price of $2.77 per share.

As at the date hereof, 4,342,917 Common Shares are reserved for issuance under share purchase warrants issued, with a weighted average exercise price of $2.60 per share.

As of the date hereof, 382,554 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 traded on the TSX-V under the symbol "NNO" until June 8, 2021, when it commenced trading on the TSX under the symbol "NANO". The following tables outline the share price trading range and volume of shares traded by month in 2021 to the date of this AIF.

Month	High ($)	Low ($)	Close ($)	Volume
January 2021	6.33	4.60	5.10	9,294,576
February 2021	6.22	4.85	5.48	4,972,762
March 2021	6.20	5.16	5.34	5,125,358
April 2021	5.46	4.50	5.04	2,776,619
May 20201	5.14	3.73	4.48	2,638,012
June 2021	5.09	4.06	4.43	2,097,608
July 2021	4.61	4.03	4.1	1,075,455
August 2021	4.49	3.07	3.17	2,594,802
September 2021	4.55	3.15	3.97	2,359,913
October 2021	4.28	3.41	4.27	2,226,171
November 2021	4.85	3.17	3.34	6,527,922
December 2021	3.52	2.91	3.04	3,451,632
January 2022	4.05	2.95	3.11	3,610,406
February 2022	3.21	1.8	2.43	4,065,176

Month	High ($)	Low ($)	Close ($)	Volume
March 1-28, 2022	2.75	1.93	2.52	3,195,990

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.

Prior Sales

During the fiscal year ended December 31, 2021, the following securities of the Company, which are not listed or quoted on a marketplace, were granted or issued:

Date Granted/Issued	Number of Securities	Security	Issue/Exercise Price
February 1, 2021	1,766,750	Stock Options	$5.10
February 25, 2021	52,100	Stock Options	$5.26
April 1, 2021(1)	324,299	Warrants	$5.35
June 7, 2021	40,000	Stock Options	$4.90
October 5, 2021	40,000	Stock Options	$3.62
October 14, 2021	184,505	RSUs	N/A
October 14, 2021	8,626	DSUs	N/A
December 2, 2021	240,000	Stock Options	$3.14

Notes:

(1) Issued to finders in connection with a private placement.

Dividends

No dividends on the Common Shares have been paid by the Company to date and the Company has no plans at present to pay dividends.

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 2019

In January 2019, the Company entered into a Joint Development Agreement with Pulead Technology Industry ("**Pulead**"). Pulead is a highly respected Chinese cathode producer with a track record of partnering with international providers of intellectual property. Under the agreement, Nano One's initial focus is on manufacturing innovations and plant design to improve the cost, margins and competitiveness of LFP.

LFP is the safest, longest lasting and cheapest cathode material for use in lithium-ion batteries, used in electric buses, fleet vehicles, and renewable energy storage. As the cost of lithium-ion batteries decreases, they anticipated to replace lead acid batteries and potentially fuel a new generation of long range, long lasting electric vehicles.

During 2019 Nano One undertook further research and development to reduce the production cost of LFP, so as to be competitive and well positioned as the LFP market continues to expand. If Nano One is successful in producing LFP at competitive prices and volumes, the Company expects to enter into royalty bearing license agreements and/or enter into joint ventures for the rights to use Nano One's intellectual property for the production of LFP.

In July 2019, the Company executed, a previously announced, contribution agreement with SDTC, for non-dilutive and non-repayable funding of up to $5,000,000 in respect of the Company's "Scaling Advanced Battery Materials" project. The proceeds are to be distributed over three years in five payments, of which the first instalment of approximately $974,000 was received during 2019 and will be directed at the expansion of Nano One's business and technical activities with its partners. The goals are to expand the laboratory, pilot plant, and staffing to support the advancement of next generation lithium-ion battery cathode materials used in electric vehicles, and renewable energy storage.

In June 2019 Volkswagen Group Research joined Nano One's consortium as an SDTC project contributor, along with previously announced consortium members Pulead, and Saint-Gobain.

In June 2019, the Company received a purchase order in the amount of $550,000 from a global Original Equipment Manufacturer ("**OEM**") to jointly evaluate processes and innovative cathode materials for high energy density lithium-ion batteries in automotive applications. The project concluded successfully in May 2020.

During 2019, the Company received aggregate payments from government funding programs of approximately $1,456,000.

Fiscal 2020

Financings and Government Funding

In February 2020, the Company completed a non-brokered private placement consisting of the issue of 9,565,000 units at a price of $1.15 per unit for gross proceeds of approximately $11,000,000. Each unit consisted of one common share and one-half of a common share purchase warrant with each whole warrant exercisable into one common share at an exercise price of $1.60 until February 21, 2023.

In May 2020, the Company announced that the Innovative Clean Energy ("**ICE**") Fund of the Province of British Columbia's Ministry of Energy, Mines and Petroleum Resources will be contributing $3,033,000 to the "Scaling Advanced Battery Material" project in conjunction with, and over and above, the SDTC's $5,000,000 funding. In 2020, the Company received approximately $1,500,000 of this contribution.

On October 29, 2020, the Company completed a short-form prospectus financing consisting of the issue of 5,282,900 units at a price of $2.72 per unit for gross proceeds of approximately $14,400,000. Each unit consisted of one common share and one-half of a common share purchase warrant with each whole warrant exercisable into one common share at an exercise price of $3.55 each until October 29, 2022.

Engineering and Economic Modelling

In June 2020, an engineering report prepared by Noram Engineering and Constructors of Vancouver, British Columbia was completed, detailing enhanced design specifications and improved economics for the commercial scale production of lithium-ion battery cathode materials using Nano One's proprietary One-Pot Process for the production of cathode active materials. 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. patented and scaled-up an innovative One-Pot Process for the production of cathode active materials.

The economics and design specifications in the report relate to the potential for a 4,800 tonne/year manufacturing line for the production of LFP and reveal a reduction in equipment and operating expenses from previous estimates and improved raw material costs (see LFP related activities within "*Three Year History - Fiscal 2019*" above and within "*Strategic Partnerships*" below). Further, the report forms an engineering basis for Nano One's other cathode materials, namely NMC and lithium nickel manganese oxide ("**LNM**").

Ongoing engineering work is underway to assess the processing and feedstock cost reductions and the waste and greenhouse gas emissions ("**GHG**") reduction benefits of M2CAM and the One-Pot Process.

Partnership and Technological Breakthroughs

In June 2020, the Company announced the development of a coated, single crystal cathode material for lithium-ion batteries that is provides up to four (4)-times improvement in battery longevity. This technology is applicable to all of Nano One's cathode materials but is especially relevant to NMC811.

In August 2020, Nano One signed a Joint Development Agreement with a large multinational materials producer that supplies the Asian automotive industry. Work under this agreement is focused on jointly developing the combined technologies of both companies to pursue a manufacturing opportunity, through licensing or joint venture, to supply materials for a new generation of lithium-ion batteries. The agreement also provides a framework to develop a business plan for the commercialization of these jointly developed materials. The potential outcomes of the agreement include formation of a joint venture, licensing of Nano One's technology, and/or further joint development work.

In October 2020, the Company announced a further breakthrough in battery longevity with its cobalt-free high voltage cathode materials which were successfully demonstrated at automotive rates of charge and discharge for over 900 cycles. The demonstration battery uses a low cost, cobalt-free LNMO cathode active material made with Nano One’s proprietary One-Pot Process. The breakthrough facilitates the avoidance of rapid capacity fade and premature failure and successfully demonstrates a high voltage lithium-ion battery cell with significant cycle life. The enabling technology is Nano One's patented LNMO cathode material operating up to 4.7 volts, 25% higher than commercial lithium-ion batteries, improving efficiency, thermal management, and power.

In December 2020, Nano One entered into a Cathode Evaluation Agreement with an American based multinational automobile manufacturer to jointly evaluate Nano One’s cathode materials for use in automotive lithium-ion batteries. The goal of this project is to evaluate the performance and commercial benefit of Nano One's patented One-Pot Process for nickel-rich and cobalt-free cathode materials in electric vehicle applications.

Facilities Expansion

In 2020, the Company began the expansion of facilities at its head office location in Burnaby, British Columbia. Two new units were leased to grow its facilities from 5,000 sq. ft. to 15,000 sq. ft. The facilities expansion is for the purpose of facilitating infrastructure growth by adding a new dry room (in construction), laboratory space (completed), expanding the battery test room (completed), adding new furnaces and facilitating the increase in staffing to support these efforts.

Fiscal 2021

M2CAM Technology

In February 2021, Nano One announced the launch of its M2CAM technology which reduces cost, reduces waste, and reduces the carbon footprint in the lithium-ion battery supply chain. The Company commenced or continued discussions with large integrated miners to reduce environmental footprints and maximize upstream value in the global battery supply chain. Nano One's other collaborators include automotive OEMs with similar motivations to meet environmental targets by reducing waste, carbon emissions, logistics and costs. Patents are pending for M2CAM and preliminary test results are showing battery capacity up to 5% higher than cathode materials currently made from metal salts.

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 metal 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

Completion of SDTC and BC-ICE Milestone 2 and Receipt of Milestone 3 Funds

On September 9, 2021, the Company announced the achievement 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 $1,652,859 in aggregate has been 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. Nano One is now focused on Milestone 3 which involves economic modelling and scaled up demonstration of both LFP and NMC.

Partnership and Technological Breakthroughs

Joint Development Agreement signed with Euro Manganese

On October 4, 2021, the Company announced the signing of a Joint Development Agreement with Euro Manganese Inc. ("**Euro Manganese**"), a battery raw materials company developing a significant manganese deposit in the Czech Republic.

The two companies will collaborate on developing economically viable and environmentally sustainable applications of high-purity manganese expected to be produced by Euro Manganese from its proposed Chvaletice Manganese Project. The manganese will be evaluated by Nano One in the formation of its innovative cathode materials including LNMO (lithium nickel manganese oxide) and nickel-rich NMC (lithium nickel manganese cobalt oxide). LNMO and NMC materials will be prepared using Nano One's patented One-Pot process, coated nanocrystal powders and M2CAM technology, enabling the use of sulfate-free metals and lithium carbonate as lower cost and environmentally more sustainable feedstocks.

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

On September 30, 2021, the Company announced the completion of a project with a global automotive Original Equipment Manufacturer ("**OEM**"), that was first announced on June 20, 2019 and the two parties have signed a Memorandum of Understanding ("**MOU**") to evaluate manganese-rich cathode materials for potential use in automotive scale battery cells.

The completed project successfully demonstrated the synthesis, performance, and improved durability of a proprietary and experimental nickel-rich cathode formulation, using Nano One's patented One-Pot process. The MOU is for the multi-phase development and evaluation of LNMO batteries using cathode materials prepared by Nano One. Work under the MOU will include performance testing, economic feasibility and future potential commercial collaboration for jointly developed battery cells using Nano One's advanced LNMO cathode materials.

Industrial Scale Engineering Study Added to Automotive Project

On August 17, 2021, the Company announced that its cathode evaluation program with a global automotive company has expanded in respect of the evaluation of NMC/LNMO cathode materials. The increased scope will include an engineering report that models cathode manufacturing at an automotive scale based on Nano One's patented One-Pot process, coated nanocrystal, and M2CAM technologies.

Nano One has engaged global engineering firm, Hatch Ltd., to lead an engineering study and provide a report to the automotive company. The report will be based on the engineering study being prepared for Nano One, and will include a Front-End Loading level 1 (FEL1) analysis on capital costs, operating costs, and a cost comparison of the Nano One process versus the conventional cathode material manufacturing process. The report

will enable the companies to evaluate both the economic and environmental advantages of Nano One's patented One-Pot, M2CAM and coated nanocrystal process technologies at large industrial scale.

Joint Development Agreement with Johnson Matthey

In June 2021, the Company announced the execution of a joint development agreement with Johnson Matthey ("**JM**") a global leader in sustainable technologies. Under this agreement the companies are to co-develop next generation products and processes for Johnson Matthey's eLNO® family of nickel-rich advanced cathode materials using Nano One's patented One-Pot process and coated nanocrystal technology, for the low-cost, low-carbon footprint production of high-performance lithium-ion battery cathode materials. On November 11, 2021, JM issued a news release about their plans to exit the battery materials business.

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 is to optimize Nano One's patented One-Pot process for nickel-rich cathode materials using small amounts of niobium from CBMM as a coating. Niobium is a key element in the advancement of lithium-ion battery cathode materials as it can be made to form a coating on the outer surface of each grain of a cathode powder. As a coating, niobium protects the highly reactive cathode from deleterious side reactions that can cause rapid degradation in high performance batteries while preventing the growth of interfacial resistance during battery cycling.

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

Throughout November and December 2021, the Company announced the engagement of Mr. Dennis Geoffroy as a consultant, the hiring of Adam Johnson (VP, External Affairs), the engagement of Dr. Yuan Gao (Strategic Advisor), and the engagement of Frank Fannon (Fannon Global Advisors, as a Strategic Advisor). Expansion of the Company's team of advisors is in effort to strengthen and enhance Nano One's innovation, commercialization, North American scale-up programs, and strategic communications/external affairs with governments.

Change in Board and Directors

During the year ended December 31, 2021, the Company had 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

On November 9, 2021, the Company announced a transition in LFP strategy towards creating a secure and cost competitive supply chain that is domestically integrated with a low environmental footprint. This involves a shift in its LFP strategic direction to large emerging markets outside of China, starting in North America, and has ceased joint development activities with Pulead Technology Industry.

Other Events

In January 2021, the Company announced that it had submitted a proposal to demonstrate its M2CAM and One-Pot Process 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). AUI were awarded the winning bid by the Corporación de Fomento de la Producción de Chile (CORFO) Council on January 4, 2021 to build, manage and operate the Institute.

In February 2021, Nano One announced that its proprietary coated single crystal HVS cathode material was performing well in University of Michigan test programs through Nano One's collaboration with the University of Michigan on the development of innovative solid-state battery technology.

Subsequent Events

Funding to Advance M2CAM and Thermal Processing Initiatives

On March 3, 2022, the Company announced that it will be receiving advisory services and funding of up to $404,000 from the NRC-IRAP to support a research and development project to advance its M2CAM technology and thermal processing innovations. The project will further advance cost optimization of the One-Pot Process for the manufacture of 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.

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

On February 15, 2022, the Company announced that it has successfully completed Phase One of its advanced lithium-ion battery cathode materials coating development agreement with CBMM, the world's leading supplier of niobium products and technology. Nano One has successfully demonstrated the use of CBMM's niobium to form a protective coating on Nano One's single nanocrystal NMC cathode active material. This coating is designed to enhance durability, and the success on this first milestone strengthens the supply chain relationship between CBMM and Nano One while providing yet another demonstration of the flexibility of Nano One's patented One-Pot process.

Phase One applied the niobium coating technology to NMC811 cathode active material and the next two phases will focus on the niobium coating of even higher nickel NMC. This will include scaling of the One-Pot coating technology to demonstrate commercial viability and validate the supply chain. Together, CBMM and Nano One are developing an integrated and differentiated supply chain for niobium coated single crystal cathode materials.

Nano One's patented One-Pot process adds a cost-effective niobium coating on each individual nanocrystal to protect the cathode from deleterious side reactions than can otherwise cause rapid performance degradation. The One-Pot process enables this coating to be formed without adding process steps or costs, and the coating can significantly increase the durability of cathode materials in lithium-ion batteries. The niobium-coated single crystal cathode materials are applicable to both conventional liquid electrolyte cells and advanced solid state electrolyte cells.

Significant Acquisitions

The Company has not completed any acquisition 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 scaled-up an innovative One-Pot Process for the production of cathode active materials ("**CAM**") for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics. Nano One has proven its technology in the laboratory, built a demonstration pilot plant, and is partnering with key automotive OEMs and cathode manufacturers.

Nano One's technology is intended to improve the performance and cost of cathode materials, reduce complexity and excess waste in the supply chain, minimize carbon footprint and simplify production using environmentally sustainable processes. It is a manufacturing platform suited to many types of lithium-ion cathode materials, which may

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

The Company holds 21 patents, with over 40 pending patent applications throughout the world.

Nano One's One-Pot Process is engineered to use non-sulfate forms of metal feedstock, with the intention of reducing total cost and carbon footprint of feedstock needs per kilogram of CAM, eliminating the need to convert metal to sulphate, thereby removing downstream sulphate waste equivalent to nearly two times the CAM product volume and it reduces water consumption, GHG emissions and added process costs. Furthermore, the process uses lithium feedstock in the form of carbonate rather than hydroxide which is more costly, corrosive and harder-to-handle. The process is feedstock flexible which enables 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 nanocrystal innovation addresses a fundamental battery trade-off between energy density and durability. Increased durability provides 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 nanocrystal cathode material simultaneously with its protective coating.

Addressable Markets

The Company’s first addressable market is cathode materials for lithium-ion rechargeable batteries for electric vehicles, energy storage systems, and consumer electronics. There is growing demand in the lithium-ion battery market for more cost effective, higher performance, and environmentally sustainable energy storage solutions. Nano One’s technology also has potential applications in other markets that require specialty mixed metal ceramic powders.

Process Developments

Nano One’s One-Pot Process forms durable nanocrystalline cathode powders and protective coatings simultaneously, using fewer steps and does so directly from sulphate-free metal salts and lithium carbonate. It is an environmentally inspired process that uses raw materials with lower environmental footprint and much less water while producing no waste. The One-Pot Process and M2CAM technology enables nickel-rich CAM to be made direct from metal using nickel, manganese and cobalt metal powder feedstocks rather than metal sulfates or other salts. By using nickel metal powder which is 22.4% the weight of nickel sulfate, Nano One avoids the added costs, energy and environmental impact of converting the metal to sulfate, shipping the extra weight and disposing of the sodium-sulphate by-product that is produced in conventional CAM processes. 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 technology offers the flexibility to use either lithium carbonate or hydroxide. This is enabled by mixing lithium with all other metal inputs in Nano One's patented One-Pot Process to produce a fully-lithiated mixed-metal intermediate powder that is neither carbonate nor hydroxide, allowing it to form finished cathode powder when thermally processed in a furnace. In contrast to this, conventional methods use nickel, manganese and cobalt sulphate to form an intermediate powder, known as a precursor cathode active material ("**PCAM**") that, when being made into nickel-rich forms of NMC, must then be milled and thermally processed with lithium hydroxide rather than lithium carbonate, to accommodate lower temperature requirements in the furnace.

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 formation and growth of particles, while converting the input materials into a composite powder that readily fires in a downstream kiln to form micron sized clusters of coated nanocrystal particles.

By mixing lithium with the other metal feedstocks, the One-Pot process enables the desired crystal structure and performance enhancing coatings to be formed readily and simultaneously during thermal processing, thereby eliminating extra coating steps and the need for long and repeated kiln firings. The process produces materials with stable phase composition (crystal structure) which is configurable to meet a variety of applications in lithium-ion batteries.

The Company is developing CAM production processes at various scales of production, beginning at gram level volumes, shifting to kilograms, 10s of kilograms and 100s of kilograms before moving to tonne level production volumes. Processes and equipment must be designed, commissioned and optimized at each scale to account for differences in thermodynamics (heat, temperature, energy, work) and reaction kinetics (reaction rates and chemical change).

The physical, chemical and battery performance characteristics of the resulting CAM are evaluated by methods such as electron microscopy, x-ray diffraction, spectroscopy, and electro-chemical cell testing in order to develop, optimise and characterize each cathode material.

The Company continues to develop coating and doping (chemical additives) technologies for LFP, NMC, and LNMO materials (see details of these specific formulations below) with the objective of improving both the durability, stability, and performance characteristics of these materials for use in lithium-ion batteries, solid state batteries and other advanced battery systems. The Company's process is suitable for component gradients within crystals and surface coatings without the need for additional process steps.

Product Developments

The Company's primary cathode formulations under development include:

- Lithium Nickel Manganese Cobaltate (NMC622, NMC811, and Ni>90% NMC);
- Lithium Nickel Manganese Oxide (LNMO, or High Voltage Spinel HVS); and
- Lithium Iron Phosphate (LFP).

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 June 2020, the Company announced a breakthrough development of a coated nanocrystalcathode 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 metals instead of sulphates.

The Company is now working with various automotive manufacturers, cathode producers and academic institutions to evaluate its patented One-Pot Process and coated NMC based materials. See "*Three Year History – Fiscal 2019 - 2021*"

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. The coated LNMO (or HVS) stabilizes the interface between cathode and electrolyte because: (i) it does not expand and stress the cathode-electrolyte interface like other cathode materials, and (ii) 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.

In 2018, the Company successfully synthesized LNMO (or HVS) and is now working with various automotive manufacturers, cathode producers and academic institutions to

evaluate its patented One-Pot Process and coated LNMO (HVS) cathode materials. See "*Three Year History*".

LFP

LFP is the safest, longest lasting and lowest cost cathode material for lithium-ion batteries due to the relative stability of olivine crystal structure, its high durability and its low-cost inputs. Further cost reductions could significantly increase the demand for LFP to make it a cathode material of choice for energy storage systems, for replacing lead-acid batteries, and for expanding applications entry level, mid-market and heavy duty electric vehicles.

In response to this opportunity, the Company has developed and continues to optimize its One-Pot process for the production of LFP using lower cost sources of materials. Engineering studies have highlighted the technology's improved economics and further engineering work is underway as the Company explores scale-up for automotive scale. In addition, the Company has shifted its LFP strategic direction towards large emerging markets outside of China, starting in North America.

Stage of Development

The Company conducts its own research and development, and its technologies and materials are currently in a pre-commercial stage. Aggregate costs for the pre-commercial activities are estimated to be approximately $5,000,000 per year,

- LFP is at the kilogram pilot scale and being optimized for advanced raw material inputs to address price pressures and demand for localized supply chains. The Company is also advancing its engineering and techno-economic studies to validate commercial interest for pilot and full scale production of LFP.
- 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.
- HVS is being developed at pre-pilot and pilot-scale with techno-economic feasibility, engineering studies and third party evaluations underway to validate commercial interest for pilot and full scale production.

Business Objectives

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

- Developing, advancing and promoting its One-Pot, M2CAM and coated nano-crystal technologies through collaborative partnerships with OEMs, miners and cathode producers. 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.

- Prototyping and scaling up by expanding its demonstration pilot plant and laboratory facilities to serve technology development, partnership and licensing objectives.
- Developing, building and operating pilot, demonstration and commercial plants in collaboration with its strategic partners, and generating revenue through licensing and joint venture arrangements that are still in various stages of business development.
- Identifying and validating additional joint development partners throughout the supply chain.

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

- Generating royalty and joint venture revenues from the production of NMC, LFP and HVS, and 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 India.
    - HVS is a mid-term opportunity driven by fast charging needs and the emergence of higher voltage batteries expected mid- to late- decade.
    - Nickel-rich NMC is also 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.
    - Continuous innovation to improve the environmental footprint, scalability and competitiveness of high volume CAM production.

Electric Vehicle 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 and fast-charging 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.

Low-cost and heavy-duty EVs include fleet vehicles as well as start-stop, hybrid and mid-range EVs, and these applications tend to favour batteries 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"), nickel-manganese cobalt oxide ("NMC") and hybrids ("NMCA") with nickel content ranging anywhere from 33-95%.

It is possible to use both LFP and NMC batteries in fast charging applications, a new generation of lithium-ion batteries consisting of lithium nickel manganese oxide ("LNM" or "HVS") may be better suited to these needs but will first require the development and commercialization of high voltage cells.

These factors have increased the demand and supply chain development of iron-rich LFP, nickel-rich NMC and manganese-rich LNM 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 enables the use of battery-grade metal feedstocks that reduces environmental footprint and costs when compared to established industrial methods.

To date, the Company has demonstrated the synthesis of LFP, NMC and LNMO 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 metal sources for the rapidly growing 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, production experts, 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 capitally 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 twenty-one (21) patents which were issued by various jurisdictions including Canada, China, Japan, Korea, Taiwan, and the United States. The patents have expiries ranging between thirteen (13) to nineteen (19) years from the patent issuance date. The Company also has over forty (40) pending patent applications throughout the world.

Patent Family	Short Description	Title
US 9,136,534 CA 2,906,009	Method of forming a powder by generation of a complexecelle	Complexometric Persursor Formulation for Industrial Production of High Performance Fine and Ultrafine Powders and Nano Powders for Specialized Applications
CA 2,905,525	Reactor designs for Complexecelle formation	Reactor Vessel for Complexecelle Formation
US 10,374,232 KR 10-1854708	Method of forming powder by complexecelle generation for battery applications	Complexometric precursor formulation methodology for industrial production of fine and ultrafine powders and nanopowders for lithium metal oxides for battery applications
US 9,698,419 US 10,283763 TW I527487 JP 6,271,599 KR 101,839,000 CN 105,594,023 CN 106,848,231	Battery having a define discharge capacity, defined porosity, low sodium content and low sulfur content	Complexometric precursor formulation methodology for industrial production of fine and ultrafine powders and nanopowders of layered lithium mixed oxides for battery production
US 9,159,999 US 10, 446,835 CA 2,905,984	Method of forming a powder by formation of a surface interface	Complexometric precursor formulation methodology for industrial production of fine and ultrafine powders and nanopowders of layered lithium mixed oxides for battery applications
CA 3.023,602	A method for making cathode materials for lithium ion batteries	Fine and ultrafine powders and nanopowders of lithium metal oxides for battery applications
US 11,018331 TW I672852	A method for stabilizing battery cathode materials by a phosphate treatment	Phosphate stabilized lithium ion battery cathode
US 11,121,370	Formation of a precursor for a cathode active materil using a digestible feedstock and a multi-carboxylic acid	One pot synthesis for lithium ion battery cathode active material precursors
US 10,189719	A process that uses matel acetates as a feedstock for making cathode materials	Process for the manufacture of lithium metal oxide cathode materials
TW I753429	One-pot coating of cathode materials	Stabilized high nickel cathode materials for improved battery performance

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 supply chain.

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 very few direct competitors as most cathode producers use in-house manufacturing methods based upon a conventional technology and are focused on manufacturing rather than disruptive process innovation.

The Company has been developing its cathode production technology, human resources, and know-how since February 2011 and has invested over $16,200,000 in R&D through to December 2021. The Company has a growing portfolio of strategically relevant intellectual property to protect its IP from competitors, which includes 21 patents granted and over 40 pending patent applications in battery centric jurisdictions around the world, 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 Americas, 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) on the design of next generation batteries and alternative supply chain strategies. 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 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 underway and is working to add more, and as such, is not dependant on the success of any single arrangement to further its business objectives in 2022 onwards. All such programs are advancing, and all parties are discussing next steps to further the relationships.

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, 2021 and the date hereof.

Employees

As at December 31, 2021, the Company had **46** employees, inclusive of members of key management personnel, of which **36** employees are either partially or fully dedicated to the Company's research activities. 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 **56** 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, 2021, 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*".*

Global Pandemic (COVID-19)

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak, which has continued to spread, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or results of operations or on the Company's industry partners who provide in-kind and/or financial contributions to the Company's government programs. There are travel restrictions and health and safety concerns that may delay the Company's research activities. Operations depend on safeguarding all personnel during the outbreak, which may be prohibitive in certain aspects. Nonetheless, the Company has implemented prevention measures at its office and laboratory facilities including the facilitation of remote work programs. Various Government wage and loan subsidies are available to qualified companies to assist them with operating costs during the pandemic, and the various programs are constantly being expanded and relaxed, which may qualify the Company for additional assistance. As at the date hereof, the Company had qualified for and received an additional $512,500 from SDTC (received between 2020 and 2021), and approximately $241,000 from the Innovative Assistance Program (under NRC-IRAP) (received between 2020 and 2021), both in relation to COVID-19 pandemic relief.

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.

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. 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.

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. 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.

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.

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.

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.

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.

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.

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.

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.

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.

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 "Global Pandemic (COVID-19)" above.

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.

Negative Cash Flow from Operations

The Company had negative operating cash flows for the fiscal year ended December 31, 2021. 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, 2021 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 continued government assistance programs, financial support

and/or contributions from its industry partners, the ability to raise additional capital from equity markets, and the ability to generate future profitable operations. In the event the Company is at any point unable to continue as a going concern, this would have an adverse impact on the Company's business, financial condition and operating results.

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.

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.

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.

International joint development agreements

Because we are a British Columbia corporation, and because we have joint development agreements with parties in Asian 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.

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 [1] and Place of Residence [3]	Principal Occupation [2] [3]	Date(s) Served as a Director or Officer Since	Ownership or Control Over Voting Shares Held [3]
Paul Matysek Executive Chair & Director *British Columbia, Canada*	The Company's Chairman since March 2015. Director of Forsys Metals Corp. since October 2007, Chairman of Nevada King Gold Corp. (formerly Victory Metals Inc.) since January 2019. Chairman of Freeman Gold Corp since September 2021 and Director of LithiumBank Resources Corp since February 2022. Past CEO and Chairman of Gold X Mining Corp. until June 2021.	January 29, 2012	2,344,416[4]
Dan Blondal CEO and Director *British Columbia, Canada*	The Company's CEO since March 2015.	March 5, 2015	1,407,500
Lyle Brown Director *British Columbia, Canada*	Partner of Culver & Co., an accounting firm.	March 5, 2015	160,833
Dr. Joseph Guy Director *North Carolina, USA*	Patent Agent since 1992. Patent Filing Specialists Inc. since 2018. Perkins Law Firm, LLC from 2013-2018.	March 5, 2015	100,000
Gordon M. Kukec Lead Director *British Columbia, Canada*	Independent consultant and advisor. Director at Intelligent City (2020 – present), BC Ferry Services Inc. (2014 - present) and Solshare Energy Corp. (2018 - present)	September 7, 2021	361,850[5]

Carla Matheson Director *British Columbia, Canada*	Independent consultant and advisor. Chief Financial Officer of Tiny Capital from August 2017- March 2021.	December 15, 2021	Nil
Stephen Campbell Chief Technology Officer *British Columbia, Canada*	The Company's CTO since October 2018. Principal Scientist of the Company from September 2015 to September 2018.	October 9, 2018	Nil
Dan Martino Chief Financial Officer *British Columbia, Canada*	The Company's CFO since January 2020. Principal at Donaldson Brohman Martin, CPA Inc. (DBM CPA) since November 2018. Former Principal at Davidson & Company LLP, in assurance and financial reporting until September 2018.	January 20, 2020	7,403
Alex Holmes Chief Operating Officer *British Columbia, Canada*	The Company's COO since February 2021. Former CEO and Director of Plateau Energy Metals Inc. (Aug 2018- Feb 2021). Co-founder and Director at VRify Technology Inc. since 2017.	January 31, 2021	50,000
Pamela Kinsman Corporate Secretary *British Columbia, Canada*	The Company's Corporate Secretary since October 2021. Former Corporate Secretary Plateau Energy Metals Inc. November 2018 to June 2021. Corporate Secretary Equinox Gold Corp. August 2016 to November 2018.	October 14, 2021	13,000

Notes:

(1) For the purposes of disclosing positions held in the Company, "Company" includes the Company and any parent or subsidiary thereof.

(2) Unless otherwise stated above, any nominees named above not elected at the last annual general meeting have held the principal occupation or employment indicated for at least five years.

(3) The information as to province or state and country of residence, principal occupation, and number of shares beneficially owned by the nominees (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 nominees. The information is presented as of the date hereof.

(4) Mr. Matysek holds 1,639,916 Common Shares directly. 704,500 Common Shares are held indirectly by Mr. Matysek through Bedrock Capital Corporation, a company controlled by Mr. Matysek.

(5) Mr. Kukec holds 229,350 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, three of the Board's six 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.

The Board has established three committees: the Audit Committee, the Compensation and Nominating Committee and the People and Governance 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
Compensation & Nominating	Lyle Brown	Independent
	Gord Kukec (Chair)	Independent
	Carla Matheson	Independent
People & Governance	Lyle Brown	Independent
	Gord Kukec (Chair)	Independent
	Carla Matheson	Independent
	Paul Matysek	Not Independent

As at the date hereof, the directors and executive officers of the Company, collectively, beneficially own, directly and indirectly, or exercise control or direction over 4,460,002 Common Shares, representing approximately 4.7% 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.

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.

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, has been subject to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

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, 2021 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 of 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, BC Ferry Services Inc. 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.

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	Audit-Related Fees[(1)]	Tax Fees	All Other Fees[(2)]
December 31, 2021	$65,000	$ -	$ -	$18,000
December 31, 2020	$40,000	$10,000	$ -	$22,500

(1) Audit-related fees were for the auditors' review of the financial statements and MD&A for the quarter ended June 30, 2020.

(2) All Other Fees were for the auditors' involvement in the preliminary and final short-form prospectus offerings in October 2020, and March 2021.

(3) Audit Fees relate to amounts paid or accrued in relation to the associated fiscal year.

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

The Company has not entered into any material contracts (i) since the beginning of its most recently completed fiscal year or (ii) before the beginning of its most recently completed fiscal year and that are still in effect, other than contracts entered into in the ordinary course of business.

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.sedar.com 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 as filed on SEDAR on September 13, 2021

Additional financial information is provided in the Company's annual financial statements and Management's Discussion & Analysis for the fiscal year ended December 31, 2021.

SCHEDULE "A"

Charter of the Audit Committee of the Board of Directors of Nano One Materials Corp.

(the "Company")

MANDATE

The primary function of the audit committee (the "Committee") of Nano One Materials Corp. (the "Company") is to assist the Board of Directors in fulfilling its financial oversight responsibilities by reviewing the financial reports and other financial information provided by the Company to regulatory authorities and shareholders, the Company's systems of internal controls regarding finance and accounting and the Company's auditing, accounting and financial reporting processes. The Committee's primary duties and responsibilities are to:

- Serve as an independent and objective party to monitor the Company's financial reporting and internal control system and review the Company's financial statements.
- Review and appraise the performance of the Company's external auditors (the "Auditor").
- Provide an open avenue of communication among the Company's auditors, management and the Board of Directors.

COMPOSITION, PROCEDURES AND ORGANIZATION

The Committee shall consist of at least three members. No member of the Committee shall be an officer or employee of the Company or any of its affiliates for the purposes of the applicable corporate statute. The members of the Committee shall meet all applicable securities laws, instruments, rules and policies and regulatory requirements and their respective applicable exemptions (collectively "Applicable Laws").

All members of the Committee shall have financial management experience and be financially literate. For the purposes of this Charter, the term "financially literate" means 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 issues that can reasonably be expected to be raised by the Company's financial statements. At least one member of the Audit Committee shall be a financial expert as determined by the Board of Directors in accordance with the Applicable Laws.

The members of the Committee shall be appointed by the Board of Directors at its first meeting following the annual shareholders' meeting. Unless a Chair is elected by the full Board of Directors, the members of the Committee may designate a Chair by a majority

vote of the full Committee membership. The Board of Directors may at any time remove or replace any member of the Committee and may fill any vacancy in the Committee.

MEETINGS OF THE COMMITTEE

Meetings of the Committee shall be scheduled to take place at regular intervals and, in any event, not less frequently than quarterly. Unless all members are present and waive notice, or those absent waive notice before or after a meeting, the Chairman will give the Committee members 24 hours' advance notice of each meeting and the matters to be discussed at such meeting. Notice may be given personally, by telephone, by facsimile or e-mail.

The Auditor shall be given reasonable notice of, and be entitled to attend and speak at, each meeting of the Committee concerning the Company's annual financial statements and, if the Committee determines it to be necessary or appropriate, at any other meeting. On request by the Auditor, the Chair shall call a meeting of the Committee to consider any matter that the Auditor believes should be brought to the attention of the Committee, the Board of Directors or the shareholders of the Company.

At each meeting of the Committee, a quorum shall consist of a majority of members that are not officers or employees of the Company or of an affiliate of the Company. A member may participate in a meeting of the Committee in person or by telephone if all members participating in the meeting, whether in person or by telephone or other communications medium other than telephone are able to communicate with each other and if all members who wish to participate in the meeting agree to such participation.

The Committee may periodically meet separately with each of management and the Auditor to discuss any matters that the Committee or any of these groups believes would be appropriate to discuss privately. In addition, the Committee should meet with the Auditor and management annually to review the Company's financial statements.

The Committee may invite to its meetings any director, any manager of the Company, and any other person whom it deems appropriate to consult in order to carry out its responsibilities.

RESPONSIBILITIES AND DUTIES

To fulfil its responsibilities and duties, the Committee shall:

1. Review the Company's financial statements, including any certification, report, opinion, or review rendered by the Auditor, MD&A, annual information form and any annual and interim earnings press releases before the Company publicly discloses such information.
2. Review and satisfy itself that adequate procedures are in place and review the Company's public disclosure of financial information extracted or derived from its

financial statements, other than disclosure described in the previous paragraph, and periodically assess the adequacy of those procedures.

3. Be directly responsible for overseeing the work by the Auditor (including resolution of disagreements between management and the Auditor regarding financial reporting) engaged for the purpose of preparing or issuing an audit report or performing other audit review services for the Company.

4. Require the Auditor to report directly to the Committee.

5. Review annually the performance of the Auditor who shall be ultimately accountable to the Board of Directors and the Committee as representatives of the shareholders of the Company.

6. Review and discuss with the Auditor any disclosed relationships or services that may impact the objectivity and independence of the Auditor.

7. Take, or recommend that the Board of Directors take, appropriate action to oversee the independence of the Auditor.

8. Recommend to the Board of Directors the external auditor to be nominated at the annual general meeting for appointment and the Auditor for the ensuing year and the compensation for the Auditors, or, if applicable, the replacement of the Auditor, from time to time.

9. Review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the Auditor and former independent external auditors of the Company.

10. Review with management and the Auditor the audit plan for the annual financial statements.

11. Review and pre-approve all audit and audit-related services and the fees and other compensation related thereto, and any non-audit services provided by the Auditor. The pre-approval requirement is waived with respect to the provision of non-audit services if:

    (a) the aggregate amount of all such non-audit services that were not pre-approved is reasonably expected to constitute not more than 5% of the total amount of fees paid by the Company and its subsidiary entities to the Auditor during the fiscal year in which the non-audit services are provided;

    (b) such services were not recognized by the Company at the time of the engagement to be non-audit services; and

    (c) such services are promptly brought to the attention of the Committee and approved, prior to the completion of the audit, by the Committee or by one or more members of the Committee to whom authority to grant such approvals has been delegated by the Committee.

12. The Committee may delegate to one or more independent members of the Committee the authority to pre-approve non-audit services in satisfaction of the pre-approval requirement set forth in this section provided the pre-approval of non-

audit services by any member to whom authority has been delegated must be presented to the Committee at its first scheduled meeting following such pre-approval.

13. In consultation with the Auditor, review with management the integrity of the Company's financial reporting process, both internal and external.

14. Consider the Auditor's judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.

15. Consider and approve, if appropriate, changes to the Company's auditing and accounting principles and practices as suggested by the Auditor and management.

16. Review significant judgments made by management in the preparation of the financial statements and the view of the Auditor as to the appropriateness of such judgments.

17. Following completion of the annual audit, review separately with management and the Auditor any significant difficulties encountered during the course of the audit, including any restrictions on the scope of the work or access to required information.

18. Review any significant disagreement among management and the Auditor in connection with the preparation of the financial statements.

19. Review with the Auditor and management the extent to which changes and improvements in financial or accounting practices have been implemented.

20. Discuss with the Auditor the Auditor's perception of the Company's financial and accounting personnel, any material recommendations which the Auditor may have, the level of co-operation which the Auditor received during the course of their review and the adequacy of their access to records, data or other requested information.

21. Maintain, review and update the procedures for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

22. Review and assess, on a quarterly basis, management's risk assessment and risk management strategies including hedging and derivative strategies.

23. Oversee and assess management's controls and processes to prevent and detect fraud.

24. Review the financial reporting of any transaction between the Company and any officer, director or other "related party" (including any shareholder holding an interest greater than 5% in the Corporation) or any entity in which any such person has a financial interest.

25. Perform such other duties as may be assigned to it by the Board of Directors from time to time or as may be required by applicable regulatory authorities or legislation.

26. Report regularly and on a timely basis to the Board of Directors on the matters coming before the Committee.

27. Review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board of Directors for approval.

AUTHORITY

The Committee is authorized to:

- to seek any information it requires from any employee of the Company in order to perform its duties;
- to engage, at the Company's expense, independent legal counsel or other professional advisors in any matter within the scope of the role and duties of the Committee under this Charter;
- to set and pay compensation for any advisors engaged by the Committee; and
- to communicate directly with the internal and external auditors of the Company.

This Charter supersedes and replaces all prior charters and other terms of reference pertaining to the Committee.

OVERSIGHT FUNCTION

While the Committee has the responsibilities and powers set out in this Charter, the members of the Committee are members of the Board of Directors who are appointed to provide broad oversight of the Company's day to day operations. It is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements are complete and accurate and are in accordance with international financial reporting standards. This is the responsibility of management (with respect to whom the Committee performs an oversight function) and the Auditors.

Updated December 2021.