Nano One Materials Corp.

Management's Discussion & Analysis

For the three months ended

March 31, 2023

PREPARATION OF MANAGEMENT'S DISCUSSION & ANALYSIS

The following Management's Discussion & Analysis ("MD&A") of Nano One® Materials Corp. ("Nano One" or the "Company") for the three months ended March 31, 2023, should be read in conjunction with the Company's condensed interim consolidated financial statements for the three months ended March 31, 2023 and the audited annual financial statements for the year ended December 31, 2022, and related notes thereto. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All monetary amounts in this MD&A are expressed in Canadian dollars, unless otherwise indicated.

The information contained herein is presented as at **May 10, 2023** (the "MD&A Date"), unless otherwise indicated.

Additional information relating to the Company, including the Annual Information Form ("AIF") dated March 29, 2023, is filed with Canadian securities regulatory authorities on SEDAR (www.sedar.com) and on the Company's website at www.nanoone.ca.

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

For the purposes of preparing this MD&A, Management, in conjunction with the Board of Directors, considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of Nano One's common shares; or (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board of Directors, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

The Company's disclosure controls, and procedures ("DC&P") are designed to provide reasonable assurance that relevant information is gathered and reported to senior management, including the Chief Executive Officer and the Chief Financial Officer, on a timely basis so that appropriate decisions can be made regarding public disclosures. We have also designed internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. During the three months ended March 31, 2023 and year ended December 31, 2022, there were no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

FORWARD-LOOKING STATEMENTS

This MD&A contains certain "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements"), within the meaning of applicable Canadian securities laws, which are based upon the Company's current internal expectations, estimates, projections, assumptions, and beliefs. All information, other than statements of historical facts, included in this MD&A that addresses activities, events or developments that the Company expects or anticipates will or may occur in the future is forward-looking information. Such statements can be identified by the use of forward-looking terminology such as "expect", "likely", "may", "will", "should", "intend", or "anticipate", "potential", "proposed", "estimate" and other similar words, including negative and grammatical variations thereof, or statements that certain events or conditions "may" or "will" happen, or by discussions of strategy. Forward-looking statements include estimates, plans, expectations, opinions, forecasts, projections, targets, guidance, or other statements that are not statements of fact. Such forward-looking statements are made as of the date of this MD&A and, except as required by law, the Company is under no obligation to update or alter any forward-looking information.

Forward-looking statements in this MD&A may include, but are not limited to, statements with respect to: the use of the net proceeds from previous financings; the Company's ability to access future financing opportunities; operating and capital costs; 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 purpose for expanding its facilities; and scalability of developed technology. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. The Company cannot guarantee future results, levels of activity, performance, or achievements. There are risks, uncertainties, and other factors, some of which are beyond the Company's control, which could cause actual results, performance, or achievements of the Company, as applicable, to differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements contained in this MD&A.

RISKS AND UNCERTAINTIES

Risk is inherent in all business activities and cannot be entirely eliminated. An investment in Nano One's common shares involves risk. Investors should carefully consider the risks and uncertainties described below and, in the AIF, filed with Canadian securities regulators (www.sedar.com) which may not be a comprehensive list of risks and uncertainties. Additional risks and uncertainties, including those unknown by the Company at this time, or are currently considered immaterial, may exist, and other risks may apply.

Global Pandemic (COVID-19)

There are many external factors that can adversely affect general workforces, economies, and financial markets globally. Examples include, but are not limited to, the COVID-19 global pandemic and political conflict in other regions. It is not possible for the Company to predict the duration or magnitude of adverse results of such external factors and their effect on the Company's business or ability to raise funds.

DESCRIPTION OF THE BUSINESS

The Company has developed, patented, and is scaling 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 1 tonne per annum ("tpa") R&D pilot plant, and is partnering with key automotive OEMs, cell manufacturers, cathode manufacturers and the upstream miners/refiners. The acquisition and conversion of the Candiac facility in Québec ("Candiac") to the One-Pot process will accelerate the Company's path to commercialization for industrial pilot scale LFP production. One-Pot trials have started, and unused equipment is being decommissioned.

The Company is focused on meeting market demand while harnessing government support. It is the Company's intention to use Candiac as an industrial scale LFP pilot facility that supports the design, engineering, and construction of a commercial demo "blueprint" LFP plant on the adjacent available land. See further details within "*Corporate Developments – Year to Date*" under *"Advancement of Commercial Plans for LFP and Other Cathode Materials".*

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 CAM, which may be used in automotive, energy storage and consumer electronic batteries, including standard, advanced, and next generation solid state batteries.

One-Pot Process Technology

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 sulfate, thereby removing downstream sulfate waste equivalent to nearly two times the CAM product volume and it reduces water consumption, GHG emissions and process costs. Furthermore, the process uses lithium feedstock in the form of carbonate, for all CAM formulations, rather than hydroxide which is more costly, corrosive and harder-to-handle.

The One-Pot technology can also utilize lithium hydroxide and provides flexibility with other feedstock to enable improved optionality of sourcing of raw materials. The process also forms innovative coated nanocrystal cathode powders that are designed to be more durable than conventional cathode powders.

The 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/dopants, 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.

The Company's primary cathode formulations under development include:

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

Further details about the Company's process developments and product developments can be found in the AIF.

M2CAM® Technology

Nano One's Metal to Cathode Active Material ("M2CAM") technology reduces cost, reduces waste, and reduces the carbon footprint in the lithium-ion battery supply chain. Nano One's collaborators include automotive OEMs with similar motivations to meet environmental targets by reducing waste, carbon emissions, logistics and costs. Patents are pending for M2CAM.

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 cathode 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 all cathode and coating feedstocks in one reaction to form an intermediate powder that is easily processed in kilns to form a finished and coated cathode powder. 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.

Intellectual Property

The Company increased its patent portfolio during the three months ended March 31, 2023 and through to the MD&A Date, with three new patents, issued and allowed in Taiwan, Korea and US which will extend protection and add value to Nano One's One-Pot process technology. As at the MD&A Date, the Company has twenty-seven (27) issued patents which were issued by various jurisdictions including Canada, China, Japan, Korea, Taiwan, and the United States. The Company also has several pending patent applications throughout the world.

In the Company's news release dated March 17, 2023, it describes that Patent Application TW 202222679 will be for the One-Pot synthesis of lithium iron phosphate (LFP) being commercialized in Candiac QC. Patent KR 10-2443307 is for the One-Pot synthesis process of NMC and LNMO cathode materials. Patent US 11,616,230 will be for fine and ultrafine powders and nanopowders of lithium metal oxides for battery applications.

The 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. Additional information on the Company's intellectual property can be found in the Company's AIF.

CHANGE IN EXECUTIVE OFFICERS AND BOARD OF DIRECTORS

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

RECENT CORPORATE MILESTONES

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

On February 21, 2023, the Company announced that it has achieved an important milestone by successfully completing the evaluation and benchmarking of its process, cathode materials and techno-economic modelling, under a Cathode Evaluation Agreement with a global automotive manufacturer. Success has led the parties to a new Cathode Evaluation Agreement that adds LFP to the program and expands their collaboration to target performance, cost, and environmental specifications of cathode materials to meet the needs of the OEM.

Key highlights of project achievements include:

- Successful completion of project objectives, advances relationship.
- Demonstrates significant potential to reduce environmental footprint, capital costs, and operating costs for NMC materials.
- Meets performance targets.

- Increases confidence in long term strategic potential.
- Led to a new evaluation agreement that adds LFP to the program and expands validation of Nano One's technology to meet specific needs of the OEM.
- Parties developing a roadmap to execute on vision.

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

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

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

New program funding from SDTC

On February 13, 2023, the Company announced an award of up to $10,000,000 in non-dilutive, non-repayable contributions from Sustainable Development Technology Canada ("SDTC"). These funds will support the conversion of Nano One's recently acquired Candiac facility to the patented One-Pot Process for industrial-scale pilot production of LFP and includes financial support for the design, construction, and operation of a multi-cathode piloting hub (MCPH) to help customize and advance Nano One's One-Pot and metal-direct-to-CAM (M2CAM) processes for the industrial scale pilot production of next-gen LFP, NMC and LNM cathode active materials (CAM). SDTC's continued support has been an important contribution to Nano One's success and will accelerate the LFP piloting while advancing the plan towards commercial operations.

This project named, "*Pre-Commercial Trial and Multi Cathode Piloting Hub"*, will be multi-phase, multi-year, and milestone driven. This follows two other successful Nano One SDTC projects which assisted in demonstrating the One-Pot Process at small pilot scale production volumes and advanced the technology to this point of pre-commercial trials. This project also leverages Nano One's recent high-value acquisition of the JMBM Canada LFP facility in Candiac, Québec, Canada, on November 1, 2022 (see below). It amplifies the opportunity for global LFP business expansion and is further validated by the support of the federal government and the project's industrial consortium partners (Rio Tinto, Lithion Battery Inc., and undisclosed automotive OEM). The Company's project in Candiac is further enhanced by a team with deep technology commercialization experience, scale-up know-how, and automotive quality CAM production expertise, all led by a seasoned executive team.

CORPORATE DEVELOPMENTS – YEAR TO DATE

In addition to the recent corporate milestones discussed above and other information discussed throughout this MD&A, the Company announced the following developments during the three months ended March 31, 2023, and through to the MD&A Date (from newest to oldest):

Advancement of Commercial Plans for LFP and Other Cathode Materials

On April 24, 2023, the Company provided an update regarding its commercial plans which are aimed at jumpstarting the commercialization of its One-Pot process starting at 200 tonnes per year in 2023, expanding in steps to 2,000, 10,000 and hundreds of thousands of tonnes per year. To expedite commercial sampling, offtake and first revenues, the Company's Candiac facility in Québec is being retrofitted with its new One-Pot reactors and technology and will be commissioned initially at 200 tons per annum ("tpa") in Q3 2023, ramping up to as much as 2,000 tpa.

Nano One will launch LFP in North America, followed by Europe and the Indo-Pacific region, giving it access to hundreds of thousands of tons and exponential revenue growth, to power hundreds of gigawatt hours of battery storage and millions of EVs. It begins with a first-of-a-kind commercial-scale LFP production facility, using Nano One's proprietary One-Pot process that leverages its know-how, equipment, land, people, and shareholder support.

Nickel and manganese-based cathode materials play an equally important role in Nano One's growth strategy, and the Company is applying its technologies and collaborating with multiple strategic partners to address the need for greater supply chain security, cost reductions, and environmental protection. To this end, Nano One also has engineering work underway for a separate 100 tpa NMC and LNMO pilot facility. Having piloting capabilities for LFP, NMC and LNMO will enable Nano One to prototype, validate, design, and pilot a new generation of CAM and accelerate the commercial adoption of its One-Pot and sulfate-free M2CAM processes in pursuit of production, joint venture and licensing opportunities.

Product from piloting will be sent to partners and potential customers for validation qualification, offtake and possibly first revenues, and will also inform the design, construction, and operation of Nano One's LFP Commercial Demo Plant.

In parallel to the Pilot activities, engineering is underway for a green-field Commercial Demo Plant, the purposes of which will determine (a) the optimal capacity for a single production line, (b) the maximum number of lines that can be constructed on the undeveloped land at the Candiac property and (c) the unit of production and basis for much larger automotive-scale multiline LFP production facilities.

Nano One intends to build the Commercial Demo Plant adjacent to the existing Pilot facility, subject to engineering results and available utilities. Preliminary estimates indicate that a single line will have a capacity of approximately 10,000 tpa representing a five-fold increase over the Pilot facility. A more detailed engineering study is underway and will inform Nano One on capital costs, the optimal line size, and maximum capacity on its undeveloped land. Nano One is planning to begin with a single production line and currently believes that it may be able to fit up to two additional lines as the LFP market grows and as local infrastructure can support it. This plan could enable hundreds of millions in revenue during Nano One's initial years of commercial operations while also enabling demonstration of its technology to the market, potential licensors, joint ventures, and investors, at a scale relevant to automotive OEM and renewable energy storage interests.

The resulting production line will be the blueprint, or modular building block, to replicate in multiproduction-line facilities, in the future, with capacities that could range from 50,000 to 100,000 tpa. Nano One's LFP Pilot and Commercial Demo Plant facilities will serve as a "centre of excellence" to train future plant operators, to facilitate continuous improvement and to offer Nano One's customers, partners and licensees access to experienced implementation teams, engineering, procurement, construction, and operation to de-risk investments and ensure a secure and stable supply of LFP.

In preparation for the Commercial Demo Plant, Nano One will focus on:

- Supply chain security – active discussions underway with key raw materials suppliers for commercial needs with a goal to source 100% from within North America.
- Customer offtake – active discussions underway for validation and customer qualification leading to offtake with small and medium volume LFP customers.
- Project finance – advanced planning underway with public and private sector project finance providers complemented by future customer and strategic investor discussions.
- Permitting, operational readiness planning and implementation underway.

Proceeds of ~$3.65M from Exercise of Warrants

On February 21, 2023, the exercise of expiring warrants concluded resulting in proceeds of $3,651,102 from the exercise of 2,281,939 warrants since January 1, 2023. The warrants were issued as part of a private placement completed in February 2020 and were due to expire on February 21, 2023. All warrants were exercised except for 6,540 warrants which expired unexercised.

As at the MD&A Date, there are 1,000,000 warrants outstanding at an exercise price of $4.00 each and are due to expire on June 16, 2023.

Candiac Integration

In January 2023, the Company provided an update on the reorganization of the combined teams, and the transformation of the Candiac LFP facility to the One-Pot Process, following completion of the acquisition on November 1, 2022.

Key highlights include the following:

- One-Pot trials commencing and decommissioning of unused equipment progressing.
- Functional re-organization implemented to align innovation and commercialization centres.
- Completed integration of Candiac team and facility, focus now on post-merger activities.
- Focusing on meeting market demand while harnessing government support.

The Company will be leveraging the deep experience of the Québec operational team, action plans are being implemented to convert the Candiac facility to Nano One's patented One-Pot Process to accelerate the commercialization of Nano One's LFP technology. Candiac assets and know-how will help design turn-key systems to address, and align with, projected global LFP cathode market demand.

LFP trials with the One-Pot technology started in January 2023. Initial plant preparations are complete, including process hazard studies, for the use of the existing commercial scale reactors for larger scale trials which started in Q1 2023. Results from this work will provide Nano One with valuable insights for the next stage of trials, pilot production and advanced engineering. Large One-Pot reactors have been designed and ordered, with installation, integration and commissioning expected in Q3 2023 for industrial pilot scale LFP production. This builds on existing development work and supports evaluation and validation work with potential customers.

OVERALL PERFORMANCE

Further to the "*Corporate Developments – Year to Date*" and *"Recent Corporate Developments"* as discussed above, the Company generated positive net cash flows during the three months ended March 31, 2023, of approximately $625,000.

The key sources and uses of cash and cash equivalents during the three months ended March 31, 2023, were as follows:

	Three months ended March 31, 2023 $
Key sources of cash:	
Government programs	3,366,000
Interest income	418,000
Exercises of stock options and warrants	3,846,000
Key uses of cash (other than operating activities):	
Construction and equipment investments, patent issuance fees, and deposits	(752,000)
Facility lease payments	(89,000)

Cash flows for the three months ended March 31, 2023

Further to the information presented above which is primarily in respect of investing and financing activities, the use of cash and cash equivalents in operating activities on a net basis after government program allocations to operating expenses was approximately $2,798,000, largely driven by $7,896,000 incurred on cash-based operating expenses less approximately $5,098,000 in changes in working capital items.

The average net monthly use of cash from operating activities was approximately $900,000 for the three months ended March 31, 2023.

The proceeds from exercises of stock options and warrants was largely due to the exercise of expiring warrants in February 2023, which resulted in proceeds of approximately $3,650,000 from the exercise of 2,281,939 warrants since January 1, 2023.

DISCUSSION OF OPERATIONS

The Company reports operating results in a single operating segment being the development and scale-up of a patented process for the production of cathode active materials (CAM) for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics.

For the three months ended March 31, 2023 and March 31, 2022

The following tables summarize the Company's results of operations and cash flows for the three months ended March 31, 2023 and March 31, 2022 (rounded):

	Three months ended		
	March 31, 2023 $	March 31, 2022 $	**Change $**
Revenue	**-**	-	**-**
Loss from operating expenses	**(8,484,000)**	(4,364,000)	**(4,120,000)**
Loss and comprehensive loss	**(8,076,000)**	(4,312,000)	**(3,764,000)**
Cash used in operating activities	**(2,798,000)**	(3,727,000)	**929,000**
Cash used in investing activities	**(334,000)**	(186,000)	**(148,000)**
Cash provided by financing activities	**3,757,000**	7,000	**3,750,000**

See above for details on key sources and uses of cash and cash equivalents during the three months ended March 31, 2023.

Research and operational expenses

Amounts for the three months March 31, 2023 and March 31, 2022 were as follows (rounded):

	Three months ended		
	March 31, 2023 $	March 31, 2022 $	**Change $**
Research and operational expenses (cash-based)	**1,803,000**	366,000	**1,437,000**
Depreciation	**283,000**	193,000	**90,000**
Cost recoveries accrued	**(58,000)**	(5,000)	**(53,000)**
Government assistance accrued, received, or amortized	**(83,000)**	(40,000)	**(43,000)**
Research and operational expenses, net	**1,945,000**	514,000	**1,431,000**

In addition to the research and operational expenses, net amount presented above, the Company incurred approximately $142,000 during the three months ended March 31, 2023, within professional and consulting, for charges relating to patent filings and applications.

Certain components of operating expenses for the three months ended March 31, 2023 and March 31, 2022, were as follows (rounded):

	Three months ended		
	March 31, 2023 $	March 31, 2022 $	**Increase (decrease) $**
Business development and investor relations	**145,000**	137,000	**8,000**
General and administrative expenses	**668,000**	270,000	**398,000**
Professional and consulting, net	**603,000**	454,000	**149,000**
Wages, benefits, and fees, net	**4,818,000**	2,426,000	**2,392,000**

A notable contribution to the increased operating expenses for the three months ended March 31, 2023 is the inclusion of operating expenses the Company's Candiac operations for the entire three months ended March 31, 2023, whereas

Candiac operations were not consolidated during the three months ended March 31, 2022, as the comparative period was prior to ownership of its subsidiary, Nano One Materials Candiac Inc. (“Nano Candiac”).

- General and administrative expenses:

  The primary cause of the increase is higher insurance premiums, rent, and increased travel and related expenses. Insurance amounts expensed during the three months ended March 31, 2023, totalled approximately $80,000. The other key components of general and administrative expenses for the three months then ended include meals, transport and accommodations totalling approximately $125,000, as well as expensed computer hardware, software, licenses and products.

- Professional and consulting:

  Legal fees totalled approximately $80,000 (decrease of approximately $88,000), patent filing fees increased to approximately $142,000 (increase of approximately $78,000) as a result of greater operational activity overall. People & Culture expenses, advisory and capital markets services and consultancy, and IT consulting increased individually and in aggregate to approximately $333,000. The incremental accrual for 2022 audit costs and Q1 2023 interim review services amounted to approximately $48,000.

- Wages, benefits and fees, net:

  Personnel levels continue to increase and the primary driver of the change over the comparative quarter is the inclusion of the Nano Candiac team for the current period. Wages, benefits and fees is presented net of allocations of SDTC funding.

Government Assistance

The Company receives funding from various Canadian federal and provincial government programs. During the three months ended March 31, 2023 and March 31, 2022 the following amounts were received:

Amounts received:	**March 31, 2023 $**	March 31, 2022 $
Sustainable Development Technology Canada (SDTC)	3,284,507	-
Industrial Research Assistance Program (NRC-IRAP)	53,104	68,296
Other Grants	28,720	-
	3,366,331	68,296

SDTC Pre-Commercial Trial and Multi Cathode Piloting Hub Project (active):

On February 13, 2023, the Company executed an agreement with SDTC in respect of a new government program (Pre-Commercial Trial and Multi Cathode Piloting Hub) (the “SDTC Pre-Commercial Project”) which will provide the Company with $10,000,000 ($3,284,507 received as at March 31, 2023) in funding from SDTC in stages. The funds are non-dilutive, and non-repayable and are intended to support the Company’s design, construction, and operation of a multi-cathode piloting hub in Candiac. The initial project timeline is from January 1, 2023 to December 31, 2025.

The funds from the SDTC Pre-Commercial Project will be paid to the Company in four (4) instalments plus the remaining unpaid release of a final 10% hold-back upon satisfactory review and approval of the project by SDTC. The instalments from SDTC will be paid to the Company at the beginning of each of the four (4) Milestones.

During the three months ended March 31, 2023, the Company received Milestone 1 funds of $3,284,507.

SDTC Scaling Project (completed):

In 2019, the Company executed a contribution agreement with SDTC for a non-repayable grant in respect of the Company’s “Scaling Advanced Battery Materials” project (the “SDTC Scaling Project”). The SDTC Scaling Project grant was for $8,545,500 which includes British Columbia Innovative Clean Energy, Mines and Petroleum Resources (“BC-ICE”) contributions (discussed below).

As at March 31, 2023 and December 31, 2022, $7,742,210 had been received. The remaining funds of $803,290 relate to the final 10% hold-back to be released in 2023. As at March 31, 2023, the Company had completed Milestone 4 (effective January 31, 2023) and is in the process of reporting to SDTC to conclude the program and receive the hold-back payment.

The cumulative amount of program funding received since 2014 from the Government of Canada are as follows:

	March 31, 2023	December 31, 2022
	$	$
Sustainable Development Technology Canada (SDTC) and BC-ICE	13,108,014	9,823,507
Automotive Supplier's Innovation Program (ASIP)	1,950,952	1,950,952
Industrial Research Assistance Program (NRC-IRAP)	1,235,803	1,182,699
Innovation Assistance Program (IAP) (from NRC-IRAP)	241,225	241,225
Scientific Research & Experimental Development (SR&ED)	98,661	98,661
Other Grants	108,779	80,059
	16,743,434	13,377,103

SUMMARY OF QUARTERLY RESULTS

The following table shows the results for the last eight fiscal quarters as prepared in accordance with IFRS and presented in Canadian dollars, the Company's functional currency:

Period Ending	**Revenue** $	**Loss and comprehensive loss** $	**Basic and Diluted Loss Per Share** $
March 31, 2023	-	(8,076,104)	(0.08)
December 31, 2022	-	(5,090,271)	(0.02)
September 30, 2022	-	(2,002,962)	(0.05)
June 30, 2022	-	(4,415,217)	(0.05)
March 31, 2022	-	(4,312,314)	(0.03)
December 31, 2021	-	(2,462,276)	(0.02)
September 30, 2021	-	(1,767,249)	(0.03)
June 30, 2021	-	(2,549,411)	(0.05)

There are no significant seasonal variations in quarterly results as the Company is not subject to significant seasonality in its research and corporate activities. The Company is exposed to currency risk as it incurs certain transactions in United States dollar, and occasional transactions in the Euro, and the British Pound. However, the Company has assessed that the impact of a 10% fluctuation in foreign exchange rates relative to the Canadian dollar would have impacted the Company's results of operations by approximately $210,000.

Variations in loss and comprehensive loss for certain of the above periods were affected primarily by the following factors:

- The quarter ended March 31, 2023, was the first full quarter inclusive of the results of operations from Nano Candiac which operating expense are substantially included within general and administrative expenses, research and operational expenses, and wages, benefits, and fees.
- The quarter ended December 31, 2022, included the acquisition of JMBM Canada (renamed to Nano One Materials Candiac Inc). This acquisition resulted in an increase in overall operating costs as costs associated with the subsidiary's operations were included from November 1, 2022. A primary component is wages and benefits.
- The quarter ended September 30, 2022, included government program proceeds and amortization of deferred government assistance in the amount of $1,208,000.
- The quarter ended March 31, 2022, was characterized by a significant increase in the volume and cost of research activities (excess of $1,000,000 increase over the previous three months ended December 31, 2021) as well as increases in substantially all other cash-based components of operating expenses.
- The quarter ended December 31, 2021, saw an increase in professional fees and consulting fees. Additionally, there were additional fees incurred on engineering studies, and a reduction in amounts recognized as government assistance which are offset to reduce research and operational expenses, net.

Use of Proceeds from Financings

The Company completed the following three equity financings between February 2020 and April 2021, for aggregate net proceeds of $50,411,757:

- On February 21, 2020 (the "First Financing"), the Company completed a non-brokered private placement for gross proceeds of approximately $11,000,000. The net proceeds of the placement after deducting finders' fees, legal, filing, and other fees were $10,381,392;
- On October 29, 2020, the Company completed a short form prospectus financing for gross proceeds of approximately $14,000,000. The net proceeds of the financing after deducting finders' fees, legal, filing and other fees were $13,118,991; and
- On April 1, 2021, the Company completed a short form Prospectus financing for gross proceeds of approximately $29,000,000. The net proceeds of the financing after deducting the cash underwriters' commission and expenses, legal, filing and other fees were $26,911,374.

For the period from closing of the First Financing (February 21, 2020) to December 31, 2022 the period in which the net proceeds had been fully utilized, the Company has used the net proceeds of the financings as shown below. These amounts are presented on a gross basis and do not include government grant proceeds or other cost recoveries.

Principal Purposes	Use of Proceeds $	Budgeted Use of Proceeds $	Variance $
Research activities	4,757,861	5,686,000	(928,139)
Equipment procurement, leasehold improvements	4,867,295	7,832,000	(2,964,705)
Pilot plant expansion	569,722	11,273,000	(10,703,278)
Intellectual property acquisition	717,135	1,472,000	(754,865)
Business development and strategic alternatives (1)	17,282,568	4,190,000	13,092,568
Working capital, including wages and benefits	22,217,176	19,958,757	2,258,419
Proceeds used	**50,411,757**	50,411,757	
Remaining	-	n/a	
Net proceeds of the financings	**50,411,757**	50,411,757	

(1) Includes approximately $16,000,000 for the acquisition of JMBM.

The primary variance between the budgeted use of proceeds and actual use of proceeds is in respect of the Company's business development and strategic alternatives, and pilot plant expansion whereby approximately $16,000,000 (before transaction costs) was used in the acquisition of JMBM Canada (business development and strategic alternatives), and thereby transitioning the Company's focus from pilot plant expansion in Burnaby, to production efforts in Québec.

TRANSACTIONS BETWEEN RELATED PARTIES

Key management personnel are the persons responsible for the planning, directing, and controlling the activities of the Company and includes both executive and non-executive directors, and entities controlled by such persons. The Company considers all directors and officers of the Company to be key management personnel.

The following transactions were carried out with key management (gross amounts):

	Transactions three months ended March 31, 2023	Transactions three months ended March 31, 2022	**Balances outstanding March 31, 2023**	Balances outstanding December 31, 2022
	$	$	**$**	$
Bedrock Capital	37,500	37,500	-	-
DBM CPA	57,500	40,650	20,475	11,844
Directors' fees	84,009	57,729	-	-
Management and directors' fees (within wages, benefits and fees)	179,009	135,879	20,475	11,844
Wages, benefits and fees (officers) & reimbursements payable	1,107,284	571,890	3,606	-
Share-based payments (directors and officers)	164,285	474,946	-	-
Patent Filing Specialists (professional and consulting; and intangible assets)	123,869	63,953	62,874	11,795
	1,574,447	1,246,668	**86,955**	23,639

(a) Professional and consulting, net:

- Includes the services of Patent Filing Specialists Inc. ("Patent Filing Specialists"), a company controlled by Joseph Guy, a Company Director. Transactions are included within both intangible assets (for capitalized patent issue costs) and professional and consulting, net for patent filings, maintenance and related.

(b) Wages, benefits and fees, net (including allocations to research and operational expenses, net):

- Includes salaries and short-term variable cash-based compensation incentives paid to Dan Blondal, CEO, Stephen Campbell, CTO, Alex Holmes, COO, Pamela Kinsman, Corporate Secretary/Director of Sustainability, Denis Geoffroy, Chief Commercialization Officer (CCO), Adam Johnson, Senior Vice-President of External Affairs, and Kelli Forster, Senior Vice-President of People & Culture.

  In accordance with an executive employment agreement the Company has in place with Dan Blondal, in case of termination by the Company without cause, he is entitled to six (6) weeks' base pay (or notice) for every year of service to a maximum of twenty-four (24) months. He would not be entitled to further bonus payments after termination. In the case of resignation after a Change of Control and for 'Good Reason', Dan Blondal is entitled to twenty-four (24) months' base salary.

- Includes the services of Bedrock Capital Corp. ("Bedrock Capital") a company controlled by Paul Matysek the Executive Chairman and a Company Director.

- Includes the services of Donaldson Brohman Martin, CPA Inc. ("DBM CPA"), a firm in which Dan Martino, CFO is a principal.

- Includes compensation to non-executive directors of the Company and committee chairpersons.

(c) Share-based payments:

- Includes amounts recognized on vesting of stock options and Equity Incentives granted to directors and officers.

- During the three months ended March 31, 2023, the Company granted 311,784 RSUs and DSUs to various directors and officers (2022 – 189,424 RSUs granted).

LIQUIDITY AND CAPITAL RESOURCES

As at March 31, 2023, the Company had working capital of approximately $35,700,000.

The Company considers its capital structure to consist of its components of shareholders' equity. When managing capital, the Company's objective is to ensure that it continues as a going concern, to ensure it has sufficient capital to deploy on new and existing projects (including the requirement for matching funds relating to SDTC programs), as well as generating returns on excess funds while maintaining liquidity/accessibility to such funds. In order to facilitate the management of its capital requirements, the Company prepares annual expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment, growth of its workforce, and general capital market or industry conditions. The Board of Directors relies on the expertise of the Company's management to sustain future development of the business. Management reviews and adjusts its capital structure on an ongoing basis.

The Company is not subject to any externally imposed capital requirements. There were no changes to the Company's approach to capital management during the three months ended March 31, 2023. There are no restrictions on the flow of funds from one part of the Company's business to another.

The Company currently has no source of revenues, though it receives funding from government programs, and certain cost recoveries from strategic partners. Additionally, the Company has historically relied upon equity financing to fund its activities. In order to fund ongoing research activities, expansion, capital expenditures, and operating expenses, the Company will spend its existing working capital and may seek additional capital sources to facilitate growth and expansion plans towards commercialization.

The Company currently invests excess capital in high-interest savings accounts ("HISAs") and/or HISA funds which bear interest at variable rates (cash equivalents), as well as in guaranteed investment certificates ("GICs") bearing fixed rates of interest that are redeemable (cash equivalents) and have terms not exceeding 12 months. These holdings are accessible on demand or cashable.

During the three months ended March 31, 2023, the Company earned interest income of approximately $418,000 from its GICs, HISA, and HISA fund. The Company's treasury is diversified amongst several Canadian chartered banks and large financial institutions. Safety and security of treasury is a paramount priority to the Company.

The Company's primary source of capital and liquidity from 2020 onwards has been from three financings over the course of fourteen months from February 2020 to April 2021, which generated gross proceeds of approximately $54,000,000 (net, $50,400,000), proceeds received from exercises of stock options and warrants (approximately $5,384,000 during 2021 and 2022, and approximately $3,800,000 in 2023), government assistance programs, and a strategic investment in the Company by Rio Tinto in June 2022 of approximately $12,500,000.

The three financings completed from 2020 onwards are summarized as follows:

- In February 2020, gross proceeds of approximately $11,000,000 was raised through a non-brokered private placement;
- In October 2020, gross proceeds of approximately $14,000,000 was raised through a short form Prospectus financing; and
- In April 2021, gross proceeds of approximately $29,000,000 was raised through a short form Prospectus financing.

In order to facilitate the management of its capital requirements, the Company prepares annual expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment, and strategic growth plans.

The Company is not subject to any externally imposed capital requirements and there were no changes to the Company's approach to capital management during the three months ended March 31, 2023.

Contractual obligations

The following table summarizes the Company's contractual maturities for its financial liabilities:

As at March 31, 2023	Carrying amount $	Contractual cash flows $	Under 1 year $	1-5 years $	More than 5 years $
Accounts payable and accrued liabilities	3,310,827	3,310,827	3,310,827	-	-
Accounts payable to related parties	86,955	86,955	86,955	-	-
Lease liabilities	1,121,706	1,326,667	410,320	867,764	48,583
Total	**4,519,488**	**4,724,449**	**3,808,102**	**867,764**	**48,583**

The Company acquired two additional facility leases at its Burnaby location. The commencement date of the leases was February 1, 2023, and total lease payments over the 36-month term of the lease are approximately $497,000.

OUTSTANDING SHARE AND EQUITY DATA

The authorized share capital of the Company consists of unlimited common shares without par value. All issued common shares are fully paid. All stock options, warrants, and RSUs/DSUs outstanding are each convertible into one common share of the Company. As at the MD&A Date, the Company's common share data was as follows:

	As at the MD&A Date	
	#	Weighted average exercise price $
Common shares issued and outstanding	103,132,989	n/a
Stock options outstanding	6,444,897	2.88
Warrants outstanding	1,000,000	4.00
RSUs/DSUs outstanding	605,054	n/a
Fully diluted	**111,182,940**	

ACCOUNTING MATTERS

The preparation of financial statements in conformity with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of income and expenses during each reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates. The Company's significant accounting policies are detailed in Note 2 to the financial statements for the year ended December 31, 2022.

Key sources of estimation uncertainty

The preparation of financial statements in conformity with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities as at the date of the financial statements and reported amounts of income (loss) and expenses during each reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates.

Fair value of equity incentives (stock options, restricted share units, deferred share units, performance share units) and compensatory warrants

Determining the fair value of stock options, and compensatory warrants for services or in relation to financings, requires estimates related to the choice of a pricing model, the estimation of stock price volatility, the fair value of the Company's common shares, the expected forfeiture rate, and the expected term of the underlying instruments. Any changes in the estimates or inputs utilized to determine fair value could have a significant impact on the Company's future operating results or on other components of shareholders' equity.

Property, plant and equipment

The estimated useful lives of property, plant and equipment are reviewed by management and adjusted if necessary. To estimate property, plant and equipment's useful life, management may use its past experience, review engineering estimates and industry practices for similar items of property, plant and equipment to assist in its determination of useful life.

The estimated useful life of the Company's pilot plant within property, plant and equipment is subject to specific estimation uncertainty as to the duration of use. The use of the pilot plant has historically been driven by securing government assistance to conduct research activities that utilize the pilot plant. Accordingly, the Company has historically depreciated the pilot plant over the term of the government assistance program. Future determinations of the expected life of the pilot plant may differ from historical experience.

There have been no changes to the depreciation methods used by the Company during the three months ended March 31, 2023.

Critical judgments in applying accounting policies

Research and operational expenses

The determination of whether expenditures on research and development activities meet the criteria for capitalization as internally generated intangible assets is subject to estimation and uncertainty. The Company has determined that until such time that it has a commercial-scale plant in the condition and location necessary to commence commercial production, that it will remain in the research phase (pre-commercial phase) and accordingly expenditures will be expensed within the Company's results of operations.

The Company has determined that its activities continue to be classified as research in nature, as opposed to development. This results in research costs being expensed to profit or loss within the consolidated financial statements.

Accounting standards issued for adoption of future periods

There are no new accounting standards issued for adoption in future periods for which the Company anticipates having a material impact on the results of operations and financial position of the Company.

Financial instruments – classification and fair value

Classification of financial instruments

Financial assets:	**Classification:**
Cash and cash equivalents	FVTPL
Receivables	Amortized cost
Deposits	Amortized cost

Financial liabilities:	**Classification:**
Accounts payable and accrued liabilities	Amortized cost
Accounts payable to related parties	Amortized cost
Lease liabilities	Amortized cost

The Company's financial instruments can be exposed to certain financial risks including liquidity risk, credit risk, interest rate risk, price risk, and currency risk. Details of these risks and related assessments as well as the fair value measurements of the Company's financial instruments are included in the Company's financial statements for the three months ended March 31, 2023, within Note 13.

OFF-BALANCE SHEET ARRANGEMENTS

Nano One does not utilize off-balance sheet arrangements.

PROPOSED TRANSACTIONS

There are no proposed transactions as the MD&A Date.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Information provided in this MD&A and the financial statements is the responsibility of management. In the preparation of the financial statements, estimates are sometimes necessary to make a determination of the carrying value for certain assets or liabilities. Management believes such estimates have been based on careful judgments and have been properly reflected in the financial statements. Management maintains a system of internal controls to provide reasonable assurances that the Company's assets are safeguarded and to facilitate the preparation of relevant and timely information.

APPROVAL

The Board of Directors of the Company has approved the disclosure contained in this MD&A.