



**Nano One Materials Corp.**  
**Management's Discussion & Analysis**  
**September 30, 2021**

## 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 and nine months ended September 30, 2021, should be read in conjunction with the Company's condensed interim financial statements for the nine months ended September 30, 2021, and the annual audited financial statements for the year ended December 31, 2020. 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 **November 10, 2021** (the "MD&A Date"), unless otherwise indicated.

Additional information relating to the Company, including the Annual Information Form ("AIF") dated March 15, 2021, is filed with Canadian securities regulatory authorities ([www.sedar.com](http://www.sedar.com)) and on the Company's website at [www.nanoone.ca](http://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 nine months ended September 30, 2021, 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 performance of the Company's business and operations; the intention to grow the business, operations and potential activities of the Company; regulatory changes; the competitive conditions of the industry and the Company's competitive position in the industry; the Company's business plans and strategies; the anticipated benefits of the Company's partnerships; the Company's licensing, supply chain and joint venture opportunities; the applicable laws, regulations and any amendments thereof; and any anticipated future gross revenues and profit margins of the Company's operations.

With respect to the forward-looking statements contained in this MD&A, the Company has made assumptions regarding, among other things: the use of the net proceeds of previous financings; operating and capital costs; anticipated partnerships; the Company's ability to access future financing opportunities; and the Company's ability to attract and retain qualified personnel or management.

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](http://www.sedar.com)) which may not be a comprehensive list of risks and uncertainties as 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.

## **CORE BUSINESS AND STRATEGY**

The Company has developed, patented and scaled-up an innovative industrial process technology (the "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 demonstrated its technology in the laboratory, built a demonstration pilot plant, and is partnering with key automotive original equipment manufacturers ("OEMs") and cathode manufacturers, with the business intent of licensing its technology through joint venture and royalty arrangements.

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 to simplify production using environmentally sustainable processes. It is a manufacturing platform suited to many types of lithium-ion cathode materials applicable to standard, advanced, and next generation solid state batteries.

### ***One-Pot Process Technology***

Nano One's patented One-Pot Process is engineered to use non-sulfate forms of metal feedstock, with the intention of reducing the total cost and carbon footprint of battery metal feedstocks and CAM. Specifically, this eliminates the need to convert metal to metal sulphate and lithium to lithium hydroxide, and also eliminates sulphate waste, excess water consumption, excess greenhouse gas emissions ("GHG") and added process costs. The process uses lithium feedstock in the form of carbonate, for manufacturing all CAM materials, including nickel rich NMC, rather than lithium hydroxide, which is 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 One-Pot Process is an aqueous process, using carbon neutral chemistry, that operates at room-temperature and atmospheric pressures, and it combines feedstock conversion, precursor formation, lithiation and coating steps into one reaction. This creates added value for metals and aligns Nano One with the environmental, sustainability and cost objectives of automotive companies, miners, investment communities and governmental infrastructure initiatives.

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

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

### ***Coated Nanocrystal Technology***

The coated nanocrystal innovation addresses a key battery trade-off between energy density and durability. Increased durability would provide electric vehicle manufacturers greater flexibility in optimizing range, charging rates, safety, and cost. The One-Pot Process combines all input components: lithium, metals, additives, and coatings in a single reaction to produce a lithiated precursor that, when dried and fired, forms quickly into a single crystal cathode material simultaneously with its protective coating.

There is a global effort to increase the ratio of nickel to cobalt in NMC (Lithium Nickel Manganese Cobalt Oxide) cathode materials, in order to increase capacity and reduce cobalt supply chain risks; however, the shift to these nickel-rich materials compromises cycle life and safety in the battery. Coated monocrystalline cathode powders can address these problems and the Company's coated nanocrystals provide similar improvements to durability as evidenced through the Company's published results and portfolio of intellectual property.

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

- **(LFP):** Lithium Iron Phosphate;
- **(LNMO or HVS):** Lithium Nickel Manganese Oxide, also referred to as "High Voltage Spinel"; and
- **(NMC):** Lithium Nickel Manganese Cobalt Oxide.

Additional information on the Company's coated nanocrystal technology can be found in the Company's AIF, including technical updates, published results and patents granted.

### ***M2CAM Technology***

In February 2021, Nano One announced its metals to cathode active materials technology ("M2CAM") which seeks to reduce cost, waste, and the carbon footprint in the lithium-ion battery supply chain. The Company is in discussions with large integrated miners to reduce environmental footprints and maximize upstream value in the global battery supply chain. Nano One's collaborations also include automotive OEMs and traditional cathode manufacturers 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 performance on par with and better in some cases 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 Class 1 nickel, manganese, and cobalt metal powder feedstocks rather than metal sulfates or other salt powders. Metal powders are one-fifth of the weight of metal sulfates, avoiding the added costs, energy, and environmental impact of converting to sulfate and shipping and handling of waste.

Nano One's technology also offers the flexibility to use either lithium carbonate or hydroxide as feedstocks. This is enabled by mixing lithium with all other metal inputs, additives and coating agents 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 react and form coated single crystal cathode powders when thermally processed in a kiln.

In contrast, conventional cathodes are made by first converting metals into metal sulfates and lithium into lithium hydroxide. The metal sulfates (i.e. nickel, manganese, cobalt and/or others) are then mixed in a chemical reaction with a co-precipitation re-agent, such as sodium hydroxide, to produce a mixed metal hydroxide salt powder, known as a precursor cathode active material ("PCAM"), which is filtered, washed and dried from the resulting solution. Sodium sulfate and water remain in solution and must then be landfilled or recycled through a cost intensive process such as salt splitting. This PCAM is then milled with lithium hydroxide powders followed by prolonged thermal processing in a kiln to form lithiated cathode powders. Protective coatings are then added to the powders and thermally processed again to produce coated clusters of crystalline particles (polycrystalline).

Each grain of cathode powder expands and contracts during charge and discharge, causing polycrystalline particles to breaking apart from repeated charging, resulting in fractures to the protective coatings. This leaves individual crystals within the grains of powder exposed to side reactions which impact performance and durability. Extra time in the kiln can alleviate some of these issues, but also damages the crystal structures and adds cost. By coating the individual crystals within the cluster, Nano One's technology single crystal coating technology protect against these side reactions.

Nano One's technology aligns it with the sustainability objectives of automotive companies, investment communities and governmental infrastructure initiatives. It also offers an opportunity for metals refiners to provide environmentally, and sustainability mined sources of nickel ore to integrate and manufacture cost-reduced value-added cathode powders for direct supply to battery manufacturers. It is a platform technology that is sustainably and economically differentiated from the conventional processes today, offering a competitive value proposition to the incumbent methods.

## **BUSINESS OBJECTIVES**

The Company's short-term objectives (1-3 years) include:

- Developing, advancing, and promoting the M2CAM adaption of its One-Pot process through collaborative partnerships with OEMs, miners and cathode producers. The Company is aiming to disrupt the supply chain and make cathode materials direct from metal powders and lithium carbonate. This eliminates the conversion of metals to sulfates, lithium to hydroxide and the associated energy, GHG emissions, cost, waste and the needless transport of water and sulfate.
- Prototyping and scaling up by expanding its demonstration pilot plant and laboratory facilities to serve technology development, partnership, and business objectives.
- Developing and building its first internationally or domestically located pilot plants and commercial plant(s), and establishing joint ventures and licensing agreements, by advancing partnerships with the goal of initial revenues in late 2022 or 2023.

Third-party validation and partner identification with its joint development partners are already in place with additional automotive, cathode and mining partners in the queue and targeted throughout the supply chain.

## **CHANGE IN BOARD OF DIRECTORS**

Effective September 7, 2021, Mr. Gordon Kukec was appointed as an independent Director to the Board of the Company. There were no further changes to the Company's Board of Directors or Executive Officers during the nine months ended September 30, 2021 and subsequent thereto.

## **RECENT CORPORATE DEVELOPMENTS**

In addition to information discussed throughout this MD&A, the Company announced the following developments during the nine months ended September 30, 2021 and through to the date of this MD&A (from newest to oldest):

### ***Transition in LFP Strategy and Accelerate ZEV Alliance Membership***

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.

The goal towards building a fully integrated and resilient battery supply chain in North America must include responsible mining of battery metals, onshore refining, environmentally favourable cathode material production, and recycling. LFP production is free from the constraints of nickel and cobalt, and although its origins are deeply rooted in Canada, its growth over the last decade is almost entirely based in China. Recent LFP cell-to-pack innovations have driven costs down and enabled greater EV range, setting the stage for EV pioneers to shift to LFP. There has never been a greater imperative for a sustainable, responsible, and secure supply of LFP materials and batteries, to be established and supported in North America and Europe, proximal to where the EV's are manufactured.

Canada has clean energy assets, responsibly sourced critical minerals and a rich history in LFP technology and manufacturing. By leveraging these opportunities with Nano One's simplified low-cost approach to cathode production, Nano seeks to create a resilient value-added domestic LFP supply chain in a collaborative ecosystem with a smaller environmental footprint.

Additionally, Nano One announced it has become a member of Accelerate, Canada's zero-emission vehicle (ZEV) supply chain alliance. Launched in 2021, Accelerate is working with its members across the supply chain to create an industrial road map to ensure the growth and stability of Canada's zero-emission vehicle market.

### ***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 OEM (Original Equipment Manufacturer), 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.

LNMO has great potential in next-generation lithium-ion batteries for electric vehicles, renewable energy storage and consumer electronic devices. It delivers energy and power on par with other high-performance cathodes and is cost effective because it is cobalt free, low in nickel and does not require excess lithium. LNMO also has an operating voltage that is 25% higher than commercial high nickel cathodes, enabling fewer cells in applications such as power tools and electric vehicles while providing improved productivity, efficiency, thermal management, and power.

### ***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 (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.

### ***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.

### ***Graduation to the Toronto Stock Exchange***

Effective June 8, 2021, Nano One commenced trading on the Toronto Stock Exchange (the “TSX”) under the symbol “NANO”. Nano One formerly traded on the TSX Venture Exchange (the “TSX-V”) under the symbol “NNO”.

***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 will 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. The agreement will focus on developing materials, methods of production and a detailed commercialization study for pre-pilot, pilot and scaled up manufacturing. The agreement is the culmination of successful technical reviews and preliminary evaluations of both Nano One’s high nickel cathode materials and IP conducted over the past year and represents a significant milestone in the business relationship between both companies.

***Co-Development Agreement with CBMM (Frame Cooperation Agreement)***

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.

***Progress Update on Joint Development Agreement with Asian Manufacturer***

In April 2021, the Company announced a progress update on the Joint Development Agreement signed in August 2020 (the “JDA”). The first two phases of the program have been focused on LNMO cathode materials and have been successfully completed with validation by both parties. At the time of the announcement, work was shifting to scale-up considerations, detailed economic analysis, third-party evaluation, and preliminary planning for commercialization. The work under this agreement is on schedule and on budget..

The JDA provides a framework to develop a business plan for the commercialization of cathode materials, through a joint venture, licensing of Nano One’s technology and/or through further development work.

The companies are co-developing high-performance LNMO cathode materials using Nano One’s patented One-Pot Process. LNMO is of increasing global interest and has great potential in next-generation lithium-ion batteries for electric vehicles, renewable energy storage and consumer electronic devices.

**Intellectual Property**

In June 2021, the Company announced three (3) new patents issued and allowed in Canada, the US and China. These patents extend the patent estate to provide protection for lithium-ion cathode powders formed by the proprietary One-Pot Process developed by Nano One.

As at the MD&A Date, the Company has been issued twenty (20) 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 several related patent applications pending throughout the world.

The Company’s 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.

## Government Assistance

The Company's primary active government assistance program is that with SDTC, as follows:

### Sustainable Development Technology Canada ("SDTC"):

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 Program #2 grant in conjunction with the British Columbia Innovative Clean Energy ("BC-ICE") fund is for up to \$8,545,500 in aggregate (\$5,944,376 received as of the MD&A Date). SDTC Program #2 is estimated to conclude in June 2024.

As of the date of this MD&A, the Company is currently working within Milestone 3 for which it received funding during September 2021 of approximately \$1,653,000.

During the nine months ended September 30, 2021 and September 30, 2020 the following amounts were received from the Government of Canada for its research activities through various programs:

	September 30, 2021	September 30, 2020
	\$	\$
<b>Grant cash proceeds received:</b>		
Sustainable Development Technology Canada (SDTC)	1,915,359	3,055,202
Innovation Assistance Program (IAP)	-	241,225
Automotive Supplier's Innovation Program (ASIP)	-	217,446
Industrial Research Assistance Program (NRC-IRAP)	16,932	164,167
Other Grants	-	2,700
	<b>1,932,291</b>	<b>3,680,740</b>

The cumulative amount of program funding received since January 1, 2014 from the Government of Canada are as follows:

	September 30, 2021	December 31, 2020
	\$	\$
Sustainable Development Technology Canada (SDTC)	8,025,673	6,110,313
Automotive Supplier's Innovation Program (ASIP)	1,950,952	1,950,952
Industrial Research Assistance Program (NRC-IRAP)	811,898	794,966
Innovation Assistance Program (IAP) (from NRC-IRAP)	241,225	241,225
Scientific Research & Experimental Development (SR&ED)	98,661	98,661
Other Grants	80,059	80,059
	<b>11,208,468</b>	<b>9,276,176</b>

## OVERALL PERFORMANCE

### Cash flows

During the nine months ended September 30, 2021, the Company generated a net increase in cash and cash equivalents of approximately \$26,879,000 inclusive of the short-form prospectus financing of common shares completed on April 1, 2021 for gross proceeds of approximately \$28,917,000 (approximately \$26,900,000 net proceeds after cash commissions and expenses).

Other key contributors to the increase in cash and cash equivalents were:

- Exercises of stock options and warrants for total proceeds of approximately \$4,693,000;
- Proceeds from Government assistance programs mainly comprising approximately \$1,932,000 from SDTC and BC-ICE; and
- The maturity of a short-term investment of approximately \$1,009,000.

See "Cash flows during the nine months ended September 30, 2021" below within Discussion of Operations for further details on cash flows for the period.



## DISCUSSION OF OPERATIONS

### For the three and nine months ended September 30, 2021 and September 30, 2020

The Company reports operating results in a single operating segment being the development 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.

The following table summarizes the Company's results of operations and cash flows for the three months ended September 30, 2021 and September 30, 2020 (rounded):

	Three months ended		Change \$
	September 30, 2021 \$	September 30, 2020 \$	
Revenue	-	-	-
Loss from operating expenses	(1,821,000)	(1,531,000)	(290,000)
Loss and comprehensive loss	(1,767,000)	(1,504,000)	(263,000)
Cash (used in) provided by operating activities	(893,000)	2,471,300	(3,364,300)
Cash provided by (used in) investing activities	114,000	(487,000)	601,000
Cash provided by financing activities	93,000	3,005,000	(2,912,000)

The cash provided by operating activities during the three months ended September 30, 2020, is attributable to the recognition of government assistance proceeds received exceeding operating expenditures during the period.

Cash provided by investing activities during the three months ended September 30, 2021, is attributable to additional interest income earned on high-interest savings accounts as well as the application of government assistance proceeds towards purchases of equipment and reclassifications of expenditures between capital (investing) and operating activities.

Cash provided by financing activities during the three months ended September 30, 2021, is attributable to the exercise of options and warrants of approximately \$144,000 during the period then ended, offset by facility lease payments of approximately \$51,000. The cash provided by financing activities in the comparative period reflected the proceeds from exercises of a greater volume of options and warrants.

The following table summarizes the Company's results of operations and cash flows for the nine months ended September 30, 2021 and September 30, 2020 (rounded):

	Nine months ended		Change \$
	September 30, 2021	September 30, 2020	
	\$	\$	
Revenue	-	-	-
Loss from operating expenses	(8,878,000)	(3,160,000)	(5,718,000)
Loss and comprehensive loss	(8,861,000)	(3,109,000)	(5,752,000)
Cash provided by (used in) operating activities	(4,975,000)	22,000	(4,997,000)
Cash provided by (used in) investing activities	387,000	(1,666,000)	2,053,000
Cash provided by financing activities	31,467,000	13,820,000	17,647,000

Certain components of operating expenses for three months ended September 30, 2021 and September 30, 2020, were as follows (rounded):

	Three months ended		Increase (decrease) \$
	September 30, 2021	September 30, 2020	
	\$	\$	
Consulting fees	179,000	97,000	82,000
Investor relations and shareholder information	152,000	133,000	19,000
Management and Directors' fees	79,000	85,000	(6,000)
Salaries and benefits, net	438,000	184,000	254,000

Certain components of operating expenses for nine months ended September 30, 2021 and September 30, 2020, were as follows (rounded):

	Nine months ended		Increase (decrease) \$
	September 30, 2021	September 30, 2020	
	\$	\$	
Consulting fees	420,000	340,000	80,000
Investor relations and shareholder information	527,000	395,000	132,000
Management and Directors' fees	246,000	365,000	(119,000)
Salaries and benefits, net	1,474,000	715,000	759,000

Explanations for the changes illustrated in the table above are as follows for the three and nine months ended September 30, 2021:

- Consulting fees:

For the three months ended September 30, 2021, consulting fees increased due to greater IT consulting fees and human resources contractor fees. IT consulting fees increased in alignment with the increase in staffing levels as well as increased equipment levels as many major components of equipment include software applications which requires IT servicing.

For the nine months ended September 30, 2021, consulting fees increased for reasons similar to the drivers of the three month increase (discussed above) which included an increase in human resources contractor fees of approximately \$66,000 and increased IT consulting fees of approximately \$31,000.

- Investor relations and shareholder information:

During the three and nine months ended September 30, 2021, the level of general and targeted investor relations programs was greater than the comparative year which drove the increase in fees. Programs ramped up during late Q1 2021 and have continued on a relatively consistent basis. Despite marketing communication and conference attendance activities and costs decreasing, these were offset by the increased investor relations service engagements and related programs.

- Management and Directors' fees:

During the nine months ended September 30, 2021 the Company incurred higher CFO fees and a compensation adjustment increase for the Company's Executive Chairman (see salaries and benefits below), however, the 2020 comparative amount is greater on a three and nine month basis due to bonuses paid during Q2 2020.

- Salaries and benefits:

Staffing levels for both the three and nine months ended September 30, 2021, were greater than the respective comparative periods. Additionally, compensation adjustments were made in Q1 2021 for the Company's Officers (effective from January 1, 2021). Salaries and benefits are presented net of allocations of SDTC government grants. During the three and nine months ended September 30, 2021, the Company welcomed 9 and 21 employees and/or interns, respectively, to its company-wide team, and as of the date of this MD&A, works with 55 employees and/or contractors (full-time, and/or short-term contract basis).

Research expenses (recoveries), net for the three and nine months ended September 30, 2021 and September 30, 2020, were as follows (rounded):

	Three months ended			Nine months ended		
	September 30, 2021 \$	September 30, 2020 \$	Change \$	September 30, 2021 \$	September 30, 2020 \$	Change \$
Contractors	122,000	24,000	98,000	222,000	135,000	87,000
Labour	670,000	421,000	249,000	1,802,000	1,130,000	672,000
Safety and training	28,000	19,000	9,000	76,000	36,000	40,000
Supplies	193,000	82,000	111,000	479,000	207,000	272,000
Utilities	18,000	4,000	14,000	41,000	20,000	21,000
	<b>1,031,000</b>	<b>550,000</b>	<b>481,000</b>	<b>2,620,000</b>	<b>1,528,000</b>	<b>1,092,000</b>
Depreciation	136,000	93,000	43,000	391,000	172,000	219,000
Cost recoveries	(227,000)	-	(227,000)	(306,000)	(224,000)	(82,000)
Government assistance received (cash)	(16,000)	(349,000)	333,000	(283,000)	(875,000)	592,000
Government assistance accrual reversed (non-cash)	-	-	-	8,000	-	8,000
Government assistance amortized (non-cash)	(630,000)	(1,083,000)	453,000	(1,137,000)	(1,515,000)	378,000
<b>Research expenses (recoveries), net</b>	<b>294,000</b>	<b>(789,000)</b>	<b>1,083,000</b>	<b>1,293,000</b>	<b>(914,000)</b>	<b>2,207,000</b>

During the three and nine months ended September 30, 2021, the Company significantly increased its research expenditures in relation to its Frame Cooperation Agreement ("FCA") executed with CBMM (May 2021 with a term of 27 months through to August 2023), the world's major supplier of niobium, aimed at optimizing Nano One's patented One-Pot process for nickel-rich cathode materials (NMC) using CBMM's niobium as a protective coating. Project details and financial contributions are confidential.

Additionally, there has been a significant focus on efforts relating to the Joint Development Agreement signed with an Asian cathode manufacturer (August 2020) which is focused on LNMO cathode materials with work shifting to scale-up considerations, detailed economic analysis, and preliminary planning for commercialization. Significant progress was also made in LNMO scale up and optimization. Lastly, the Company is also progressing scaling efforts relating to the Cathode Evaluation Agreement (December 2020) with an American based multinational auto manufacturer to jointly evaluate the performance and commercial benefit of Nano One's patented One-Pot process for nickel-rich and cobalt-free cathode materials (NMC) in electric vehicle applications.

Moreover to the research expenses (recoveries), net amount presented above, the Company incurred approximately \$48,000 and \$127,000 respectively, during the three and nine months ended September 30, 2021, within professional fees for charges relating to patent filings and applications, and incurred approximately \$593,000 net of government grant allocations on research and development equipment, pilot plant, and leasehold improvements in aggregate during the nine months ended September 30, 2021.

Supplies costs primarily comprises chemical formulations which may be subject to fluctuations in commodity prices. Overall, the Company's exposure to fluctuations in commodity prices is not expected to have a significant impact on operations given the relative value of volumes purchased.

Contractors costs include third-party researchers and amounts paid to environmental agencies that assist with chemical supply removal. The Company is compliant to the best of its knowledge with all local required environmental waste and disposal regulations.

The Company's facilities and staffing expansion is a direct result of the increasing global interest in the Company's technologies and processes, progress through government programs, technological breakthroughs, and new strategic partnerships. Market dynamics coupled with the increased capital resources contribute to an overall increase in research activities and related expenditures in all or most categories, which works to expedite the achievement of the Company's strategic goals.

### ***Global Pandemic (COVID-19)***

In March 2020, the World Health Organization declared the outbreak of 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. Overall, travel and other restrictions related to the COVID-19 pandemic have not had a significant impact on the Company's operations and research efforts including staffing levels. The shipment of purchased equipment at times has been partially delayed due to the pandemic, and travel by employees and executives has been limited, however, the Company continues to progress partnerships and research efforts without significant constraint.

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 (\$262,500 of which was received during the nine months ended September 30, 2021), and approximately \$241,000 from the Innovative Assistance Program (NRC-IRAP) (during the year ended December 31, 2020), both in relation to COVID-19 pandemic relief.

### Cash flows during the nine months ended September 30, 2021

Cash used in operating activities was approximately \$4,795,000, largely driven by \$4,613,000 incurred on cash-based operating expenses plus approximately \$362,000 in changes in working capital items.

Cash provided by investing activities was approximately \$387,000, driven by the maturity of a short-term investment (a fixed rate non-redeemable guaranteed investment certificate) including interest income received on the short-term investment and high-interest savings accounts of approximately \$1,157,000 in aggregate, partially offset by approximately \$770,000 in equipment deposits, purchases of property and equipment (primarily research equipment and leasehold improvements, net of government assistance amounts received) and payments for issuance costs of newly issued patents (intangible assets).

Cash provided by financing activities was approximately \$31,467,000 substantially comprising the net proceeds from the short-form prospectus financing of common shares that closed in April 2021, and the exercise of stock options and warrants generating net proceeds of approximately \$31,604,000 after cash commissions, legal and filing fees. Cash flows from financing activities are partially reduced by lease payments of the Company's facilities of approximately \$137,000 in aggregate.

## 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 \$
September 30, 2021	-	(1,767,249)	(0.02)
June 30, 2021	-	(2,549,411)	(0.03)
March 31, 2021	-	(4,544,172)	(0.05)
December 31, 2020	-	(2,103,524)	(0.02)
September 30, 2020	-	(1,504,365)	(0.02)
June 30, 2020	-	(541,673)	(0.01)
March 31, 2020	-	(1,062,846)	(0.01)
December 31, 2019	-	(529,851)	(0.01)

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 be insignificant to the Company's financial position and results of operations.

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

- The quarters ended June 30, 2021 and September 30, 2021 were reflective of a general increase in activities in all departments and projects for the Company including increased investor relations programs, increased research expenditures, and increased salaries and benefits reflective of an expanded workforce.
- The quarter ended March 31, 2021 included share-based payment expense of approximately \$3,070,000 in relation to the grant of stock options of which certain stock options granted to Directors and Officers vested immediately.
- The quarter ended June 30, 2020, included significant Government assistance recoveries in relation to COVID-19 pandemic relief which were included directly in profit or loss as opposed to deferred (liability).
- The quarter ended December 31, 2019 represented a focus on cost savings measures prior to financing obtained via private placement during February 2020.

### Use of Proceeds from Financings

The Company completed the following 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 to September 30, 2021, 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.

Principal Purposes	Use of Proceeds \$
Research activities	4,749,377
Capital equipment purchases and leasehold improvements on laboratory facilities	2,815,262
Pilot plant expansion	403,641
Intellectual property acquisition	330,791
Business development and strategic alternatives	549,975
Working capital	5,929,043
<b>Proceeds used</b>	<b>14,778,089</b>
Remaining	35,633,668
<b>Net proceeds of the financings</b>	<b>50,411,757</b>

#### 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 related parties (gross before applicable government assistance recoveries):

	Transactions nine months ended September 30, 2021 \$	Transactions nine months ended September 30, 2020 \$	Balances outstanding September 30, 2021 \$	Balances outstanding December 31, 2020 \$
Bedrock Capital	112,500	234,500	-	-
DBM CPA	93,175	65,000	8,400	7,875
Directors' fees	40,500	65,500	-	-
Management and Directors' fees	246,175	365,000	8,400	7,875
Officers - Salaries and benefits	954,675	703,750	-	2,696
Directors and Officers - Share-based payments	3,381,321	1,339,100	-	-
Patent Filing Specialists	119,029	99,128	17,895	38,753
	<b>4,701,200</b>	<b>2,506,978</b>	<b>26,295</b>	<b>49,324</b>

(a) Management and Directors' fees:

- Includes the services of Bedrock Capital Corp. ("Bedrock Capital") a company controlled by Paul Matysek the Chairman and a Director of the Company;
- Includes the services of Donaldson Brohman Martin, CPA Inc. ("DBM CPA"), a firm in which Dan Martino, CFO is a principal; and
- Includes Directors' fees paid to two of the Company's Directors (Joseph Guy, \$20,250 (2020 - \$32,750)) and (Lyle Brown, \$20,250 (2020 - \$32,750)).

(b) Professional fees:

- Includes the services of Patent Filing Specialists Inc. ("Patent Filing Specialists"), a company controlled by Joseph Guy, a Company Director. Transactions incurred during the nine months ended September 30, 2021 are included within both intangible assets and professional fees (2020 – professional fees only).

(c) Salaries and benefits (including allocations to research expenses (recoveries):

- Includes salaries and short-term variable cash-based compensation incentives paid to Dan Blondal, CEO (\$330,925 (2020 - \$312,500)), Stephen Campbell, CTO (\$202,500 (2020 - \$135,000)), John Lando, President (\$245,000 (2020 - \$256,250)), and Alex Holmes, COO (\$176,250 (2020 - \$nil)). Expense reimbursements outstanding as at December 31, 2020 related to Dan Blondal.

(d) Share-based payments:

- Includes amounts recognized on vesting of stock options granted to Directors and Officers. During the nine months ended September 30, 2021, 1,540,000 stock options (2020 – none) were granted to Directors and Officers which are exercisable at \$5.10. 1,140,000 stock options are exercisable for three years until February 1, 2024 and vested immediately, and 400,000 stock options are exercisable for five years until February 1, 2026 and vest over 24 months.

## LIQUIDITY AND CAPITAL RESOURCES

As at September 30, 2021, the Company had working capital of approximately \$54,043,000.

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 the SDTC program), as well as generating returns on excess funds while maintaining accessibility to such funds. In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general 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 nine months ended September 30, 2021.

The Company currently has no source of revenues, though it receives funding from government programs, and certain research 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 and pay for operating expenses, the Company will spend its existing working capital and may complete additional equity financings to facilitate the management of its capital requirements.

Additionally, the Company may seek to invest excess capital in guaranteed investment certificates ("GICs") bearing fixed rates of interest that are either redeemable (cash equivalents) or non-redeemable (short-term investments) and have terms not exceeding 24 months. The Company will also hold excess capital in high-interest savings accounts (HISAs) which bear interest at variable rates (classified as cash).

As at September 30, 2021, the Company had excess capital invested in HISAs which are accessible on demand and did not have any GIC or other short-term investment holdings. The primary source of interest income earned during the period then ended was from HISAs.

The Company's primary sources of capital and liquidity during the nine months ended September 30, 2021 and during the previous fiscal year ended December 31, 2020, were primarily generated 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, \$50,412,000) summarized as follows:

- In February 2020, the Company completed a non-brokered private placement for gross proceeds of approximately \$11,000,000;
- In October 2020, the Company completed a Short Form Prospectus financing for gross proceeds of approximately \$14,000,000; and
- In April 2021, the Company completed a Short Form Prospectus financing for gross proceeds of approximately \$28,900,000.

In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The Board of Directors relies on the expertise of the Company's management to sustain future development of the business.

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 nine months ended September 30, 2021. The Company does not have specific capital or operating expenditure commitments on any of its projects aside from the provisions of SDTC Program #2 that require the Company to have matching funds to the grant amounts and to incur the required expenditures to complete the various Milestones. The Company will use its existing working capital to incur the required SDTC Program #2 expenditures.

### Contractual obligations

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

As at September 30, 2021	Carrying amount \$	Contractual cash flows \$	Under 1 year \$	1-3 years \$	3-5 years \$	More than 5 years \$
Accounts payable and accrued liabilities	357,688	357,688	357,688	-	-	-
Accounts payable to related parties	26,295	26,295	26,295	-	-	-
Lease liabilities	834,493	1,043,163	210,791	334,984	273,910	223,478
<b>Total</b>	<b>1,218,476</b>	<b>1,427,146</b>	<b>594,774</b>	<b>334,984</b>	<b>273,910</b>	<b>223,478</b>

### 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. 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	95,509,903	n/a
Stock options outstanding	6,057,050	2.74
Warrants outstanding	4,387,387	2.58
<b>Fully diluted</b>	<b>105,954,340</b>	

### SUBSEQUENT EVENTS

- The Company granted 40,000 stock options to a new employee of the Company with an exercise price of \$3.62 until October 5, 2024 and vesting over 18 months through to April 5, 2023.
- The Company issued 76,750 common shares upon the exercise of warrants between \$1.60 and \$3.55 each for proceeds of \$126,213.
- In October 2021, at its Annual and Special Meeting of Shareholders, the Company received shareholder approval of its Omnibus Equity Incentive Plan (the "Equity Plan"). Accordingly, the Company granted 184,505 RSUs and 8,626 DSUs to various Officers and Directors of the Company, whereby one-third (64,377) of the RSUs and DSUs vest on August 27, 2022, one-third (64,377) vest on August 27, 2023, and the remaining one-third (64,377) vest on August 27, 2024. The value of the restricted share units is based on the fair value of the Company's common shares on the date of grant, which is the date which shareholder approval was obtained, on October 14, 2021.

The Company grants RSUs to directors, officers, employees and consultants as compensation for services, pursuant to its RSU Plan (the "RSU Plan"). The number of RSUs awarded and underlying vesting conditions are determined by the Board of Directors at its discretion. At the election of the Board of Directors, upon each vesting date, participants receive (a) Common Shares equal to the number of RSUs that vested; (b) a cash payment equal to the number of vested RSUs multiplied by the fair market value of a Voting Share; or (c) a combination of (a) and (b).



## 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 annual financial statements for the year ended December 31, 2020.

### 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 stock options and compensatory warrants*

Determining the fair value of compensatory warrants (finders' warrants) and stock options 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.

The fair value of stock options granted, or compensatory warrants issued by the Company is determined by using the Black-Scholes option pricing model. The fair value is particularly impacted by the Company's stock price volatility which is determined by way of a historical look-back of weekly closing stock prices over a period of time equivalent to the term provided on stock options and compensatory warrants when granted or issued.

#### *Property and equipment*

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

The estimated useful life of the Company's pilot plant within property 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 nine months ended September 30, 2021. The Company's pilot plant is being depreciated over the term of the existing SDTC Program #2 which is expected to conclude in June 2024.

### Critical judgments in applying accounting policies

#### *Income taxes*

Tax provisions are based on enacted or substantively enacted laws. Changes in those laws could affect amounts recognized in profit or loss both in the period of change, which would include any impact on cumulative provisions, and in future periods. Deferred tax assets (if any) are recognized only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse and a judgment as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognized in respect of deferred tax assets as well as the amounts recognized in profit or loss in the period in which the change occurs.

The Company has determined that the likelihood and timing of future profitability for which to use its unrecognized deferred tax assets is uncertain at this time, therefore, the Company's deferred tax assets continue to be unrecognized.

#### *Research 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 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 financial statements.

#### **Changes in accounting policies and future accounting policy changes**

During the nine months ended September 30, 2021, there were no changes to the Company's significant accounting policies, nor any new accounting policies adopted.

Certain pronouncements have been issued by the IASB or IFRIC that are effective for accounting periods beginning on or after January 1, 2021. The Company has reviewed these updates and determined that many of these updates are not applicable or consequential to the Company and have been excluded from discussion within these significant accounting policies.

#### **Financial instruments – classification and fair value**

##### Classification of financial instruments

<b>Financial assets:</b>	<b>Classification:</b>	<b>Subsequent measurement:</b>
Cash and cash equivalents	FVTPL	Fair value
Short-term investment	Amortized cost	Amortized cost
Receivables	Amortized cost	Amortized cost
Deposits	Amortized cost	Amortized cost
<b>Financial liabilities:</b>	<b>Classification:</b>	<b>Subsequent measurement:</b>
Accounts payable and accrued liabilities	Amortized cost	Amortized cost
Accounts payable to related parties	Amortized cost	Amortized cost
Lease liabilities	Amortized cost	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 nine months ended September 30, 2021, within Note 11.

#### **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.

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