



**Nano One Materials Corp.**  
**Management's Discussion & Analysis**  
**For the year ended**  
**December 31, 2024**

## MANAGEMENT'S DISCUSSION & ANALYSIS ("MD&A")

The following Management's Discussion & Analysis ("MD&A") of Nano One® Materials Corp. ("Nano One", "we", "our", the "Company") for the year ended December 31, 2024, should be read in conjunction with its audited annual consolidated financial statements for the year ended December 31, 2024, (the "financial statements") and related notes thereto. The financial statements have been prepared in accordance with IFRS Accounting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and interpretations of the IFRS Interpretations Committee ("IFRIC"). All monetary amounts in this MD&A are expressed in Canadian dollars, unless otherwise indicated. The information contained herein is presented as at **March 25, 2025** (the "MD&A Date"), unless otherwise indicated.

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

Continuous disclosure documents including the Company's most recent Annual Information Form ("AIF"), annual MD&A, and audited annual consolidated financial statements, are filed with Canadian securities regulatory authorities on SEDAR+ ([www.sedarplus.ca](http://www.sedarplus.ca)) and on its website at [www.nanoone.ca](http://www.nanoone.ca).

### Abbreviations

<b>CAM</b>	Cathode Active Material	<b>LNMO</b>	Lithium Nickel Manganese Oxide
<b>ESS</b>	Energy Storage Systems	<b>M</b>	Million or millions
<b>EV</b>	Electric Vehicle	<b>M2CAM</b>	Metal to Cathode Active Material
<b>FEL</b>	Front-End Loading	<b>NMC</b>	Lithium Nickel Manganese Cobalt
<b>GHG</b>	Greenhouse Gas Emissions	<b>OEM</b>	Original Equipment Manufacturer
<b>ICFR</b>	Internal Controls over Financial Reporting	<b>pCAM</b>	Precursor Cathode Active Material
<b>LFP</b>	Lithium Iron Phosphate	<b>tpa</b>	Tonnes Per Annum
<b>AI</b>	Artificial Intelligence		

### 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 using forward-looking terminology such as "believe", "expect", "plan", "likely", "may", "will", "should", "intend", "anticipate", "potential", "proposed", or "estimate" and other similar words, including negative and grammatical variations thereof, or statements that certain events or conditions "may", "should" or "will" happen, or by discussions of strategy. Forward-looking statements include estimates, plans, expectations, opinions, forecasts, projections, targets, guidance, goals, 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 performance of the Company's business and operations; shareholder value; the Company's ability to raise sufficient financing to continue its operations, and the related cost of capital; estimated future working capital; funds available; uses of fund; future capital expenditures and other expenses; the intention to grow the business; OEM collaboration and strategies; operations and potential activities of the Company; access to land and utilities; the anticipated demand of the industry and market acceptance of the Company's technology and products; the functions and intended benefits of the Company's technology and products; the commercial development of the Company's technology and products; facilities expansion and/or commercial production of CAM; entering into definitive agreements of any kind; the Company's piloting, demonstration, development projects, production trials, feasibility studies, and innovation activities; collaboration with materials producers; regulatory changes; the competitive conditions of the industry and the Company's competitive position in the industry; intellectual property protection; anticipated joint development programs; 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 those partnerships; the Company's marketing efforts and potential licensing, supply chain, and royalty arrangements; the purpose for expanding the

Company's facilities; and the anticipated future sales, revenues; the imposition of tariffs, trade sanctions, quotas or other protectionist measures or the breakdown of trade relations; production and government tax incentives; collaboration with municipalities; the impact of public health crises; and profit margins of the Company's operations.

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 and those factors identified in the section "Risks and Uncertainties" in this MD&A and in the section titled "Risk Factors" in the Company's most recently filed AIF on SEDAR+.

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## BUSINESS OVERVIEW

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

Nano One is a process technology company specializing in lithium-ion battery cathode active materials. Its One-Pot technology combines pCAM and CAM processes to reduce CAPEX, OPEX, energy intensity and water use while also eliminating all wastewater, sulfate byproduct and reliance on foreign supply chains of concern. The Company has shifted its focus predominantly towards the commercialization of its One-Pot LFP and is actively collaborating on this with automotive OEMs and globally strategic industry supply chain partners such as Sumitomo Metal Mining ("SMM"), Rio Tinto and Worley Chemetics (a wholly owned Canadian subsidiary of Worley Limited, a global engineering leader in sustainability solutions).

Nano One's technology is applicable to lithium-ion battery cathode materials used in EV, ESS and AI data centers, and consumer electronic batteries, reducing costs and carbon intensity with easier-to-permit modular plants that can leverage resilient and secure sources of critical minerals in emerging markets such as North America, Europe, and the Indo-Pacific region. The Company has a commercially experienced production team and facility in Candiac, Québec ("Candiac Facility") that serves as a platform to (a) pilot and demonstrate commercial scale production, (b) sample product for the purposes of evaluation and future sales, and (c) optimize and launch the marketing and licensing of its CAM production facility packages. Nano One aims to create shareholder value by diversifying future revenue streams that include production plant licensing fees, equipment procurement and sales from its Candiac Facility. Nano One is focussing on LFP to leverage a global shift towards this battery chemistry and is investing in the capacity expansion of its demonstration plant and its engineering plans for licensing, while streamlining its operations for first commercial revenues. As such, its initiatives on

other CAM chemistry formulations, such as NMC and LNMO, have slowed and focussed on fundamental process technology development initiatives with its strategic partners, or been put on hold until market conditions allow for further investment.

Nano One began operating a 200 tpa One-Pot™ LFP pilot line (“pilot line”) at its Candiatic Facility in Q4 2023 and has successfully de-risked the production of LFP with performance results consistent to lab scale. This advancement enabled commercial scale LFP samples to be sent to qualified customers starting in Q1 2024 for the purposes of evaluation, validation and entering into potential binding offtake agreements. As the market has evolved, so have LFP product specifications and as such, Nano One continues to work with its potential customers in a collaborative feedback loop to improve and qualify its LFP materials, initially for sale in the battery energy storage (BESS), defense and heavy-duty industrial sectors, followed by licensing opportunities in the larger market sectors for AI data centers and mass market EVs.

Nano One has also de-risked production and quality in larger full-scale reactors at its Candiatic Facility and is now investing in the automation and integration of these reactors with its full scale dryers and kiln, to expand capacity and demonstrate commercial production and sales at 1,000 tpa or greater. The Company is also advancing the high priority aspects of an FEL3 study to be site agnostic and support its licensing, joint venture, and independent production initiatives (see “Commercialization Updates” below).

Nano One remains steadfast in its licensing strategy, together with its alliance partner Worley Chemetics (see below), and a “Design One, Build Many” growth strategy that is cost competitive, capital light, and globally significant. Nano One’s LFP know-how, demonstration plant and scale-up expertise in Candiatic are key differentiators that stand it apart from the competition. Further, the Company has a continuous improvement approach that will benefit its licensees with valuable process innovations that are cost competitive, differentiated, IP protected and supported with continual focus on its cost competitiveness, protecting its production know-how and training.

## **Technology and Intellectual Property**

### *One-Pot Process and M2CAM® Technologies*

Nano One’s patented technology is engineered to make cathode materials directly from non-sulfate forms of battery metals and aims to reduce cost, waste, logistics, energy intensity, carbon footprint and trade uncertainty in the lithium-ion battery supply chain.

The One-Pot technology is an aqueous process, using carbon neutral chemistry, that operates at room-temperature and atmospheric pressures. Reactants first nucleate in the One-Pot reactor to form an intermediate salt that readily fires in high efficiency kilns to form coated nanocrystal cathode powders. Its benefits for LFP mainly attribute to the elimination of the iron and phosphate precursor steps (pCAM) by integrating them with the lithium addition step (CAM), high efficiency thermal processing, and the elimination of sodium sulfate wastewater. This has the additional benefit of making One-Pot enabled CAM production facilities easier to site, permit, construct, and operate while decoupling from foreign supply chains of concern. Furthermore, the process uses lithium feedstock in the form of carbonate rather than hydroxide (even in the case of high-nickel CAM) to further reduce cost, handling, logistics and safety issues.

### *Life Cycle Assessment (LCA)*

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

### *Intellectual Property*

Nano One’s intellectual property (IP) was developed and is wholly owned by Nano One. The Company continues to expand patent coverage of its proprietary technology and has various patents which have been granted or approved across the globe. There are also many pending patent applications throughout the world. In February 2024, the Company announced the expansion of its patent portfolio adding further IP protection of the One-Pot process, single crystal coating process, and M2CAM process technologies. The Company additionally announced on December 18, 2024, the allowance and/or issuance of several new patents bringing its total to 48 with more than 56 further patent applications pending, in jurisdictions around the world. These recent patents not only fortify Nano One’s IP portfolio but also add value for its shareholders and enhance the Company’s technological edge in a rapidly evolving market.

Patents, trade secrets, flowsheets, knowhow, plant design and people are at the core of what Nano One’s partners, shareholders, and prospective customers value. Not only are these intellectual property assets critical to Nano One’s

leadership position, but they have also enabled the Company to pilot LFP using its technology and demonstrate at scales that are relevant to the automotive industry. When bundled with detailed engineering plans, innovative supply chains, and performance targets, Nano One believes that its technology could be widely licensed for a new generation of sustainable and cost-effective CAM production that is cleaner, more easily permitted and securely established in North America, Europe, and the Indo-Pacific region.

## **Key Business Developments**

### *License and Alliance Agreement with Worley Chemetics®*

On May 1, 2024, Nano One executed a Strategic Alliance Agreement and License Agreement with Worley Chemetics. Under the Strategic Alliance Agreement, Nano One and Worley Chemetics will jointly develop, market, and license a process engineering design package for the development of CAM production facilities with potential customers in the lithium-ion battery materials sector.

The parties are working towards jointly developing a holistic technology CAM package that incorporates Nano One's proprietary One-Pot process into a modular process engineering design package with intellectual property rights, flow sheets, detailed engineering, the operational know-how of both parties and applicable proprietary equipment (see December 4, 2024 update below). Worley Chemetics will also design and fabricate One-Pot reactors made with customized metal alloys. The License Agreement oversees the sale of CAM packages, including necessary cross-licensing of intellectual property, license fees and remuneration to both parties over a term of up to 20 years. The collaboration with Worley Chemetics is expected to generate revenues through upfront fees, equipment sales, and technology licensing fees from production.

On June 20, 2024, the Company issued a news release with a video link to a detailed discussion on the strategic partnership, technology, plans, and potential for the future of sustainable battery materials production. The full fireside chat featuring Dan Blondal, CEO and Founder of Nano One, and Laura Leonard, Group President, Technology Solutions at Worley Chemetics is available here: <https://nanoone.ca/news/video-update-worley/>.

### *Update on Alliance with Worley Chemetics*

On December 4, 2024, the Company provided a progress update on its Worley Chemetics – Nano One Strategic Alliance ("Alliance"), including a jointly conducted cost comparison confirming the economic advantages of Nano One's One-Pot process for LFP. In addition, the preliminary design and full-scale layout of the modular "Design One, Build Many" plants is complete and being marketed with the cost comparison study to prospective clients.

The comparative analysis showed that the One-Pot process could enable at least 30% lower costs in total invested capital and up to 30% lower operational costs, using up to 80% less energy than the incumbent method. The One-Pot process also eliminates sodium sulfate wastewater and could use up to 80% less process water and reduce GHG emissions by up to 50% depending on energy sources and jurisdiction.

The Strategic Alliance has also completed a layout of the modular plant with operability and maintainability in mind and is accelerating engineering and qualification of vendor equipment to complete the LFP CAM Technology Package and support customer ambitions in this market.

The analysis estimated and compared the cost of two 25,000 tpa North American CAM production facilities that convert iron, phosphate and lithium sources into LFP, one enabled with One-Pot technology from Nano One, and the other using incumbent high-volume production technology from China. The operating and capital cost estimates of the incumbent technology were done to a Class 5 level in accordance with the Association for the Advancement of Cost Engineering (AACE) and included the treatment of sodium sulfate wastewater in North America. Comparisons were made with Nano One's One-Pot process from a previously completed FEL2 pre-feasibility study and the partially advanced FEL3 feasibility study. Nano One and Worley are confident with the cost estimates which are based on equipment quotes from various major vendors, installation factors, indirect costs, and best practices in engineering, procurement and construction management (EPCM).

### *NGen awards Nano One and Worley Chemetics \$2,800,000*

On August 13, 2024, Nano One and Worley Chemetics announced the award (effective July 16, 2024) of approximately \$2,072,000 and \$888,000, respectively in non-dilutive and non-repayable funding by Next Generation Manufacturing Canada (NGen) through its Electric Vehicle Manufacturing Program (EVMP). The funding stream is through to March 31, 2028, and aids in the development of the Canadian Electric Vehicle supply chain and manufacturing ecosystem. NGen is an industry-led, non-profit organization that supports development of world-leading advanced manufacturing capabilities in Canada. The funding will advance a new project to help both companies develop, market, and sell CAM facility packages that incorporate Nano One's proprietary One-Pot process into a process engineering design package.

Drawing on its specialized capabilities, experience and knowledgeable team, Worley Chemetics will support Nano One in identifying the best materials of construction, and fabrication methods for key equipment required for the One-Pot process, and in engineering and delivering the technology and its associated equipment. The project's goal is to integrate both companies' advanced process and equipment knowledge into the CAM manufacturing ecosystem, enabling the joint marketing and sale of equipment in Canada and around the world. Design specifications will be determined through rigorous reactor studies, analysis and selection of appropriate materials of construction, ensuring compatibility with feedstocks and reagents, as well as operating conditions.

#### *Nano One sells vacant land for gross proceeds of \$5,000,000*

On September 12, 2024, further to a definitive agreement signed in August 2024, Nano One closed on the sale of the 157,000 sq. ft vacant parcel of its land in Candiac, Québec for gross proceeds of \$5,000,000 (\$4,834,550, net after closing costs).

The sale by Nano One provides non-dilutive funds to its treasury without compromising its growth strategy, while leveraging access to alternative sites with better utility infrastructure, improved constructability and room to expand well beyond 25,000 tpa of LFP capacity. The LFP cathode manufacturing facility on the remaining property in Candiac remains the launch pad for the Nano One's growth strategy and a clear path to first revenue and larger offtakes. See "Production Updates" below for a further discussion.

#### *Department of Defense (DoD) of the United States of America awards US\$12,900,000 to Nano One*

On September 25, 2024, Nano One executed a Technology Investment Agreement for an award from the DoD of approximately \$17,800,000 (equivalent as of the date of the agreement execution) through the Defense Production Act Investments (DPAI) office's Title III program. The project will support work underway at the Company's facilities in Burnaby, British Columbia, and Candiac, Québec, and is effective for the period from July 1, 2024 through 2027. The funds will expand capacity at the Candiac Facility, which is North America's only LFP production facility. The award is broadly focused on improving energy security by accelerating the formation of a resilient industrial base and LFP battery supply chain in the United States and Canada. The project also addresses the energy security requirements of the defense sector by supporting product validation and potential sales with customers that include, as previously disclosed, suppliers to the US government. The Company received its first payment of \$1,223,281 (US\$849,501) from the DoD in March 2025.

#### *Sale and leaseback transaction*

On February 28, 2025, the Company closed a transaction to sell and lease back its Candiac building and surrounding property at 280 Liberté Avenue, Candiac, Québec ("Property"), which is the location of the Company's Candiac Facility to Candiac Industrial Properties (I) L.P. ("Purchaser") (the "Agreements"). This transaction significantly strengthens the Company's cash balance while ensuring long-term operational stability in the province of Québec through a 15-year lease agreement with renewal provisions for up to an additional 15 years. The net proceeds received by the Company at closing were \$13,716,817 (plus a \$2,000,000 deferred payment in the form of a vendor loan).

The vendor loan of \$2,000,000 is secured by an immovable hypothec, safeguarding Nano One's interests. It bears interest at 4% per annum and is due \$1,000,000 plus interest in February 2028, and \$1,000,000 plus interest in February 2031. In addition to the proceeds and pursuant to a capital investment agreement, a separate \$3,000,000 reserve will be funded by the Purchaser and held in escrow to fund potential capital improvements, should the Purchaser deem them necessary.

Additionally, Nano One entered into a lease agreement for the Property for an initial term of 15 years, with three optional 5-year renewal periods. In addition, the Company has the right of first offer should the Purchaser decide to sell in the future. This arrangement provides long-term stability for the Candiac operations.

#### *NRC IRAP Novated Project Funding Agreement (formerly, SDTC Project Funding Agreement)*

On June 4, 2024, the Government of Canada announced that Sustainable Development Technology Canada ("SDTC") programming will transition from SDTC to the National Research Council of Canada IRAP (the "NRC"), and assignment of the February 2023 funding agreement (see below) and any and all amendments thereto was completed in February 2025.

SDTC First Amendment to Project Funding Agreement: Under its February 2023 agreement with SDTC, Nano One was to be reimbursed for up to \$10,000,000 in eligible project expenses to support the conversion of the Candiac Facility to the One-Pot process for industrial-scale pilot production of LFP. The SDTC project was to also include financial reimbursement for expenses incurred in the design, construction, and operation of a multi-cathode piloting hub (MCPH) at the Candiac Facility.

To re-align the SDTC program with the Company's focus on LFP and commercialization as announced on August 22, 2024, Nano One and SDTC executed an amended agreement on November 6, 2024, that changed the scope of the project to exclude the MCPH component of the program and include certain feasibility and engineering expenses (FEL3) related to the Development Project (as described within "Commercialization Updates" below). This amendment helped reduce

overall project costs to Nano One and as such, it also reduced the projected reimbursements from SDTC for these expenses to approximately \$6,700,000.

The amended agreement signed on November 6, 2024, supersedes the original agreement signed on February 13, 2023. Of the total available funding of \$6,735,987, Nano One has received \$4,738,398 through to the MD&A Date, of which \$1,453,891 as the advance Milestone 2 payment, was received in January 2025.

#### *Government of Québec awards \$18,000,000 to Nano One (Investissement Québec and Technoclimat)*

On December 11, 2024, the Company (through its subsidiary Nano One Materials Candiatic Inc. (“Nano Candiatic”)) executed an interest-free loan agreement (the “Loan”) with Investissement Québec (“IQ”) through which funding of up to a maximum of \$15,000,000 can be received based on the terms and conditions of the Loan. Concurrently, Nano Candiatic was awarded a grant of up to \$3,000,000 from the Government of Québec’s Ministry of the Environment, the Fight against Climate Change, Wildlife and Parks (MELCCFP), through its Technoclimat program (the “Grant”). The Grant is structured as a reimbursement for eligible expenditures incurred at the Candiatic plant, subject to compliance with the terms and conditions of the agreement. Funds received through the Grant will support the Company’s transition toward cleaner and more efficient manufacturing processes.

The \$15,000,000 Loan directly supports approximately \$63,400,000 of eligible expenditures between January 1, 2023, through December 31, 2026, at the Candiatic Facility. Nano One has submitted a claim for \$31,713,073 in eligible expenditures that have been incurred to December 31, 2024. The Loan repayment period begins 60 months after the first disbursement and will be repaid over a subsequent 60-month period.

The \$3,000,000 Grant also reimburses expenses incurred at the Candiatic Facility and is directed towards a transition to cleaner and more efficient manufacturing.

The funds apply to some of the expenses incurred during the construction and operation of the Company’s pilot line that was successfully commissioned in Q4 2023, and for capacity expansion planned at the facility in 2025 and 2026.

The Company received \$2,200,000 from the Technoclimat Grant in February 2025. Additionally, in March 2025, the Company received \$7,503,313 for reimbursement claims from IQ.

## **COMMERCIALIZATION UPDATES**

Timing, scope and spend on the below initiatives are discretionary and flexible, enabling Nano One to adjust and align its strategy with the evolving battery market landscape and timelines. Given uncertainties in the capital markets, the Company is also evaluating options to conserve capital while focusing on product evaluation, first sales, offtake from the Candiatic Facility, licensing opportunities and government funding. The goal is to launch LFP in North America with a globally diversified customer base, followed by Europe and the Indo-Pacific region.

Nano One continues to execute on its plans and bring value to its shareholders by advancing its commercial scale production capabilities in Candiatic, by enhancing its pipeline of potential customers and licensees, by furthering its product and techno-economic evaluations and by developing increasingly compelling business opportunities.

#### *Demo Plant - 200 tpa capacity*

Nano One acquired the Candiatic Facility in Q4 2022 and repurposed it to demonstrate its One-Pot process at a commercially valid scale. The waste handling systems were no longer needed and subsequently decommissioned, and the Company completed the commissioning of new 200 tpa One-Pot reactors in Q4 2023. The pilot line is now being used to facilitate demonstration, technology validation, sampling and evaluation while also informing FEL design studies and the LFP CAM package with Worley Chemetics (see “Key Business Developments” above). There are plans to further expand the capacity of the existing Candiatic Facility (see “Expansion” below), as demand for LFP takes hold, leveraging existing full-scale equipment and facility capacity with further automation (see discussion below).

Through to December 31, 2024, Nano One had cumulatively incurred on a cash-basis approximately \$8,660,000 in converting and commissioning the One-Pot 200 tpa LFP pilot line. Of this amount, approximately \$940,000 was paid during the year ended December 31, 2024. These costs were largely aligned with forecasts and budgets.

#### *Expansion – minimum 1,000 tpa capacity*

The Candiatic Facility remains the launch pad for Nano One’s growth strategy and a clear path to first revenue and larger offtakes. The Candiatic Facility is equipped with commercial scale equipment that enable Nano One to demonstrate its technology and to complete the customer material validation process that requires production scale batches for up to C sampling for OEM customers. The Candiatic Facility will support small scale offtakes and production for first revenues and large scale offtakes for licensees and a potential future 25,000 tpa Development Project (see below), and even larger scale offtakes for the technology licensing business in alliance with Worley Chemetics.

Through to December 31, 2024, Nano One has incurred approximately \$530,000 in engineering and planning costs related to this expansion effort to a minimum of 1,000 tpa.

A Front End Engineering and Design (FEED) study is planned for completion in Q2 2025 which will result in pre-feasibility level costing and nameplate capacity estimation for the expansion. Together with the results of the study, the Company will make a final investment decision in Q2 2025.

Existing capacity and future expansion, together with Nano One LFP know-how, plays a strategic and critically valuable role in driving potential revenues via small customer sales, validation, and qualification support with its licensee opportunities.

### *Commercial Plant (Development Project) - 25,000 tpa capacity*

The Company's FEL2 pre-feasibility study, as reported in October 2023, modelled a 25,000 tpa LFP plant on the unused portion of its land in Candiac, Québec (which land was sold in September 2024). In February 2024, a FEL3 feasibility study was launched with consideration being given to lower-cost alternative sites that would better accommodate growth, utility requirements and future market needs. The Company reported that its FEL3 study to date is showing lower capital costs and operating expenses than its earlier FEL2 study. This further enhances the One-Pot value proposition and supports the Strategic Alliance with Worley Chemetics. Currently, the Company is focused on advancing the high priority aspects of the FEL3 study that is site agnostic and will support its licensing strategy.

For the abovementioned FEL3 study, \$1,890,000 had been paid through to December 31, 2024 (all during 2024), in relation to the 25,000 tpa Development Project.

Nano One continues to consider its Development Project and various paths forward as part of its licensing strategy into a joint venture and would include the project becoming a separate stand-alone operating company. As such, Nano One would significantly reduce its capital needs and could earn a license fee for the use of its One-Pot process technology. This would be in addition to a development fee for its efforts on the 25,000 tpa Development Project which could be settled by either an equity interest in the operating company, cash, or a combination thereof. Nano One believes that this approach offers its partners and stakeholders significant value through licensing, technology, know-how, customer engagements and project finance solutions while minimizing equity dilution. The FEL3 study will also support the "Design One, Build Many" growth strategy to develop, market, license and deploy CAM packages globally in partnership with Worley Chemetics.

The Development Project leverages Nano One's existing Candiac Facility together with target customer engagements and project finance initiatives. A financial decision to apply significant resources to the Development Project will require further progress on agreements for customer offtake, feedstock supply, and government support, as well as final site selection.

With regards to site selection for the Development Project, Nano One is in dialogue with governments, their agencies and third-party strategic interests with regards to incentive programs and the evolving market needs in North America and Europe. Key considerations include automotive OEM timing, their LFP battery manufacturing and procurement strategies, government tariffs and production tax incentives, government incentives in the form of grants and forgivable loans, municipal collaboration, and access to low-cost land, sufficient utilities (power, water, natural gas), footprint for expansion to align with longer-term objectives and location preferences from collaborating stakeholders.

### **2025 Catalysts:**

- **Finance** - Begin drawing down \$40 million in government funding to accelerate expansion, production, scaling, and commercial LFP sales (\$12.75 million received subsequent to December 31, 2024, to the MD&A Date).
- **Increase Non-Dilutive Funding** - Add further working capital from government programs and other sources.
- **Capacity Expansion** - Complete Candiac engineering and launching a minimum 1,000 tpa LFP capacity expansion project.
- **LFP sales** - Sampling and sales of initial Candiac production volumes to support advancement towards multi-year contracts.
- **CAM Package** - Finalize 25,000 tpa LFP CAM plant engineering design with Worley Chemetics for licensing/joint venture.
- **Licensing** - Market LFP pre-sales and a detailed CAM Package to secure agreements for future revenue.
- **One-Pot Equipment** - Design reactor and kiln components with Worley Chemetics and develop partnerships with other equipment providers.



- **Supply Chain** - Diversify region-specific raw materials supply base to support licensee growth.
- **Innovation** - Advancing M2CAM across all chemistries with partners while expanding our IP patent portfolio, production know-how, and product specification.
- Engage on public policy and related matters that impact supply chain and trade development in key markets including America, Canada, European Union and the Indo-Pacific region.

Nano One has the goal of licensing its One-Pot LFP CAM packages, globally, to chemicals, materials and energy companies looking to produce CAM for battery applications for the EV and ESS markets. Shareholder value will be created with increased market penetration through the Company's partnership channels, with the low cost of capital from its licensees, and by diversifying revenue exposure via the Worley Chemetics alliance to include equipment procurement, along with licensing fees and revenues from its Candiatic Facility.

## **Market Conditions and Business Environment**

### *Market Conditions*

Throughout the second half of 2023 and through 2024, many ambitious targets for EV, battery and critical minerals production have been scaled-back. This despite over 3 million EVs sold in the first quarter of 2024, which represents an increase of over 25%<sup>1</sup> over the same period in 2023, marking demand for batteries and cathode materials that continues to grow, year over year, with a decisive shift towards LFP technology. LFP offers significant advantages in terms of cost, safety, security of supply, and environmental impact compared to traditional NMC cathode materials and is suited to mass market, heavy-duty applications in stationary ESS, AI data centers and EVs.

The Government of Canada has recognized the emerging importance of the LFP supply chain by placing lithium, phosphorous and high-purity iron on the Critical Minerals list.<sup>2</sup>

The global market for battery demand experienced robust growth in 2024, supported by increases in both EV segment and the ESS sectors. According to Rho Motion, 2024 global EV sales reported strong year-over-year growth - with a 25% increase totaling 17.1-million-unit sales. Regional sales were led by China, which reported 40% growth, followed by Rest of the World markets with a 27% increase - growth in the North American market slowed to a 9% increase, while the UK/European markets contracted by 3% for the year.

Global ESS installations also reported strong growth for the year, with a 53% year-over-year increase, representing a total of 205GWh installed capacity worldwide. China led regional growth, commanding a share over 67% of all ESS deployments globally, followed by North America as the next largest market. By category, grid applications represent over 78% of global deployment and importantly, of those ESS deployed, over 98% were based on lithium-ion battery technologies.

The global demand for LFP cathode materials continues to surge, driven by growing adoption in EVs, ESS, and AI data centers. China, which dominates approximately 95% of global LFP production capacity (International Energy Agency, IEA, Global EV Outlook 2024), recently proposed export restrictions which cover processing technology and operational know-how used in the production of LFP cathode material, precursors, and raw material inputs. China's LFP technology export restrictions follow US 2024 elections and are aimed at slowing efforts to onshore mineral production, cathode processing and improve competitiveness.. This demonstrates the strategic importance of LFP and the importance of localizing materials processing to ensure energy security, especially as North America and Europe enter a phase of unprecedented growth in the demand for energy including for ESS and AI data centers, military applications and EVs . According to Rho Motion, the USA and EU have emerged as the second fastest-growing markets for ESS, supported by expanding grid infrastructure.

### *Business Environment and Opportunities*

Nano One's patented One-Pot process innovations could drive down cost, energy intensity and environmental permitting challenges at an industrial scale enable secure sources of raw material inputs, and accelerate the adoption of LFP for stationary ESS, AI data center and EV applications in North America and other jurisdictions. The One-Pot process positions Nano One favorably, with an easier-permit and competitively differentiated production process, to meet the emerging demand for LFP in North America, Europe and the Indo-Pacific region. NMC remains important for applications in long range, energy dense batteries and Nano One will keep modest efforts on its One-Pot process NMC program to support collaborators and stakeholders in developing sustainable process solutions for the future.

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<sup>1</sup> <https://www.iea.org/energy-system/transport/electric-vehicles>

<sup>2</sup> <https://www.canada.ca/en/natural-resources-canada/news/2024/06/government-of-canada-releases-updated-critical-minerals-list.html>

In response to various macroeconomic and market factors, Nano One announced the streamlining of its operations on August 22, 2024, including a workforce reduction of approximately 20%, as part of its broader strategic plan to prioritize third party product validation for near term production and sales of LFP at its Candiatic Facility, and longer-term revenue growth through licensing, joint venture and project development.

Nano One has long anticipated the challenges discussed above and is uniquely positioned to meet demand, with its One-Pot enabled LFP cathode production facilities, designed for easy permitting, modular deployment, and rapid adoption. The Company's technology is homegrown, and its team has 20 years of experience making LFP. Nano One is serving a global market by enabling flexible feedstocks and cost-competitive production for waste-free and easy-to-permit plants that transcend trade restrictions and borders.

With a diverse set of emerging clients that serve Europe, the Indo-Pacific, and the United States, Nano One can elect where it sells its LFP and licenses its technology, enabling the Company to navigate emerging markets, and trade uncertainty with agility. This flexibility is bolstered by strong government support, strategic partners, and clearly defined near-, mid-, and long-term revenue pathways through production and licensing.

## REVIEW OF FINANCIAL RESULTS

The financial statements include disclosure based on the Company's two operating segments. The CAM manufacturing business is organized into two operating segments: a research and innovation operation; and a demonstration and pre-commercialization operation. Segment performance is evaluated based on various measures including assets and liabilities, operating expenses, and cash flows. Refer to Note 14 to the financial statements for details.

As mentioned, the Company restructured during August 2024 reducing its workforce by approximately 20%. This resulted in the recognition of severance expenses during Q3 2024 amounting to approximately \$600,000 and is expected to result in a reduction to personnel costs for fiscal 2025 of approximately \$2,100,000 to \$2,500,000, before considering cash-based short-term incentive bonuses which are subject to variability.

### Q4 2024 compared to Q3 2024

Three months ended	December 31, 2024 \$	September 30, 2024 \$	Increase (decrease) \$
<b>Expenses</b>			
Amortization	1,130	1,126	4
Business development and investor relations	135,369	85,102	50,267
Depreciation	55,118	69,180	(14,062)
Finance costs	42,176	45,235	(3,059)
General and administrative expenses	623,991	645,717	(21,726)
Professional and consulting, net	710,773	410,145	300,628
Research and operational expenses, net	1,174,407	1,667,433	(493,026)
Share-based payments	730,059	763,134	(33,075)
Wages, benefits and fees, net	2,900,212	4,633,735	(1,733,523)
<b>Loss from operating expenses</b>	<b>(6,373,235)</b>	<b>(8,320,807)</b>	<b>(1,947,572)</b>
Interest income	85,247	111,466	(26,219)
Gain (loss) on disposal of property, plant and equipment	(18,259)	3,581,393	(3,599,652)
Other income	92,533	17,410	75,123
<b>Loss and comprehensive loss</b>	<b>(6,213,714)</b>	<b>(4,610,538)</b>	<b>1,603,176</b>

- Professional and consulting fees increased primarily due to financing fee prepayments relating to the IQ loan.
- Research and operational expenses continued a decreasing trend during Q4 2024 over and above quarter over decreases throughout fiscal 2024. This is a result of engineering studies and services being reduced throughout the year as part of a sharper focus on LFP commercialization. Noting Q1 2024 and Q2 2024 had costs relating to the feasibility study (FEL3) for a 25,000 tpa LFP plant (Development Project).
- Wages, benefits and fees decreased primarily as a result of the preceding Q3 2024 period due to the effect of the 20% workforce reduction which included the recognition of severance expenses during Q3 2024 amounting to approximately \$600,000.
- The gain on disposal of property, plant and equipment was driven by the disposal of land in Candiatic, Québec of approximately \$3,600,000 as discussed within "Key Business Developments" above, which partial offsetting amounts relating to losses on disposal of certain equipment.

#### Q4 2024 compared to Q4 2023

Three months ended	December 31, 2024	December 31, 2023	Increase (decrease)
	\$	\$	\$
<b>Expenses</b>			
Amortization	1,130	894	236
Business development and investor relations	135,369	150,130	(14,761)
Depreciation	55,118	77,365	(22,247)
Finance costs	42,176	52,465	(10,289)
General and administrative expenses	623,991	708,883	(84,892)
Professional and consulting, net	710,773	806,152	(95,379)
Research and operational expenses, net	1,174,407	2,414,333	(1,239,926)
Share-based payments	730,059	674,211	55,848
Wages, benefits and fees, net	2,900,212	4,129,147	(1,228,935)
<b>Loss from operating expenses</b>	<b>(6,373,235)</b>	<b>(9,013,580)</b>	<b>(2,640,345)</b>
Interest income	85,247	512,812	(427,565)
Gain (loss) on disposal of property, plant and equipment	(18,259)	(247,624)	229,365
Other income	92,533	-	92,533
<b>Loss and comprehensive loss</b>	<b>(6,213,714)</b>	<b>(8,748,392)</b>	<b>(2,746,012)</b>

- General and administrative expenses decreased relative to the comparative period which is correlated with cost reduction efforts which was a trend that began in Q4 2023. Despite an increase in insurance costs due to fluctuating market premiums and expanded coverage, and an expansion in IT products and services, travel and meals were greatly reduced as travel between sites was intentionally limited which was a driver of the net decrease.
- Professional and consulting decreased relative to the comparative period on a net basis due to reduced corporate advisory engagements and services, and a reduction in the reliance of external third-party IT contractor services as the Company moved a greater portion of IT activity in-house during 2024 with the growth of the IT department internally. Additionally, patent filing fees decreased as the Company reduced its patent activity and leveraged newly issued patents announced in December 2024. Partially offsetting decreases in these areas were increases in legal fees relating to 2024 business milestones such as the Worley agreement and sale of land transaction, as well as the entering into government funding contacts at a greater rate than the comparative period. The Company also incurred fees in exploring various strategic and business development opportunities. Lastly, payments of financing fees in relation to the IQ loan announced in December 2024 were a new occurrence relative to the comparative period which partially offset the net decrease.
- A reduction in the activity levels at the Company's innovation hub in Burnaby has contributed to a decrease in research and operational expenses as engineering and related studies and engagements were reduced to focus on LFP. An outlier for Q1 and Q2 2024 was increased engineering and related studies including the FEL3 feasibility study on the 25,000 tpa Development Project at the Candiac Facility.
- Wages, benefits and fees decreased as the headcount during Q4 2024 was less than Q4 2023 given the restructuring that occurred during Q3 2024. The Q4 2023 figure is also inflated by short-term incentive bonus accruals historically being accrued once annually in Q4, compared to the 2024 and go-forward process of recognizing such accruals quarterly.
- The gain on disposal of property, plant and equipment was driven by the disposal of land in Candiac, Québec as discussed above.

### Year ended 2024 compared to 2023

Year ended	December 31, 2024 \$	December 31, 2023 \$	Increase (decrease) \$
<b>Expenses</b>			
Amortization	3,983	3,007	976
Business development and investor relations	556,367	661,807	(105,440)
Depreciation	258,352	254,052	4,300
Finance costs	185,447	160,332	25,115
General and administrative expenses	2,608,191	2,509,027	99,164
Professional and consulting, net	2,308,114	2,719,748	(411,634)
Research and operational expenses, net	7,908,652	8,369,064	(460,412)
Share-based payments	3,161,999	1,745,926	1,416,073
Wages, benefits and fees, net	16,709,841	16,745,071	(35,230)
<b>Loss from operating expenses</b>	<b>(33,700,946)</b>	<b>(33,168,034)</b>	<b>532,912</b>
Interest income	756,461	1,654,412	(897,951)
Gain (loss) on disposal of property, plant and equipment	3,537,531	(301,261)	(3,838,792)
Other income	186,932	-	186,932
<b>Loss and comprehensive loss</b>	<b>(29,220,022)</b>	<b>(31,814,883)</b>	<b>(2,594,861)</b>

The direction of the variances for the years ended 2024 and 2023, relative to the quarter to date period Q4 2024 compared to Q4 2023 are largely aligned which is due to the same key business drivers contributing to fluctuations in the results of operations for the year as those that impacted variances for the three month (quarter to date) periods.

- Business development and investor relations decreased primarily due to a reduction of costs relating to marketing communications, and the amortization of certain prepaid subscriptions and services during 2023 which were not renewed at comparable levels during 2024. Moreover, the Company incurred higher branding and website development costs during 2023 relative to 2024.
- Despite cost reduction efforts in 2024 as discussed above, general and administrative expenses increased on a net basis driven increases in municipal taxes in Québec, insurance due to expanded coverage and general market fluctuations in premiums, and expansion of IT applications and software.
- Reductions in professional fees were driven largely by decreases in IT consulting, capital markets and advisory services, people and culture (HR) service arrangements, and patent filing legal fees. These decreases were partially offset by increased general corporate and legal fees and financing fee payments for the IQ loan. Further detail is discussed in the Q4 2024 compared to Q4 2023 discussion above.
- The decrease in research and operational expenses for 2024 compared to 2023 on a gross costs basis is greater than the approximately \$460,000 shown above due to the approximately \$900,000 in additional government funding and other cost recoveries recognized in 2023 compared to 2024. Overall, controlled spending and certain project deferrals was a focus for 2024. Accordingly, expenses relating to engineering, contactors, piloting, supplies, and other categories were significantly reduced year over year partially offset by increased depreciation expense recognized within this category.
- Share-based payments increased primarily due to the grant of stock options in Q1 2024 which vested immediately as this was a short-term incentive award in lieu of a cash-based award, whereas during the comparative period the stock options granted during Q1 2023 are vesting annually over three years. Further, a post-AGM grant of RSUs and DSUs to Company Directors occurred in August 2024 (Q3 2024), compared to a similar grant which occurred in October 2023 (Q4 2023). Lastly, DSUs and RSUs were granted to the new Chairman appointed on October 1, 2024, in addition to additional DSUs granted to directors in October 2024.

## REVIEW OF FINANCIAL CONDITION

### Summary Financial Position and Key Metrics

	December 31, 2024 \$	December 31, 2023 \$	December 31, 2022 \$	2024 to 2023 Change \$	2023 to 2022 Change \$
Cash and cash equivalents	7,160,529	31,868,882	39,445,395	(24,708,353)	(7,576,513)
Restricted cash	-	575,000	-	(575,000)	575,000
Current assets (all others)	1,692,612	1,835,321	3,182,564	(142,709)	(1,347,243)
Non-current assets	16,814,120	18,695,565	13,448,401	(1,881,445)	5,247,164
<b>Total assets</b>	<b>25,667,261</b>	<b>52,974,768</b>	<b>56,076,360</b>	<b>(27,307,507)</b>	<b>(3,101,592)</b>
Current liabilities	3,344,367	4,143,968	2,039,869	(799,601)	2,104,099
Non-current liabilities (lease liabilities)	894,261	1,344,144	587,122	(449,883)	757,022
<b>Total liabilities</b>	<b>4,238,628</b>	<b>5,488,112</b>	<b>2,626,991</b>	<b>(1,249,484)</b>	<b>2,861,121</b>
<b>Total shareholders' equity</b>	<b>21,428,633</b>	<b>47,486,656</b>	<b>53,449,369</b>	<b>(26,058,023)</b>	<b>(5,962,713)</b>
<b>Key Financial Metrics:</b>					
<b>Working capital<sup>1</sup></b>	<b>5,508,774</b>	<b>30,135,235</b>	<b>40,588,090</b>	<b>(24,626,461)</b>	<b>(10,452,855)</b>
<b>Liquid working capital<sup>2</sup></b>	<b>4,218,656</b>	<b>28,691,624</b>	<b>38,891,919</b>	<b>(24,472,968)</b>	<b>(10,200,295)</b>

<sup>1</sup> Represents current assets (including cash and cash equivalents and restricted cash) minus current liabilities.

<sup>2</sup> Represents working capital minus prepaid expenses and inventory.

For all periods presented, total assets are substantially comprised of cash and cash equivalents, and property, plant and equipment. Property, plant and equipment had decreased in 2024 compared to 2023 due to the disposal of land and other items of equipment, coupled with depreciation which exceeded capital expenditure additions in 2024.

During 2024, the reduction of all components of current assets in addition to the net reduction in the carrying value of property, plant and equipment were drivers of the decrease in total assets. Cash and cash equivalents were used in operating activities including technology innovation and advancements, inventory levels were reduced as raw materials were consumed in production trials and not replenished to the same previous extent. There were also write-downs to the cost of certain raw materials to market prices. Offsetting these variances was an increase in prepaid expenses due to increases in insurance premiums which policies were renewed in Q4 2024. Sales tax recoverable decreased slightly in correlation with reduced operating activity levels and normal course timing variances, and purchases and inventory levels of spare parts (non-current) related to production machinery increased.

During 2023 compared to 2022, the decrease in total assets was attributable to decreases in cash and cash equivalents, and receivables and prepayments exceeding the increases in property, plant and equipment and inventory. Receivables and prepayments for 2022 comprised approximately \$800,000 in trade receivables that were acquired in the November 2022 acquisition of Johnson Matthey Battery Materials Ltd. and collected during 2023.

Total liabilities decreased in 2024 from 2023 as payables were lower due to reduced operating levels and cost containment efforts in 2024.

Total liabilities increased in 2023 compared to 2022, as additional office and research facilities were leased commencing in Q1 2023, and other facility leases were renewed during 2023. Additionally, payables increased in the normal course of business as the level of operating and investing expenditures increased in alignment with operational growth during those periods.

## Review of Cash Inflows

(Amounts are rounded)	Three months ended	Three months ended	Year ended	Year ended
	December 31, 2024	September 30, 2024	December 31, 2024	December 31, 2023
	\$	\$	\$	\$
<b>Sources of cash and cash equivalents:</b>				
Government programs (operating and investing activities)	-	339,000	426,000	4,294,000
Interest income and standby letter of credit (investing activities)	85,000	686,000	1,331,000	1,654,000
Cost recoveries from strategic partners (operating activities)	-	-	-	162,000
Private placement, net (financing activities)	-	-	-	16,843,000
Disposal of land (investing activities)	-	4,835,000	4,835,000	-
Exercises of stock options and warrants (financing activities)	-	-	-	7,263,000
	<b>85,000</b>	<b>5,860,000</b>	<b>6,592,000</b>	<b>30,216,000</b>

For both the three month and year end comparisons above, interest income has reduced as a result of decreasing market rates of interest for deposit accounts as well as lower average cash and cash equivalent balances on which interest is earned.

### Q4 2024 compared to Q3 2024

**Government programs:** No proceeds were received in Q4 2024. The Q3 2024 amount was driven by the receipt of proceeds from SR&ED (approximately \$311,000), and NGen (approximately \$13,000). Amounts relating to wage reimbursements for internships and other qualified employment positions from NRC-IRAP or other programs were consistently received throughout 2024.

### Year ended 2024 compared to 2023

**Government programs:** In 2023, the SDTC Milestone 1 grant (approximately \$3,300,000) was received during Q1 2023, and approximately \$800,000 was received in Q3 2023 for the SDTC holdback amount on the previously completed program. Amounts for 2024 relate to SR&ED, NRC-IRAP, NGen, and other non-repayable grants relating to employment and wage reimbursements. NRC-IRAP amounts were lower in 2024 as there were fewer internships subject to the program.

**Exercises of stock options and warrants:** During Q1 2023, warrants were exercised generating proceeds of approximately \$3,651,000, and stock options were exercised on various dates throughout 2023 generating proceeds of approximately \$3,612,000.

## Summary of Cash Flows

### Q4 2024 compared to Q3 2024

	December 31, 2024	September 30, 2024	Increase (decrease)
Three months ended	\$	\$	\$
<b>Operating activities</b>			
Loss for the period	(6,213,714)	(4,610,538)	1,603,176
Adjustments for non-cash items	1,253,663	(2,172,403)	3,426,066
Interest income (reclassified to investing activities below)	(85,247)	(111,466)	(26,219)
Net change in non-cash working capital items	(857,868)	65,774	(923,642)
	<b>(5,903,166)</b>	<b>(6,828,633)</b>	<b>(925,467)</b>
<b>Investing activities</b>			
Interest income	85,247	111,466	(26,219)
Disposal of land, net	-	4,834,550	(4,834,550)
Capital expenditures <sup>1</sup>	(338,653)	(219,974)	118,679
Standby letter of credit (restricted cash)	-	575,000	(575,000)
	<b>(253,406)</b>	<b>5,301,042</b>	<b>(5,317,090)</b>
<b>Financing activities</b>			
Payments for facility leases	(149,910)	(148,241)	1,669
	<b>(149,910)</b>	<b>(148,241)</b>	<b>1,669</b>
<b>Change in cash and cash equivalents</b>	<b>(6,306,482)</b>	<b>(1,675,832)</b>	
<b>Cash and cash equivalents, beginning</b>	<b>13,467,011</b>	<b>15,142,843</b>	
<b>Cash and cash equivalents, ending</b>	<b>7,160,529</b>	<b>13,467,011</b>	<b>(6,306,482)</b>

<sup>1</sup> Capital expenditures includes purchases of equipment, payments on deposits and other assets, and payments for intangible assets.

<b>Allocation of cash inflows from government assistance and cost recoveries</b>	<b>December 31,</b>	September 30,
<b>Three months ended</b>	<b>2024</b>	2024
<b>Operating activities</b>	<b>\$</b>	<b>\$</b>
	-	338,903

The \$925,000 decrease in cash used in operating activities was driven by a general reduction in quarter over quarter operating expenses, despite the unfavourable net change in non-cash working capital items. Q4 2024 saw a continued trend of reducing payables on a net basis, similar to Q3 2024.

The disposal of land in Candiac, Québec as well as the redemption of a standby letter of credit were one-time drivers of the net cash inflows during the previous quarter for Q3 2024, whereas Q4 2024 was normalized with capital expenditures being the primary investing activity with no new significant projects or engineering engagements commencing in Q4 2024 and the theme being continued progress on the Candiac Facility capacity expansion to over 1,000 tpa.

*Year ended 2024 compared to 2023*

<b>Year ended</b>	<b>December 31,</b>	December 31,	Change
<b>Operating activities</b>	<b>2024</b>	2023	<b>\$</b>
<b>Investing activities</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Loss for the period	(29,220,022)	(31,814,883)	(2,594,861)
Adjustments for non-cash items	1,621,950	3,713,919	(2,091,969)
Interest income (to investing activities)	(756,461)	(1,654,412)	(897,951)
Net change in non-cash working capital items	30,626	2,696,323	(2,665,697)
	<b>(28,323,907)</b>	<b>(27,059,053)</b>	<b>1,264,854</b>
Interest income	756,461	1,654,412	(897,951)
Capital expenditures <sup>1</sup>	(1,990,770)	(5,246,115)	(3,255,345)
Disposal of land, net	4,834,550	-	(4,834,550)
Standby letter of credit (restricted cash)	575,000	(575,000)	1,150,000
	<b>4,175,241</b>	<b>(4,166,703)</b>	<b>(8,341,944)</b>
Issuance of common shares for cash, net	-	24,106,244	(24,106,244)
Payments for facility leases	(559,687)	(457,001)	(102,686)
	<b>(559,687)</b>	<b>23,649,243</b>	<b>(24,208,930)</b>
<b>Change in cash and cash equivalents</b>	<b>(24,708,353)</b>	<b>(7,576,513)</b>	
<b>Cash and cash equivalents, beginning</b>	<b>31,868,882</b>	<b>39,445,395</b>	
<b>Cash and cash equivalents, ending</b>	<b>7,160,529</b>	<b>31,868,882</b>	<b>(24,708,353)</b>

<sup>1</sup> Capital expenditures includes purchases equipment, payments on deposits and other assets, and payments for intangible assets. Engineering costs and FEL2 and FEL3 studies are included within operating activities.

<b>Allocation of cash inflows from government assistance and cost recoveries</b>	<b>December 31,</b>	December 31,
<b>Year ended</b>	<b>2024</b>	2023
<b>Operating activities</b>	<b>\$</b>	<b>\$</b>
	425,654	2,229,613
Investing activities	-	2,217,832
	<b>425,654</b>	<b>4,447,445</b>

The favourable fluctuation in working capital items for the comparative 2023 period is due to the favourable fluctuation combined between receivables and prepayments (collection of approximately \$800,000 in receivables acquired in the November 2022 acquisition of Johnson Matthey Battery Materials Ltd.), and accounts payable and accrued liabilities.

After adjusting for the impact of government funding allocations that reduced operating expenses by a significantly greater extent in 2023, the burn rate for 2024 (operating activities) is approximately \$2,800,000 lower than the 2023 comparative which is initially reflective of the restructuring in August 2024 which reduced the workforce by approximately 20%.

The reduction in capital expenditures reflects the conclusion of the initial 200 tpa pilot line expansion project which carried significant investment during the 2023 comparative period. Capital expenditures for 2024 are reflective of the gradual progress in the Candiac Facility capacity expansion to over 1,000 tpa.

The disposal of land and the redemption of the standby letter of credit are discussed in the quarterly comparison above. Financing activities are discussed above under “Review of Cash Flows”.

### **Capital management**

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 its commercialization objectives, as well as generating returns on excess funds while maintaining liquidity/accessibility to such funds. To facilitate the management of its capital requirements, the Company prepares annual operating and capital expenditure budgets that are monitored for variances and updated regularly depending on various factors, including but not limited to: business development and commercial arrangements, capital deployment, personnel planning, service contracts with vendors, access to financing, government program applications, 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 towards production and licensing. 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 year ended December 31, 2024.

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 liquid and redeemable on demand (cash equivalents) and have original terms not exceeding 12 months.

### **Capital Sources**

Nano One is in active dialogue with government agencies in Canada and Québec who are aligned with growing a domestic, environmentally focused, and economically viable battery ecosystem, and with project finance lenders and strategic partners to secure funding for growth activities, the Development Project (see “Commercialization Updates” above), and ongoing innovations. The Company is evaluating various non-dilutive funding programs, structures and government incentives to bolster and complement its treasury and continue advancing the commercialization of its LFP One-Pot process and CAM product.

**Sale and lease back:** On closing of a sale and lease back transaction involving the Company’s Candiac Facility after the reporting period, on February 28, 2025, the Company received net proceeds of \$13,716,817 (plus a \$2,000,000 deferred payment in the form of a vendor loan). The carrying value of the land, building, and assets subject to the sale and lease back was approximately \$6,500,000 as at December 31, 2024, resulting in a Q1 2025 gain of approximately \$7,200,000.

This transaction bolsters the Company’s financial position and helps leverage confirmed government funding and reimbursements programs recently announced. It also accelerates the commercialization and capacity expansion of the Candiac Facility to at least 1,000 tpa of LFP cathode production.

**Sale of land:** The Company also sold land in Q3 2024 generating net proceeds of approximately \$4,800,000

**Government funding:** In addition to receiving over \$300,000 from SR&ED during Q3 2024, the Company in 2024 announced milestone funding arrangements with Next Generation Manufacturing Canada (NGen) (\$2,072,000 awarded to the Company), the Department of Defense (DoD) of the United States of America (US\$12,900,000), and the Government of Québec (Investissement Québec and Technoclimat) (\$18,000,000), which are set to provide funding over several years.

Subsequent to December 31, 2024, and through to the MD&A Date, the Company received funding from certain government grant and loan programs totalling \$12,758,577 as follows:

- \$1,453,891 from NRC (formerly SDTC);
- \$1,223,281 (US\$849,501) from the DoD;
- \$2,200,000 from Technoclimat;
- \$7,503,313 from Investissement Quebec; and
- \$378,092 (\$59,805 accrued as at December 31, 2024) from NGen.

In April 2024, Nano One filed a short form base shelf prospectus (“Shelf Prospectus”) which permits it to make offerings of various financial securities, up to an aggregate total of \$175,000,000 at its discretion, at any time during the 25-month period (to May 2026 (Q2 2026)) that the Shelf Prospectus remains valid. During the 25-month period that the Shelf Prospectus remains valid, the nature, size and timing of any financings would be dependent on Nano One’s assessment of requirements for funding and general market conditions. At the time any securities covered by the Shelf Prospectus are offered for sale, a prospectus supplement containing specific information regarding the terms of the securities being offered would be provided. As described in the Commercialization Updates above, the Development Project in support of the



Company's licensing and joint venture strategy will require significantly less capital than previously anticipated when Nano One was planning to fund the development and construction of the 25,000 tpa LFP plant as the sole shareholder. Accordingly, the capital requirements of Nano One are significantly less than those permitted under the Shelf Prospectus.

### Shareholders' Equity

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, and RSUs/DSUs outstanding are each convertible into one common share of the Company. As at the MD&A Date, the Company's capital structure was as follows:

As at the MD&A Date		
	#	Weighted average exercise price \$
Common shares issued and outstanding	111,443,526	n/a
Stock options outstanding	4,084,105	1.79
RSUs/DSUs/PSUs outstanding	4,873,940	n/a
Warrants outstanding	-	n/a
<b>Fully diluted</b>	<b>120,401,571</b>	

### Equity Awards:

In January 2024, the Company granted 1,566,686 stock options and RSUs in aggregate to officers, employees, and consultants as follows:

- 200,000 stock options to an officer of the Company exercisable at \$1.94 each for a period five years until January 19, 2029, which vest one-third annually to January 19, 2027;
- 743,948 stock options to officers of the Company exercisable at \$1.91 each for a period seven years until January 23, 2031, of which 500,000 vested immediately and the remainder vest one-third annually to January 23, 2027; and
- 622,738 RSUs to officers, employees, and consultants of the Company which vest one-third annually to January 23, 2027.

On August 1, 2024, the Company granted 369,564 RSUs and DSUs in aggregate to Directors of the Company following the results of the Annual General and Special Meeting held on August 1, 2024. The 326,086 DSUs vested immediately on grant, and the 43,478 RSUs vest in three annual instalments (one-third (14,493) on August 1, 2025; one-third (14,493) on August 1, 2026; and the final one-third (14,492) on August 1, 2027). This award represents the annual non-cash equity compensation to the Board of Directors.

On October 1, 2024, the Company granted 300,000 RSUs, and 108,696 DSUs upon appointing a new Chairman. The 108,696 DSUs vested immediately on grant, and the 300,000 RSUs vest as follows: one-third (100,000) immediately on grant; one-third (100,000) on October 1, 2025; and the final one-third (100,000) on October 1, 2026.

On October 23, 2024, 5,822 RSUs and 31,850 DSUs in aggregate to Directors of the Company. The 31,850 DSUs vested immediately on grant, and the 5,822 RSUs vest as follows: one-third (1,941) immediately on grant; one-third (1,941) on October 23, 2025; and the final one-third (1,940) on October 23, 2026.

In January 2025, the Company granted an aggregate of 5,211,233 equity incentives as follows:

- 2,193,225 stock options to executive officers exercisable at \$0.79 each for a period of seven years until January 23, 2032, with certain stock options vesting immediately and others vesting one-third annually to January 23, 2028.
- 1,733,255 PSUs to officers of the Company which vest upon certain performance goals being achieved within a three year period from the date of grant (by January 23, 2028).
- 1,284,753 RSUs to officers, employees, and consultants of the Company which vest one-third annually to January 23, 2028.

### Issuance of common shares:

Throughout 2024, a total of 144,245 common shares were issued for \$nil proceeds on the exercise of RSUs.

In February and March 2025, a total of 32,504 common shares were issued for \$nil proceeds on the exercise of RSUs.

## CONTRACTUAL OBLIGATIONS

As at December 31, 2024	Carrying amount \$	Contractual cash flows \$	Under 1 year \$	1-5 years \$	More than 5 years \$
Accounts payable and accrued liabilities	2,894,482	2,894,482	2,894,482	-	-
Lease liabilities	1,344,146	1,641,368	588,279	1,053,089	-
<b>Total</b>	<b>4,238,628</b>	<b>4,535,850</b>	<b>3,482,761</b>	<b>1,053,089</b>	<b>-</b>

## 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 functional currency of Nano One and its subsidiaries:

	2024				2023			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue	-	-	-	-	-	-	-	-
Operating expenses	<b>(6,373,235)</b>	(8,320,807)	(8,617,897)	(10,389,007)	(9,013,580)	(7,581,520)	(8,088,571)	(8,484,363)
Adjusted operating expenses <sup>1</sup>	<b>(5,586,928)</b>	(7,487,367)	(8,145,986)	(9,056,331)	(8,261,110)	(7,119,319)	(7,580,527)	(8,204,093)
Cash used in operating activities	<b>(5,903,166)</b>	(6,828,633)	(7,038,387)	(8,553,721)	(9,036,487)	(6,921,232)	(8,303,093)	(2,798,241)
Cash provided by (used in) investing activities	<b>(253,406)</b>	5,301,042	(781,142)	(91,253)	(1,919,234)	(1,720,180)	(193,687)	(333,592)
Cash (used in) provided by financing activities	<b>(149,910)</b>	(148,241)	(130,961)	(130,575)	16,822,700	240,178	2,829,193	3,757,172
Change in cash and cash equivalents	<b>(6,306,482)</b>	(1,675,832)	(7,950,490)	(8,775,549)	5,866,979	(8,401,234)	(5,667,587)	625,339
Cash from government grants <sup>2</sup>	-	338,903	38,125	48,626	13,666	884,300	29,448	3,366,331
Cash from disposal of land	-	4,834,550	-	-	-	-	-	-
Cash and cash equivalents	<b>7,160,529</b>	13,467,011	15,142,843	23,093,333	31,868,882	26,001,903	34,403,137	40,070,734
Working capital	<b>5,508,774</b>	10,857,360	13,229,972	21,218,588	30,135,235	22,067,827	30,049,580	35,726,607

<sup>1</sup> Operating expenses less amortization, depreciation, and share-based payments expense is adjusted operating expenses.

<sup>2</sup> Cash from government grants is allocated between operating and investing activities within the financial statements.

There are no significant seasonal variations in quarterly results as Nano One is not subject to significant seasonality in its operations. Historically, its cash and working capital positions have been supported by private placements, equity exercises, and government grants particularly during the 2023 and 2022 fiscal years. Specific drivers for the variances presented above and discussed below are detailed within the "Review of Financial Results" section above.

Proceeds from government funding are a contributing factor to quarter over quarter fluctuations in operating expenses as a portion of the proceeds are recognized as a credit towards certain expenses. Variances in capital expenditures (investing activities) are also subject to fluctuations for government proceeds for the same reason. Fluctuations are expected to continue for future fiscal quarters into 2025 and through 2027 due to recent awards from NGen, The USA Department of Defense (DoD), Government of Québec, and NRC (formerly SDTC).

### Operating expenses:

Operating expenses decreased quarter over quarter for both Q4 2024 from Q3 2024 and from Q2 2024, as business development, professional and consulting, and research and operational expenses decreased, which were partially offset by an increase in personnel costs during Q3 2024 and Q2 2024. Conversely, the reduction in operating expenses from Q4 2024 is reflective of reduced personnel costs going forward demonstrating the effect of the organizational restructuring from August 2024 (mid-Q3 2024).

Operating expenses decreased in Q2 2024 compared to Q1 2024 as share-based payments expense in Q1 2024 included a one-time \$678,000 amount relating to stock options granted that had immediately vested. Despite increases in business development and investor relations, and professional and consulting, these were more than offset by the decreases in share-based payments expense, research and operational expenses, and personnel costs.

Increased operating expenses in Q1 2024 compared to Q4 2023 are attributable to the normal course increasing overheads as well as the commencement of the FEL3 study during Q1 2024 which costs are captured as operating expenses. Notably, a grant of stock options in Q1 2024 which vested immediately increased share-based payments expense and consequently operating expenses but from a non-cash perspective.

### Cash used in operating and investing activities:

Variations occur in operating cash flows due to the timing and amounts received from government grants that are recognized through operating (burn rate) and/or investing activities. A burn rate which trended lower in each fiscal quarter for 2024 (from nearly \$9,000,000 down to less than \$6,000,000) is reflective of cost containment efforts during 2024. Management expects further reductions in the burn rate in 2025 due to expenditure reimbursements from the aforementioned government programs.

Q4 2023 and Q3 2023 were particularly characterized by completing the conversion and commissioning of Nano One's 200 tpa LFP pilot line within investing activities.

The most notable cash flow during Q3 2024 was the proceeds received on the disposal of land (approximately \$4,800,000, net within investing activities). Otherwise investing activities are presented as capital expenditures on the Candiac Facility conversion and expansion, the purchase of equipment, machinery, leasehold improvements, informational technology, and patent issuance costs (intangible assets), partially offset by interest income. Notably, engineering costs and studies including FEL2 and FEL3 costs are presented as a component of operating cash flows as amounts are expensed through research and operational expenses. Capital expenditures have fluctuated during 2024 totalling between approximately \$300,000 and \$200,000 for Q4 2024 and Q3 2024, respectively, \$1,000,000 for Q2 2024, and \$400,000 for Q1 2024. Payments of amounts payable as at December 31, 2023 largely account for relatively higher spend particularly in Q2 2024. Capital expenditures are normally subject to fluctuation based on various timing and planning factors.

Cash provided by financing activities:

Amounts include proceeds received from the Q4 2023 private placement with Sumitomo Metal Mining (SMM), warrant exercises in Q4 2022 and Q1 2023, and stock option exercises throughout 2023. No proceeds have been received in 2024 from the issuance or exercise of equity securities. Financing activities are partially offset by monthly payments for leased facilities which have increased as additional facilities were added in 2023 along with certain lease renewals in 2023 that carry higher monthly payments going forward.

The SMM equity financing in Q4 2023 largely accounts for the variance in the change in cash and cash equivalents between Q1 2024 and Q4 2023 given the proceeds from the SMM financing of approximately \$17,000,000. When removing the SMM proceeds the change in cash and cash equivalents for Q4 2023 would have been approximately \$11,000,000 in cash used, which for Q1 2024 is a net reduction in cash used compared to Q4 2023.

**TRANSACTIONS AND BALANCES BETWEEN RELATED PARTIES**

The following transactions involved key management (gross amounts):

	Transactions year ended December 31, 2024 \$	Transactions year ended December 31, 2023 \$	Balances outstanding December 31, 2024 \$	Balances outstanding December 31, 2023 \$
Bedrock Capital	112,500	150,000	-	-
DBMCPA	7,500	220,000	-	11,550
Directors' fees	327,500	320,259	-	-
Management and directors' fees (within wages, benefits and fees)	447,500	690,259	-	11,550
Expense reimbursements (officer)	-	-	428	-
Wages, benefits and fees (officers) <sup>(1)</sup>	2,280,342	2,424,678	359,350	-
Share-based payments (directors and officers)	2,380,744	1,163,140	-	-
PFS (professional and consulting; and intangible assets)	266,065	451,166	11,528	34,911
	<b>5,374,651</b>	<b>4,729,243</b>	<b>371,306</b>	<b>46,461</b>

<sup>(1)</sup> As at December 31, 2024, \$359,350 was accrued as short-term incentive compensation to key management relating to 2024 performance (December 31, 2023 - \$nil relating to 2023 performance) which is based on performance targets. Short-term incentive compensation is payable in cash or equity annually during the first quarter of the fiscal year.

During the year ended December 31, 2024, there were no short-term incentive amounts paid to key management in relation to the year ended December 31, 2023. During the year ended December 31, 2023, wages benefits, and fees included \$599,758 in amounts paid for short-term incentive compensation in relation to 2022.

Refer to the financial statements for specifics on transactions with related parties. The Company transacted with the following individuals or entities considered to be related parties to the Company at any point during 2024:

- Dan Blondal, CEO;
- Stephen Campbell, CTO;
- Alex Holmes, COO;
- Carlo Valente, CFO (from January 15, 2024);
- Denis Geoffroy, Chief Commercialization Officer (CCO);
- Adam Johnson, Senior Vice-President of External Affairs;

- Kelli Forster, Senior Vice-President of People & Culture;
- Leanne Swanson, Corporate Secretary (from January 15, 2024);
- Pamela Kinsman, former Corporate Secretary (until January 15, 2024);
- Paul Matysek, former Executive Chairman and a Director of the Company (controls Bedrock Capital Corp.) until Mr. Matysek's resignation effective October 1, 2024;
- Dan Martino, former CFO (until January 15, 2024) (has significant influence over Donaldson Brohman Martin, CPA Inc.)
- Patent Filing Specialists Inc. ("PFS"), controlled by Company Director, Joseph Guy;
- Non-executive directors: Anthony Tse, Carla Matheson, Gord Kukec, Joseph Guy, Lisa Skakun, and Lyle Brown,

Refer to "Shareholders' Equity" above for grants of stock options, RSUs, and DSUs, certain of which involving related parties of the Company.

## **ACCOUNTING ESTIMATES, JUDGMENTS AND STANDARDS**

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. Nano One's material accounting policy information is detailed in Note 2 to the financial statements for the year ended December 31, 2024.

### **Key Estimates and Judgments**

*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/or appraisal reports, and industry practices for similar items of property, plant and equipment to assist in its determination of useful life.

During the year ended December 31, 2024, the Company changed certain estimates over the depreciation of property, plant and equipment on a prospective basis. Effective January 1, 2024, certain of the Company's production and equipment fixtures are being depreciated on a straight-line basis between five (5) and ten (10) years (formerly 20% declining balance basis); and certain information technology equipment are being depreciated on a straight-line basis over three (3) years (formerly 30% declining balance basis).

*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 plant in the condition and location necessary to commence commercial production, or until such time that it has jointly developed with Worley Chemetics, and licensed a process engineering design package for the production of CAM materials, that it will remain in a pre-commercial phase and accordingly expenditures will be expensed within the Company's results of operations.

The Company has determined that its pre-commercial and development activities do not meet the criteria within IAS 38 *Intangible Assets* as development phase costs which would otherwise require capitalization of certain costs to the statements of financial position. Accordingly, the Company recognizes and presents such costs as research and operational expenses on the statements of loss and comprehensive loss.

## **New accounting policies**

Certain pronouncements have been issued by the IASB that are effective for the Company's accounting period beginning on January 1, 2024. The Company has reviewed all other updates and determined that many of these updates are not applicable or consequential to the Company.

### **Standards issued but not yet effective**

In June 2023, the International Sustainability Standards Board ("ISSB") issued the following IFRS Sustainability Disclosure Standards: *General Requirements for Disclosure of Sustainability-related Information* (IFRS S1); and *Climate-related Disclosure* (IFRS S2), which are effective for accounting periods beginning on or after January 1, 2024 but are not currently mandated in Canada.

IFRS S1 sets out general reporting requirements for disclosing sustainability-related financial information. IFRS S2 requires an entity to disclose information about climate-related risks and opportunities and the impact on an entity's financial position, performance, cash flows, strategy, and business model.

The Canadian Sustainability Standards Board ("CSSB") was established to set and maintain sustainability disclosure standards for Canadian entities. The CSSB has developed the Exposure Drafts, "Proposed Canadian Sustainability Disclosure Standard (CSDS) 1, *General Requirements for Disclosure of Sustainability-related Financial Information*." And "Proposed Canadian Sustainability Disclosure Standard (CSDS) 2, *Climate-related Disclosures*."

CSDS 1 and CSDS 2 are proposed to be effective for annual periods beginning on or after January 1, 2025.

The Company will monitor the continued development of mandating these standards and the requisite disclosure requirements. The CSSB's standards are expected to be finalized and issued in December 2024. Upon release, the CSDSs will be voluntary initially as the CSSB continues its dialogue with governments and regulatory bodies on mandating the CSSB's standards in Canada.

IFRS 18, *Presentation and Disclosure in Financial Statements* ("IFRS 18"), which will replace IAS 1, *Presentation of Financial Statements* aims to improve how companies communicate in their financial statements, with a focus on information about financial performance in the statement of profit or loss, in particular additional defined subtotals, disclosures about management-defined performance measures and new principles for aggregation and disaggregation of information. IFRS 18 is accompanied by limited amendments to the requirements in IAS 7 *Statement of Cash Flows*. IFRS 18 is effective from January 1, 2027. Companies are permitted to apply IFRS 18 before that date.

The Company has not yet determined the impact of these amendments on its consolidated financial statements.

### **CHANGE IN EXECUTIVE OFFICERS AND DIRECTORS**

Effective January 15, 2024, the Company announced the appointment of Carlo Valente as the Company's CFO, replacing Dan Martino who remains with the Company as Vice President of Finance providing financial reporting and other services through DBM CPA. Additionally, Leanne Likness Swanson became the Company's Corporate Secretary effective January 15, 2024, replacing Pamela Kinsman who remains with the Company as Director of Sustainability.

Effective October 1, 2024, the Company announced the resignation of Paul Matysek as Executive Chairman from the Board of Directors, and the appointment of Anthony Tse as the successor Chairman and Board member.

## **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 in connection with the Company's AIF for the fiscal year ended December 31, 2024, for a more comprehensive list of risk factors. Additional risks and uncertainties, including those unknown by Nano One at this time, or are currently considered immaterial, may exist, and other risks may apply.

### *Funding and Global Economy Risk*

The volatility of global capital markets has generally made the raising of capital by equity or debt financing more difficult. While the Company is successfully accessing strategic pools of capital with government programs and industrial interests, it may also become dependent upon capital markets to raise additional financing in the future. As such, the Company is subject to liquidity risks in meeting its operating expenditure requirements and future development cost requirements in instances where adequate cash positions are unable to be maintained or appropriate financing is unavailable. The Company seeks to manage its liquidity risk through a rigorous planning, budgeting and forecasting process to help determine the funding requirements to support its current operations, development and expansion plans. However, the factors described above may impact the ability to raise equity or obtain loans and other credit facilities in the future and on terms favourable to the Company and its management. If these levels of volatility persist or if there is a further economic slowdown, the Company's operations, the Company's ability to raise capital and the trading price of the Company's securities could be adversely impacted. As the Company's operations expand and reliance on global supply chains increases, the impact of tariffs and other trade barriers, pandemics (such as COVID-19), significant geopolitical risk and conflict globally may have a sizeable and unpredictable impact on the Company's business, financial condition and operations. The United States recently introduced broad tariffs against Canada, Mexico and China and has threatened to do so against other countries, resulting in retaliatory tariffs or the threat of retaliatory tariffs. Further, support for protectionism and rising anti-globalization sentiment in Canada, the United States and other countries may slow global growth. In particular, a protracted and wide-ranging trade conflict between the United States and various other countries, including Canada, Mexico and China, could adversely affect global economic growth. The COVID-19 pandemic and the ongoing conflicts between Russia and Ukraine and in the Middle East, including the global response to such conflicts as it relates to sanctions, trade embargos, export controls, military support and any restrictive actions in response thereto, have resulted in significant uncertainty as well as economic and supply chain disruptions, changes in commodity prices and implications in the financial markets. Should another significant variant of COVID-19 develop or the conflicts between Russia and Ukraine or in the Middle East go on for an extended period of time or expand territorially, or should other geopolitical disputes and conflicts emerge in other regions, this could result in material adverse effects to the Company.

### *Risk Management*

The ability to advance Nano One's strategic objectives depends on its ability to understand and appropriately respond to the uncertainties or business risks that may prevent it from achieving its objectives. To achieve this, the Company maintains a framework that permits it to manage risk effectively and integrate a process for managing risk into all of its important decision-making processes so that it can reduce the effect of uncertainty on achieving its objectives and maintain the oversight of relevant committees of the Board of Directors on the effectiveness of its risk management processes.

### *Climate Change Legislation*

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

## **DISCLOSURE CONTROLS AND PROCEDURES AND ICFR**

In accordance with National Instrument 52—109 of the Canadian Securities Administrators (CSA), the Company has filed certificates signed by the Chief Executive Officer (“CEO”) and the Chief Financial Officer (“CFO”) that report on the design and effectiveness of disclosure controls and procedures (“DC&P”) and the design and effectiveness of internal controls over financial reporting.

The Company’s DC&P are designed to provide reasonable assurance that material information relating to the Company is made known to the CEO and CFO, particularly during the period in which the interim filings are being prepared, and information required to be disclosed by the Company in its annual and interim filings under Canadian securities legislation is recorded, processed, summarized, and reported within the time periods specified in securities legislation.

Additionally, the Company has designed internal controls over financial reporting or caused it to be designed 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 years ended December 31, 2024 and December 31, 2023, 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.

## **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 determine 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.

Nano One does not utilize off-balance sheet arrangements. There are no proposed transactions as at the MD&A Date.