



**Nano One Materials Corp.**  
**Management's Discussion & Analysis**  
**For the six months ended**  
**June 30, 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 six months ended June 30, 2024, should be read in conjunction with its condensed interim consolidated financial statements for the six months ended June 30, 2024, and its audited annual financial statements for the year ended December 31, 2023, (collectively, 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"). All monetary amounts in this MD&A are expressed in Canadian dollars, unless otherwise indicated. The information contained herein is presented as at **August 13, 2024** (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>LFP</b>	Lithium Iron Phosphate
<b>ESS</b>	Energy Storage Solutions	<b>LNMO</b>	Lithium Nickel Manganese Oxide
<b>FEL</b>	Front-End Loading	<b>M</b>	Million or millions
<b>GHG</b>	Greenhouse Gas Emissions	<b>M2CAM</b>	Metal to Cathode Active Material
<b>ICFR</b>	Internal Controls over Financial Reporting	<b>NMC</b>	Lithium Nickel Manganese Cobalt
<b>IRA</b>	Inflation Reduction Act	<b>OEM</b>	Original Equipment Manufacturer
<b>JDA</b>	Joint Development Agreement	<b>pCAM</b>	Precursor Cathode Active Material
		<b>tpa</b>	Tonnes Per Annum

### 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", or "anticipate", "potential", "proposed", "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; the Company's ability to raise sufficient financing, if any when necessary, to continue its operations; estimated future working capital, funds available, uses of funds, and future capital expenditures and other expenses; the intention to grow the business, operations and potential activities of the Company; the anticipated demand of the industry and market acceptance of Nano One's products; the functions and intended benefits of the Company's technology and products; the commercial development of the Company's technology and products; the commencement of a commercialization phase and entering into a definitive agreement with a counterparty to plan, design, finance, construct and/or operate a cathode production facility; the Company's research and development programs; collaboration with material 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 licensing, supply chain, and potential royalty arrangements; the purpose for expanding the Company's facilities; and the anticipated future gross revenues 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 clean technology company with a patented, scalable, and low carbon intensity industrial process for the low-cost production of high-performance lithium-ion battery cathode materials. The Company has several strategic collaborations and partnerships, including automotive OEMs and strategic industry supply chain companies like Sumitomo Metal Mining, BASF, Umicore, 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 electric vehicle, energy storage, and consumer electronic applications, reducing costs and carbon intensity while improving environmental impact and security of critical mineral supply. The Company has a facility in Candiac, Québec 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 packages. Nano One aims to create shareholder value by diversifying its revenue streams to include licensing fees along with equipment procurement and sales from its plant in Candiac.

Nano One is piloting its technology at various scales ranging from 1 to 200 tpa and demonstrating its technology using full scale commercial equipment as modular production solutions for license, joint venture, and independent production opportunities, leveraging Canadian talent and critical minerals for emerging markets in North America, Europe, and the Indo-Pacific region.

The Q4 2022 acquisition and conversion of the Candiac facility in Québec to the One-Pot process has accelerated Nano One's path to commercialization. Production trials conducted in 2023 using the One-Pot process in our commercial scale reactors have successfully de-risked the production of LFP at full scale with performance results consistent to lab scale.

This advancement enabled commercial scale LFP samples to be sent to qualified customers in Q1 2024 for the purposes of evaluation, validation and entering into potential binding offtake agreements.

Nano One began operating a 200 tpa LFP pilot plant (“pilot plant”) in Candiac, Québec in Q4 2023 and is progressing a feasibility (FEL3) study announced on February 27, 2024, for a 25,000 tpa LFP commercial plant.

Nano One remains steadfast in its licensing strategy, together with its alliance partner Worley Chemetics, and a “Design One, Build Many” growth strategy that is cost competitive, capital light and globally significant. While there remains a modest effort still on NMC to support the Company’s OEM and strategic partners in developing cost effective and sustainable process technology solutions for the future, the technology focus has shifted mostly to LFP.

## **Technology and Intellectual Property**

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

Nano One’s patented One-Pot process is engineered to make cathode materials directly from non-sulfate forms of battery metals. This eliminates the need for intermediate metal sulfates, all sodium sulfate by-product, and all wastewater, which avoids permitting obstacles in jurisdictions with strict environmental regulations such as Canada, USA, and Europe. The waste streams avoided can amount to three times the product stream, and the One-Pot process simplifications also reduce operating costs, capital equipment costs and GHG emissions. Furthermore, the process uses lithium feedstock in the form of carbonate rather than hydroxide, which is costly, corrosive and harder to handle.

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

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

### *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 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. On February 21, 2024, the Company announced the expansion of its patent portfolio adding further intellectual property protection of the One-Pot process, single crystal coating process and M2CAM process technologies.

Patents, trade secret, 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 cathode production that is cleaner, more easily permitted and securely established in North America, Europe, and the Indo-Pacific region.

## Key Business Developments

While Nano One remains committed to its 2024 objectives and commercialization plans as described below, market and business conditions as mentioned herein have resulted in shifting timelines to better align with the evolving energy transition.

### *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.

Under the Strategic Alliance Agreement, Nano One and Worley will jointly develop 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. Worley 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 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 is available via a video link within the news release.

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

On August 13, 2024, Nano One and Worley Chemetics announced the award of approximately \$2,000,000 and \$800,000, respectively (\$2,800,000 in total) 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 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 signs Definitive Agreement to sell vacant land for gross proceeds of \$5,000,000*

On August 12, 2024, the Company reached a definitive agreement to sell the vacant lot on its land in Candiac, Québec for \$5,000,000 in gross proceeds ("Offer to Purchase"). This will add non-dilutive funds to the Company's 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 purchaser has provided a deposit of \$500,000 that is non-refundable except in the unlikely event that the Deed of Sale is not executed due to a fault or negligence of the Company. The parties will work in good faith to close the transaction by September 12, 2024. 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.

## PRODUCTION UPDATES

Timing, scope and spend on the below initiatives are discretionary and flexible, enabling Nano One to adjust and align them with the evolving battery market landscape and timelines. Given conditions in the capital markets, the Company is also evaluating options to conserve capital while it focuses on product evaluation, first sales, offtake from existing assets in Candiatic, licensing opportunities and government support. The goal is to launch LFP in North America, followed by Europe and the Indo-Pacific region.

### *Pilot Plant - 200 tpa capacity*

Nano One acquired the 10-year-old facility in Candiatic, Québec in Q4 2022 and repurposed it to demonstrate its One-Pot process at 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 facility is now being used to facilitate demonstration, sampling and evaluation while also informing FEL design studies and the LFP CAM package with Worley Chemetics. There are plans to further expand the capacity of the existing facility up to 2,000 tpa, as demand for LFP takes hold, leveraging existing full-scale equipment and the balance of plant with further automation (see discussion below).

Through to June 30, 2024, Nano One had cumulatively incurred on a cash-basis approximately \$8,500,000 in converting and commissioning the One-Pot 200 tpa LFP pilot plant. Of this amount, approximately \$750,000 was paid during the six months ended June 30, 2024. These costs were largely aligned with forecasts and budgets.

### *Expansion - 2,000 tpa capacity (up to)*

The existing facility in Candiatic, Québec remains the launch pad for Nano One's growth strategy and a clear path to first revenue and larger offtakes. The existing facilities are equipped with commercial scale equipment that have significantly de-risked the ability to scale, and there are confirmed orders for tonne-scale sample evaluations. These facilities could support small scale offtakes and production for first revenues, large scale offtakes for the 25,000 tpa Development Project (see below), and even larger scale offtakes for the technology licensing business in alliance with Worley Chemetics.

Through to June 30, 2024, Nano One has incurred approximately \$300,000, in engineering and planning costs related to this potential expansion effort to 2,000 tpa.

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

The Company's FEL2 pre-feasibility study, as reported on October 23, 2023, modelled a 25,000 tpa LFP plant on the unused portion of its Candiatic land, and later on February 27, 2024, an 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 is pleased to report that its FEL3 study is showing even lower capital costs and operating expenses than its earlier FEL2 study. This further enhances the One-Pot value proposition and supports the Worley Chemetics Strategic Alliance. Spending has been deferred on lower priority aspects of the FEL3 study and will be resumed as market conditions allow.

For the abovementioned FEL3 study, \$1,540,000 had been paid through to June 30, 2024 (all during 2024), in relation to the 25,000 tpa LFP commercial plant Development Project.

Nano One is approaching its 25,000 tpa LFP commercial plant as a development project opportunity (the "Development Project") that leverages its existing piloting and commercialization facility in Candiatic, together with target customer engagements and project finance initiatives. It will require product validation, customer offtake, feedstock supply agreements and the completion of an FEL3 feasibility study that is site specific. The objective is for the Development Project to be owned by a separate stand-alone operating company with its own capital structure, and Nano One as a joint venture or minority equity partner. Nano One is expecting to earn a license fee from the operating company for the use of its One-Pot technology in addition to a development fee for its efforts on the project which can be settled by 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.

With regards to site selection for the Development Project, Nano One is in active dialogue with governments, their agencies and third-party strategic interests with regards to incentive programs and the evolving market needs in North America. Key considerations include automotive OEM timing, government incentives in the form of grants and forgivable loans, municipal collaboration, low-cost land, access to sufficient utilities (power, water, natural gas), footprint for expansion to align with longer-term partner objectives and location preferences from collaborating stakeholders. With the active support of provincial and municipal governments and its strategic partners, Nano One has identified and narrowed down potential site

options in Québec and Ontario and is also exploring government incentive programs in North America and lower-cost jurisdictions where a focus also exists on attracting investment in the midstream.

Optimization and product validation work at the facilities in Candiac, Québec will continue into 2025 for the purposes of:

- a) Generating product sales and first revenues;
- b) Expanding capacity from 200 tpa up to 2,000 tpa, subject to sales commitments, customer technology validation, capital support from government, and financial returns;
- c) Securing larger volume customer offtakes in support of the Development Project;
- d) Informing the FEL3 design study and progression of the Development Project and to support the Worley Chemetics alliance; and
- e) Developing, marketing, licensing, and deploying of One-Pot enabled LFP CAM packages (engineering process design packages) in collaboration with Worley Chemetics (see “*License and Alliance Agreement with Worley Chemetics*” above)

## **Market Conditions and Business Environment**

Nano One continues to execute on its plans, with advancements in its product evaluations and the development of increasingly compelling business opportunities. The Company is also navigating an economic cycle with challenging capital market conditions, and a slower pace in the lithium-ion battery supply chain. Throughout the second half of 2023 through to mid-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 looming shift towards LFP. This has led to media coverage for Nano One and increased brand recognition.

Nano One believes that the LFP market will be catalyzed and enhanced by stationary storage needs in the coming years, to provide organic growth, and downside protection. Nano One continues to advance its business opportunities with automotive companies, while in parallel pursuing the industrial and stationary storage sectors that can start small, move quicker and grow large while enabling the security of supply that is ultimately needed by the automotive companies.

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

## REVIEW OF FINANCIAL RESULTS

In Q2 2024, Nano One began reporting results within its financial statements based on two operating segments. The CAM manufacturing business is organized into two segments being a research and innovation operation, and a piloting and pre-commercialization operation. Segment performance is evaluated based on a number of measures including operating expenses, working capital and liabilities, and cash flows from operating and investing activities. Certain costs are managed on a consolidated basis and are therefore not reflected in segment results. Refer to Note 13 to the financial statements for details.

### Q2 2024 compared to Q1 2024

Three months ended	June 30, 2024 \$	March 31, 2024 \$	Change \$
<b>Expenses</b>			
Amortization	909	818	91
Business development and investor relations	237,878	98,018	139,860
Depreciation	67,909	66,145	1,764
Finance costs	47,838	50,198	(2,360)
General and administrative expenses	644,861	693,622	(48,761)
Professional and consulting, net	604,601	582,595	22,006
Research and operational expenses, net	2,446,718	2,620,094	(173,376)
Share-based payments	403,093	1,265,713	(862,620)
Wages, benefits and fees, net	4,164,090	5,011,804	(847,714)
<b>Loss from operating expenses</b>	<b>(8,617,897)</b>	<b>(10,389,007)</b>	<b>1,771,110</b>
Interest income	214,111	345,637	(131,526)
Loss on disposal of equipment	-	(25,603)	25,603
Other income	34,006	42,983	(8,977)
<b>Loss and comprehensive loss</b>	<b>(8,369,780)</b>	<b>(10,025,990)</b>	<b>1,656,210</b>

- Business development and investor relations increased as there was more road show, promotional and conference activities as well as increased sponsorship and marketing fees for shareholder engagement and research.
- General and administrative expenses decreased on a net basis. The primary drivers were less overall travel by Company personnel, in addition to a decrease in exchange and filing fees as such fees are incurred annually during Q1 in connection with the Company's annual continuous disclosure filings.
- Research and operational expenses decreased as engineering studies and services were reduced during Q2 2024. Comparatively, Q1 2024 included services relating to the feasibility study (FEL3) for a 25,000 tpa LFP plant Development Project.
- Share-based payments (non-cash expense) decreased as the preceding Q1 2024 period included the grant of stock options of which a portion vested immediately, whereas only the vesting of previous grants were recognized during Q2 2024.
- Wages, benefits and fees decreased primarily as a result of accruing a receivable for Scientific Research and Experimental Development (SR&ED) in relation to Candiac's operations resulting in a credit recorded to wages, benefits and fees of approximately \$311,000. Additionally, normal course fluctuations in staffing and related wages are a contributing factor furthered by a decrease in payroll taxes as certain personnel maximized their statutory annual contributions during Q2 2024.



## Q2 2024 compared to Q2 2023

Three months ended	June 30, 2024 \$	June 30, 2023 \$	Change \$
<b>Expenses</b>			
Amortization	909	668	241
Business development and investor relations	237,878	207,500	30,378
Depreciation	67,909	61,552	6,357
Finance costs	47,838	26,988	20,850
General and administrative expenses	644,861	619,031	25,830
Professional and consulting, net	604,601	646,631	(42,030)
Research and operational expenses, net	2,446,718	2,054,305	392,413
Share-based payments	403,093	445,824	(42,731)
Wages, benefits and fees, net	4,164,090	4,026,072	138,018
<b>Loss from operating expenses</b>	<b>(8,617,897)</b>	<b>(8,088,571)</b>	<b>(529,326)</b>
Interest income	214,111	401,793	(187,682)
Loss on disposal of equipment	-	(964)	964
Other income	34,006	-	34,006
<b>Loss and comprehensive loss</b>	<b>(8,369,780)</b>	<b>(7,687,742)</b>	<b>(682,038)</b>

Increases in most components of operating expenses are largely aligned and correlated with the factors discussed herein in terms of increased operating activity including advancing scale-up and piloting activities, personnel expansion and hiring, and the resulting increased general overheads related to expanded operations.

- Business development and investor relations have increased on a net basis as a result of increased sponsorship and marketing fees for shareholder engagement and research.
- Renewals of facility leases during the latter portion of 2023 drove finance costs higher in Q2 2024 compared to Q2 2023.
- Professional and consulting has decreased as a result of a decrease in corporate advisory engagements and services, and a reduction in third-party IT contractor services as IT services are currently substantially performed in-house. Additionally, Q2 2023 included one-time brokerage services relating to the facilitation of stock option exercises.
- Engineering and related studies including the FEL3 feasibility study in Candiac drove the net increase in research and operational expenses, more than offsetting a decrease in engineering activity and services in BC.
- Wages, benefits and fees increased despite Q2 2024 having included a SR&ED credit accrual of approximately \$310,000 to reduce wages. The organizational structure at Q2 2024 in relation to the comparative quarter has expanded with a greater number of Company employees in addition annual wage adjustments, and short-term incentive bonus accruals being recorded quarterly during 2024 while historically being accrued annually in Q4. Moreover, the comparative 2023 amount included allocations of deferred SDTC proceeds throughout the progress of the Milestone 1 activity.
- Interest income was higher in Q2 2023 due to a higher average cash balance on which interest is earned.

## Six months ended 2024 compared to 2023

Six months ended	June 30, 2024 \$	June 30, 2023 \$	Change \$
<b>Expenses</b>			
Amortization	1,727	1,301	426
Business development and investor relations	335,896	352,847	(16,951)
Depreciation	134,054	119,739	14,315
Finance costs	98,036	51,644	46,392
General and administrative expenses	1,338,483	1,287,185	51,298
Professional and consulting, net	1,187,196	1,249,572	(62,376)
Research and operational expenses, net	5,066,812	3,999,381	1,067,431
Share-based payments	1,668,806	667,274	1,001,532
Wages, benefits and fees, net	9,175,894	8,843,991	331,903
<b>Loss from operating expenses</b>	<b>(19,006,904)</b>	<b>(16,572,934)</b>	<b>(2,433,970)</b>
Interest income	559,748	819,874	(260,126)
Loss on disposal of equipment	(25,603)	(10,786)	(14,817)
Other income	76,989	-	76,989
<b>Loss and comprehensive loss</b>	<b>(18,395,770)</b>	<b>(15,763,846)</b>	<b>(2,631,924)</b>

The key business drivers behind fluctuations in the results of operations for the six months ended June 30, 2024 and June 30, 2023, are fairly consistent with those that impacted variances for the three months ended June 30, 2024 and June 30, 2023. Refer to the discussion above for the latter. Furthermore, share-based payments increased primarily due to the grant of stock options to executives during Q1 2024 which vested immediately compared to no grants and immediate vesting of stock options to executives or others during the comparative period.

## REVIEW OF FINANCIAL CONDITION

### Summary Financial Position and Key Metrics

	June 30, 2024 \$	December 31, 2023 \$	December 31, 2022 \$
Cash and cash equivalents	15,142,843	31,868,882	39,445,395
Restricted cash	575,000	575,000	-
Current assets (all others)	1,916,977	1,835,321	3,182,564
Non-current assets	18,648,770	18,695,565	13,448,401
<b>Total assets</b>	<b>36,283,590</b>	<b>52,974,768</b>	<b>56,076,360</b>
Current liabilities	4,404,848	4,143,968	2,039,869
Non-current liabilities (lease liabilities)	1,119,050	1,344,144	587,122
<b>Total liabilities</b>	<b>5,523,898</b>	<b>5,488,112</b>	<b>2,626,991</b>
<b>Total shareholders' equity</b>	<b>30,759,692</b>	<b>47,486,656</b>	<b>53,449,369</b>
<b>Key Financial Metrics:</b>			
<b>Working capital<sup>1</sup></b>	<b>13,229,972</b>	<b>30,135,235</b>	<b>40,588,090</b>
<b>Liquid working capital<sup>2</sup></b>	<b>11,985,681</b>	<b>28,691,624</b>	<b>38,891,919</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.

Total assets are substantially comprised of cash and cash equivalents, and property, plant and equipment as at the reporting dates presented above. Further, property, plant and equipment had decreased as at June 30, 2024 compared to December 31, 2023 as depreciation and disposals of equipment not in use exceeded capital expenditure additions.

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 at 2022 comprised approximately \$800,000 in receivables that were acquired in the November 2022

acquisition of Johnson Matthey Battery Materials Ltd. During 2024, the consumption of cash and cash equivalents and the net decrease in inventory were drivers of the decrease in total assets.

Total liabilities were comparable between June 30, 2024 and December 31, 2023, as each component thereof remained relatively consistent. Total liabilities increased in 2023 compared to 2022, as Nano One leased additional office and research facilities starting in Q1 2023, and renewed other leases on our facilities during 2023. Additionally, payables increased in the normal course of business as the level of operating and investing expenditures have increased in alignment with operational growth. Working capital has decreased in direct correlation to the use of cash in operating and investing activities.

## Review of Cash Inflows

	Three months ended	Three months ended	Six months ended	Six months ended
	June 30, 2024	March 31, 2024	June 30, 2024	June 30, 2023
(Amounts are rounded)	\$	\$	\$	\$
<b>Sources of cash and cash equivalents:</b>				
Government programs (operating and investing activities)	38,000	49,000	87,000	3,396,000
Interest income (investing activities)	214,000	346,000	560,000	402,000
Exercises of stock options and warrants (financing activities)	-	-	-	6,777,000
	<b>252,000</b>	<b>395,000</b>	<b>647,000</b>	<b>10,575,000</b>

### Q2 2024 compared to Q1 2024

*Government programs:* Nominal amounts were received in both Q2 2024 and Q1 2024 related to wage reimbursements for internships and other qualified employment positions either relating to NRC-IRAP or other programs.

### Six months ended Q2 2024 compared to Q2 2023

*Government programs:* In 2023 the SDTC Milestone 1 grant (approximately \$3,300,000) was received during Q1 2023. Amounts for 2024 and amounts in excess of the SDTC Milestone 1 grant received during 2023 relate to NRC-IRAP and other non-repayable grants relating to employment and wage reimbursements.

*Exercises of stock options and warrants:* During Q1 2023, warrants were exercised generating proceeds of approximately \$3,651,000, and stock options were exercised generating proceeds of approximately \$3,126,000.

## Summary of Cash Flows

### Q2 2024 compared to Q1 2024

	June 30, 2024	March 31, 2024	Change
Three months ended	\$	\$	\$
<b>Operating activities</b>			
Loss for the period	(8,369,780)	(10,025,990)	1,656,210
Adjustments for non-cash items	836,566	1,704,124	(867,558)
Interest income (reclassified to investing activities below)	(214,111)	(345,637)	131,526
Net change in non-cash working capital items	708,938	113,782	595,156
	<b>(7,038,387)</b>	<b>(8,553,721)</b>	<b>1,515,334</b>
<b>Investing activities</b>			
Interest income	214,111	345,637	(131,526)
Capital expenditures <sup>1</sup>	(995,253)	(436,890)	(558,363)
	<b>(781,142)</b>	<b>(91,253)</b>	<b>(689,889)</b>
<b>Financing activities</b>			
Payments for facility leases	(130,961)	(130,575)	(386)
	<b>(130,961)</b>	<b>(130,575)</b>	<b>(386)</b>
<b>Change in cash and cash equivalents</b>	<b>(7,950,490)</b>	<b>(8,775,549)</b>	<b>825,059</b>
<b>Cash and cash equivalents, beginning</b>	<b>23,093,333</b>	<b>31,868,882</b>	
<b>Cash and cash equivalents, ending</b>	<b>15,142,843</b>	<b>23,093,333</b>	

<sup>1</sup> Capital expenditures includes purchases of equipment, payments on deposits and other assets, and payments for intangible assets. Engineering costs and FEL 2 and FEL 3 studies are included within operating activities.

<b>Allocation of cash inflows from government assistance and cost recoveries</b>	<b>June 30,</b>	<b>March 31,</b>
<b>Three months ended</b>	<b>2024</b>	<b>2024</b>
	<b>\$</b>	<b>\$</b>
Operating activities	38,125	48,626
	<b>38,125</b>	<b>48,626</b>

The decrease in cash used in operating activities was attributable to a reduced quarterly loss including adjustments for non-cash items, and a favourable fluctuation in working capital items.

Interest income reduced as the average cash balance subject to interest also reduced. Increased capital expenditures primarily includes the 2024 payment of approximately \$802,000 that was payable as at December 31, 2023. Furthermore, capital expenditure variances include fluctuations in the normal course of business as well as activities that reduce the overall outflow such as streamlining pre-commercial activities and reducing or deferring components of projects.

*Six months ended 2024 compared to 2023*

<b>Six months ended</b>	<b>June 30,</b>	<b>June 30,</b>	<b>Change</b>
	<b>2024</b>	<b>2023</b>	<b>\$</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Operating activities</b>			
Loss for the period	(18,395,770)	(15,763,846)	(2,631,924)
Adjustments for non-cash items	2,540,690	1,412,049	1,128,641
Interest income (to investing activities)	(559,748)	(819,874)	260,126
Net change in non-cash working capital items	822,720	4,070,337	(3,247,617)
	<b>(15,592,108)</b>	<b>(11,101,334)</b>	<b>(4,490,774)</b>
<b>Investing activities</b>			
Interest income	559,748	819,874	(260,126)
Capital expenditures <sup>1</sup>	(1,432,143)	(1,347,163)	(84,980)
	<b>(872,395)</b>	<b>(527,289)</b>	<b>(345,106)</b>
<b>Financing activities</b>			
Equity financing and exercises of options and warrants, net	-	6,777,245	(6,777,245)
Payments for facility leases	(261,536)	(190,880)	(70,656)
	<b>(261,536)</b>	<b>6,586,365</b>	<b>(6,847,901)</b>
<b>Change in cash and cash equivalents</b>	<b>(16,726,039)</b>	<b>(5,042,258)</b>	<b>(11,683,781)</b>
<b>Cash and cash equivalents, beginning of period</b>	<b>31,868,882</b>	<b>39,445,395</b>	
<b>Cash and cash equivalents, end of period</b>	<b>15,142,843</b>	<b>34,403,137</b>	

<sup>1</sup> Capital expenditures includes purchases equipment, payments on deposits and other assets, and payments for intangible assets. Engineering costs and FEL 2 and FEL 3 studies are included within operating activities.

<b>Allocation of cash inflows from government assistance and cost recoveries</b>	<b>June 30,</b>	<b>June 30,</b>
<b>Six months ended</b>	<b>2024</b>	<b>2023</b>
	<b>\$</b>	<b>\$</b>
Operating activities	86,751	875,579
Investing activities	-	974,862
	<b>86,751</b>	<b>1,850,441</b>

The favourable fluctuation in working capital items for the comparative 2023 period is primarily attributable to collection of approximately \$800,000 in receivables that were acquired in the November 2022 acquisition of Johnson Matthey Battery Materials Ltd., and nearly \$3,000,000 in SDTC funding that remained capitalized to deferred liabilities. When backing out approximately \$3,500,000 of the 2023 fluctuation that was attributable to collection of receivables, and government funding, the excess in cash used in operating activities during 2024 compared to 2023 was approximately \$1,000,000 which is directly correlated to the operational growth between the periods.

### 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 six months ended June 30, 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. In specific circumstances the Company will invest in a GIC relating to standby letter of credit arrangements (restricted cash).

### Capital Sources

Nano One is in active dialogue with government agencies, project finance lenders and strategic partners to secure funding for growth activities, the Development Project, and ongoing innovations. The Company is evaluating structures and government incentives to bring One-Pot process LFP to market, while being cognizant of shareholder's interests.

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 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.

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

	As at the MD&A Date	
	#	Weighted average exercise price \$
Common shares issued and outstanding	111,291,982	n/a
Stock options outstanding	2,210,549	2.99
RSUs/DSUs outstanding	1,258,452	n/a
Warrants outstanding	-	n/a
<b>Fully diluted</b>	<b>114,760,983</b>	

In January 2024, the Company granted an aggregate of 1,566,686 stock options and RSUs 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.

In April 2024, 25,205 RSUs were exercised resulting in the issuance of an equivalent number of common shares, for \$nil proceeds.

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).

## CONTRACTUAL OBLIGATIONS

As at June 30, 2024	Carrying amount	Contractual cash flows	Under 1 year	1-5 years	More than 5 years
	\$	\$	\$	\$	\$
Accounts payable and accrued liabilities	3,948,162	3,948,162	3,948,162	-	-
Accounts payable to related parties	20,850	20,850	20,850	-	-
Lease liabilities	1,554,886	1,939,520	597,973	1,341,547	-
<b>Total</b>	<b>5,523,898</b>	<b>5,908,532</b>	<b>4,566,985</b>	<b>1,341,547</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				2022	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenue	-	-	-	-	-	-	-	-
Loss from operating expenses	(8,617,897)	(10,389,007)	(9,013,580)	(7,581,520)	(8,088,571)	(8,484,363)	(5,430,296)	(2,407,926)
Cash used in operating activities	(7,038,387)	(8,553,721)	(9,036,487)	(6,921,232)	(8,303,093)	(2,798,241)	(575,888)	(2,144,738)
Cash used in investing activities	(781,142)	(91,253)	(1,919,234)	(1,720,180)	(193,687)	(333,592)	(6,181,208)	(31,419)
Cash (used in) provided by financing activities	(130,961)	(130,575)	16,822,700	240,178	2,829,193	3,757,172	265,459	184,030
Change in cash and cash equivalents	(7,950,490)	(8,775,549)	5,866,979	(8,401,234)	(5,667,587)	625,339	(6,491,637)	(1,992,127)
Cash from government grants <sup>1</sup>	38,125	48,626	13,666	884,300	29,448	3,366,331	102,362	1,913,055
Cash and cash equivalents	15,142,843	23,093,333	31,868,882	26,001,903	34,403,137	40,070,734	39,445,395	45,937,032
Working capital	13,229,972	21,218,588	30,135,235	22,067,827	30,049,580	35,726,607	40,588,090	45,802,797

<sup>1</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. Overall, its cash and working capital positions have been well supported by private placements, equity exercises, and government grants over the fiscal quarters during 2023 and 2022. This is an achievement especially in the context of its growth.

- Operating expenses decreased in Q2 2024 compared to Q1 2024. Share-based payment expense in Q1 2024 included \$678,000 representing stock options granted during the period which vested immediately. This had the effect of inflating operating expenses during Q1 2024. 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 wages, benefits and fees. The drivers for variances in these specific areas are discussed above within this MD&A. The net use of cash in operating activities is a core driver of the reduction in working capital over the preceding quarter.
- The 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. The primary driver of the increased quarterly operating expenses and cash used in operating and financing activities during 2023 compared to the 2022 quarters is the consolidation the Candiatic subsidiary's operations for all fiscal quarters in 2023. Consolidation of its operations began part way through Q4 2022 (from November 1, 2022). Particularly from Q4 2022 onwards, the first fiscal quarter with subsidiary operations consolidated, Nano One's operating expenses have trended upwards. A significant portion of the Company's operating expenses relates to research and operational expenses, and wages, benefits and fees, which are characterized by significant advancements in its research and innovation, patent portfolio, engineering/feasibility and other studies, as well as the growth of its personnel headcount as it fills key roles along its path towards commercialization.

- Cash used in operating activities is subject to fluctuation due to the timing and amounts received from government grants that are recognized through operating and/or investing activities. Cash used in operations during Q1 2024 reduced compared to Q4 2023 by approximately \$483,000. Q4 2023 and Q3 2023 were particularly characterized by completing the conversion and commissioning of Nano One's 200 tpa LFP pilot plant within investing activities. In Q4 2022 and Q2 2022 investing activities included portions of the cash consideration paid for the acquisition of JMBM. Operating activities in Q1 2023 were relatively lower due to the SDTC proceeds received. Interest income increased in 2023 compared to 2022 and is included within investing activities.
- Investing activities in Q1 2024 were reduced as a result of easing the pace of expansion projects.
- Cash provided by financing activities includes proceeds received from equity financings including the Q4 2023 private placement with Sumitomo, and the Q2 2022 private placement with Rio Tinto. Amounts received in other quarters are attributable to exercises of stock options and warrants. Financing activities are partially offset by monthly payments for leased facilities which have increased as additional facilities were added in 2023 and 2022 along with certain lease renewals in 2023 that carry higher rates.
- The Sumitomo 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 Sumitomo financing of approximately \$17,000,000. When removing the Sumitomo proceeds the change in cash and cash equivalents for Q4 2023 would have been approximately \$11,000,000 in cash used, which indicates a net reduction in cash used during Q1 2024 compared to Q4 2023.

## TRANSACTIONS AND BALANCES BETWEEN RELATED PARTIES

The following transactions involved key management (gross amounts):

	Transactions six months ended June 30, 2024 \$	Transactions six months ended June 30, 2023 \$	Balances outstanding June 30, 2024 \$	Balances outstanding December 31, 2023 \$
Bedrock Capital	75,000	75,000	-	-
DBM CPA	7,500	113,000	-	11,550
Directors' fees	161,250	162,759	-	-
Management and directors' fees (within wages, benefits and fees)	243,750	350,759	-	11,550
Expense reimbursements (officer)	-	-	1,754	-
Wages, benefits and fees (officers) <sup>(1)</sup>	1,347,798	1,546,416	-	-
Share-based payments (directors and officers)	1,222,042	413,610	-	-
Patent Filing Specialists (professional and consulting; and intangible assets)	125,162	274,267	19,096	34,911
	<b>2,938,752</b>	<b>2,585,052</b>	<b>20,850</b>	<b>46,461</b>

- (1) As at June 30, 2024, accounts payable and accrued liabilities included \$355,435 (December 31, 2023 - \$nil) in accrued short-term incentive compensation to key management relating to 2024 performance which is based on performance targets. Short-term incentive compensation is payable in cash annually during the first quarter of the fiscal year.

During the six months ended June 30, 2024, there were no short-term incentive amounts paid to key management in relation to the year ended December 31, 2023. During the six months ended June 30, 2023, wages benefits and fees included \$599,758 in amounts paid for short-term incentive compensation in relation to 2022.

(a) Professional and consulting, net:

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

(b) Wages, benefits and fees, net:

- Includes salaries and short-term incentive cash-based compensation paid to Dan Blondal, CEO; Stephen Campbell, CTO; Alex Holmes, COO; Carlo Valente, CFO; Denis Geoffroy, Chief Commercialization Officer (CCO); Adam Johnson, Senior Vice-President of External Affairs; Kelli Forster, Senior Vice-President of People & Culture; and Leanne Swanson, Corporate Secretary.
- Includes the services of Bedrock Capital Corp. ("Bedrock Capital") a company controlled by Paul Matysek the Executive Chairman and a Director of the Company.
- Includes compensation to non-executive directors of the Company and committee chairpersons.

- Includes the services of Donaldson Brohman Martin, CPA Inc. (“DBM CPA”) to January 15, 2024, a firm in which Dan Martino, former CFO, is a principal and has significant influence. On January 15, 2024, the Company announced the appointment of Carlo Valente as the new CFO. Dan Martino remains with the Company as Vice President of Finance provided services through DBM CPA. From January 15, 2024 to June 30, 2024, salaries and short-term incentive cash-based compensation paid or accrued for Carlo Valente are included within wages, benefits, and fees.
  - As of January 15, 2024, Pamela Kinsman, Corporate Secretary & Director of Sustainability resigned as Corporate Secretary and remains with the Company as Director of Sustainability. As of January 15, 2024, Leanne Swanson was appointed Corporate Secretary of the Company.
- (c) Share-based payments:
- Includes amounts recognized on vesting of stock options and Equity Incentives granted to directors and officers.
  - During the six months ended June 30, 2024, the Company granted 175,435 RSUs to Company directors and officers (2023 – 311,784 RSUs and DSUs granted).
  - During the six months ended June 30, 2024, the Company granted 943,948 stock options to Company officers (2023 – nil).

## 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, 2023.

### 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. There have been no changes to the depreciation methods used by the Company during the six months ended June 30, 2024.

*Research and operational expenses*

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

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

### 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 and have been excluded from discussion within the material accounting policy information.



## **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. The Company will monitor the continued development of mandating these standards and the requisite disclosure requirements.

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.

## **CHANGE IN EXECUTIVE OFFICERS**

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

## **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 the Company’s AIF, the MD&A and audited financial statements and related notes thereto for the fiscal year ended December 31, 2023 and the Shelf Prospectus, filed with Canadian securities regulators and on Nano One’s website which may not be a comprehensive list of risks and uncertainties. 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.

### *Public Health Crises, Including COVID-19*

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

### *Funding and Global Economy Risk*

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

### *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 three months ended March 31, 2024 and the year ended 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.