



MANAGEMENT'S DISCUSSION & ANALYSIS

Three-months ended March 31, 2025

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE THREE-MONTHS ENDED MARCH 31, 2025

The following management discussion and analysis (the "MD&A") of the operations and financial position of Niobay Metals Inc. ("NioBay" or the "Company") for the three-month period ended March 31, 2025, should be read in conjunction with NioBay's audited consolidated financial statements as at and for the year ended December 31, 2024 (the "Annual Financial Statements"). The MD&A is intended to supplement and complement the Company's unaudited condensed interim consolidated financial statements and related notes as of March 31, 2025, and for the three-month periods ended March 31, 2025 and 2024 (the "Financial Statements").

The Financial Statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"). Consequently, all comparative financial information presented in the MD&A reflects the consistent application of IFRS.

NioBay's management ("Management") is responsible for the preparation of the Financial Statements and other financial information relating to the Company included in this MD&A. The Board of Directors (the "Board") is responsible for ensuring that Management fulfills its responsibilities for financial reporting. In furtherance of the foregoing, the Board has appointed an Audit Committee composed of a majority of independent directors. The Audit Committee meets with Management in order to discuss results of operations and the financial condition of the Company prior to making recommendations and submitting the financial statements to the Board for its consideration and approval for issuance to shareholders. The information included in the MD&A is as of May 21, 2025, the date when the Board approved the Financial Statements, following the recommendation of the Audit Committee. All monetary amounts included in this report are expressed in Canadian dollars ("C\$"), the Company's reporting and functional currency, unless otherwise noted.

DESCRIPTION OF BUSINESS

NioBay is a mineral resource company. The business of the Company consists of acquiring, exploring, evaluating and developing mining properties. NioBay has not yet determined whether its properties contain economically viable mineral deposits. NioBay aims to become a leader in the development of mine(s) with low carbon consumption and responsible water and wildlife management practices while prioritizing the environment, social responsibility, good governance, and the inclusion of all stakeholders. The Company's top priority, which is critical to our success, is the consent and full participation of the Indigenous communities in whose territories and/or on ancestral lands we operate.

NioBay's assets are all located in Canada. The Company owns a 100% interest in the James Bay Niobium Project located 42 km south of Moosonee, Ontario (the "James Bay Project" or the "Project"). NioBay also holds through its 72.5%-owned subsidiary Crevier Minerals Inc ("CMI"), the Crevier niobium and tantalum project (the "Crevier Project") located 53 km north of the municipality of Girardville, Québec. The Company also has an option agreement (the "Option Agreement"), with Vior Inc. ("Vior") to acquire an 80% undivided interest in Vior's Foothills Project located north of Saint-Urbain, 100 km north of Québec City and 90 km south of Saguenay (La Baie region), Québec (the "Foothills Project").

The Company's common shares ("Common Shares") are listed on the TSX Venture Exchange ("TSX-V") under the symbol "NBY" and on the OTCQB Venture Market, a U.S. market operated by OTC Markets Group Inc. under the symbol "NBYCF".

JAMES BAY NIOBIUM PROJECT

In June 2016, the Company acquired the James Bay Project from Barrick Gold Inc., James Bay Columbian Ltd. and Goldcorp Inc. This property is located in the James Bay Lowlands in northeastern Ontario, and covers an area of 8,833 ha. These property rights are held through a Crown mining lease recorded in the name of the Company. As of March 1, 2018, the mining lease was renewed for a term of ten (10) years. OR Royalties Inc owns a 1.0% royalty on all products to be produced from the James Bay Project.

The James Bay Project was discovered in 1966 by Consolidated Morrison Explorations Limited. At that time, exploratory and detailed drilling totaled over 14,000 m, outlining the deposit to a maximum depth of 275 m. The deposit was drilled along a strike of 730 m. An exploration shaft was sunk to investigate ground conditions and to provide a 225 ton bulk sample. Subsequent pilot plant operations demonstrated an excellent quality pyrochlore concentrate with low impurities, with a high recovery rate of 78%.

Following the acquisition of the James Bay Project, the Company gathered and compiled all of the historical data. Geologists cleaned and re-logged the historical drill core and over 600 samples from twelve (12) representative historical drill holes were re-assayed. In May 2017, the Company reported the results of preliminary metallurgical testing conducted by SGS Lakefield ("SGS") using core from the historical drilling program. In November 2017, the Company announced an initial Mineral Resource Estimate ("MRE") which estimate was updated in November 2018 (the "2018 MRE") and in July 2020 (the "2020 MRE") as described below under the "Mineral

Resource Estimate" heading. In November 2020, the Company filed a National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101") independent Preliminary Economic Assessment ("PEA") on the James Bay Project as described below under the "*Preliminary Economic Assessment*" heading.

The Protection Agreement

The Company concluded a protection agreement with the Moose Cree First Nation (the "MCFN") which was updated in February 2021 and December 7, 2021 (the "Updated PA"). These agreements provide a framework for the building of a mutually cooperative, respectful, and beneficial relationship between the Company and the MCFN (collectively, the "Parties"), including a mechanism for effective communication, information exchange, environmental protection and the inclusion of MCFN businesses while respecting MCFN aboriginal and treaty rights.

On March 17, 2022, the Company received a letter ("Band Council Resolution") from the MCFN announcing the result of a small survey of the population which indicated an intent to preserve the South Bluff Creek area from any development. This area is where NioBay's mining lease for the James Bay Project is located and where drilling activities were ongoing. Based on the results of this survey, the MCFN requested a meeting with NioBay regarding ceasing its permitted exploration. In order to address the MCFN concerns and evaluate all options to the Company, NioBay suspended all of its exploration activities at the Project pending a meeting with MCFN. Subsequent to this meeting and following support received from certain MCFN members, NioBay tabled a request of support and a plan to return to complete the exploration work originally expected to be completed in 2022. Following the 2022 Ontario Provincial election, NioBay and the Ontario Ministry of Mines (the "OMM") held discussions to identify areas where the Provincial Government can facilitate in the consultation process between the Company and the MCFN in order to advance exploration activities.

The Ontario government acknowledged that NioBay had met its duty to consult with MCFN and that the Company was entitled to return to the field and continue its exploration work. The Company has applied for a three year extension to its exploration permit and is awaiting the result of this filing with the Government.

Exploration Drilling Programs

On December 7, 2021, NioBay and MCFN signed the Updated PA to cover the exploration work to be completed in 2022 (the "2022 Drill Program"). On February 23, 2022, the Company announced that Forage G4 Drilling, with the support of Expedition Helicopters and Expedition Camps and Logistics had completed the mobilisation of the first drill rig and commenced drilling. All three companies are in joint ventures with MCFN registered businesses.

The 2022 Drill Program, estimated at 12,000 m, targeted a potentially high-grade zone to the north in an unexplored zone at vertical depths between 200 and 400 m. The 2022 Drill Program was primarily an infill drill program to be used to maximize the conversion of resources from the inferred to indicated category, as required for prefeasibility reporting. This infill drill program was initiated in February 2022 and was expected to be completed in the second quarter of 2022, prior to its suspension as described under the "*The Protection Agreement*" heading above.

On August 11, 2022, the Company announced the discovery of significant extensions to the mineralized zone at the Project, from the results obtained from the 2022 Drill Program's first 3 holes (see Press release dated August 11, 2022, entitled "*NioBay Metals confirms mineralization to the north at depth at the James Bay Niobium Project*"), which confirmed:

- Presence of high-grade mineralization and intersections in the unexplored zone at depth to the north;
- Expansion of the mineralized zone;
- The presence of mineralization (in field) on the west side of the deposit;
- Potential to significantly increase the resource.

Visual observations of the drill core continue to indicate the presence of very coarse grains of pyrochlore, the niobium mineral, which portends an exceptional recovery, as shown by previous metallurgical tests.

Mineral Resource Estimate

In November 2017, the Company had reported an initial MRE for its James Bay Project prepared in accordance with NI 43-101 following the re-logging and re-sampling program of representative historical drill holes. In November 2018, the Company reported an increase to the initial MRE due to a revised tonnage factor. The initial, 2018 and 2020 MREs were prepared by Roscoe Postle

Associates Inc. ("RPA"). The effective date of the 2020 MRE is July 9, 2020 and the supporting NI 43-101 technical report is filed on SEDAR+ (www.sedarplus.ca).

Highlights of the 2020 MRE:

Category	Tonnes (Mt)	Grade (%Nb ₂ O ₅)	Contained Nb ₂ O ₅ (Mkg)
Indicated	29.7	0.53	158
Inferred	33.8	0.52	177

Notes:

1. CIM (2014) Definitions Standards were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.3% Nb₂O₅ based on an underground mining scenario, an operating cost of C\$70/tonne and a metallurgical recovery of 70%.
3. Mineral Resources are estimated using a long-term niobium price of US\$40/kg and a US\$/C\$ exchange rate of 1:1.2.
4. Bulk density of 2.93 g/cm³ was used.
5. A minimum mining width of approximately 7.5 m was used.
6. Resources situated in a 46 m thick crown pillar have been excluded.
7. The RPA Qualified Persons for the estimate are Dorota El Rassi, P.Eng. and Paul Chamois, P.Geo.

Preliminary Economic Assessment

On November 27, 2020, NioBay filed the PEA for the James Bay Project which was prepared with the independent engineering firm G Mining Services Inc. ("G Mining"). Because of the geometry and location of the deposit, supported by the Company's ESGI principles, three mining scenarios were evaluated: open pit (scenario #1), underground (scenario #3) and a hybrid of both mining methods (scenario #2). Details of the financial and technical highlights of all three scenarios are available on the Company's website and the supporting NI 43-101 technical report is filed on SEDAR+ (www.sedarplus.ca).

PEA Highlights

	Open Pit	Open Pit + UG	Underground
Pre-Tax Internal Rate of Return (IRR)	33.6%	33.4%	26.0%
Pre-Tax Net Present Value (NPV) 8%	\$1,475 M	\$1,268 M	\$1,104 M
Pre-Tax Payback (years)	2.6 years	2.5 years	3.8 years
After-Tax IRR	27.5%	27.0%	21.6%
After-Tax NPV 8%	\$1,008 M	\$856 M	\$733 M
After-Tax Payback (years)	3.2 years	3.1 years	4.3 years
Pre-Production CAPEX (incl. 25% Contingency)	\$510.5 M	\$482.0 M	\$579 M
Life of Mine ("LOM")	30 years	23 years	23 years
Average Annual LOM Niobium Production	5,470 t Nb	6,213 t Nb	6,283 t Nb
Total Mineral Resources Mined	70.8 Mt	53.7 Mt	53.6 Mt
Average Grade Mined	0.44 % Nb ₂ O ₅	0.51 % Nb ₂ O ₅	0.51 % Nb ₂ O ₅
Gross Revenue After Royalties (LOM)	\$9,264 M	\$8,360	\$8,454
After-tax Operating Cash Flow (LOM)	\$3,581 M	\$2,696 M	\$2,536 M
C1 Costs over LOM*	US\$16.10/kg Nb	US\$18.45/kg Nb	US\$19.11/kg Nb
	\$48.48/t	\$63.85/t	\$66.94
All-in Costs (sustaining CAPEX + Closure + OPEX)	US\$17.58/kg Nb	US\$20.52/kg Nb	US\$21.43/kg Nb
	\$52.93/t	\$70.98/t	\$75.08/t
LOM Niobium Price	US\$45/kg Nb	US\$45/kg Nb	US\$45/kg Nb
Exchange Rate (C\$/US\$)	1.30	1.30	1.30

*C1 Cost is mine site and transport

Capital Costs

Capital Costs by Area (in C\$M)	Open Pit	OP + UG	Underground
Infrastructure	133.58	133.58	112.61
Power & Electrical	31.49	31.49	31.49
Water & Tailings	31.41	13.58	20.48
Mining Equipment OP	29.41	29.41	-
Process Plant	69.99	69.99	99.99
Other Equipment	5.61	5.61	5.61
Construction Indirect	35.02	32.70	34.77
General Services	40.41	37.73	40.12
Pre-Prod, Startup, Commission	31.46	31.49	117.73
Contingency	102.09	96.39	115.74
Total CAPEX	510.45	481.95	578.69
Sustaining Costs	283.16	359.12	416.08
Closure Costs	32.42	23.99	20.69

Operating Costs

Operating Costs by Area (C\$/t)	Open Pit	OP + UG	Underground
Mining Costs*	12.39	26.47	29.44
Processing Costs	14.60	14.62	14.62
Converter Costs	11.48	12.76	12.89
G&A	10.00	10.00	10.00
Total	48.47	63.85	66.94
US\$/kg Nb	16.10	18.45	19.11

*Unit mining cost of \$4.43/t based on 1.8 strip ratio and including stockpile rehandle.

The PEA is preliminary in nature, includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Opportunities to Enhance Value

Trade-off studies will be performed to determine the most suitable mining scenario among the three contemplated. Below are examples of items and programs to enhance the Project's value to be included in an eventual feasibility study:

- Initial metallurgical results indicate that there is a likelihood to improve the overall recovery rate above 80%.
- The Federal & Provincial governments announced a billion-dollar program to support infrastructure development in northern Ontario. The Company believes that capital costs associated with the road access and power line may qualify for these programs.
- Future drilling programs will test the high-grade zone raking north as described below, under "Exploration Potential" heading. This high grade zone may lead us to work the underground scenario.
- Geotechnical studies and drilling will be required to establish design criteria for open pit slopes which could potentially steepen angles and reduce the strip ratio (scenarios #1 and #2). Similarly, for the underground, the crown pillar thickness will be evaluated, and could potentially be reduced and increase ore recovery (scenario #3).
- Incorporation of automation to reduce personnel requirements (scenarios #2 and #3). It is believed that the underground scenario will be more socially accepted.
- Mine production is expected to be set at a maximum of 5% of the ferro-niobium ("FeNb") world market share. However, the deposit is suitable to provide additional material to market to maintain market share in a growing market.

Mining

The PEA detailed the open pit mining under scenario #1 using an owner operated fleet, however, the two other mining scenarios are as interesting as the scenario #1.

Open pit mining is possible given that the orebody sub-crops in the basement formation overlain by sediments and overburden ranging from 10 to 20 m in thickness. A stream flows over the deposit which will require relocation to the north outside of the mining footprint by the third year of operation.

The open pit will be mined for 24 years during which time low grade material will be stockpiled and processed at the end of the mine life. A cut-off grade of 0.12% Nb₂O₅ was applied for the open pit resulting in 70.8 Mt of mill feed. A total of 198 Mt of material will be mined for an average LOM strip ratio of 1.8.

During pre-production a total of 5 Mt is mined to supply construction materials for the tailings storage facility and to strip overburden. The initial mining rate is then established at 7 Mt/year for the first 4 years and increases to a peak of 10 Mt/year by the 8th year of operation. The mining fleet will consist of 64 t rigid trucks matched with hydraulic excavators with 7 m³ buckets supported by front-end loaders.

Metallurgy and Processing

The selected process has been developed using available technology and retaining some aspects of past work done. The process flowsheet and design criteria are based on the interpretation of preliminary metallurgical test work results and industry practice. The process scenario description is for a nominal throughput of 2.4 Mt/yr and a process plant availability of 93%. The scenario retained includes an intermediary gravity circuit removing close to 42% of the mass with limited niobium losses. This particularity of the process minimizes energy requirements and considerably reduces the volume of pulp thereby lowering reagent costs. The reagents consumption has been estimated on the preliminary metallurgical results.

The low grinding index of the ore and coarse grind required for good liberation of the niobium mineral minimizes the power requirement for grinding. A total of 1,900 kw has been estimated for the entire grinding stage to prepare the ore for processing. The process will have two stages of grinding with the gravity interstage followed by pulp desliming, magnetic separation, three steps of specific minerals removal prior to the niobium flotation. The niobium concentrate will be leached, filtered and a gravity separation will be done to generate two different concentrate grades. The final concentrates will be dried and bagged to respond to the feed of a converter process.

A series of metallurgical tests were performed at SGS in 2022 with results confirming a recovery rate of 78% and high niobium grade in the concentrate and low impurities, item as the pilot plant results performed in the 1960's. NioBay has succeeded in producing Niobium Oxyde when performing bench tests (small scale) with the ore obtained in previous drilling campaigns.

On January 13, 2025, NioBay announced the successful results of metallurgical testing conducted by SGS on concentrate from James Bay Project (the "Test Program"). In order to fully explore the potential of this project, which initially focused on FeNb production, the Company commissioned SGS to perform metallurgical tests on the concentrate derived from ore samples collected during the drilling phase. On December 20, 2024, NioBay received a report detailing the production of Ammonium Niobium Oxalate (ANO), which is available on the Company's website.

Key Highlights of the Test Program

- A flotation concentrate sample, provided by SGS, served as feedstock for the metallurgical test program. The sample assayed 60.2% Nb₂O₅ (42.1% niobium).
- The Test Program compared two processes for generating a pregnant leach solution (PLS) rich in niobium with minimal impurities:
 - Strong acid agitated baking followed by water leaching.
 - Hydrofluoric acid leaching.
- Hydrofluoric acid leaching consistently achieved niobium dissolution in excess of 95% when testing acid dosages ranging from 90% to 130% of the stoichiometric requirement of hydrofluoric acid for a selection of prevalent elements (Nb, Ti, Si, and Fe).
- The strip liquor was then added to a pre-measured dosage of 100% of the stoichiometric requirement of ammonium hydroxide for Nb, Ti, and Fe at 60°C for two hours in a "reverse precipitation" test to precipitate approximately 90% of the dissolved niobium with very low levels of impurity co-precipitation. This test produced a residue assaying at 59.4% Nb.

In conclusion, production of ANO was completed and this program demonstrated a reliable flowsheet incorporating hydrofluoric acid leaching, solvent extraction using 1-octanol, and precipitation with ammonium hydroxide. These results confirm that mineralization from the Project can also be processed to produce high-purity niobium, which reveal an opportunity to target markets that demand high-purity niobium.

Proposed Infrastructure

Access to the mine site will be via a 38.0 km all season road from Moose River East bank south of Moosonee. A 4.0 km one lane tunnel is planned to cross Moose River and a final 2.6 km road segment will connect to the existing road to Moosonee near the Hydro One Renison substation. From Moosonee, the Ontario Northland Railway connects to Cochrane and from there onto the Ontario Highway 11.

Power will be provided from the Hydro One grid with a connection from the Renison substation. This substation provided power onto the Five Nations Energy Inc. transmission line servicing the now closed DeBeers Victor Diamond Mine.

The mining activities and processing facility will be supported by ancillaries located at site including a maintenance shop, warehouse, mine dry, explosives storage, fuel storage, administration building, and an operations camp. Other infrastructure is planned to be in Moosonee such as a material transit terminal, laboratory, and administrative building for support functions such as accounting, human resources and other.

Environment and Closure Plan

It is anticipated that this project will require a review under the Federal Impact Assessment Act coordinated along with provincial Class Environmental Assessment. NioBay would be proposing the active participation of identified impacted First Nation communities in the design, baseline data collection and follow up environmental monitoring. Only under Scenario #1 is it anticipated to be a federal Department of Fisheries and Oceans permit for a creek re-alignment. Examples of other provincial permits that will be required would include: Permit(s) to Take Water; Lands and Rivers Improvement Act; and Environmental Compliance Approval(s)(air and water). Depending on project decisions related to the creeks located on the Project site, a review from the Federal Impact Assessment team may not be necessary.

In Ontario, Canada a mine must file a closure plan prior to commencing construction. It is anticipated that with the active participation of identified impacted First Nation communities, the closure plan will be integrated into the mine design and initial environmental approvals. The closure plan must also include financial assurance that the operation will be closed out and remediated.

Stakeholder Engagement

Stakeholder engagement includes individuals and communities interested in or impacted by the potential development. However, there will be a distinct negotiated engagement plan with potentially impacted First Nation communities. This is in recognition of their established Treaty and Aboriginal Rights. NioBay will collaborate with the First Nation community to design a plan of engagement to ensure that the environmental approvals are fully aligned with their values. As future exploration and/or baseline environmental work proceeds, the MCFN may want another longer-term agreement that speaks to both their environmental and business involvement with the Project.

NioBay provided updates to the MCFN in relation to drilling and other potential activities at site, as discussed above under the heading, "*The Protection Agreement*". Additional efforts have been made to provide project information directly to MCFN members and NioBay also increased activities on social media and on the Company's web site.

Following the June 2023 elections in the MCFN community, the Company delivered a letter to the new Chief in order to respectively establish contact and have an opportunity to meet. NioBay's intention is to restore a relationship with the MCFN in order to have the opportunity to re-introduce the Company and discuss the remaining drill campaign required to fulfill the objectives established under the signed Protection Agreement. This step is necessary for the Company to complete an eventual pre-feasibility study and to establish with the Chief and Council the successive stages in the development of this critical metal. The Chief confirmed his intention to meet with NioBay. The OMM met with MCFN under their "duty to consult" responsibility. This meeting was to discuss the new drilling permit for the James Bay Project. The consultation process for the renewal of the exploration permit, initiated by the Ontario government, continued during fourth quarter of 2024. In September 2024, a formal meeting was held between the Ontario Ministry of Natural Resources and the MCFN. Exchanges also took place between NioBay and MCFN as part of this consultation.

NioBay believes that its projects can support the Truth and Reconciliation Commission call for economic reconciliation.

Independent Qualified Persons

The PEA was prepared for NioBay by G Mining, and other industry consultants, all Qualified Persons ("QP") under NI 43-101. The Company and independent QPs include:

- G Mining: Louis-Pierre Gignac P. Eng, M.Sc.A, CFA, Antoine Champagne P. Eng, Paul Murphy, P. Eng., Carl Michaud P. Eng.
- NioBay: Jacquelin Gauthier, P. Geo, Pierre Pelletier P. Eng (Consultant Metallurgy). Effective October 23, 2022, Jacquelin Gauthier ceased to act as Vice President, Geology of NioBay.

CREVIER PROJECT

The Crevier Project is located north of Lac St-Jean in the MRC Maria Chapdelaine, Québec. The Crevier deposit was discovered in 1975 by SOQUEM. In 2010, a PEA of the development of the niobium-tantalum resource was prepared by Met-Chem Canada Inc. after which several feasibility-stage studies were conducted including a pilot plant process.

On January 25, 2023, the Company announced significant improvements in metallurgical testing on the known area of the Crevier Project. The table below shows the historical work and results obtained by SGS:

Year	Grade Nb ₂ O ₅	Recovery
1985	7.5%	67.2%
2012*	21.9%	47.9%
2013*	13.9%	26.7%
2021**	22%	44.6%
2022**	24.4%	64%
2022**	38.7%	65%***

* Feed material consisting of 0.21% Nb₂O₅

** Feed material consisting of 0.22% Nb₂O₅

*** Actual estimation from the open circuit

Government Grants

On June 25, 2024, the Company announced the awarding of a grant of up to \$500,000 as part of the second call for projects for critical and strategic minerals for the Crevier Project. This grant was awarded by the Ministry of Natural Resources and Forests and the "Consortium de recherche et d'innovation en transformation métallique ("CRITM)". The title of this project is: "Demonstration of the niobium-tantalum concentration process on a pilot scale and production of niobium and tantalum oxides from the Crevier Project deposit located in the Lac St-Jean region" (the "Study"). This Study will also allow NioBay to produce final product samples, which will be sent to potential off takers that are supply chain manufacturer for batteries. Over a two-year period, the Company will be reimbursed for approximately 61% for costs incurred on the Study up to \$500,000.

The materiel from Crevier was crushed and prepared at SGS facilities in Québec City and a few bench scale tests were completed in December 2024 in preparation for the pilot test in H1-2025.

On April 8, 2025, the Company announced the award of a grant for up to \$400,000 under the Mining Exploration Support Program for Critical and Strategic Minerals of the Ministry of Natural Resources and Forests ("MRNF") for its Crevier 2 niobium & tantalum project, which is the southern and northern extension of the Crevier Project. This grant was awarded by the MNRF for the study entitled: "Conduct mineral processing tests on peripheral facies and host rocks at the Crevier deposit." An advance of \$240,000 was received in April 2025.

OPTION AGREEMENT WITH VIOR INC ("VIOR")

On February 21, 2024, the Company closed a definitive option agreement (the "Option Agreement"), with Vior to acquire an 80% undivided interest in the Foothills Project.

The Foothills Project covers an area of approximately 285 km² and is comprised of 5 separate claims blocks. It covers most of the contact of the intrusive zone known as the St. Urbain anorthosite. This zone has demonstrated the presence of rutile-ilmenite with results up to 57% of titanium dioxide (TiO₂), as well as apatite (Note: Vior referred to as phosphate). Of 139 outcrop samples collected, 67 contain P₂O₅ values of 4.0 to 6.3%, and boulder samples reveal some historic higher-grade mineralization of over 10% P₂O₅ (Sigeom, QC, See *Vior Press Release, September 20, 2023*).

The Option Agreement was amended on December 23, 2024 (the "Amended Agreement"). The Amended Agreement provides for the following terms and schedule:

Period	Cash Payments	Share Payments	Minimum Work Expenditures
Closing Date	\$40,000	1,250,000 Common Shares	N/A
June 30, 2025	\$40,000	1 250 000 Common Shares	\$400,000
June 30, 2026	\$60,000	\$150,000 in Common Shares, subject to a minimum of 1,000,000 Common Shares	\$1,100,000
June 30, 2027	\$60,000	\$250,000 in Common Shares, subject to a minimum of 1,000,000 Common Shares.	-
June 30, 2028	\$200,000	\$500,000 in Common Shares, subject to a minimum of 1,000,000 Common Shares	\$2,500,000

Installments are payable in Common Shares at a price per share equal to a 10-day VWAP, subject to a minimum issue price of \$0.055 per Common Shares. In accordance with the Option Agreement, NioBay Metals made the initial \$40,000 cash payment and issued 1,250,000 Common Shares which are subject to a four-month hold period under applicable securities laws.

The effective date for a contractual joint venture between Niobay and Vior (the "Joint Venture") will be the date on which the Option will be completed. The Option Agreement provides that once one party's interest in the Foothills Project and/or the Joint Venture falls below 10%, this interest will transferred to the other party and converted into a 1.5% NSR (Net Smelter Return) on precious and base metals and a 1.5% GRR (Gross Revenue Royalty) on mineral substances other than precious or base metals), with a 0.5% NSR/0.5% GRR being collectively redeemable for an aggregate amount of \$1,500,000.

Historic Vior Drill Holes

On May 7, 2024, NioBay announced that, following re-sampling of historic Vior drill holes from the Foothills Project, assay results confirm the presence of phosphate in addition to the titanium already demonstrated in previous campaigns.

Table 1: Composites of intercepted mineralization

Hole	From (m)	To (m)	Length (m)	TiO ₂ (%)
FH-20-01	4 m.	21.35 m.	17.85 m.	39.47%
FH-20-01	56.2 m.	61 m.	4.80 m.	39.47%
FH-20-02	3 m.	30.8 m.	27.80 m.	38.82%
FH-20-04	40.9 m.	56.55 m.	15.65 m.	40.92%
FH-20-05	115 m.	127.85 m.	10.85 m.	40.65%
FH-20-07	34.65 m.	84.15 m.	49.50 m.	30.98%
FH-20-08	32.9 m.	49.60 m.	16.70 m.	31.46%
FH-20-08	64.75 m	69.05 m	4.30 m.	35.80%

Table 2: Resampling results for holes 07 and 08 by NioBay

Hole	From(m)	To (m)	Length (m)	Lithology	P ₂ O ₅ %	TiO ₂ (%)
FH-20-07	84,15	98,00	13,85	Nelsonite	5,27	
FH-20-08	79,25	80,30	1,05	Gabbro	6,21	
FH-20-08	83,90	86,10	2,20	Gabbro	5,40	
FH-20-08	86,10	87,80	1,70	Massive Ilmenite		38,4
FH-20-08	87,80	88,50	0,70	Gabbro	4,86	
FH-20-08	91,90	92,40	0,50	Massive ilmenite	8,11	
FH-20-08	93,85	94,60	0,75	Gabbro	6,47	
FH-20-08	94,60	95,40	0,80	Semi-massive ilmenite	7,24	
FH-20-08	96,95	98,05	1,10	Gabbro	5,72	
FH-20-08	99,75	101,05	1,30	Gabbro	5,16	

The field campaign at the Foothills Project commenced on May 6, 2024 (the "2024 Summer Campaign"). On June 27 and August 7, 2024, NioBay announced that, following the start of exploration work on the Foothills Project, assay results (see Table 3) confirming the presence of high TiO₂ grades in massive ilmenite boulders. The samples taken were surface boulders found in the southern part of sector 1. The Company presented only those boulders with a TiO₂ value greater than 30%.

Table 3: Results of the initial samples from the 2024 Summer Campaign

Sample number	Type	TiO ₂ (%)
162590015	Boulder	39.4%
162590016	Boulder	38.9%
162590018	Boulder	36.6%
162590019	Boulder	38.5%
162590022	Boulder	38.9%
162590158	Boulder	36.8%
162590165	Boulder	37.2%
162590304	Boulder	38.2%
162590312	Boulder	37.7%
162590024	Boulder	44.2%
162590171	Boulder	41.0%
162590172	Boulder	40.0%
162590319	Boulder	42.5%
162590034	Boulder	34.6%
162590035	Bedrock	37.9%
162590329	Bedrock	37.9%
162590330	Bedrock	38.2%
162590331	Bedrock	38.5%
162590332	Bedrock	37.7%
162590333	Bedrock	38.0%
162590037	Bedrock	36.3%
162590064	Bedrock	30.6%
162590065	Bedrock	37.5%
162590069	Bedrock	35.5%
162590070	Bedrock	34.7%
162590075	Bedrock	39.8%
162590076	Bedrock	38.0%
162590077	Bedrock	38.7%
162590079	Bedrock	39.5%
162590080	Bedrock	38.1%
162590082	Bedrock	37.5%
162590083	Bedrock	40.2%
162590084	Bedrock	39.6%
162590085	Bedrock	37.8%
162590086	Bedrock	37.8%
162590104	Bedrock	36.6%
162590106	Boulder	32.9%
162590107	Bedrock	32.1%
162590110	Sub-bedrock	32.9%
162590112	Bedrock	37.7%
162590113	Bedrock	35.8%
162590114	Bedrock	38.0%
162590192	Bedrock	36.7%
162590193	Bedrock	35.9%
162590200	Bedrock	36.4%
162590201	Bedrock	40.3%
162590203	Bedrock	36.1%
162590204	Bedrock	36.1%
162590210	Bedrock	37.8%
162590212	Bedrock	34.6%
162590213	Bedrock	38.3%
162590215	Bedrock	38.4%
162590335 (New showing discovered north of the Brassard showing)	Bedrock	38.0%

162590336 (New showing discovered north of the Brassard showing)	Bedrock	38.0%
162590337 (New showing discovered north of the Brassard showing)	Bedrock	32.5%
162590338 (New showing discovered north of the Brassard showing)	Bedrock	35.8%
162590339 (New showing discovered north of the Brassard showing)	Bedrock	38.0%
162590340	Bedrock	37.7%
162590341	Bedrock	38.2%
162590342	Bedrock	39.9%
162590346	Bedrock	39.9%

The Company also carried out a detailed magnetic survey in the Lac aux Bleuets area. This area, located on Séminaire de Québec land, was prioritized for its high potential, as determined by analysis of previous data and cross-referencing with artificial intelligence software (IRIS). This survey, carried out in June 2024, showed a very strong anomaly in this sector. On September 13, 2024, the Company announced the receipt of authorizations to carry out surface drilling on the Foothills Property.

NioBay commenced drilling at the end of October 2024, with this campaign's completion in December 2024. On February 26, 2025, the Company announced that it had intercepted titanium in several of the surface drill holes carried out in Zone 1, on the Foothills Property, with the results below in Table 4.

Table 4: Drilling results at the Foothills Property

Drill Hole	From (m)	To (m)	Length (m)	Dilution (m)	TiO2 (%)
1625-24-002	89.75	153.00	63.25	1.00	10.57
1625-24-002	185.00	186.80	1.80	0.00	17.09
1625-24-002	220.80	226.55	5.75	0.00	22.36
1625-24-003	135.25	149.00	13.75	0.00	12.62
1625-24-003	151.00	156.00	5.00	0.50	19.13
1625-24-003	172.30	180.00	7.70	0.00	14.44
1625-24-004	154.10	158.40	4.30	0.00	14.73
1625-24-006	16.50	18.80	2.30	0.00	9.22
1625-24-006	25.00	30.45	5.45	0.70	11.76
1625-24-006	37.00	38.00	1.00	0.00	8.01
1625-24-006	48.00	49.00	1.00	0.00	14.60
1625-24-007	44.20	47.00	2.80	0.00	11.14
1625-24-007	49.00	62.65	13.65	0.00	10.56

BATTERY GRADE NIOBIUM

In April 2021, the Company announced the beginning of a series of hydrometallurgical process testing for the production of battery grade niobium at the James Bay Project. NioBay further announced the initiation of additional test work to produce precursor material for niobium batteries from the Crevier Project. This first phase of testing, performed by SGS Lakefield Inc, consisted of producing a niobium concentrate, similar to the previous tests done on the James Bay Project's ore.

The results demonstrated a 3% improvement from the Company's PEA recovery, reaching up to 81.3% while producing a niobium concentrate of 61.7%. In addition, the lack of deleterious material and low silicate content should translate in a significant reduction in acid consumption for the battery-grade niobium oxide production. The first phase of metallurgical testing also contributed to optimizing the parameters and flowsheet design.

The second phase of the metallurgical program will focus on the optimisation of the beneficiation flow-sheet from the previous metallurgical test work and also to work on the production of niobium battery grade and consist of a hydrometallurgical treatment to purify the concentrate to +99% Nb₂O₅ (battery-grade Niobium oxide), at a larger scale. This phase of the metallurgical program is expected to commence subsequent to the completion of additional drilling at the James Bay Project.

NIOBAY RESEARCH PROJECTS

NioBay continues its support of various Canadian universities by taking part in research and development work to develop the use of niobium and tantalum in various technologies that will help decarbonize our economy.

Current projects include:

- Development of Niobium-based Bipolar Plates for Proton-Exchange Membrane (PEM) Fuel Cells (University of Waterloo)
- Development of a new Niobium-based porous transport layer for PEM water electrolysis (Université du Québec à Trois-Rivières (UQTR))
- Valorization of Niobium and Tantalum for the Production of Low Carbon Intensity Fuels: Water Electrolysis and CO₂ Conversion into Value Added Products (Institut national de la recherche scientifique (INRS))

On September 19, 2024, the Company announced the first results of the work with UQTR. Metallic bipolar plates are crucial for the development of compact and lightweight proton exchange membrane fuel cell stacks; however, most of them encounter durability and conductivity challenges in the fuel cell environment. In this study, Nb-Ti alloy/Pt coatings are deposited on SS316L plates to enhance corrosion resistance, surface wettability, electrical and thermal conductivity, with reduced interfacial contact resistance. The work was directed by Professors Samaneh Shahgalidi of UQTR and Xianguo Li of the University of Waterloo, and carried out as part of Mr. Pramoth Varsan Madhavan's doctoral thesis.

Amongst other results, the incorporation of Nb-Ti alloy/Pt coatings on SS316L increases the in-plane electrical conductivity by 42.6% and thermal conductivity by 3.5%, surpassing the US Department of Energy's technical targets in these categories. These results indicate the viability of Nb-Ti alloy/Pt coated SS316L bipolar plates for fuel cell applications. The work was published in the journal: "Energy Conversion and Management 311 (2024) 118536". The full article can be found on the NioBay website under R&D project.

Furthermore, the tests carried out at the University of Waterloo, have met the criteria of the United States Department of Energy (DOE), achieving a corrosion protection efficiency of 99.98% in PEM fuel cells.

It should be noted that niobium is seen as a potential substitute for the platinum group elements (PGEs) usually used in these technologies, making them more affordable.

QUALIFIED PERSON

Mr. Jean-Sebastien David, P. geo, acted as the QP as defined in NI 43-101. He reviewed and approved the technical and scientific content of this MD&A. Mr. David is NioBay's President and Chief executive officer ("CEO").

NIBIUM MARKET

Niobium is used in various forms such as oxide, pure metal, nickel master-alloys and alloys with other noble metals and in its most used form, FeNb, representing approximately 90% of the production of niobium. FeNb is used as an additive in the production of high-quality steels which are used mostly in the manufacturing of automobiles, bridges, skyscrapers and other large steel structures, pipelines and stainless steels. The addition of niobium in steel reinforces and lightens the steel, makes it more resistant to corrosion, facilitates its welding and helps it withstand forces under high pressure and high temperature. The addition of niobium therefore has a positive impact on the reduction of CO₂ emission in the atmosphere which gives it a "green" metal recognition. The demand for niobium is thus directly related to the manufacture of these steels and the development of new specialty steels.

Also, recent developments in battery manufacturing technology have involved using niobium as an anode material and as coating material for cathode materials, which provides an indication of an increase in the demand for battery grade niobium. The potential increase in market demand could be significant, and the Company intends to become an active participant in the electrification of vehicles and/or other devices.

Today, 100% of the Niobium Oxide is produced by one supplier; CBMM. Customers will require other sources of Niobium Oxide supply to remain competitive. NioBay is aiming to become this new source of supply.

Niobium is classified as a critical and strategic metal for the United States, Canada, Europe and certain Asian countries. There are only three major producers, CBMM and Catalao in Brazil and Niobec in Canada.

ABOUT TITANIUM

Titanium (Ti) is as strong as steel, but much less dense. It is therefore important as an alloying agent with many metals, including aluminum, molybdenum and iron. These alloys are mainly used in aircraft and spacecraft because of their low density and ability to withstand extreme temperatures. They are also used in sports equipment, laptops, bicycles and medical prostheses. Recently, this metal has been used in some battery components.

ABOUT HYDROGEN

Hydrogen is one of the most efficient energy carriers and can be produced by different methods. Among all the production methods, the proton exchange membrane water electrolyzer (PEMWE) is considered the most promising technique to produce highly pure hydrogen from renewable energy sources with pure oxygen as by-products with no carbon emissions.

ABOUT PEMWE TECHNOLOGY

The PEMWE technology has reached the early stages of commercial deployment while the mass production is tied to cost reduction. The single electrochemical cell includes a membrane electrode assembly (MEA), porous transport layers (PTLs), and bipolar plates (BPPs). The PTLs cover the MEA on both sides and play an important role in cell performance, and durability as they are responsible for electrical and heat conduction in the cell as well as mass transport and accessibility of the reactants. In addition, they provide mechanical support to the delicate catalyst layers in MEA.

LIQUIDITY AND CAPITAL RESOURCES

As at March 31, 2025, the Company had a working capital of \$2,065,946, which includes cash and cash equivalents of \$2,264,761. The majority of the Company's financial liabilities have contractual maturities of less than 30 days and are subject to normal trade terms.

The Company has no history of revenues from its operating activities. The Company is not in commercial production on any of its mineral properties and accordingly does not generate cash from operations. The Company anticipates it will have negative cash flow from operating activities in future years.

The Company has, in the past, financed its activities by raising capital through equity issuances. Until NioBay can generate a positive cash flow position in order to finance its exploration programs, the Company will remain reliant on the equity markets for raising capital, in addition to adjusting spending, disposing of assets, and obtaining other non-equity sources of financing.

The Company believes it has sufficient cash resources to meet its exploration and administrative overhead expenses and maintain its planned exploration activities for at least the next 12 months. However, there is no guarantee that the Company will be able to maintain sufficient working capital beyond that horizon with the planned expenditures due to market, economic, and commodity price fluctuations.

OUTLOOK

The Company's strategy is focused on the exploration and development of economic critical & strategic mineral deposits. Management, while implementing its development strategy, will take into account the context of global market conditions and the stock market.

As previously discussed in this MD&A, subsequent to the filing of the PEA on the James Bay Project, NioBay planned the next steps in the development of the James Bay Project includes the completion of the 2022 Drill Program, which consisted of a 13,000 m infill drill program (originally initiated in early 2022 and suspended in March 2022). Following discussions with OMM, the Company has applied for a three-year extension to its exploration permit at the Project. In addition, the Company plans to advance its metallurgical testing, complete a new resource calculation and to implement certain environmental and cultural baseline studies to be included in an eventual pre-feasibility study. NioBay intends to work with the MCFN in order to return to the Project and complete the 2022 Drill Program. The core from this program will be used to continue metallurgical test work which will be required for a pre-feasibility study.

Subsequent to the closing of the Option Agreement, NioBay's objective is to complete exploration work at the Foothills Project with the objective to discover a homogeneous zone, supported by a resource calculation, and thus prove the mineral potential of this sector. As discussed, the Company filed an application for authorization for impact projects with the MNRF with the aim of carrying out a drilling campaign in 2024. This authorization was granted and the Company completed its drill program at the end of December 2024.

In early 2025, the Company, applied for authorization for impact projects with the MRNF with the aim to carrying out a drilling program in Zone 3 at the Foothills Project. The authorization was granted in April 2025 and the Company will look to complete drilling in the Fall of 2025.

NioBay announced a \$500,000 grant from CRITM to produce battery-grade niobium from its Crevier Project. A new concentrate will be produced at SGS's installations in Quebec City.

The 3 main objectives are:

- 1- to test a new flow sheet at a pilot scale level;
- 2- to produce ANO by 3 different methods. SGS will make ANO by the standard method, University Laval will use a high pH method and UQAT (Université du Québec en Abitibi-Témiscamingue) will use a roasting method.
- 3- NioBay has agreed, with two end users (one based in USA and the second based in Europe), to ship samples of the ANO produced to see if the product fits their requirements. 10 mt of material was sent in September 2024 and SGS (with partners) completed the pilot plant build in December 2024. During Q1-2025, the first phase of the program was completed, by processing 9.2 mt of material. The second phase (the flotation) commenced mid-May. The Company is looking to ship the first samples of concentrate to Europe at the beginning of June 2025.

Over a two-year period, the Company will be reimbursed for approximately 61% for costs incurred on the Study. During the three month period ended March 31, 2025, the Company incurred \$215,000 in eligible costs related to the Study (\$ nil in the three month period ended March 31, 2024), recognizing \$131,104 as other income in the consolidated statement of loss and comprehensive loss for this period (\$ nil in the three month period ended March 31, 2024). As at March 31, 2025, \$141,673 is recorded as a grant receivable (\$10,569 as at December 31, 2024).

The Company will continue its collaboration with the UQTR, which has started research on the production of green hydrogen ("*Developing novel and cost-effective niobium-based porous transport layers to be used in proton exchange membrane water electrolysis for renewable hydrogen production*"). Following successful results, four scientific papers were release and are available on the Company's Web site.

NioBay will also continue our collaboration with the University of Waterloo in the context of their work on fuel cells. University of Waterloo is working to develop niobium-based bipolar plates to increase the efficiency and performance of proton exchange membrane fuel cells. The tests, carried out at UW have met the criteria of the United States Department of Energy (DOE), achieving a corrosion protection efficiency of 99.98% in PEM fuel cells.

EXPLORATION AND EVALUATION EXPENSES

The Company incurred the following exploration and evaluation expenses by project:

Three-months ended March 31, 2025	Foothills	James Bay	Crevier	Others	Total
	\$	\$	\$	\$	\$
Wages and consulting	-	15,894	-	-	15,894
Drilling	41,019	973	57,881	-	99,873
Studies	2,620	4,865	19,536	309,633	336,654
Mineral claims	13	8,273	143	129	8,558
Administrative and others	-	10,709	-	4,887	15,596
Total	43,652	40,714	77,560	314,649	476,575

Three-months ended March 31, 2024	James Bay	Crevier	Others	Total
	\$	\$	\$	\$
Studies and analysis	1,015	73,640	117,794	192,449
Wages and consulting	16,879	-	-	16,879
Mineral claims	13,139	-	2,280	15,419
Administrative and others	11,353	-	-	11,353
Total	42,386	73,640	120,074	236,100

FINANCIAL REVIEW

NioBay is in the exploration and evaluation phase and does not yet have revenue-generating activities. Accordingly, the Company's financial performance is largely a function of the level of exploration and evaluation activities undertaken on its projects and the management and administrative expenses required to operate and carry out its activities.

Results for the three-months ended March 31, 2025 ("Q1-2025") compared to the three-months ended March 31, 2024 ("Q1-2024")

The Company incurred a net loss of \$623,434 during Q1-2025 (\$0.01 per share) compared to a net loss of \$494,255 during Q1-2024 (\$0.01 per share). The net loss attributable to shareholders of the Company totaled \$597,893 in Q1-2025 compared to \$470,145 in Q1-2024.

The operating loss for Q1-2025 was \$784,971 and increased by \$256,307 as compared to Q1-2024. This increase from Q1-2024 is mostly due to higher exploration and evaluation expenses incurred at the James Bay, Foothills and Crevier Project, in addition to the Study. Evaluation and evaluation expenditures totaled \$476,575 in Q1-2025 (\$236,100 in Q1-2024), the details of which can be seen in the tables above.

In addition, NioBay realized \$18,005 of finance income in Q1-2025 (\$34,766 in Q1-2024), with the decrease resulting from lower interest rates and lower liquidities held in Q1-2025. Income related to the recognition of the deferred premium on flow-through shares in Q1-2025 amounted to \$10,021 (\$ nil in Q1-2024). Grant income totaled \$131,104K in Q1-2025 (\$ nil in Q1-2024).

Selected Quarterly Financial Information

The following is a summary of the Company's financial results for the past eight quarters:

Period ended	Net finance income (loss)	Net loss	Net loss attributable to shareholders of the Company	Basic and diluted loss per share
	\$	\$	\$	\$
March 31, 2025	18,005	(623,434)	(597, 893)	(0.01)
December 31, 2024	21,257	(793,636)	(825,692)	(0.01)
September 30, 2024	30,932	(473,417)	(463,823)	(0.00)
June 30, 2024	28,827	(674,383)	(662,363)	(0.01)
March 31, 2024	34,766	(494,255)	(470,145)	(0.01)
December 31, 2023	41,204	(204,135)	(199,762)	(0.00)
September 30, 2023	42,010	(934,395)	(773,715)	(0.01)
June 30, 2023	42,015	(548,284)	(527,883)	(0.01)

The elevated net losses in during the periods above coincide with the completion of drill programs at the James Bay, Foothills and Crevier Projects.

Capital Management

In managing its capital, the objective of the Company is to preserve its ability to continue its mining exploration while maintaining the current exploration programs and evaluation of mining assets, to provide sufficient working capital to meet its current commitments and to pursue potential investments. At March 31, 2025, the capital of the Company consists of equity attributable to shareholders of the Company of \$3,330,549 (\$3,920,644 at December 31, 2024). The Company manages its capital structure and makes adjustments in accordance with the aforementioned objectives, as well as in light of changes in economic conditions and the risk characteristics of the underlying assets.

Transactions with Related Parties

The remuneration awarded to directors and to key management personnel, including the President and CEO and the Chief Financial Officer, is as follows:

	Three-months ended March 31,	
	2025	2024
	\$	\$
Salaries, professional fees and other short-term benefits	105,680	95,000
Share-based compensation	5,320	5,168
	111,000	100,168

On March 26, 2025, the Company granted stock options to a director to purchase up to an aggregate of 50,000 Common Shares. One third of such stock options will vest immediately and the remaining stock options are subject to a two-year vesting period. The stock options have a seven-year term at an exercise price of \$0.055 per Common Share.

Off-Balance Sheet Arrangements

As at May 21, 2025, the Company has no off-balance sheet arrangements.

Outstanding Share Data

As at May 21, 2025, the Company has 107,277,572 Common Shares, 19,655,095 Warrants and 4,145,000 stock options outstanding.

OTHER RISKS AND UNCERTAINTIES

An investment in the Company's common shares is subject to a number of risks and uncertainties. An investor should carefully consider the risks described below and the other information filed with the Canadian securities regulators SEDAR+ (www.sedarplus.ca), before investing in the Company's common shares. If any of the described risks occur, or if others occur, the Company's business, operating results and financial condition could be seriously harmed and investors may lose a significant proportion of their investment.

The following risk factors may not be a definitive list of all risk factors associated with an investment in NioBay or in connection with the business and operations of NioBay.

Industry Conditions

The exploration for and development of mineral deposits involve significant risks and while the discovery of an ore body may result in substantial rewards, few properties that are explored are ultimately developed into producing mines. All of NioBay's properties are in the exploration stage and NioBay is presently not exploiting any of its properties and its future success will depend on its capacity to generate revenues from an exploited property.

The discovery of mineral deposits depends on a number of factors, including the professional qualification of its personnel in charge of exploration. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are the particular attributes of the deposit, such as size, grade and proximity to infrastructure, as well as metal prices which are highly cyclical and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. In the event that NioBay wishes to commercially exploit one of its properties, the exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in NioBay not receiving an adequate return on invested capital. NioBay's operations will be subject to all the hazards and risks normally encountered in the exploration and development of mineral deposits. Mining operations generally involve a high degree of risk, including unusual and unexpected geologic formations. There can be no guarantee that sufficient quantities of minerals will be discovered or that one of NioBay's properties will reach the commercial production stage.

Regulatory Matters

NioBay's activities are subject to governmental laws and regulations. These activities can be affected at various levels by governmental regulation governing prospecting and development, price control, taxes, labour standards and occupational health, expropriation, mine safety and other matters. Exploration and commercialization are subject to various federal, provincial and local laws and regulations relating to the protection of the environment. These laws impose high standards on the mining industry to monitor the discharge of wastewater and report the results of such monitoring to regulatory authorities, to reduce or eliminate certain effects on or into land,

water or air, to progressively rehabilitate mine properties, to manage hazardous wastes and materials and to reduce the risk of worker accidents.

Failure to comply with applicable laws and regulations may result in civil or criminal fines or penalties or enforcement actions, including orders issued by regulatory or judicial authorities enjoining or curtailing operations or requiring corrective measures, installation of additional equipment or remedial actions, any of which could result in significant expenditures. NioBay may also be required to compensate private parties suffering loss or damage by reason of a breach of such laws, regulations or permitting requirements. It is also possible that future laws and regulations, or more stringent enforcement of current laws and regulations by governmental authorities, could cause additional expense, capital expenditures, restrictions on or suspensions of NioBay's activities and delays in the exploration of properties.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on NioBay and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

NioBay's operations are subject to financing risks and additional financing may result in dilution or partial sale of assets

NioBay's operations are subject to financing risks. At the present time, NioBay does not have any producing projects and no sources of revenue. NioBay's ability to explore for and find potential economic projects, and then to bring them into production, is highly dependent upon its ability to raise equity and debt capital in the financial markets. Any projects that NioBay develops will require significant capital expenditures. To obtain such funds, NioBay may sell additional securities including, but not limited to, NioBay common shares or some form of convertible security, the effect of which could result in a substantial dilution of the equity interests of the NioBay Shareholders. Alternatively, NioBay may also sell a part of its interest in an asset in order to raise capital. There is no assurance that NioBay will be able to raise the funds required to continue its exploration programs and finance the development of any potentially economic deposit that is identified on acceptable terms or at all. The failure to obtain the necessary financing could have a material adverse effect.

Economics of developing mineral properties

Mineral exploration and development is speculative and involves a high degree of risk. While the discovery of an ore body may result in substantial rewards, few properties which are explored are commercially mineable and ultimately developed into producing mines. There is no assurance that any exploration properties will be commercially mineable.

Should any mineral resources exist, substantial expenditures will be required to confirm mineral reserves which are sufficient to commercially mine and to obtain the required environmental approvals and permitting required to commence commercial operations. The decision as to whether a property contains a commercially viable mineral deposit and should be brought into production will depend upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense. This decision will involve consideration and evaluation of several significant factors including, but not limited to: (a) costs of bringing a property into production, including exploration and development work, preparation of production feasibility studies and construction of production facilities; (b) availability and costs of financing; (c) ongoing costs of production; (d) metal prices; (e) environmental compliance regulations and restraints (including potential environmental liabilities associated with historical exploration activities); and (f) political climate and/or governmental regulation and control. Development projects are also subject to the successful completion of engineering studies, issuance of necessary governmental permits, and availability of adequate financing. Development projects have no operating history upon which to base estimates of future cash flow.

Community relations, social license and land claim

Maintaining a positive relationship with the communities in which NioBay operates is critical to its business operations and the development of the James Bay Project.

NioBay may come under pressure to demonstrate that other stakeholders (including employees, communities surrounding operations and the countries in which they respectively operate) benefit and will continue to benefit from its commercial activities, and/or that it operates in a manner that will minimize any potential damage or disruption to the interests of those stakeholders.

Erosion of social licence or activities of third parties seeking to call into question social licence may have the effect of slowing down the development of new projects and potentially may increase the cost of constructing and operating these projects. Productivity may be reduced due to restriction of access, proceedings initiated or delays in permitting and there may also be extra costs associated with improving the relationship with the surrounding communities.

While the Company is committed to operating in a socially responsible manner there is no guarantee that its efforts will meet all of third parties' expectations, which could have a material adverse effect on the Company's business, financial position and operations.

Competition

NioBay's activities are directed towards the exploration and evaluation of mineral deposits. There is no certainty that the expenditures to be made by NioBay will result in discoveries of commercial quantities of mineral deposits. There is aggressive competition within the mining industry for the discovery and acquisition of properties considered to have commercial potential. NioBay will compete with other interests, many of which have greater financial resources than it will have, for the opportunity to participate in promising projects. Significant capital investment is required to achieve commercial production from successful exploration efforts, and NioBay may not be able to successfully raise funds required for any such capital investment.

NioBay may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot economically insure

Mining is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions, earthquakes, pit wall failures and cave-ins) and encountering unusual or unexpected geological conditions. Such risk and hazards might impact NioBay's business. Consequently, many of the foregoing risks and hazards could result in damage to, or destruction of, NioBay's mineral properties or future processing facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of their exploration or development activities, delay in or inability to receive required regulatory approvals, or costs, monetary losses and potential legal liability and adverse governmental action. NioBay may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot insure or against which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to NioBay.

Information systems and cyber security

NioBay relies on its IT infrastructure to meet its business objectives. NioBay uses different IT systems, networks, equipment and software and has adopted security measures to prevent and detect cyber threats. However, NioBay and third-party service providers and vendors may be vulnerable to cyber threats, which have been evolving in terms of sophistication and new threats are emerging at an increased rate. Unauthorized third parties may be able to penetrate network security and misappropriate or compromise confidential information, create system disruptions or cause shutdowns to NioBay or its counterparties. Although NioBay has not experienced any losses relating to cyber-attacks or other information security breaches, there can be no assurance that there will be no such loss in the future. Significant security breaches or system failures of NioBay or its counterparties, especially if such breach goes undetected for a period of time, may result in significant costs, fines or lawsuits and damage to reputation. The significance of any cyber security breach is difficult to quantify, but may in certain circumstances be material and could have a material adverse effect on NioBay's business.

Infectious Disease Outbreaks

NioBay faces risks related to health epidemics, pandemics and other outbreaks of infectious diseases, which could significantly disrupt, directly or indirectly, its operations and may materially and adversely affect its business and financial conditions.

NioBay's business could be adversely impacted by the effects of the coronavirus or other epidemics or pandemics. The extent to which an epidemic or pandemic impacts NioBay's business, including its operations and the market for its securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity and scope of an outbreak and the actions taken to contain or treat such outbreak. In particular, the continued spread of the coronavirus globally could materially and adversely impact NioBay's business including without limitation, employee health, workforce productivity, increased insurance premiums, limitations on travel, the availability of industry experts and personnel, operations and business of third party operators, and other factors that will depend on future developments beyond NioBay's control, which may have a material and adverse effect on its business, financial condition and results of operations. There can be no assurance that NioBay's personnel will not be impacted by these pandemic diseases and ultimately see its workforce productivity reduced or incur increased medical costs / insurance premiums as a result of these health risks.

In addition, a significant outbreak of infectious diseases could result in a widespread global health crisis that could adversely affect global economies and financial markets resulting in an economic downturn that could have an adverse effect on the demand for precious metals and NioBay's future prospects.

Fluctuation in market value of NioBay common shares

The market price of NioBay common shares is affected by many variables not directly related to the corporate performance of NioBay, including the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. The effect of these and other factors on the market price of the NioBay common shares in the future cannot be predicted.

Factors beyond the control of NioBay

The potential profitability of mineral properties is dependent upon many factors beyond NioBay's control. For instance, world prices of and markets for minerals are unpredictable, highly volatile, potentially subject to governmental fixing, pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that rates of recovery of minerals from mined ore (assuming that such mineral deposits are known to exist) may vary from the rate experienced in tests and a reduction in the recovery rate will adversely affect profitability and, possibly, the economic viability of a property. Profitability also depends on the costs of operations, including costs of labour, equipment, electricity, environmental compliance or other production inputs. Such costs will fluctuate in ways NioBay cannot predict and are beyond NioBay's control, and such fluctuations will impact profitability and may eliminate profitability altogether. Additionally, due to worldwide economic uncertainty, the availability and cost of funds for development and other costs have become increasingly difficult, if not impossible, to project. These changes and events may materially affect the financial performance of NioBay and they may also negatively impact the project schedule.

Financial Risks

The Company's activities expose it to a variety of financial risks: market risks (including foreign currency risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's performance.

A description of the financial risks are included in the Annual Financial Statements, filed on SEDAR+ (www.sedarplus.ca).

Internal Control Disclosure

In November 2007, the Canadian Securities Administrators exempted issuers on the TSX-V, such as the Company, from certifying disclosure controls and procedures, as well as internal controls over financial reporting as of December 31, 2007, and thereafter. The Company is required to file basic certificates. The Company makes no assessment relating to establishment and maintenance of disclosure controls and procedures as defined under National Instrument 52-109.

Basis of Presentation of Financial Statements

The Financial Statements have been prepared in accordance with the IFRS Accounting Standards. The accounting policies, methods of computation and presentation applied in the Financial Statements are consistent with those of the previous financial year.

The Board has approved the Financial Statements on May 21, 2025.

The significant accounting policies of NioBay, as well as the accounting standards issued but not yet effective, are detailed in the notes to the Annual Financial Statements, filed on SEDAR+ (www.sedarplus.ca).

Critical Accounting Estimates and Judgments

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The determination of estimates requires the exercise of judgment based on various assumptions and other factors such as historical experience and current and expected economic conditions. Actual results could differ from those estimates.

Critical judgments in applying the Company's accounting policies are detailed in the Annual Financial Statements, filed on SEDAR+ (www.sedarplus.ca).

Financial Instruments

All financial instruments are required to be measured at fair value on initial recognition. The fair value is based on quoted market prices, unless the financial instruments are not traded in an active market. In this case, the fair value is determined by using valuation techniques like the Black-Scholes option pricing model or other valuation techniques. Measurement in subsequent periods depends on the classification of the financial instrument.

A description of financial instruments and their fair value is included in the in the Annual Financial Statements filed on SEDAR+ (www.sedarplus.ca).

Cautionary Statement Regarding Forward-Looking Statements

Statements contained in this document that are not historical facts are regarded as forward-looking statements. These statements may involve risk, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Many factors could cause such differences, including: volatility in market metal prices; changes in foreign currency exchange rates and interest rates; unexpected variations in geological conditions of a property or erroneous geological data; environmental risks including increased regulatory constraints; unexpected adverse mining conditions; adverse political conditions, and changes in government regulations and policies. Although NioBay has attempted to identify important factors that could cause actual plans, actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause plans, actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual plans, results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

Additional Information and Continuous Disclosure

This MD&A has been prepared as at May 21, 2025. Additional information on the Company is available through regular filings of press releases, financial statements and MD&A on SEDAR+ (www.sedarplus.ca) and on the Company's website (www.niobaymetals.com).

(Signed) Jean-Sebastien David
Jean-Sebastien David
President & Chief Executive Officer

(Signed) Anthony Glavac
Anthony Glavac
Chief Financial Officer

May 21, 2025

Corporate Information

Administrative Office

1100 av. des Canadiens-de-Montréal
Suite 300
Montréal, Québec, Canada H3B 2S2
Tel.: (514) 866-6500
Web site: www.niobaymetals.com

Directors

Serge Savard, Chairman
Dawn Madahbee Leach
Jean-Sébastien David
Raymond Legault
Laurence Farmer
Josianne Beaudry

Officers

Jean-Sebastien David, President and Chief Executive Officer
Anthony Glavac, Chief Financial Officer
Marc Pothier, Corporate Secretary

Auditors

PricewaterhouseCoopers LLP/s.r.l./s.e.n.c.r.l.

Transfer Agent

TSX Trust Company

Exchange listing

TSX-V: NBY
OTCQB: NBYCF