

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023



This Management Discussion and Analysis is dated April 29, 2024.

Gratomic Inc. (hereafter the “Company” or “Gratomic”), was incorporated under the Business Corporations Act (Ontario), R.S.O. 1990, on February 27, 2007, and is listed on the TSX Venture Exchange, OTCQX and Frankfurt exchanges (TSX-V: GRAT) (OTCQX: CBULF) (FRANKFURT: CB82). The Company’s corporate office is located at Bay Adelaide Centre - East Tower, 22 Adelaide Street West, Suite 3600, Toronto, Ontario M5H 4E3. The Company is a junior resource company engaged in the acquisition, exploration and development of mineral properties located in Namibia, Brazil, and Canada.

The following is the management discussion and analysis (“MD&A”) of the financial condition, changes in financial condition, and results of operations of Gratomic for the year ended December 31, 2023. The MD&A should be read in conjunction with the Company’s consolidated financial statements for the year ended December 31, 2023 (www.sedarplus.ca), which have been prepared using accounting policies consistent with IFRS Accounting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

The Company’s ability to realize the costs it has incurred to date on its properties is dependent upon it being able to identify economically recoverable reserves; finance their exploration and evaluation costs; resolve any environmental, regulatory, or other constraints which may hinder the successful development of the reserves; and attain profitable operations.

The business of mining and exploration for minerals involves a high degree of risk and there can be no assurance that current exploration and development programs will result in profitable mining operations. The recoverability of the carrying value of exploration, evaluation and development assets, and the Company’s continued existence, is dependent upon the preservation of its interest in the underlying properties, the discovery of economically recoverable reserves, the ability of the Company to raise the necessary financing to develop successful operations, and the achievement of profitable operations, or alternatively, upon the Company’s ability to dispose of its interests on an advantageous basis. These conditions indicate the existence of material uncertainties that cast significant doubt on the Company’s ability to continue as a going concern. Changes in future conditions could require material write downs of the carrying values.

Gratomic wishes to emphasize that no Preliminary Economic Analysis, Preliminary Feasibility Study (“PFS”) or Feasibility Study (“FS”) has been completed to support any level of production. In fact, no mineral resources let alone mineral reserves demonstrating economic viability and technical feasibility, have been delineated on the Aukam property. The Company is working towards completing a FS on the Aukam processing plant. The study, its recommendations, and their subsequent implementation, will provide conclusions and recommendations at a FS level of comfort relating to the scale up of the existing processing plant to a commercial scale processing facility capable of producing the desired concentrate grades and production rates.

The Company advises that it has not based its production decision on even the existence of mineral resources let alone on a PFS or FS of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit. Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that production will begin as anticipated or at all or that anticipated production costs will be achieved.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

Failure to commence production would have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve the anticipated production costs would have a material adverse impact on the Company's cash flow and future profitability.

Although the Company has taken steps to verify title to the properties on which it is conducting exploration and development activities and in which it has an interest, in accordance with industry standards for the current stage of such properties, these procedures do not guarantee the Company's title. Property title may be subject to government licensing requirements or regulations, unregistered prior agreements, unregistered claims, aboriginal claims, and non-compliance with regulatory, environmental, and social requirements.

The consolidated financial statements have been prepared using accounting policies applicable to a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business as they become due. The Company has incurred a loss for the year ended December 31, 2023, of \$5,310,252 and has an accumulated deficit of \$90,585,163. The Company is a junior resource company and is subject to risks and challenges similar to other companies at a comparable stage. These risks include, but are not limited to, dependence on key individuals, investment risks, market risks, and the ability to maintain adequate cash flows, and continuing as a going concern. Cash on hand is currently not adequate to cover expected expenditures for the next 12 months and therefore the Company will be required to secure additional funding. These challenges, and the continued cumulative operating losses, cast significant doubt on the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts nor to the amounts or classification of liabilities that might be necessary should the Company not be able to continue as a going concern. Such adjustments could be material.

Unless otherwise specified, all dollar amounts herein are expressed in Canadian currency.

Additional information on the Company may be found on SEDAR+ at www.sedarplus.ca

Forward-Looking Information

Except for statements of historical fact, certain information contained herein constitutes forward-looking statements under Canadian securities legislation. Such statements and assumptions include those relating to guidance; proposed acquisitions; strategy; development potential and timetable for the Company's properties; the Company's ability to raise additional financing; mineralization projections; the Company's ability to restart the Aukam Mine; the economic viability of mining at the Aukam Mine; the timing, success and amount of future exploration and development; and projected capital and operating expenditures. In making and providing the forward-looking information included in this MD&A the Company's assumptions may include among other things: (i) assumptions about the prices of minerals; (ii) that there are no material delays in the optimization of operations at the exploration and evaluation assets; (iii) assumptions about operating costs and expenditures; (iv) assumptions about future production and recovery; (v) that there is no unanticipated fluctuation in foreign exchange rates; and (vi) that there is no material deterioration in general economic conditions. Although management believes that the assumptions made and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. By its nature, forward-looking information is based on assumptions and involves known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements, to be materially different from future results, performance or achievements expressed or implied by such forward-looking information. Such risks, uncertainties and other factors include among other things the following: (i) decreases in the price of graphite; (ii) the risk that the Company will continue to have negative operating cash flow; (iii) the risk that additional financing will not be obtained as and when required; (iv) material increases in operating costs; (v) adverse fluctuations in foreign exchange rates; (vi) environmental risks and changes in environmental legislation; (vii) unexpected events and delays during construction and start-up; (viii) changes in project parameters as plans continue to be refined; (ix) failure of equipment or processes to operate as anticipated; (x) labour or community disputes; (xi) variations in mineral grade and recovery rates; (xii) failure to issue, revocation or non-renewal of

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

government approvals or permits; (xiii) foreign country risks inherent to the jurisdictions where the Company operates; (xiv) reliance on qualified personnel; and (xv) dependence on outside parties.

This MD&A (see “Risks and Uncertainties”) contains additional information on risks, uncertainties and other factors relating to the forward-looking information. Although the Company has attempted to identify factors that would cause actual actions, events, or results to differ materially from those disclosed in the forward-looking information, there may be other factors that cause actual results, performances, achievements, or events not to be as anticipated, estimated, or intended. Also, many of the factors are beyond the Company’s control. Accordingly, readers should not place undue reliance on forward-looking information. The Company undertakes no obligation to reissue or update forward-looking information as a result of new information or events after the date of this MD&A, except as may be required by law. All forward-looking information disclosed in this document is qualified by this cautionary statement.

Outlook and Performance Highlights

Projects

Gratomic is an exploration and development stage company, with projects in Namibia, Brazil, and Canada, focused on mine-to-market commercialization of graphite products, most notably high value graphene-based components for a range of mass market products.

Aukam Graphite Project

On July 29, 2021, Gratomic purchased the remaining 37% interest in the Aukam graphite project in Southern Namibia and now owns 100%.

Aukam graphite has been tested in several high value applications, including nano engineered graphenes. Large quantities of high-grade graphite concentrate have been shipped for testing, following early positive results, to confirm its suitability as an anode material. Gratomic is confident that the test results will provide a unique competitive advantage in its intended target markets.

There is year-round road access to the Aukam project from the paved B4 highway, that runs between Lüderitz and Keetmanshoop, and via district gravel roads south from the B4 highway. The infrastructure in the area is good, with water from underground aquifers, and a rail link between Lüderitz and Keetmanshoop adjacent to the B4 highway, approximately 70 km north of the project.

Zumbi Graphite Project, Brazil

On December 8, 2021, the Capim Grosso graphite asset was acquired through the acquisition of a 99.9% interest in Zumbi Mineração Ltda. The Capim Grosso asset is situated in the center east portion of the Bahia State, 280 km from the port of Salvador, the state capital, and 166 km from Feira de Santana, the state’s second largest city. The project comprises mineral claims covering a surface area of 3,728.06 hectares and is owned by Zumbi Mineração Ltda. The Vendors retained a 3% gross smelter return royalty in respect of all minerals processed other than graphite.

On June 10, 2022, the Jacobina and Igrapiuna projects were acquired by Zumbi Mineração. The projects cover a surface area of 2,782.09 hectares, and are located in the State of Bahia, Brazil within 30 km of its Capim Grosso graphite asset.

On September 13 and 14, 2022, Gratomic was granted four additional Prospecting Licenses for graphite exploration by Brazil’s National Mining Agency in new promising areas near its existing Capim Grosso Graphite project. The total area of the new claims is 6,312 ha.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

On May 10, 2023, Gratomic was granted one additional Prospecting License for graphite exploration by Brazil's National Mining Agency in a new promising area contiguous to its existing Capim Grosso Graphite project. The total area of the new claims is 1,972.55 ha.

On August 16, 2023, Gratomic announced the issuing of a NI43-101 technical report dated August 14, 2023, with an effective date of July 10, 2023, and mineral resource effective date of July 15, 2023, in respect of its 100% owned Capim Grosso graphite project, with the calculation of inferred mineral resources of 7,965,211t of mineralization at 5.86% TCG grade, resulting on 466,670t of contained graphite.

Performance highlights

Performance highlights are as follows (See also *Operations Update*):

- On January 25, 2023, the Company announced that it had entered into a nonbinding Letter of Intent (“LOI”) with Graphex Group Limited and its U.S. subsidiary, Graphex Technologies LLC (collectively “Graphex”), a global leader in the downstream processing of specialized natural graphite used in electric vehicle (EV) lithium-ion (Li-ion) batteries. The intent of the LOI is to combine Gratomic’s raw material supply capabilities with Graphex’s proven downstream processing expertise to solve an industry wide supply-demand gap by delivering an end-to-end supply of graphite from mine to battery through facilities to be located in North America. Gratomic shall remain entitled to enter into supply agreements with third parties for raw material not committed to the joint venture.

It is contemplated that Graphex will provide all the technology, plans and expertise for building and operating the plant(s). Graphex has existing processing facilities in Asia and has also secured and is developing a site in Warren Michigan that is being designed to produce 15,000 tonnes per annum of battery anode material.

Graphite is the primary anode material in EV batteries. Typically, graphite is mined and concentrated to ~95% purity by companies such as Gratomic. The mine concentrate is then shaped, purified, and coated to create the critical EV battery anode material in a downstream process by operations like Graphex. The supply picture for natural graphite in North America is marked both by a significant shortfall in the availability of the necessary volume of graphite raw material from regions outside of China that is needed to meet projected demand, and the complete absence of experienced commercial-scale downstream processing capability to transform that raw material into battery-grade anode material. The collaboration between Gratomic and Graphex seeks to solve both issues on an industry-wide level by providing OEMs and battery makers with a transparent, ESG compliant supply of quality product needed to meet current and future demand.

- On February 1, 2023, Gratomic completed the first tranche of a non-brokered private placement offering of up to 20,000,000 working capital units at a price of \$0.30 per unit for gross proceeds of up to \$6 million (the “Offering”), with the placement of 4,348,984 units for gross proceeds of \$1,304,695. Each unit consists of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share at a price of \$0.45 per share until the date that is two years after the closing of the Offering. A finder’s fee of \$25,983 was paid to an eligible intermediary and 86,610 broker warrants were issued. Each broker warrant issued in connection with the sale of units at the initial closing entitles the holder to purchase one common share of the Company at a price of \$0.45 until February 1, 2025. Two insiders subscribed for 1,126,700 units for proceeds of \$338,010 on the first closing of the Offering.
- On February 16, 2023, the Company announced the appointment Bruno Baillavoine as chairman of its board of directors. Mr. Baillavoine was originally appointed to the board as an independent director in May of 2021. The appointment of Mr. Baillavoine enhances the corporate governance of Gratomic with an independent director acting as Chair. Bruno Baillavoine is United Kingdom based managing director of the Paris head-quartered Pericles Group. They are a leading consulting firm in

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

the field of banking, finance, asset management and insurance. Bruno is a director of ESG.AI Technologies Inc., a fully reporting ESG data analytics company that offers a revolutionary platform for enterprises, asset managers, banks etc. to help them understand and analyse ESG data and scores. Bruno is also a director of Cel-Sci, a leading biotech company listed on the NYSE engaged in intent to cure for head and neck cancer patients. Mr. Baillavoine is an entrepreneurial manager, strategist, innovator, and business builder, with a record of creating substantial sustained growth and strong profitability in a broad range of businesses. He is an experienced CEO, chairman, and independent director with successes ranging from small companies to large multinationals.

- On March 8, 2023, the Company completed the second tranche of a non-brokered private placement, issuing 4,730,951 units for gross proceeds of \$1,419,285. Each unit consists of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share at a price of \$0.45 per share until March 8, 2025. A finder's fee of \$3,497 was paid to an eligible intermediary and 11,656 broker warrants were issued. Each broker warrant issued in connection with the sale of units at the second closing entitles the holder to purchase one common share of the Company at a price of \$0.45 until March 8, 2025.
- On March 29, 2023, Gratomic completed the third tranche of a non-brokered private placement, issuing 1,090,000 units for gross proceeds of \$327,000. Each unit consists of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share at a price of \$0.45 per share until March 29, 2025.
- On May 12, 2023, Gratomic announced the appointment of Mr. Hermanus (Manie) Silver as Mine Manager at its 100% owned Aukam graphite mine and processing plant located 200 km east of the port of Lüderitz in Namibia. During his 42 years of open-pit and open-cast mining experience, Manie held positions as Mine Manager, COO, and CEO and is still instrumental in starting up and managing mining projects across Africa. He also consulted as Senior Engineer in mining metals and minerals within and outside the African continent, and as far as Mali and Kazakhstan. As Senior Engineer for the Highland Group in Eritrea, Angola, and Zambia on gold, copper, and diamonds, he was responsible for improving mine capex and opex and training senior management at Zambia Copper, DRC Copper, and Angola Diamond Mines. He also served as CEO for Miranda Coal.
- On May 15, 2023, Gratomic completed the fourth tranche of its non-brokered private placement offering at a price of \$0.30 per unit, with the placement of 1,420,000 units for proceeds of \$426,000. Each unit consists of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share at a price of \$0.45 per share until May 15, 2025. One insider subscribed for 66,666 units for proceeds of \$20,000.
- On May 19, 2023, the Company completed a further tranche of its non-brokered private placement offering at a price of \$0.30 per unit, with the placement of 2,237,363 units for gross proceeds of \$671,208.90. Each unit consists of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share at a price of \$0.45 per share until May 19, 2025. A finder's fee of \$1,750 was paid to an eligible intermediary and 5,833 broker warrants were issued. Each broker warrant entitles the holder to purchase one common share of the Company at a price of \$0.45 until May 19, 2025. One insider subscribed for 879,030 units for proceeds of \$263,709 on this closing of the Offering.
- On May 26 and 29, 2023, Gratomic completed the final tranche of its non-brokered private placement offering at a price of \$0.30 per unit, with the placement of 1,515,000 units for gross proceeds of \$454,500. Each unit consists of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share at a price of \$0.45 per share until between May 26 and May 29, 2025. A finder's fee of \$16,800 was paid to an eligible intermediary and 56,000 broker warrants were issued. Each broker warrant entitles the holder to purchase one common share of the Company at a price of \$0.45 until May 29, 2025. The Company

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

raised a total of \$4,602,689 pursuant to the offering.

- On June 15, 2023, the Company announced that it has entered into a Commercial Partnership and Sales Agreement with TM2 Verticals (“TM2”). Gratomic will sell concentrate to the partnership for the joint supply of value-added applications. The initial focus will be on Alkaline Batteries. On June 12, 2023, Gratomic executed a purchase order to supply TM2 with 1 tonne of graphite concentrate from its Aukam vein graphite mine in Namibia. The concentrate was sent to South Africa for further upgrading and then onwards to midstream processors in the United States and Europe, where it will be converted into a Purified Flake Graphite (PFG) equivalent to include in Alkaline Batteries. The pilot processing of this material is being funded by an end user that chooses to stay anonymous during this period. Once the supply chain and the PFG has been qualified, the end user will enter into a direct purchase agreement with the Commercial Partnership. One of the terms of this arrangement is that Gratomic will sell its graphite to the Commercial Partnership for a 50:50 split of the profit after toll processing, between TM2 and Gratomic. In case the grade of the concentrate exceeds 95%, which is the grade quoted by the Benchmark Mineral Intelligence index price, a “Special Premium” will be applied to the Concentrate Price. In such a case, the final price for the concentrate will be adjusted and increased by the Special Premium to the “Final Concentrate Price”. The target rate will be a 6.5% increase for a 96% grade, a 19.5% increase for a 97% grade, and a 32% increase for a 98% grade, until such time as there is a quotable index for a grade above 95%. The contract is valid for five years, and establishes annual quantities for delivery starting at 4,200 tonnes per year and reaching 7,260 tonnes per year.
- On July 10, 2023 Gratomic announced the appointment of Bruno Baillavoine as Executive Chairman of its Board of Directors. Mr. Baillavoine was originally appointed Chairman of the Board of Directors on February 16, 2023, as an independent director. The Company also announced that it has appointed Stephen Woodhead as Chief Financial Officer to fill the vacancy created by the retirement of Rodger Roden. The Company also reported that all matters on the agenda at the Annual General and Special Meeting of Shareholders held on July 6, 2023 were approved by at least a 97% majority of the shares voted at the meeting. The Company has commenced a search for up to two additional independent directors to enhance the corporate governance of Gratomic, and is in discussions with suitable candidates.
- On August 16, 2023, Gratomic announced the issuing of a NI43-101 technical report dated August 14, 2023, with an effective date of July 10, 2023, and mineral resource effective date of July 15, 2023, in respect of its 100% owned Capim Grosso graphite project, with the calculation of inferred mineral resources of 7,965,211t of mineralization at 5.86% TCG grade, resulting on 466,670t of contained graphite.
- On October 26, 2023, Gratomic announced that it had retained SP Angel Corporate Finance LLP (“SPA”) of London, UK to act as Nominated Advisor and Broker in connection with the proposed admission of the Company’s securities to the Alternative Investment Market (“AIM”) of the London Stock Exchange (“LSE”). The admission process generally takes 3 to 4 months and will require the Company to obtain a Competent Person’s Report relating to the properties of the Company. SPA, as the Company’s nominated adviser, is responsible to the LSE for assessing the appropriateness of the Company for AIM and for advising and guiding the Company on its responsibilities under the AIM Rules for Companies, both in respect of its admission and its continuing obligations on an ongoing basis. The Company’s admission to AIM remains conditional on, amongst other things, it meeting the eligibility requirements set out in the AIM Rules for Companies.
- On November 13, 2023, the Company provided an update on its Commercial Partnership and Sales Agreement (“Commercial Partnership”) with TM2 Verticals to supply Purified Flake Graphite (PFG) to the alkaline battery sector. TM2 Verticals, in partnership with Gratomic and Suntech Labs of South Africa, has successfully upgraded Aukam graphite concentrate to the required 96% grade concentrate as part of their large-scale pilot plant OEM qualification program to generate bulk

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

samples to send to global alkaline battery producers. Approximately 700 kilograms of minimum 96% grade were produced. Gratomic's stockpiled graphite was tested and processed, achieving 96.8% and 97.1% grade concentrate across multiple tests with an average recovery of 80%+.

This marks an important milestone in the development of the business in general and more specifically, the global alkaline battery market opportunity for Gratomic. The material will be sent to midstream processors in the United States and Japan where it will be converted into PFG after which it will be supplied to a global OEM for Phase 1 battery performance testing. After Phase 1, Gratomic and TM2 will enter Phase 2 of testing which will include supplying more concentrate from the mine in Namibia, to produce 1 million battery cell units as the final stage of qualification with the OEM that is financing the qualification process.

Once the supply chain and the PFG has been qualified, the OEM will enter into a direct purchase agreement with the Commercial Partnership which is currently in advanced discussions for expected timelines, logistics and potential long term offtake agreements subject to final outcomes of the qualification program. The binding offtake contract with TM2 has been extended by 210 days to provide more time for advanced testing and to secure binding agreements with global OEMS.

Exploration and Evaluation Expenditures

Exploration and evaluation expenditures for the three months and years ended December 31, 2023, and 2022 are summarized as follows:

Outlays by expenditure category, by project, for the three months ended December 31, 2023 and 2022 are as follows:

	<u>Aukam Namibia project</u>		<u>Zumbi Brazil project</u>		<u>Buckingham Quebec project</u>		<u>Total</u>	
	2023	2022	2023	2022	2023	2022	2023	2022
	\$	\$	\$	\$	\$	\$	\$	\$
Drilling and related costs	-	668,916	-	21,698	-	-	-	690,614
Field work, supplies and other	-	-	-	-	-	-	-	-
	-	668,916	-	21,698	-	-	-	690,614

Outlays by expenditure category, by project, for the year ended December 31, 2023 and 2022 are as follows:

	<u>Aukam Namibia project</u>		<u>Zumbi Brazil project</u>		<u>Buckingham Quebec project</u>		<u>Total</u>	
	2023	2022	2023	2022	2023	2022	2023	2022
	\$	\$	\$	\$	\$	\$	\$	\$
Drilling and related costs	-	1,463,391	-	459,299	-	-	-	1,922,690
Field work, supplies and other	90,955	-	99,550	-	-	-	190,505	-
	90,955	1,463,391	99,550	459,299	-	-	190,505	1,922,690

Selected Annual Information

Selected audited annual information for the three most recently completed years, all reported under IFRS, are as follows:

Years ended December 31,	2023	2022	2021
	\$	\$	\$
Net loss before provision for income taxes	5,310,252	8,157,675	21,312,761
Net loss after provision for income taxes	5,310,252	8,157,675	21,312,761
Basic and diluted loss per share	0.03	0.05	0.15
Total assets	27,453,652	26,669,378	23,112,817

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

Results of Operations

The following table provides selected financial information for the three months and years ended December 31, 2023, and 2022.

	For the three months ended		Years ended	
	December 31,		December 31,	
	2023	2022	2023	2022
	\$	\$	\$	\$
Operating expenses	(1,506,579)	(1,461,202)	(5,298,589)	(7,366,458)
Net loss	(1,509,425)	(2,252,420)	(5,310,252)	(8,157,676)
Net loss per share	(0.01)	(0.01)	(0.03)	(0.05)
Exploration and evaluation assets	14,215,005	14,024,500	14,215,005	14,024,500
Total assets	27,453,652	26,669,378	27,453,652	26,669,378

Revenues

The Company has no sales or revenues at this time.

Expenses

The major expense items for the three months and years ended December 31, 2023, and 2022 are summarized as follows:

	For the three months ended		Years ended	
	December 31,		December 31,	
	2023	2022	2023	2022
	\$	\$	\$	\$
Consulting	187,901	512,483	850,584	2,040,385
Filing fees and permits	9,845	11,750	116,791	159,910
Investor relations	-	2,483	-	38,785
Management fees	136,247	117,497	588,750	470,000
Marketing	793,898	287,977	1,746,063	1,251,279
Office and other	169,406	(17,979)	808,796	1,160,962
Professional fees	91,441	134,681	589,152	485,149
Share-based compensation	-	-	-	1,126,000
Travel, meals and accommodation	99,236	20,597	332,480	242,272
Project investigation fees	18,605	391,715	265,973	391,715
	1,506,579	1,461,202	5,298,589	7,366,458

Comments on the year ended December 31, 2023:

With the Company doing everything possible to raise additional capital, marketing costs and travel expenses increased in especially the second and fourth quarters, although this was more than offset by the reduction in consulting fees.

Corporate overheads were contained as far as possible, however professional fees increased in the third quarter as work commenced towards a dual listing of the Company's shares on the Alternative Investment Market of the London Stock Exchange.

Office and other includes head office administrative expenses, insurance, and all costs associated with the local head office in Namibia.

Project investigation fees are in respect of activities in Brazil.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

Exploration and Evaluation Assets

The technical content of the mineral property disclosure in this MD&A has been reviewed and approved by Nico Scholtz Pr. Sci. Nat. (Reg. No. 400299/07) as Qualified Person (QP). Nico is a QP under the JORC, SAMREC and National Instrument (NI) 43-101 legislation. Except where noted, the property disclosure in this MD&A has not been the subject of a National Instrument 43-101 report.

Description of properties

Aukam Graphite Project, Namibia

The Aukam property is comprised of Mining License (ML) 215 (5,002 ha, in respect of base and rare metals, industrial minerals, and precious metals); and Exclusive Prospecting Licence (EPL) 8746 (49,693 ha, in respect of base and rare metals, industrial minerals, and precious metals). Located in the district of Bethanie, Karas region of southern Namibia, the licence areas include numerous privately held farms. Graphite in the Aukam area is hosted by altered Garub Sequence granite that is exposed in an erosional window in the Nama cover. Graphite mineralization at Aukam occurs as massive lenses and veins, and as disseminated patches mostly associated with strong alteration. It is hosted by an east-west trending shear zone traceable on surface for about 400 metres along strike.

The rights to explore and develop parts of the property, which are of primary interest, were previously owned 37% by Next Graphite, Inc. (“NextG”) and 63% by the Company. On July 29, 2021, the Company acquired NextG’s 37% interest in Gratomic Graphite Mining Namibia (Pty) Ltd. In consideration for the interest, Gratomic issued a total of 25,758,915 common shares valued at \$36,062,481, made a cash payment of \$100,000, and agreed to provide future consideration of \$316,350. The total consideration amounted to \$36,478,831, which was charged to deficit.

A 2% revenue royalty is payable to the individual who farms the property.

Under Namibian law, a 2% royalty is payable on the value of minerals mined to the Namibian government in connection with the Aukam graphite mine.

Zumbi Graphite Project, Brazil

On December 8, 2021, Gratomic acquired a 99.9% interest in Zumbi Mineração Ltda (“Zumbi”), which in turn owns 100% of the Capim Grosso graphite project asset. In consideration, Gratomic issued a total of 3,840,580 common shares valued at \$4,954,350 and made a cash payment of \$200,000. The Capim Grosso project is situated at the center east portion of the Bahia State, 280 km from the port of Salvador, the state capital, and 166 km from Feira de Santana, the state’s second largest city. The project comprises mineral claims covering a surface area of 3,728.06 hectares. The vendors retained a 3% gross smelter return royalty in respect of all minerals processed other than graphite.

On June 10, 2022, Zumbi acquired an additional 3 mineral claims comprising a total of 2,782.09 hectares located in the State of Bahia, Brazil. The properties are within 30 kilometers of the Zumbi project. The Company issued 1,262,865 shares valued at \$505,146 and agreed to pay US\$100,000 (\$128,715) as consideration for the property for a total value of \$633,861.

On September 13 and 14, 2022, Gratomic was granted four additional Prospecting Licenses for graphite exploration by Brazil’s National Mining Agency in new promising areas near its existing Capim Grosso Graphite project. The total area of the new claims is 6,312 hectares.

On May 10, 2023, Gratomic was granted one additional Prospecting License for graphite exploration by Brazil’s National Mining Agency in a new promising area contiguous to its existing Capim Grosso Graphite project. The total area of the new claims is 1,972.55 ha.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

The Capim Grosso graphite project is located within the São Francisco Craton (SFC). The SFC is a tectonic domain surrounded by Neoproterozoic orogens. Its southern sector is composed by Archean crust, with age between 3.5 and 2.6 Ga, that is formed mostly by granite-gneisses and greenstone belts constituted by mafic-ultramafic, intermediate-felsic volcanic and volcanoclastic rocks with terrigenous sediments.

On August 16, 2023, Gratomic announced the issuing of a National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI43-101”) technical report dated July 30, 2023, with an effective date of July 10, 2023, and a mineral resource effective date of July 15, 2023, and entitled “NI 43-101 Technical Report And Mineral Resource Estimate on The Capim Grosso Graphite Project, Brazil” in respect of its Capim Grosso graphite project, with the Company holding a 100% controlling interest in the property. The Technical Report was authored by Nico Scholtz, Pr. Sci. Nat. (“QP”). The Technical Report provides a summary of work carried out on the Capim Grosso Project between 2021 and 2023, an Inferred Mineral Resource Estimate (MRE), and recommends a follow up exploration program for the property.

The exploration work completed by Gratomic to date included the excavation of exploration trenches over delineated target areas. Graphite mineralization intersected in these trenches has been followed up with exploration diamond drilling. The results of the trenching and drilling to date allowed for the calculation of the following NI43-101 Inferred Mineral Resource Estimate (2 % TGC grade cut off). Note that the grades are weighted averages. Mineralization is open at depth and along strike (rounded):

	Mineralization (t)	TGC Grade (%)	Graphite (t)
Total	7,965,211	5.86	466,670

The exploration work completed by Gratomic to date warrants additional expenditure and confirms the good exploration potential of the Capim Grosso project. To further the exploration efforts on the project, the QP has proposed an initial exploration budget over 24 months of US\$ 1,650,000 (spent over two stages within 24 months) to include the following (the budget is a recommendation and excludes overheads such as management salaries, travel and other corporate expenses):

- Stage 1: Infill Drilling and Trenching
- Stage 2: Feasibility Study

Buckingham Property, Quebec

The 100%-owned Buckingham Graphite Property is located 7 km northwest of the town of Buckingham, Quebec, Canada, and 82 km north of Imerys Graphite & Carbon’s operating Lac des Iles graphite mine. The property consists of eight claim blocks totaling 480 hectares and is accessed by well-maintained bush roads.

The property is located within the Central Metasedimentary Belt of the Grenville Geologic Province. It is underlain by paragneiss and marble, with associated pegmatite, and amphibolite. Graphite occurs disseminated in marble and paragneiss and within veins hosted in pegmatite, diopside skarn, marble, and gneiss. Two graphitic zones, the Uncle Zone and the Case Zone have been discovered to date, with both zones showing high grade occurrences of disseminated flake and vein type graphite and yielding assay values as high as 81.1% Cg. Initial crushing and flotation of two samples from the Uncle Zone has achieved purity of up to 99.4% Cg from a single flotation test without process optimization (see news release dated February 17, 2015).

An airborne time domain electromagnetic (TDEM) survey flown over the Buckingham project in 2016 outlined several anomalies. The largest conductor stretches over 1.54 km in a northeast-southwest direction. The northeastern portion of this conductor is coincident with graphite mineralization in the Case Zone, from which 35 grab samples collected in 2015 yielded values ranging from 1.6% Cg to 28.7% Cg (see news releases dated May 22, 2015, and November 4, 2015). The length of the conductor suggests that the Case Zone may be longer than previously thought.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

Trenching during Q4-2016 along the TDEM conductor uncovered zones of graphite mineralization hosted primarily by paragneiss. Highlights of the trench sampling include 8.33% Cg over 11.3 metres, 2.76% Cg over 15 metres, 2.23% Cg over 27 metres and 1.52% Cg over 65.5 metres. Individual samples assayed between 0.02% Cg and 17.3% Cg, with an average of 1.92% Cg for the 158 samples.

In 2017 additional trenching and diamond drilling were executed to follow up on the successful results of the 2016 trenching program. Highlights of the work included trench results of 15.0% Cg over 8.0 metres, and diamond drill results of 7.4% Cg over 12.0 metres, in hole CK17-01, and 6.1% Cg over 88.0 metres beginning at nine metres, included a higher-grade interval of 20.7% Cg over 8.0 metres in hole CK17-02

Summary of Quarterly Results

The following table sets out selected consolidated quarterly information for the last eight quarters.

	December 31 2023 \$	September 30 2023 \$	June 30 2023 \$	March 31 2023 \$
Exploration and evaluation assets	14,215,005	14,120,407	14,100,227	14,055,639
Deficit	90,585,163	89,075,737	88,043,452	86,464,518
Total Assets	27,453,652	27,018,319	26,700,904	26,636,687
Net and Comprehensive Loss	1,509,425	1,036,501	1,578,933	1,189,607
Basic and Diluted Loss Per Share	0.01	0.01	0.01	0.01
	December 31 2022 \$	September 30 2022 \$	June 30 2022 \$	March 31 2022 \$
Exploration and evaluation assets	14,024,500	13,383,887	13,135,072	12,042,084
Deficit	85,274,911	83,022,492	81,575,399	78,753,551
Total Assets	26,669,378	27,144,020	26,393,579	26,249,328
Net and Comprehensive Loss	2,252,420	1,447,093	2,821,848	1,636,315
Basic and Diluted Loss Per Share	0.01	0.01	0.02	0.01

Q4 2023

The focus of the fourth quarter continued to be on securing the necessary finance to complete construction at Aukam and recommence exploration activities in both Brazil and Namibia. Various site visits were conducted with interested parties, and negotiations continue at the time of this report.

Q3 2023

Limited plant construction activity continued at the Aukam Graphite Mine. The Company's focus, however, continued to be on securing the necessary funding to complete plant construction and begin operations. In Q3 2023, this focus included pursuing a proposed admission of the Company's securities to the Alternative Investment Market of the London Stock Exchange as an additional source for such finance.

Q2 2023

Mine construction activities were restarted at Aukam, in Namibia, while on the corporate side the Company continued efforts to secure the necessary financing to complete construction and commence operations at the Aukam graphite mine. Limited exploration was also undertaken at Capim Grosso, in Brazil. No share options were issued during the period (Q2 2022 – share-based compensation of \$1,126,000 was recorded).

Q1 2023

With limited activities at Aukam and in Brazil, during the ongoing financing activities, corporate operating expenses were contained as far as possible.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

Liquidity

The Company has a working capital deficit of \$4,423,681 (December 31, 2022 – \$1,602,186) and needs urgent funding to meet its operating and development plans over the next 12 months.

Future exploration and development programs will depend on the Company’s ongoing ability to raise funds. Gratomic is an exploration and development stage company and continues to rely on equity offerings and other partnership arrangements to fund its activities. There can be no assurance that adequate financing will be available in the future, or that the terms of such financing, if secured, will be favorable.

Capital Resources

The Company’s capital resources were boosted during the year ended December 31, 2023, as follows:

- February 1, 2023: A non-brokered private placement of 4,348,984 units at a price of \$0.30 per unit for gross proceeds of \$1,304,695.
- March 8, 2023: A non-brokered private placement of 4,730,951 units at a price of \$0.30 per unit for gross proceeds of \$1,419,285.
- March 29, 2023: A non-brokered private placement of 1,090,000 units at a price of \$0.30 per unit for gross proceeds of \$327,000.
- May 15, 2023: A non-brokered private placement of 1,420,000 units at a price of \$0.30 per unit for gross proceeds of \$426,000.
- May 19, 2023: A non-brokered private placement of 2,237,363 units at a price of \$0.30 per unit for gross proceeds of \$671,209.
- May 26 and May 29, 2023: A non-brokered private placement of 1,515,000 units at a price of \$0.30 per unit for gross proceeds of \$454,500.

Off Balance Sheet Arrangements

The Company is not a party to any off-balance sheet arrangements or transactions.

Transactions With Related Parties

The Company has determined that key management consists of the Company’s Board of Directors and corporate officers, including the Company’s Chief Executive Officer and Chief Financial Officer. The Company paid or accrued the following amounts to key management, and private corporations owned by them:

	For the three months ended		For the year ended	
	December 31,		December 31,	
	2023	2022	2023	2022
	\$	\$	\$	\$
Fees charged to:				
Management fees and consulting fees	312,148	322,725	1,190,384	1,114,765
Professional and other expenses	54,603	52,119	281,212	270,030
	366,751	374,844	1,471,596	1,384,795

During the year ended December 31, 2023, legal fees in the amount of \$281,212 (2022 – \$235,748) were paid or payable to a law firm whose partner is an officer of the Company.

Included in accounts payable and accrued liabilities at December 31, 2023, was \$1,336,572 (December 31, 2022 – \$676,078) owing for services to directors, and officers, companies owned by directors and officers, and a law firm whose partner is a director and an officer of the Company.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

The Company has a consulting agreement with its CEO providing for a monthly retainer of \$26,667, which:

- a) Is terminable by the Company on six months' notice.
- b) Contains a change of control clause providing that, in the event of a change in control, a lump sum payment equivalent to 24 months retainer fees will be paid.

The Company has a consulting agreement with its CFO providing for a monthly retained of \$18,750, which:

- a) Is terminable by the Company on six months' notice.
- b) Contains a change of control clause providing that, in the event of a change in control, a lump sum payment equivalent to 24 months retainer fees will be paid.

Events Affecting the Company's Financial Condition

The Company's capital resources were favourably impacted during the year ended December 31, 2023, through six closings of its private placement of units, for total gross proceeds of \$4,602,689 (year ended December 31, 2022 - \$6,989,760).

Critical Accounting Judgements and Key Sources of Estimation Uncertainty

Critical judgements exercised in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements are as follows:

i) Determination of functional currency

The Company determines its functional currency through an analysis of several indicators, such as expenses and cash flows, financing activities, retention of operating cash flows, and frequency of transactions with the reporting entity. The functional currency for the Company and each of its subsidiaries is the Canadian dollar.

ii) Capitalization of deferred exploration costs

Management is required to assess impairment of intangible exploration and evaluation assets and property and equipment. The triggering events are defined in IFRS 6 and IAS 36 respectively. In making the assessment, management is required to make judgments on the status of each project, and their future plans for finding commercial reserves to which the exploration and evaluation assets and property and equipment relate.

Management has determined that there were no triggering events present as at December 31, 2023, and 2022, as defined in IFRS 6 and IAS 36, as such, no impairment test was performed.

Critical estimates are as follows:

i) Valuation of share-based compensation

The Company uses the Black-Scholes Option Pricing Model for valuation of share-based compensation. Option pricing models require the input of subjective assumptions including expected price volatility, interest rates, and forfeiture rate. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings and equity settled benefits.

ii) Income taxes

In assessing the probability of realizing income tax assets, management makes estimates related to expectations of future taxable income, applicable tax opportunities, expected timing of reversals of existing temporary differences and the likelihood that tax positions taken will be sustained upon examination by applicable tax authorities. In making its assessments, management gives additional weight to positive and negative evidence that can be objectively verified.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

iii) Property and equipment

Management reviews the carrying value of long-lived assets, including plant and equipment and amortizable intangible assets, for impairment to determine if the carrying value of an asset may not be recoverable due to changes in the current and expected future use of the asset, external valuations of the asset, and the obsolescence or physical damage to the asset. If such indicators of impairment exist, the asset's recoverable amount is estimated. An impairment loss is recognized if the carrying amount of an asset or its related cash generating unit exceeds its estimated recoverable amount.

iv) Useful life of property and equipment

Depreciation expense is allocated based on assumed useful life of property and equipment. Should the useful life differ from the initial estimate, an adjustment would be made in the statement of loss and comprehensive loss.

v) Estimation of decommissioning and restoration costs and the timing of expenditure

The cost estimates are updated annually to reflect known developments, (e.g. revisions to cost estimates and to the estimated lives of operations) and are subject to review at regular intervals. Decommissioning, restoration, and similar liabilities are estimated based on the Company's interpretation of current regulatory requirements and constructive obligations, and are measured at fair value. Fair value is determined based on the net present value of estimated future cash expenditures for the settlement of decommissioning, restoration or similar liabilities that may occur upon decommissioning of the mine. Such estimates are subject to change based on changes in laws and regulations and negotiations with regulatory authorities.

Risk Management

Economic Viability and Technical Feasibility Risk

No mineral resources, let alone mineral reserves demonstrating economic viability and technical feasibility, have been delineated on the Aukam Property. The Company is not in a position to demonstrate or disclose any capital and/or operating costs that may be associated with the processing plant until the PFS is completed. The Company advises that it has not based its production decision on even the existence of mineral resources let alone on a PFS or feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals and the cost of such recovery, including increased risks associated with developing a commercially mineable deposit. Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that production will begin as anticipated or at all or that anticipated production costs will be achieved. Failure to commence production would have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve the anticipated production costs would have a material adverse impact on the Company's cash flow and future profitability.

Credit Risk

The Company's credit risk is primarily attributable to amounts receivable. The Company has no significant concentration of credit risk arising from operations. Management believes that the credit risk concentration with respect to the financial instrument included in amounts receivable is remote.

Liquidity Risk

The Company's main source of liquidity is derived from common stock issuances. At December 31, 2023, the Company had current assets of \$580,077 (December 31, 2022 - \$1,378,163) to settle current liabilities of \$5,003,758 (December 31, 2022 - \$2,980,349). The Company's financial liabilities generally have contractual maturities that are subject to normal trade terms.

Interest Rate Risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company has cash balances and minimal interest-bearing debt. The Company's current policy is to invest excess cash in investment grade short-term deposit certificates issued

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

by its banking institutions. The Company monitors its cash balances and is satisfied with the creditworthiness of its banks. As a result of having minimal interest-bearing debt, or interest earning investments, the Company's exposure to interest rate risk is minimal.

Market Risk

Foreign Currency Risk

The Company's functional and reporting currency is the Canadian dollar, and all expenditures are funded in Canadian dollars. The Company's exposure to foreign currency risk is therefore minimal. The Company is exposed to currency risk by incurring certain expenditures in Namibian dollars, US dollars, South African Rand and Brazilian Real for its operations in Namibia and Brazil. The Company has sought to minimize this risk by keeping its cash reserves in Canadian dollars and only purchasing Namibian dollars, US dollars, South African Rand and Brazilian Real as needed.

Price Risk

The Company is exposed to price risk with respect to commodity prices. The Company closely monitors commodity prices to determine the appropriate course of action to be taken by the Company. As the Company's properties are in the exploration and development stages and to date do not contain any identified mineral reserves, the Company does not hedge against commodity price risk.

Sensitivity Analysis

Based on management's knowledge and experience of the financial markets, the Company believes the following movements are reasonably possible over a twelve-month period:

- a) The Company receives low interest rates on its cash and cash equivalent balances and, as such, the Company does not have significant interest rate risk.
- b) The Company holds balances in foreign currencies that give rise to exposure to foreign exchange risk, however, at any point in time, the balances are not significant. The Company estimates that a 10% increase or decrease in the foreign currency would give rise to a gain or loss of approximately \$5,000 respectively at December 31, 2023.

Operations Update

Aukam Graphite Project, Namibia

On May 9, 2023, the Company provided an operational update for its 100% owned Aukam graphite mine and processing plant located 200 km east of the port of Lüderitz in Namibia. In April 2023, the technical team arrived at the Aukam mine site to advance the plant to batch process one hundred tonnes of a high purity graphite concentrate to be shipped to industry partners in Asia, Europe and USA for integration into end-user applications. This program completed operational readiness ahead of commercial production, and included the installation of the polishing mill and the stirred media mill, which are designed to remove minor impurities from the surface of graphite particles to attain the specification required by customers. From previous programs and test results, an average grade between 94.8% and 97.3%, with a recovery between 87% and 94%, can be achieved.

The engineering team carried out the following actions to prepare for delivery of the final product:

- Final assembly of the modified flotation columns and spargers
- Set up and levelling of the base frames for the flotation columns
- Installation of a cover for the reagent area
- Installation of the dosing pumps for the frother
- Assembly and installation of the conditioning tanks
- Construction of the sumps for the flotation columns
- Connection of the air lines for the flotation columns
- Connection of the water feed for the flotation columns
- Installation of the upgraded cyclones at the mill discharge
- Installation of the mill feed water control system

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

- Installation of the head chute of CV1 conveyor belt
- Retrofitting the CV2 and CV8 conveyors with chevron belts
- Installation of the spill boards for the run-of-mine (ROM) bin
- Assembling of fencing for the core storage and mine access.

On June 8, 2023, Gratomic and Graphex Technologies LLC, the U.S. subsidiary of Graphex Group Limited (Graphex) announced that they had jointly submitted samples of vein graphite concentrate from the Aukam mine in Namibia for characterization at an independent laboratory. The aim is to determine whether the graphite is suitable for lithiumion (Li-ion) battery anode applications. These test results are critical to establish if Gratomic and Graphex could enter into the next phase of their collaboration, with the objective to incorporate Aukam vein graphite in Lithium Ion battery applications that utilize Graphex's competitive technology and expertise in mid-tier processing of graphite for anode materials. Initially, Gratomic will produce 100 tonnes of graphite concentrate as it optimizes its operations for commercial readiness. Deliveries of 100 tonnes of concentrate will be targeted to multiple parties across the world to roll into their applications. The majority will be sent to Graphex's existing full scale processing facilities to further validate original equipment manufacturers (OEMs) using the material in Li-ion batteries.

X-Ray Diffraction (XRD) analysis on an Aukam graphite concentrate sample evaluated key technical aspects of the graphite material such as interlayer spacing, graphite layer thickness, number of graphite monolayers in the flake, average width of the graphite crystal along the a-axis, and degree of graphitization. The results were compared with graphite concentrate from other sources Graphex uses currently for the high value-added processing of anode material. This comparison indicates the positive potential for processing Aukam Vein Graphite into battery-grade graphite. Accordingly, Gratomic and Graphex will proceed with due diligence discussions of their proposed joint venture to produce coated spherical graphite anode material for the electric vehicle (EV) battery market.

On June 30, 2023, the Company advised that commercial commissioning had begun at its Aukam graphite mine in Namibia to prepare the first 100 tonnes of product to send customers for final inclusion into value-added applications. Gratomic will be calibrating the Aukam processing plant on a scale large enough to meet exact end-user specifications. This program is the final step before commencing full operation of the facility.

During this phase several changes were made to the circuit; particularly to resonance time, flotation columns slurry pumps, angles of cleat conveyors, stir media and polishing mill charge capacities and tails management. The adjustment to these sections of the processing plant at Aukam will optimize performance. The stirred media mill and the polishing mill, part of the refining circuit, are already on site and have been set up for production requirements. Additional pumps are available for immediate acquisition, and the different circuits need to be connected by them. The crushing circuit, the rod mill and most of the flotation circuit have already been commissioned for commercial readiness. As the Company completes this stage, it will also commission the refining, drying and bagging circuits.

Once the plant is wholly operational and optimized, the Company will focus on fine-tuning costs to ensure the best outcome for all parties involved. The cost optimization phase will involve installing a solar power station on site to reduce the overall power cost and ESG footprint.

Gratomic will continue its geological development to complete a Technical Report for Aukam in accordance with the provisions of NI 43-101. This will be achieved by continuing the benching program executed in 2023, when we were able to extract 12 months' worth of plant feed to the feed bin, and by an additional drilling program to be performed.

Capim Grosso Graphite Project, Brazil

On April 12, 2023, the Company announced that an additional 1,621 m of drilling (for a total of 4784 m to date of the 5,000-meter drilling campaign) on its Capim Grosso graphite project had been completed - 34 diamond drillholes (DD) have been completed to date - and provided assay details on holes CGD017 to CGD034.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

On August 16, 2023, Gratomic announced the issuing of a NI43-101 technical report dated July 30, 2023 with an effective date of July 10, 2023, and mineral resource effective date of July 15, 2023, and entitled “NI 43-101 Technical Report And Mineral Resource Estimate on The Capim Grosso Graphite Project, Brazil” in respect of its Capim Grosso graphite project located in the Bahia State of Brazil, with the Company holding a 100% controlling interest in the property. The Technical Report was authored by Nico Scholtz, Pr. Sci. Nat. The Technical Report provides a summary of work carried out on the Capim Grosso Project between 2021 and 2023, an Inferred MRE, and recommends a follow up exploration program for the property.

The exploration work completed by Gratomic to date included the excavation of exploration trenches over delineated target areas. Graphite mineralisation intersected in these trenches have been followed up with exploration diamond drilling. The results of the trenching and drilling to date allowed for the calculation of the following NI43-101 Inferred Mineral Resource Estimate (2 % TGC grade cut off). Note that the grades are weighted averages. Mineralisation is open at depth and along strike (rounded):

	Mineralization (t)	TGC Grade (%)	Graphite (t)
Total	7,965,211	5.86	466,670

The exploration work completed by Gratomic to date warrants additional expenditure and confirms the good exploration potential of the Capim Grosso project. In order to further the exploration efforts on the project, the QP has proposed an initial exploration budget over 24 months of US\$ 1,650,000 (spent over two stages within 24 months) to include the following (the budget is a recommendation and excludes overheads such as director salaries, flights/transport and other corporate expenses):

- Stage 1: Infill Drilling and Trenching
- Stage 2: Feasibility Study

Gratomic completed the following exploration work between 2021 and 2023 on the Capim Grosso Project:

1. Geological mapping
2. Trenching (63 trenches for 3,830.55 m)
3. Diamond drilling (34 drillholes for 4,784.10 m)
4. Metallurgical test work
5. Bulk density determinations
6. Exploration target (using the parameters as set out in NI43-101 Section 2.3(2) (b))
7. Mineral Resource Estimate in compliance with NI43-101
8. Ongoing trenching on Exploration Permit 872160/2016

The Company plans to continue development of Capim Grosso asset in 2024 through the execution of a PFS (pre-feasibility study), which will include 5,000 meters of additional drilling, initial engineering development, and commencement of the environment and operation licensing processes. In 2025, the Company plans to perform additional infill drilling aiming to refine the mine planning of the asset; and advance the detailed engineering preceding the Feasibility Study stage, followed by commencement of site construction and ordering of core equipment.

New accounting standards and interpretations

Amended accounting standards

IAS 1 – Presentation of Financial Statements (“IAS 1”) was amended in January 2020 to provide a more general approach to the classification of liabilities under IAS 1 based on the contractual arrangements in place at the reporting date. The amendments clarify that the classification of liabilities as current or non-current is based solely on a company’s right to defer settlement at the reporting date. The right needs to be unconditional and must have substance. The amendments also clarify that the transfer of a company’s own equity instruments is regarded as settlement of a liability, unless it results from the exercise of a conversion

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)

For the year ended December 31, 2023

option meeting the definition of an equity instrument. The amendments did not have a significant impact on the Company's financial statements.

IAS 1 – In February 2021, the IASB issued 'Disclosure of Accounting Policies' with amendments that are intended to help preparers in deciding which accounting policies to disclose in their financial statements. The amendments did not have a significant impact on the Company's financial statements.

IAS 8 – In February 2021, the IASB issued 'Definition of Accounting Estimates' to help entities distinguish between accounting policies and accounting estimates. The amendments did not have a significant impact on the Company's financial statements.

IAS 12 – In May 2021, the IASB issued 'Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction' that clarifies how entities account for deferred tax on transactions such as leases and decommissioning obligations. The amendments did not have a significant impact on the Company's financial statements.

Future accounting changes

IFRS 7 – 'Financial Instrument Disclosures' and IAS 7 – 'Statement of Cash Flows' provide additional application guidance and disclosure requirements related to "Supplier Finance Arrangements".

IFRS 16 – 'Leases', includes additional guidance related to the initial recognition and subsequent measurement of a sale-and-leaseback transaction with variable lease payments.

These new and amended statements are not expected to have a significant impact on the Company's financial statements.

Risks and Uncertainties

Investing in the Company involves risks that should be carefully considered. The operations of the Company are highly speculative due to the high-risk nature of its business, being the acquisition, financing, exploration and development of mineral properties, and the Company's immediate need to raise additional funding to continue with the development and exploration of its mineral properties, and settle accounts payable. These risk factors could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward-looking information relating to the Company.

Liquidity Concerns and Financing Risks

The Company has limited financial resources, no source of operating cash flow, and has no assurance that additional funding will be available for further exploration and the development of its projects or to fulfill its obligations under any applicable agreements. There can be no assurance that adequate financing will be obtained in the future, or that the terms of such financing, if secured, will be favorable. Failure to obtain such additional financing could result in the delay or indefinite postponement of further exploration and development of the Company's projects with the possible loss of such properties.

While the Company's financial statements have been prepared on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. Failure to secure additional funding may cast doubt about the validity of that assumption. Adjustments to the financial statements, should they be required, could be material.

Exploration and Mining Risks

The Company is engaged in mineral exploration and development activities. Mineral exploration and development involve a high degree of risk, and few properties that are explored are ultimately developed into

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

producing mines.

The long-term profitability of the Company's operations will be in part directly related to the cost and success of the Company's exploration programs, which may be affected by factors beyond the Company's control. Mineral exploration involves many risks, which even a combination of experience, knowledge and careful evaluation may not overcome. Operations in which the Company has a direct or indirect interest will be subject to all the hazards and risks normally incidental to the exploration and development of, and production from, mineral resources, any of which could result in work stoppages; damage to or destruction of property or production facilities; personal injury; environmental damage; delays in mining; monetary losses and legal liability. Hazards such as unusual or unexpected geological formations, and other conditions such as formation pressures, flooding, fire, explosions, cave-ins, landslides, inclement or hazardous weather conditions, power outages, labour or transportation disruptions, and the inability to obtain suitable machinery, equipment or labour are involved in mineral exploration, development and operation.

Substantial expenditures are required to establish ore reserves through exploration, including significant expenditure on drilling, to develop the metallurgical processes to extract the mineral from the ore and, in the case of new properties, to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations, or that the funds required for development will be obtained on a timely basis. Even when mineralization is discovered, it may take several years until production is possible, during which time the economic feasibility of production may change. The economics of developing mineral properties are affected by many factors, including the cost of operations, variations in the grade of ore mined, fluctuations in market prices, allowable production, impediments to the importing and exporting of minerals, and environmental protection.

Stage of Development

The Company is in the business of exploring for mineral resources, with the ultimate goal of producing from its mineral properties. None of the Company's properties have commenced commercial production and Gratomic has no history of earnings or cash flow from its operations. There can therefore be no assurance that the Company will be able to develop any of its properties profitably, or that its activities will generate positive cash flow. The Company's anticipated operating and capital expenditures may increase in future years in relation to the engagement of consultants and personnel, and the purchase of equipment associated with advancing exploration, development and commercial production at the Company's properties. The Company expects to continue to incur losses for the foreseeable future. There can be no assurance that the Company will generate any revenues or achieve profitability. A prospective investor in the Company must be prepared to rely solely upon the ability, expertise, judgment, discretion, integrity, and good faith of management in all aspects of the development and implementation of the Company's business activities.

Regulatory Requirements, Permits and Licenses

Even if the Company's mineral properties are proven to host economic Mineral Reserves or Mineral Resources, factors such as governmental expropriation or regulation may prevent or restrict mining of any such deposits or the repatriation of profits. The Company's exploration and development activities, including exploration, plant construction, mining, milling, and road, rail and other transportation activities, require permits and approvals from various government authorities, and are subject to extensive federal, departmental and local laws and regulations governing prospecting, development, production, exports, taxes, labour standards, occupational health and safety, mine safety and other matters. Such laws and regulations are subject to change, can become more stringent, and compliance can therefore become more time consuming and costly. Any changes in regulations or shifts in political conditions are beyond the control of the Company and may adversely affect its business. There can be no guarantee that the Company will be able to obtain or maintain all necessary licenses, permits and approvals that may be required to explore and develop its properties, or for the operation of mining facilities. In addition, the Company may be required to compensate those suffering loss or damage by reason of its activities.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

Environmental Regulations

The Company's activities are subject to environmental protection and employee health and safety regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions on spills, releases and emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact assessments. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessment of proposed projects, and a heightened degree of responsibility for companies and their officers, directors, and employees. Any failure to comply fully with all applicable laws and regulations could have significant adverse effects on the Company, including the suspension or cessation of operations, and there is no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's operations.

Markets for Securities

There can be no assurance that an active trading market in the Company's securities will be sustained or that significant fluctuations in the Company's share price will not occur. The market prices for securities of many companies, particularly junior resource companies, are subject to wide fluctuations that are not necessarily reflective of their operating performance, underlying asset values or the prospects of such companies. Factors such as commodity prices, government regulation, interest rates, share price movements of peer companies and competitors, as well as overall market conditions, may have a significant impact on the market price of the securities of the Company.

Uninsurable Risks

The Company maintains insurance to cover normal business risks. The Company may, however, become subject to liability for pollution or hazards against which it cannot insure or against which it may elect not to insure. The payment of such liabilities may have a material, adverse effect on the Company's financial position. In the exploration for, development of, and production from, mineral properties, certain risks, and in particular, unexpected or unusual geological operating conditions, including explosions, rock bursts, cave-ins, land movements, earth work failures, fires, flooding and earthquakes may occur. It is not always possible to fully insure against such risks and the Company may decide not to take out insurance against such risks due to high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the securities of the Company.

Reliance on Key Individuals and Outside Parties

The Company's success depends upon the personal efforts and commitment of key members of its existing management. It is expected that the contribution of these individuals will be a significant factor in the Company's growth and success. The loss of the services of these members of management and certain key employees could have a material adverse effect on the Company. The Company also relies upon consultants, engineers and others for exploration, development, construction, and operating expertise. Substantial expenditures are required to establish mineral reserves, to carry out environmental and social impact assessments, and to develop metallurgical processes to extract the metal from the ore. If such parties' work is deficient or negligent, or is not completed in a timely manner, it could have a material adverse effect on the Company.

Competition

The mineral industry is intensely competitive in all its phases. The Company competes with many companies possessing greater financial and technical resources for the acquisition of mineral interests, as well as for the recruitment and retention of qualified employees. Such competition may result in the Company being unable to acquire desired properties, recruit or retain qualified employees, or acquire the capital necessary to fund

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

its operations and develop its properties. The Company's inability to compete with other mining companies for these resources would have a material adverse effect on the Company's results of operation and business.

Conflicts of Interest

Certain directors and officers of the Company are also directors, officers or shareholders of other companies that are similarly engaged in the business of acquiring, developing, or exploiting natural resource properties. Such associations may give rise to conflicts of interest from time to time. The directors of the Company are required by law to act honestly and in good faith with a view to the best interests of Gratomic and to disclose any interest that they may have in any project or opportunity to the Company. If a conflict of interest arises at a meeting of the board of directors, any director in a conflict will disclose his interest and abstain from voting on such matter. In determining whether the Company will participate in any project or opportunity, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at that time.

Litigation

Legal proceedings, with and without merit, may arise from time to time in the course of the Company's business. Defense and settlement costs of legal claims can be substantial, even with respect to claims that have no merit. The process of defending such claims could take away from management time and effort. Due to the inherent uncertainty of the litigation process, the resolution of any legal proceeding to which the Company or one or more of its subsidiaries may become subject, could have a material effect on the Company's financial position, results of operations, or mining and project development activities.

Corruption and Bribery Laws

The Company's operations are governed by, and involve interactions with, many levels of government in multiple countries. The Company is required to comply with anti-corruption and anti-bribery laws, including the Criminal Code (Canada), and the Canadian Corruption of Foreign Public Officials Act, as well as similar laws in the countries in which the Company conducts its business.

There has been a general increase in both the frequency of enforcement and the severity of penalties under such laws, resulting in greater scrutiny and punishment for companies convicted of violating anti-corruption and anti-bribery laws. Furthermore, a company may be found liable for violations by not only its employees, but also by its contractors and third-party agents. Although the Company has adopted steps to mitigate such risks, such measures may not always be effective in ensuring that the Company, its employees, contractors, or third-party agents comply strictly with such laws. If the Company is subject to an enforcement action or is found to be in violation of such laws, this may result in significant penalties, fines and/or sanctions being imposed, resulting in a material adverse effect on the Company's reputation and results of its operations.

Enforcement of Legal Rights

The Company's material subsidiaries are organized under the laws of foreign jurisdictions and certain individuals of the Company's experts are located in foreign jurisdictions. Given that the Company's material assets are located outside of Canada, investors may have difficulty effecting service of process within Canada and collecting from or enforcing against the Company or its experts any judgments obtained through the Canadian courts or Canadian securities regulatory authorities, predicated on the civil liability provisions of Canadian securities legislation or otherwise. Similarly, in the event a dispute arises in relation to the Company's foreign operations, the Company may be subject to the exclusive jurisdiction of foreign courts or may not be successful in subjecting foreign persons to the jurisdictions of courts in Canada.

Gratomic Inc.
MANAGEMENT DISCUSSION AND ANALYSIS
(Form 51-102F1)
For the year ended December 31, 2023

Other Disclosures

Share Capital

Common Shares

At December 31, 2023, and the date hereof, there were 200,260,817 common shares issued and outstanding.

Warrants

At December 31, 2023, and the date hereof, there were a total of 21,186,837 warrants outstanding.

Options

At December 31, 2023, and the date hereof, there were a total of 10,520,000 stock options granted and outstanding.

Additional Information

Additional information about the Company including the financial statements, press releases and other filings are available on the internet at www.sedarplus.ca and additional supplemental information is available on the Company website at www.gratomic.ca.