

GRAPHITE ONE INC.

Management's Discussion and Analysis

December 31, 2020



GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

The following Management's Discussion and Analysis ("MD&A"), prepared as of April 20, 2021, should be read together with the consolidated financial statements of Graphite One Inc. ("Graphite One" or the "Company") for the years ended December 31, 2020 and December 31, 2019, and related notes thereto, which are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"). The reader should be aware that historical results are not necessarily indicative of future performance.

All monetary amounts are in United States dollars unless otherwise noted. The Company changed its reporting currency from Canadian dollars to United States dollars commencing January 1, 2019.

Forward Looking Statements

Forward-looking statements look into the future and provide an opinion as to the effect of certain events and trends on the business. Certain statements contained in this MD&A constitute forward-looking statements. The use of any words such as "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe" and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based on current expectations and various estimates, factors and assumptions and involve known and unknown risks, uncertainties and other factors. Examples of where the company uses forward looking statements include when discussing exploration plans, operational plans and future expenditure expectations.

It is important to note that:

- Unless otherwise indicated, forward-looking statements in this MD&A describe the Company's expectations as of April 20, 2021.
- Readers are cautioned not to place undue reliance on these statements as the Company's actual results, performance or achievements may differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements if known or unknown risks, uncertainties or other factors affect the Company's business, or if the Company's estimates or assumptions prove inaccurate. Therefore, the Company cannot provide any assurance that forward-looking statements will materialize.
- The Company assumes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or any other reason except as required by law.

The mineral resource estimates reported in this MD&A were prepared in accordance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"), as required by Canadian securities regulatory authorities. For United States reporting purposes, the United States Securities and Exchange Commission ("SEC") applies different standards in the classification of mineralization. In particular, while the terms "measured," "indicated" and "inferred" mineral resources are required pursuant to NI 43-101, the SEC does not recognize such terms. Canadian standards differ significantly from the requirements of the SEC. Investors are cautioned not to assume that any part or all of the mineral deposits in these categories constitute or will ever be converted into reserves. In addition, "inferred" mineral resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian securities laws,

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

issuers must not make any disclosure of results of an economic analysis that includes inferred mineral resources, except in the case of a preliminary economic assessment disclosure.

For a description of material factors that could cause the Company's actual results to differ materially from the forward-looking statements in this MD&A, please see "Mining Risks" and "Business Risks".

Nature of Operations

Graphite One was incorporated in Alberta and commenced operations on March 16, 2006 under the name Cedar Mountain Exploration Inc. and on October 29, 2007 began trading on the TSX-Venture Exchange under the symbol CED. On March 23, 2012, the Company changed its name to Graphite One Resources Inc. and adopted the symbol GPH on the TSX-Venture Exchange effective March 27, 2012. On June 11, 2012 the Company began trading in the over-the-counter market in the United States on the OTCQX under the symbol GPHOF. The Company was continued into British Columbia on September 12, 2014. Due to changes in the listing requirements of the OTCQX, the Company began trading on the OTCQB on April 1, 2017. On February 27, 2019 the Company changed its name to Graphite One Inc. Graphite One is the parent company of the consolidated group.

Graphite One is evaluating its graphite materials supply chain project with the objective of becoming an American producer of advanced graphite products that is integrated with a domestic graphite resource. Proposed is a vertically integrated enterprise to mine, process and manufacture high grade Coated Spherical Graphite ("CSG"), primarily for the lithium-ion electric vehicle battery and energy storage systems markets, with significant additional production of a range of value-added graphite products. Graphite mineralization mined from the Company's Graphite Creek Property (the "Property") would be processed into concentrate at the Property situated on the Seward Peninsula about 60 kilometers north of Nome, Alaska. CSG and other value-added graphite products would be manufactured from this concentrate at the Company's proposed graphite product manufacturing facility, the location of which is being studied (the "Project").

The recoverability of the invested amounts shown for the exploration and evaluation property is dependent upon the existence of economically recoverable reserves, maintaining title and beneficial interest in the Property, obtaining the necessary financing and approvals to complete development and, ultimately, either generating sufficient profits from future production or sufficient proceeds from the disposition of the exploration and evaluation property.

In July 2017, the Company released the results of its inaugural Preliminary Economic Assessment ("PEA"). The PEA positively assessed the potential economic viability of the Project and recommended the Company proceed with the Project's Preliminary Feasibility Study ("PFS") (See the "Preliminary Economic Assessment" section herein for details). The Company began the PFS in 2019 and work continues with completion expected in mid-2021. A production decision on the Project would be made once a positive feasibility study is completed.

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

Exploration and Evaluation Property

Graphite Creek Property Summary

The Graphite Creek Property is located on the Seward Peninsula of Alaska about 60 kilometers ("km") north of the deep seaport at Nome and is situated about 20 km from a seasonal road and 4km from tidewater.

The Property consists of 176 mining claims covering 9,583 hectares (23,680 acres) and is comprised of:

- Fifty-six Alaska state mining claims (the "GC Purchased Property"); and,
- One hundred and twenty located Alaska state mining claims (the "GC Staked Property").

Graphite Creek Lease Agreement and Net Smelter Royalty Agreements

In May 2015, the Company executed a long-term lease agreement ("Lease") with Kougarok LLC ("Kougarok"), commencing effective January 1, 2014 with an initial term of twenty years, and with provisions to extend the lease for two successive twenty-year periods and ultimately for as long as production continues from the property. An advance royalty in the amount of \$30,000 was paid upon execution of the Lease, with annual payments of \$30,000 due each year until January 2020. The advance royalty becomes \$40,000 January 1, 2020, \$50,000 January 1, 2021, and then increases by \$10,000 each year until production commences. All required payments under the Lease have been made to date. The production royalties are to be calculated as follows: 5% from lands in 4 former federal claims originally located in 1943; 2.5% from lands within 20 former federal claims; 5% from lands within state claims staked by the Company within the area of interest; and 2.5% from state claims acquired by the Company within the area of interest. All advance royalties paid may be recouped from production royalties. The Company has the option to reduce the production royalties by up to 2% by paying \$2 million for each 1% reduction of the production royalties. In March 2018 and under the terms of the Lease, Kougarok completed the conversion of its 24 Federal unpatented lode mining claims to State of Alaska mining claims with the Alaska Department of Natural Resources. The Company in turn transferred ownership to Kougarok, thirteen of its Alaska state mining claims that overlapped with the lands of 4 of the former federal claims and simultaneously leased them back from Kougarok. This conversion puts the State of Alaska in the lead regulatory role which is anticipated to simplify the permitting process for the project.

On January 24, 2012, the Company purchased from a private individual (the "Seller") 28 of the claims included in the GC Purchased Property for CA\$20,000 and a 2% production royalty on future production from the GC Purchased Property. The Company had the right to purchase the production royalty for CA\$1 million until January 24, 2015 (the "Royalty Purchase Option"). The Company and the Seller entered into an extension agreement effective January 24, 2015 (the "2015 Extension Agreement") whereby the Royalty Purchase Option could have been exercised at any time on or before the earlier of (i) January 24, 2017, or (ii) the date that is six (6) months after the release by the Company of a feasibility study on the Graphite Creek Property. In connection with the 2015 Extension Agreement, the Company issued to the Seller 76,923 common shares of the Company at an issue price of CA\$0.13 per share. In January 2017, the Company and the Seller agreed to further extend the terms of the Royalty Purchase Option and entered into an extension agreement effective January 24, 2017 (the "2017 Extension Agreement") whereby the Royalty Purchase Option may be exercised at any time on or before January 24, 2021. In connection with the 2017 Extension Agreement, the Company issued to the Seller pre-consolidated

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

1,666,667 common shares of the Company at an issue price of CA\$0.09 per share and 1,153,846 common share purchase warrants of the Company. In October 2020, the Company exercised the Royalty Purchase Option and acquired the 2% production royalty. In settlement of this purchase, the Company issued 2,500,000 Common Shares and 2,500,000 Warrants (the "Warrants"). On March 15, 2021, the Company exercised its right under the terms of the Warrants and accelerated their expiry date, if not exercised, to April 29, 2021.

During June 2015, the Company purchased from another private individual the balance of the GC Purchased Property (28 Alaska state mining claims covering the same lands as the 28 Alaska state mining claims acquired in January 2012) for \$50,000, the issuance of 3 million common shares of the Company at a fair value of CA\$270,000 and a royalty interest equal to 1% of the Net Smelter Returns received by the Company on production from the claims. The Company has the right to purchase the royalty for \$500,000 at any time within 36 months following the start of mine production.

The Company located an additional 43 Alaska state mining claims in 2015, bringing the total to 176 Alaska state claims, for a total area of 9,583 hectares (23,680 acres) covering the project area. The new claims include eight on Alaska select and transferred lands and 35 on unselected Alaska state land, which will require selection and transfer to be active. These new claims cover areas adjacent to the Graphite Creek deposit for potential infrastructure needs and access to tide water.

TRU Graphite Reports

In 2014, TRU Group was commissioned by the Company to identify options for the Graphite Creek Project with a focus on matching the resources to up-market functionalized end uses for graphite (Stage A). In 2015, TRU Group undertook a second stage of study (Stage B) to conduct test work and determine the characteristics of the graphite. On April 15, 2015, the Company announced receipt of TRU Group's Stage B Report (see the Company's press release dated April 15, 2015) which revealed that Graphite Creek graphite has unique characteristics, including spheroidal shaped graphite, high proportions of coarse flake graphite with high aspect ratios and naturally expanded/exfoliated flake graphite. TRU Group also identified the need for additional research and development to more fully understand these characteristics and the impact on processing and finished products. As a result of the importance of this development, the Company suspended work on its PEA in order to incorporate the findings from the Stage B Report into the PEA.

In November 2015, the Company engaged TRU Group to produce trial spherical graphite lab samples for internal assessment of electrochemical performance and for potential end-user evaluation. In May 2016, the Company announced the successful production of premium grade spheroidized graphite ("SPG") from 99.98% Cg purified graphite (see the Company's press release dated May 5, 2016), with yield in these first trial runs averaging 74.6%. The results of Phase 5 of the Company's Exploratory Product Development have shown that first discharge capacity of the samples approached, and in one case equaled the theoretical maximum capacity of natural graphite and results from repeat charge/discharge cycles confirm high performance, repeatability and stability of GPH STAX graphite (see the Company's press release dated May 20, 2016).

GRAPHITE ONE INC.
Management’s Discussion and Analysis
For the years ended December 31, 2020 and 2019

Preliminary Economic Assessment

In January 2017, the Company announced the results of its PEA for the Graphite Creek Project. The Project is conceived as a vertically integrated manufacturer of high grade Coated Spherical Graphite (“CSG”) with mining and processing facilities near Nome, Alaska and advanced material processing done at a dedicated graphite product manufacturing facility situated, for the purposes of the PEA, in Washington State.

The PEA projects an estimated Net Present Value (“NPV”) for the Project on a pre-tax basis of \$1,037 million using a 10% discount rate, with an Internal Rate of Return (“IRR”) of 27%. On a post-tax basis, the NPV is projected at \$616 million using a 10% discount rate, with an Internal Rate of Return (“IRR”) of 22%. Combined federal taxes, state taxes and royalties are about \$2,163 million or 32% of earnings before depreciation, interest and taxes (“EBDIT”). Annual production of CSG and other graphite specialty materials is projected at 55,350 metric tonnes when full production is reached in Year 6. The PEA is based on 40 years of indicated and inferred resources grading 7% Cg (graphite) that have been identified in the target exploitation zone to sustain full scale operations, notwithstanding additional potential resources immediately outside the target zone or the broader Graphite Creek property.

Summary of the Project’s Pre-Tax Financial Results (US\$ Million)	
Project Earnings before Depreciation, Interest and Taxes (EBDIT)	\$6,696
Net Cash Flow	\$6,268
NPV of Net Cash Flow at 10% Discount Rate	\$1,037
IRR	27%
Payback Period in Production Year	4
Summary of the Project’s Post-Tax Financial Results (US\$ Million)	
Project Earnings Post-tax	\$4,533
Capital Outlay and NSR Buyout/Buydown	\$433
Net Cash Flow Post-tax	\$4,100
NPV of Net Cash Flow at 10% Discount Rate	\$616
IRR	22%
Payback Period in Production Year	4

Pending a detailed graphite market study, the PEA is based on a selling price of \$6,200 per tonne for CSG and an average selling price of \$1,500 per tonne for Purified Graphite Powders. The Project’s average blended price of its manufactured products is expected to be \$5,054 per tonne, ex plant, on a 2016 constant US dollar basis. This is expected to generate cash earnings of \$182 million per year on sales of \$280 million at full capacity with a consolidated operating margin (“EBDIT”) of 63% on sales. CSG will dominate output and is expected to account for 75% of sales volume and 93% of sales revenue, or \$260 million, of the total. Purified graphite powders will account for the balance with sales of \$20 million.

Mineral Resource Estimates

The Company’s mineral resources as identified in the PEA contain an estimated 10.3 million tonnes classified as Indicated Resources averaging 7.2% Cg, and 71.2 million tonnes classified as Inferred

GRAPHITE ONE INC.
Management’s Discussion and Analysis
For the years ended December 31, 2020 and 2019

Resources grading 7.0% Cg, both at 6% graphitic carbon (“Cg”) cut-off grade. The resource estimates are summarized in the table below.

Graphite Creek Mineral Resource Estimates – January 2017^c			
Mineral Resource Classification ^a	Tonnage (Million Tonnes ^b)	Graphite % (% Cg)	In Situ Graphite ^b (000’s Tonnes ^b)
Indicated	10.3	7.2	1,133,000
Inferred	71.2	7.0	1,109,000

- a: This resource estimate uses a 6.0 % Cg cut-off grade with a resource recovery of 80 to 95% Graphite concentrate with average selling price of \$5,054/tonne.
- b: The tonnage and in situ graphite (metric tonnes) have been rounded off to the nearest thousand, and therefore may not tally due to rounding.
- c: Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve.

The mineral resource estimate was prepared by R. James Robinson, P.Geo of TRU Group Inc., who is an independent Qualified Persons under National Instrument 43-101, using the most current Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves, Definitions and Guidelines.

Resource estimates are based on cumulative drill data from the Company’s 2012, 2013 and 2014 drill programs, totaling 48 holes and about 7,500 metres of drilling.

The Project’s economic analysis has been designed based on the 6% mining cut-off grade, producing the desired 7.0% Cg mill-feed head grade. The scale of available material at 7% Cg is estimated to be 43.66 million tonnes using both Indicated and Inferred Resources, sufficient to support over 40 years of mining at full-scale production of 1,018,000 tonnes per year.

Graphite Creek Mine

The Graphite Creek Mine (the “Mine”) has been designed to operate on a 24-hour per day schedule (assuming two 12-hour shifts per day) on a year-round basis. When in full production in Year 6, the mine plan proposes delivering 1,018,000 tpy of graphite mineralized material to a nearby Mineral Processing Plant (“Processing Plant”). The PEA assumes mining would be performed year-round with owner-operated equipment.

Processing Plant

The proposed Processing Plant, to be located at the Mine when at full production capacity, is to receive from the Mine 1,018,000 tpy of graphite mineralization grading 7% Cg and extract and recover 60,000 tpy of concentrate, grading 95% Cg. Graphite recovery during mineral processing is assumed under optimized conditions to reach 80%. The single concentrate recovered would be packaged in one tonne super sacks, placed in 20 tonne shipping containers and trucked to the Port of Nome. The containers would be loaded

GRAPHITE ONE INC.
Management’s Discussion and Analysis
For the years ended December 31, 2020 and 2019

onto barges during the seasonal shipping window and delivered to the Product Manufacturing Plant (the “Manufacturing Plant”).

Manufacturing Plant

For purposes of the PEA, the Manufacturing Plant is assumed to be situated on a brownfield industrial site in Washington State serviced by public utilities with developed road and rail infrastructure. Criteria relevant to deciding its location include power cost, availability of industrial zoned land, proximity to tidewater and port facilities, and infrastructure that supports both the workforce and delivery logistics for input materials, services and finished products. The Company is identifying suitable locations for the Manufacturing Plant site.

The Manufacturing Plant would receive 60,000 tpy of concentrate grading 95% Cg from the Processing Plant. It would then be purified under an inert atmosphere to at least 99.95% Cg. Spherical graphite size fractions suitable for lithium-ion batteries are combined with coating precursor. The ‘green’ surface coated graphite product is heat treated in kiln type furnaces to harden the coating and into the final spherical graphite product.

Finished products at full production are projected to include:

- 41,850 tpy of Coated Spherical Graphite with a minimum purity of 99.95% Cg for the EV Li-ion battery market; and,
- 13,500 tpy Purified Graphite Powders, 99.8% Cg, <20 microns, suitable for lubricants, friction products, conductive polymers, specialty powder and metallurgical additives.

Project Capital Cost Summary

Estimated capital costs for mining operations, the Processing Plant and the Manufacturing Plant and infrastructure are summarized in the table below and estimated to be \$363 million. The plant capital expenditures were spread over three years and ramp up to full production at 60,000 tpy of graphite concentrate at the Processing Plant in Year Six of production. The Manufacturing Plant would concurrently reach full capacity of 55,350 tpy of graphite products. No contingency is included for the two plants. Indirect costs were assumed to be 33% of direct costs: 20% for EPCM (engineering, procurement, construction & management), 10% for freight and capital spare parts, and 3% for commissioning and start-up costs.

Capital Cost Estimates, Mine and Plants

Operations Category	Capital Cost (US\$ millions)
Mine & Processing Plant	\$233
Product Manufacturing Plant	\$130
Total All Operations	\$363

Project Operating Cost Summary

Operating costs at full capacity for the Mine, Processing Plant and Infrastructure, and the Manufacturing Plant are estimated to be \$98 million per year, as summarized in the table below. On a plant

GRAPHITE ONE INC.

Management's Discussion and Analysis

For the years ended December 31, 2020 and 2019

input/output basis, the total project operating cost equates to \$96 per tonne of processing plant feed or \$1,774 per tonne of finished graphite product.

MAJOR OPERATING COST ITEM	Mining (US\$ 000)	Mineral Processing (US\$ 000)	Product Manufacturing (US\$ 000)	Integrated Project (US\$ 000)
Labour	\$21,887	\$12,170	\$7,270	\$41,327
Energy (Power and Diesel) ¹		\$9,900	\$14,900	\$24,800
Equipment Operation	\$2,800			\$2,800
Consumables		\$3,300	\$7,100	\$10,400
Maintenance & Supplies	\$1,781	\$2,700	\$3,600	\$8,081
Miscellaneous	\$1,273			\$1,273
Concentrate Shipping		\$1,800	\$7,698	\$9,498
Total Operating Cost (OPEX)	\$27,741	\$29,870	\$40,568	\$98,179
Operating Expenses per tonne	(US\$)	(US\$)	(US\$)	(US\$)
Processing Plant Feed	\$27	\$29	\$40	\$96
Concentrate	\$462	\$498	\$676	\$1,636
Graphite Product	\$501	\$540	\$733	\$1,774

Notes: 1 The mining energy cost is included in Mineral Processing Plant cost

The complete PEA can be obtained from the Company's website at graphiteoneresources.com or on the SEDAR at www.sedar.com.

Alaska Industrial Development and Export Authority

In February 2017 the Company and the Alaska Industrial Development and Export Authority ("AIDEA") announced that they had entered into a Memorandum of Understanding ("MOU") to explore opportunities to collaborate on the development of Graphite One's proposed project as outlined in the PEA (see Press Release of February 16, 2017).

2018 Field Program and May 2019 Updated Resource Estimate

During the summer and fall of 2018, the Company conducted a field program that comprised 801 metres in six core holes. The drill holes were angled to perpendicularly intercept the projected graphite material zones with the objective of determining their true thickness. Results from all 2018 drill holes were consistent with previous drilling in the graphite mineralized zones, including significant high-grade intercepts with Cg values greater than 10 percent.

The field program also included preliminary field surveying and an aerial LiDAR survey along possible access routes. Surface water sampling and anadromous fish surveys were also conducted, which added to the environmental baseline studies from prior years.

Further to the 2018 drill program, the Company issued an updated resource estimate in May 2019. The results from the drill program moved a portion of the previously released resource estimate set forth in the PEA from Indicated to Measured Resource status.

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

Following are the highlights of the 2019 updated resource estimate as compared to the estimate reported in the PEA.

- Infill drilling results from 2018 and a more detailed block model have elevated a portion of the resource to Measured Resources, totaling 1.69 Mt at 8.0% Cg and 0.14 Mt of contained graphite.
- Total Measured and Indicated Resources are 10.95 Mt at 7.8% Cg with 0.85 Mt of contained graphite. This represents a 6% increase in tonnage, an 8% improvement in grade and a 14% increase in contained graphite when compared to the PEA's Indicated Resource results.
- Inferred Resources totaled 91.89 Mt at 8.0% Cg with 7.3 Mt of contained graphite. This represents an increase in tonnage, grade and contained graphite when compared to the PEA's Inferred Resources and supports the potential of a long-term mine life described by the PEA.
- High-grade graphite mineralization is present at the surface and has been extended to depths of over 200 m by drilling.
- The deposit remains open along strike in both the east and west directions, as well as down dip.
- The updated resource estimate provided direction for continued drilling which would form the basis for the Pre-Feasibility Study ("PFS"), the next phase for the Project.

The updated mineral resource estimate for the Graphite Creek Project is summarized in the following table and is compared to the previous mineral resource estimate reported in the PEA.

The PEA presented a cut-off grade of 6.0% Cg "as it would produce mill feed grading 7% percent Cg. This has been determined to be the minimum grade required to support economically viable graphite production in western Alaska."¹ With this guidance, a cut-off grade of 5.0% Cg for the updated resource estimate was selected as it resulted in Cg grades in excess of 7% in all resource categories. The selected cut-off grades in each case are highlighted in the table below.

¹ Page 14-7; NI 43-101 Preliminary Economic Analysis on the Graphite One Project; dated June 30, 2017 and filed July 12, 2017; Prepared by TRU Group

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

Comparison of Estimated Resources - May 2019 Resource Update to PEA Dated June 30, 2017

Graphite Creek Resource Estimate Update: May 2019					PEA June 30, 2017				
MINERAL RESOURCE CLASSIFICATION	CUT-OFF GRADE (% Cg)	TONNAGE (MILLION TONNES)	GRAPHITE GRADE (% Cg)	CONTAINED GRAPHITE (TONNES)	CUT-OFF GRADE (% Cg)	TONNAGE (MILLION TONNES)	GRAPHITE GRADE (% Cg)	CONTAINED GRAPHITE (TONNES)	MINERAL RESOURCE CLASSIFICATION
INFERRED	4.0	125.48	7.1%	8,850,296	4.0	121.62	6.2%	7,591,000	INFERRED
	5.0	91.89	8.0%	7,342,883	5.0	105.81	6.5%	6,881,000	
	6.0	65.94	9.0%	5,922,778	6.0	71.24	7.0%	4,969,000	
	7.0	44.01	10.2%	4,504,835	7.0	22.24	8.2%	1,823,000	
	8.0	29.77	11.6%	3,440,831	8.0	8.79	9.3%	817,000	
INDICATED	4.0	12.57	6.9%	864,110	4.0	17.34	6.4%	1,111,000	INDICATED
	5.0	9.26	7.7%	715,363	5.0	15.10	6.7%	1,009,000	
	6.0	6.45	8.7%	561,470	6.0	10.32	7.2%	744,000	
	7.0	4.32	9.8%	423,790	7.0	4.46	8.2%	367,000	
	8.0	2.80	11.1%	309,862	8.0	2.07	9.1%	189,000	
MEASURED	4.0	2.19	7.2%	157,634	4.0	0.00	0.0%	0	MEASURED
	5.0	1.69	8.0%	135,171	5.0	0.00	0.0%	0	
	6.0	1.22	9.0%	109,456	6.0	0.00	0.0%	0	
	7.0	0.84	10.1%	84,904	7.0	0.00	0.0%	0	
	8.0	0.57	11.3%	64,825	8.0	0.00	0.0%	0	
MEASURED + INDICATED	4.0	14.76	6.9%	1,021,744	4.0	17.34	6.4%	1,111,000	MEASURED + INDICATED
	5.0	10.95	7.8%	850,534	5.0	15.10	6.7%	1,009,000	
	6.0	7.67	8.8%	670,926	6.0	10.32	7.2%	744,000	
	7.0	5.16	9.9%	508,694	7.0	4.46	8.2%	367,000	
	8.0	3.37	11.1%	374,687	8.0	2.07	9.1%	189,000	

Notes to the Mineral Resource Estimate:

- Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the indicated or inferred mineral resource will be converted into a mineral reserve. The collective work to date from the Graphite Creek Property indicates that while the project is in early stages of exploration/resource work that indications of the size and grade of the graphite give suggestions that they are of high enough concentration to be of economic interest.
- Values in the tables have been rounded. Totals may not tally due to rounding.

The 2018 summer field program provided the necessary information to complete the 2019 NI 43-101 Mineral Resource Update dated May 2, 2019. At the end of the program, the Company held its first Subsistence Advisory Council meeting with representatives appointed by the local communities. An overview of the project was presented, the 2018 summer work was reviewed and guidance was solicited for the 2019 plans.

In 2019, the Project's PFS commenced. The work included a late fall drilling program comprised of 3 geotechnical core holes primarily to collect data for mine design and engineering purposes. The 2019 field program also included, geotechnical analysis for tailings management and process plant sites, access route analysis, continuation of environmental baseline surveys, design of primary and secondary treatment facilities, financial modeling and preparation of metallurgical samples for testing. Meetings with the local communities continued in 2019 to provide project updates and to learn about any concerns.

The PFS work continued in 2020 with a resource update and work on open-pit mine engineering, facilities design, metallurgical testing, financial modeling, product development and report writing. Due to the late-season start to the 2019 drilling program, the completion and compilation of all drill results and geotechnical data analysis were not completed until the first quarter of 2020. By the second quarter of 2020, work on the PFS was significantly slowed because of impacts of COVID-19 followed by the need to efficiently utilize available funds. This persisted into Q1 2021. With the February 2021 funding, PFS work fully resumed with completion now estimated by August 2021.

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

Overall Financial Performance

The Company has generated no operating revenue to date. The Company relies on the issuance of common shares as well as debt to finance exploration on its exploration and evaluation property, and to provide general operating working capital. The majority of the Company's expenditures relate to the acquisition and exploration of its exploration and evaluation property which is reflected in the Company's consolidated financial statements as capitalized exploration and evaluation costs.

Selected Annual Information

The following table summarizes financial data for annual operations reported by the Company as at and for the years ended December 31, 2020, 2019 and 2018.

	December 31, 2020	December 31, 2019	December 31, 2018
Current assets (\$)	134,718	423,591	511,918
Exploration and evaluation property (\$)	20,646,057	15,881,167	11,423,274
Total Assets (\$)	20,906,385	16,455,307	11,961,634
Current liabilities (\$)	1,489,285	301,161	68,293
Net loss (\$)	2,121,753	1,538,730	883,062
Basic and diluted net loss per common share (\$)	0.05	0.04	0.02
Weighted average number of common shares outstanding	42,891,752	40,609,143	32,612,243

GRAPHITE ONE INC.
Management’s Discussion and Analysis
For the years ended December 31, 2020 and 2019

Summary of Quarterly Results

The following is a summary of selected financial data for the Company for the eight most recently completed quarters based on and derived from the unaudited consolidated financial statements of the Company.

Period ended	Dec 31 2020	Sep 30 2020	Jun 30 2020	Mar 31 2020
Net loss (\$)	275,977	418,382	726,489	706,905
Basic and diluted loss per common share (\$)	0.00	0.01	0.02	0.02

Period ended	Dec 31 2019	Sep 30 2019	Jun 30 2019	Mar 31 2019
Net loss (\$)	349,985	282,510	597,709	308,526
Basic and diluted loss per common share (\$)	0.01	0.01	0.01	0.01

The increase in expenses in Q1 2020 was primarily due to losses on the changes in foreign exchange and interest expense on the loans. Increased expenses in Q2 2020 reflect the recording of compensation increases that were retroactive to January 1, 2020 and the recording of performance bonuses and granting of share-based payments, plus the loan interest.

Results of Operations

Three months ended December 31, 2020

During the three months ended December 31, 2020 (“the last quarter of 2020”), the Company incurred a net loss of \$275,977 compared to a net loss of \$349,985 during the three months ended December 31, 2019 (the “last quarter of 2019”).

General and administrative expenses consist of management fees and salaries, marketing and investor relations, office and administration and professional fees.

Three months ended	December 31, 2020	December 31, 2019
Management fees and salaries	\$ 238,029	\$ 150,379
Marketing and investor relations	55,127	37,947
Office and administration	43,747	46,670
Professional fees	31,369	18,879
Share-based compensation	4,447	75,386
	<u>\$ 372,719</u>	<u>\$ 329,261</u>

- Management fees and salaries increased in the three months ended December 31, 2020 when compared to the three months ended December 31, 2019 as the result of the increases to

GRAPHITE ONE INC.

Management's Discussion and Analysis

For the years ended December 31, 2020 and 2019

management compensation retroactive to January 1, 2020 offset in part by a reduction in other consulting costs.

- Marketing and investor relations costs increased in the three months ended December 31, 2020 when compared to the three months ended December 31, 2019 reflecting the expensing of prepaid conference fees, offset in part by lower costs due to reduced marketing activities resulting from the impact of COVID-19 in the three months ended December 31, 2020.
- Office and administration costs were slightly lower in the three months ended December 31, 2020 when compared to the three months ended December 31, 2019 primarily due to a decrease in travel costs in the third quarter of 2020 resulting from travel restrictions caused by the pandemic outbreak.
- Professional fees increased in the three months ended December 31, 2020 when compared to the three months ended December 31, 2019 due to increases in audit and tax related fees.
- Share-based compensation in the last quarter of 2019 reflects the expense for repricing options, whereas the share-based compensation in the last quarter of 2020 reflects a change in the exchange rate from the previous quarters.

Fiscal Year ended December 31, 2020 and year ended December 31, 2019

For the year ended December 31, 2020 (the "current year"), the Company incurred a net loss of \$2,121,753 compared to a net loss of \$1,538,730 for the year ended December 31, 2019 (the "prior year"). Factors that contributed to the increase in the expenses are outlined below.

General and administrative expenses consist of management fees and salaries, marketing and investor relations, office and administration and professional fees.

Fiscal Year ended	December 31 2020	December 31 2019
Management fees and salaries	\$ 1,181,008	\$ 558,351
Marketing and investor relations	183,799	226,198
Office and administration	98,760	222,630
Professional fees	62,619	91,653
Share-based compensation	203,979	350,336
	<u>\$ 1,730,165</u>	<u>\$ 1,449,168</u>

- Management fees and salaries increased in the year ended December 31, 2020 when compared to the year ended December 31, 2019 as the result of increases to management compensation retroactive to January 1, 2020, the awarding of management bonuses relating to 2019 efforts, the engagement of a Chief Technology Officer in late 2019 and the engagement of a consultant to assist with applying for United States government programs and grants.
- Marketing and investor relations costs decreased in the year ended December 31, 2020 when compared to the year ended December 31, 2019 primarily due to the Company's actions to reduce marketing activities and thus costs in 2020 resulting from the impact of COVID-19.
- Office and administration costs were lower in the year ended December 31, 2020 when compared to the year ended December 31, 2019 primarily as a result of additional costs incurred in 2019 for

GRAPHITE ONE INC.

Management's Discussion and Analysis

For the years ended December 31, 2020 and 2019

the Special Meeting of Shareholders, a decrease in travel costs in the year ended December 31, 2020 due to travel restrictions caused by the COVID-19 pandemic and costs incurred in the year ended December 31, 2019 related to a compensation study.

- Professional fees decreased in the year ended December 31, 2020 when compared to the year ended December 31, 2019 primarily due to reduced legal work in 2020 and additional costs in 2019 related to holding the Special Meeting of Shareholders.
- Share based payments expense, a non-cash expense, amounted to \$203,979 (2019 – \$350,336) with 575,000 stock options granted in 2020 compared with 1,800,000 granted in 2019, and which vested immediately and the repricing of previously granted options. Share based payments of \$3,440 in the current year and \$54,687 from the prior year were capitalized to the exploration and evaluation property.

Liquidity, Capital Resources and Going Concern

The Company's consolidated financial statements have been prepared on a going concern basis which assumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

The continuing operations of the Company are dependent upon the Company's ability to arrange adequate financing in the near term. However, there can be no assurance that the Company will be able to obtain adequate financing in the future or that the terms of such financing will be favourable. If adequate financing is not available when required, the Company may be required to delay, scale back or eliminate various programs and may be unable to continue operations. The Company will seek such additional financing through debt or equity offerings, but there can be no assurance that such financing will be available on terms acceptable to the Company or at all.

As at December 31, 2020, the Company had a cash balance of \$14,586 and a working capital deficit (current assets less current liabilities) of \$1,342,449. Current liabilities as at December 31, 2020 totaled \$1,477,167. The Company has incurred losses since inception and does not generate any cash inflows from operations. In the year ended December 31, 2020, cash used in operating activities totaled \$690,528.

The Company's ability to continue to meet its obligations and carry out its planned exploration activities is uncertain and dependent upon the continued financial support of its shareholders and on securing additional financing. Subsequent to December 31, 2020, the Company completed two financings raising gross proceeds of CA\$10 million through the issuance of 18,564,104 units consisting of one common share and one share purchase warrant (see Financial Statement Note 11: Subsequent Events). There is, however, no assurance that any such initiatives will be sufficient and, as a result, there is significant doubt regarding the going concern assumption and, accordingly, the ultimate appropriateness of the use of accounting principles applicable to a going concern. The Company's consolidated financial statements do not reflect the adjustments to the carrying values of assets and liabilities and the reported expenses and balance sheet classifications that would be necessary if the Company were unable to realize its assets and settle its liabilities as a going concern in the normal course of operations for the foreseeable future. These adjustments could be material.

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

Financial Instruments and risk management

Financial instrument classification

The Company's financial instruments recognized on the statement of financial position consist of cash, deposits and trade and other accounts payable and loans.

The estimated fair market values of the Company's financial instruments carried at amortized cost approximate their carrying values due to their short-term nature.

Financial Risk Management

The Company may be exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives. The main objectives of the Company's risk management processes are to ensure that risks are properly identified and that the capital base is adequate in relation to those risks. The principal risks to which the Company is exposed are described below.

Interest rate risk

Interest rate risk is the risk arising from the effect of changes in prevailing interest rates on the Company's financial instruments. The Company's cash balances held at financial institutions earn interest at rates which vary according to prevailing rates. The Company does not deem the associated interest rate risk to be material.

Credit risk

Credit risk is the risk of potential loss to the Company if a counter party to a financial instrument fails to meet its contractual obligations. Management does not believe that the Company is exposed to any material credit risk.

Foreign currency risk

Foreign currency risk is the risk that the fair value of, or future cash flows from, the Company's financial instruments will fluctuate because of changes in foreign exchange rates. Graphite One maintains the majority of its cash reserves in United States dollars. A portion of the Company's funds are held in Canadian dollars and are, therefore, subject to fluctuations in foreign exchange rates.

At December 31, 2020, the Company has certain monetary items denominated in Canadian dollars. Based on these net exposures, a 10% appreciation or depreciation of the Canadian dollar against the United States dollar would result in an increase or decrease of \$60,000 in the Company's net loss.

Liquidity risk

Liquidity risk is the risk that the Company will not meet its financial obligations as they fall due. See "Liquidity, Capital Resources and Going Concern" section.

GRAPHITE ONE INC.
Management’s Discussion and Analysis
For the years ended December 31, 2020 and 2019

Related party transactions and balances

Relationships	Nature of the relationship
Huston and Huston Holdings Corp. (“Huston”)	Huston and Huston Holdings Corp. is a private company controlled by Anthony Huston, an officer and director of the Company which provides management services to the Company.
Rockford Resources LLC (“Rockford”)	Rockford is a private company controlled by Patrick Smith, a director of the Company which provides director services to the Company.
0897877 BC Ltd. (“0897877 BC”)	0897877 BC is a private company controlled by Brian Budd, a director of the Company which provides director services to the Company.
Beattie Battery Technology Innovations (“Beattie”)	Beattie is a private company controlled by Dr. Shane Beattie, Chief Technology Officer of the Company, which provided technical services to the Company, until Dr. Beattie’s death in July 2020.
Taiga Mining Company, Inc. (“Taiga”)	Taiga is a private company and a Control person of the Company on accordance with Policy 4.1 of the TSX Venture Exchange Corporate Finance Manual.

For the year ended December 31	Management Consulting and Directors' Fees	
	2020	2019
Huston & Huston Holdings Corp.	\$ 405,414	\$ 188,414
Rockford Resources, LLC	18,010	18,087
0897877 BC Ltd.	18,010	18,087
Beattie Battery Technologies Innovations	33,199	13,636

Related party transactions

The above transactions relate to consulting fees incurred by the Company. Management services expenses are included in management fees and salaries in the consolidated statements of financial position. Geological services are capitalized to Exploration and evaluation property in the consolidated statements of financial position.

During 2019, the Company settled the first loan payable with Taiga through the issuance of 1,330,000 common shares and paid \$13,274 in interest (see Note 6).

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

During 2019, the Company drew \$3.2 million and in during 2020 drew an additional \$1.6 million, pursuant to a second loan agreement with Taiga (see Note 6). As at December 31, 2020, the Company owed the loan principal and interest equal to \$5,622,398.

Amounts owing to related parties are non-interest bearing, unsecured and due on demand. The transactions were in the normal course of operations. At December 31, 2020, the Company owed \$5,980,749 (December 31, 2019- \$4,307,570) to related parties.

Key management compensation

<u>For the year ended December 31,</u>	<u>2020</u>	<u>2019</u>
Consulting and directors' fees	\$ 439,465	\$ 224,590
Salaries	809,506	517,433
Benefits	77,752	86,246
Stock-based compensation	151,630	327,367
	<u>\$ 1,478,353</u>	<u>\$ 1,155,636</u>

Key management are those personnel having the authority and responsibility for planning, directing and controlling the Company and include the President, Chief Executive Officer, Directors, Chief Financial Officer and Chief Operations Officer.

Management contracts

The Company entered into a consulting agreement with a private company controlled by the President and CEO to provide certain management services to the Company whereby the Company will pay an annual fee for services of CA\$250,000 and, in the event of a change of control of the Company, an amount equal to three times the annual fee. In June 2020, the New President & CEO Agreement was amended whereby the annual fee was increased to US\$300,000, retroactive to January 1, 2020. All other terms remain unchanged.

Commencing January 1, 2016, the Executive Chairman has been engaged as an employee of the Company. Subsequent to September 30, 2016, the Company finalized the terms of the employment agreement with the Executive Chairman. Under this agreement, the Company will also pay an annual fee for services of CA\$200,000 and, in the event of change of control of the Company, an amount equal to two times the annual salary. In June 2020, the Executive Chairman Agreement was amended whereby the annual salary was increased to US\$250,000, retroactive to January 1, 2020. All other terms remain unchanged.

Commencing January 1, 2016, the Chief Financial Officer has been engaged as an employee of the Company. Subsequent to September 30, 2016, the Company finalized the terms of the employment agreement with the Chief Financial Officer. Under this agreement, the Company will pay an annual fee for services of CA\$190,000 and, in the event of a change of control of the Company, an amount equal to two times the annual salary. In June 2020, the CFO Agreement was amended whereby the annual salary was increased to US\$200,000, retroactive to January 1, 2020. All other terms remain unchanged.

Outstanding Share Data

The following table summarizes the Company's outstanding share capital (after share consolidation):

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

	April 20, 2021
Common shares issued and outstanding	62,702,611
Stock options outstanding (weighted average exercise price CA\$0.60)	5,190,000
Warrants outstanding (weighed average exercise price CA\$0.80)	29,505,149
Broker warrants outstanding (weighted average exercise price CA\$0.67)	1,446,080
<u>Fully diluted common shares outstanding</u>	<u>98,843,840</u>

Additional Disclosure for Venture Issuers without Significant Revenue

Details of the Company's general and administrative expenses for the three and twelve months ended December 31, 2020 and December 31, 2019 are included in the results of operations section of this MD&A. Details of the Company's expenditures relating to exploration and evaluation properties are presented in Note 7 to the consolidated financial statements.

Mining Risks

The Company is subject to risks typical in the mining business including uncertainty of success in exploration and development; unusual and unexpected geological formations, possible flooding and other conditions involved in drilling and removal of material, mitigation of possible environmental impacts, and the occurrence of other unexpected hazards. Risks also include the possibility that intended drilling schedules or estimated costs will not be achieved and unexpected fluctuations in the price of materials, supplies and currency exchange rates. The aggregate effect of these factors is impossible to predict with any degree of certainty.

Product Manufacturing Risks

The Company is subject to the risks typical in the mineral processing business including uncertainty that intended schedules, timelines, process performance criteria or estimated capital and operating costs will be achieved. There are risks beyond the Company's control, including: currency exchange rates; inflation; levels of interest rates; costs and availability of skilled workers, materials and supplies; global or regional political, economic and banking crises; and transportation and distribution disruptions. The aggregate effect of these factors is impossible to predict with any degree of certainty.

Business Risks

Natural resources exploration, project development, processing, and transportation; and, product development, processing, production, and marketing all involve a number of business risks, some of which are beyond the Company's control. These can be categorized as operational, market, financial and regulatory risks.

- Operational risks include finding and developing reserves economically; processing minerals competitively into successful products; product deliverability uncertainties; changing governmental law and regulation; hiring and retaining skilled employees and contractors; and, conducting operations in a cost effective and safe manner. The Company continuously monitors and responds to changes in these factors and adheres to all regulations governing its operations. Insurance may be maintained at levels

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

consistent with prudent industry practices to minimize risks however the Company is not fully insured against all risks nor are all such risks insurable.

- Operational risks also include the timing and successful completion of the Pre-Feasibility Study, Feasibility Study, permitting, construction and start-up.
- Market risks include demand and prices for graphite and graphite products not achieving expectations and disruptions in transportation and distribution. These and other factors are beyond the Company's control, including levels of inflation and interest rates, the demand for commodities, global or regional political, economic and banking crises and production rates in competitive producing regions.
- Financial risks include the timely availability of capital and changes in commodity prices, interest rates, inflation, wages and salaries, taxation, and foreign exchange rates, all of which are beyond the Company's control.
- Regulatory risks include possible delays in regulatory approvals for developments and transactions that the Board of Directors believe to be in the best interest of the Company, increased fees for filings, and the introduction of ever more complex reporting requirements, the cost of which the Company must meet in order to maintain its exchange listing.

COVID-19

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus (COVID-19) as a pandemic, which continues to spread throughout North America. The spread of COVID-19 has caused significant volatility in North America and international markets. There is significant uncertainty around the breadth and duration of business disruptions related to COVID-19. The Company has and continues to take all prescribed steps to minimize the impact of the outbreak of the COVID-19 pandemic on the health of its employees, contractors and consultants. Working remotely, conducting virtual instead of in-person meetings, restricting travel and other measures for physical distancing are in place. Due to the uncertainty as to the duration of the pandemic and the impact on operations, the Company may find it challenging to complete its Project PFS in the time expected or conduct Project feasibility study related field operations this year, which may delay progress on the Project.

Outlook

The Company's primary focus is the continued evaluation of the Graphite One Project which includes the proposed mine and primary processing facilities on the Seward Peninsula in Alaska and the graphite product manufacturing facilities at a preferred location to be determined in the PFS. The Company's goal is to become a vertically integrated producer of American natural graphite and advanced graphite products by creating an integrated American domestic supply chain. The ability of the Company to achieve this is contingent upon its ongoing ability to raise the risk capital necessary to advance its plans.

Approval

The Board of Directors of the Company have approved the disclosure contained in this MD&A as of April 20, 2021.

GRAPHITE ONE INC.
Management's Discussion and Analysis
For the years ended December 31, 2020 and 2019

Other Information

Additional information related to the Company is available for viewing on SEDAR at www.sedar.com and on the Company's website at www.graphiteoneinc.com.