

NMG Files Preliminary Economic Assessment for the Uatnan Mining Project Amidst Positive Market Conditions and Strengthens its Management Team

- + Preliminary economic assessment of the Uatnan Mining Project demonstrates attractive economics with an indicative NPV of C\$ 2,173 million for a targeted production of approximately 500,000 tonnes of graphite concentrate per annum over a 24-year life of mine, making it one of the world's largest graphite projects in development.
- + As lithium-ion battery production points to 8 TWh of capacity by 2030, the Uatnan Mining Project provides NMG with a robust and sizeable expansion plan for its Phase 3 in line with the Company's commercial discussions with EV and battery manufacturers.
- + NMG's leadership team to engage with the marketplace and investment community via upcoming participation at BMO Global Metals, Mining & Critical Minerals Conference, PDAC 2023 Convention and the Annual ROTH Conference.
- + Jean Cayouette appointed as Vice President, Metallurgy & Process, complementing NMG's technical team with over 30 years of experience in the mining industry looking after the design, start-up, and optimization of various mineral processing plants.

MONTREAL, CANADA, February 27, 2023 – Following the [publishing of results on January 10, 2023](#), Nouveau Monde Graphite Inc. ("NMG" or the "Company") (NYSE: NMG, TSX.V: NOU) has filed the preliminary economic assessment ("PEA") for the Uatnan mining project (the "Uatnan Mining Project") located in Québec, Canada, with the securities commissions and regulatory authorities in Canada and the U.S. The PEA, conducted by engineering firms BBA Inc. ("BBA") and GoldMinds Geoservices Inc. ("GMG") according to National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"), was carried out in collaboration with Mason Graphite Inc. ("Mason Graphite") (TSX.V: LLG, OTCQX: MGPHF) as the Uatnan Mining Project leverages the Lac Guéret deposit wholly-owned by Mason Graphite and subject to an [investment agreement and option and joint venture agreement with NMG](#).

The PEA shows strong economics for NMG's updated operational parameters and production volumes targeting the production of approximately 500,000 tonnes of graphite concentrate per annum over a 24-year life of mine ("LOM"). The proposed Uatnan Mining Project is currently one of the largest projected natural graphite productions being developed in the world. Consistent with NMG's vertical integration strategy, the Uatnan Mining Project's contemplated production would serve as feedstock for battery materials advanced manufacturing, providing refining expansion opportunity, increasing potential margins, and enhancing the Company's growth profile.

In today’s dynamic market, the Uatnan Mining Project aligns with NMG’s commercial engagement amidst electric vehicle (“EV”) adoption reaching unprecedented levels with 10.3 million vehicles sold in 2022 (Rho Motion, February 2023). With 7,940 GWh of global lithium-ion battery production capacity projected by 2030, demand for advanced materials is set to increase up to fivefold, with graphite outpacing the other battery metals (Benchmark, January 2023) at 10,363,000 tonnes per annum for that market segment alone.

Arne H Frandsen, Chair of NMG, declared: *“The market is actively searching for alternative sources of graphite, in significant volumes, to reduce its dependence on Chinese-controlled supply chains. NMG’s integrated operating model, from ore to battery materials, caters to western world’s EV and battery manufacturers with a turnkey, scalable, and ESG-driven production. The Uatnan Mining Project fits perfectly into the Company’s development plan, providing a large resource to complement our Phase-2 Matawinie Mine and Bécancour Battery Material Plant. Now more than ever, NMG is demonstrating its leadership in striving to establish North America’s largest natural graphite production to serve the energy transition.”*

PEA Results: The Potential of the Uatnan Mining Project

NMG and its consultants revisited the fundamentals for the property development with a view to aligning the Uatnan Mining Project with today’s market opportunity. Design of the Uatnan Mining Project has been tailored to the needs of the battery and EV market, orienting production volumes for beneficiation in order to produce active anode material.

The Uatnan Mining Project optimizes the Mineral Resources (see Table 2) and aims to expand the original mining project tenfold by targeting the production of approximately 500,000 tonnes of graphite concentrate per annum. It would be operated as a conventional open pit with a concentrator near the deposit. In line with NMG’s responsible mining approach, plans include considerations for high standards in term of tailings management, progressive site closure with backfilling of the pit and a transition to fleet electrification. Québec’s affordable clean hydropower underpins the Uatnan Mining Project’s economic structure and supports NMG’s undeterred carbon-neutrality commitment.

Table 1: Operational Parameters of the Uatnan Mining Project

OPERATIONAL PARAMETERS	
LOM	24 years
Nominal annual processing rate	3.4 M tonnes
Stripping ratio (LOM)	1.3:1
Average grade (LOM)	17.5% Cg
Average graphite recovery	85%
Average annual graphite concentrate production (LOM)	500,000 tonnes
Finished product purity	94% Cg

Cautionary Note: Graphite is expressed in graphitic carbon (“Cg”). The PEA is preliminary in nature and includes Inferred Mineral Resources, considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves have not demonstrated economic viability. Additional trenching and/or drilling will be required to convert inferred mineral resources to indicated or measured mineral resources. There is no certainty that the resources development, production, and economic forecasts on which this PEA is based will be realized.

Table 2: Current Pit-Constrained Mineral Resource Estimate

IN-PIT CONSTRAINED MINERAL RESOURCES	Tonnes (Mt)	Grade (% Cg)	Cg (Mt)
Measured 5.75% < Cg < 25%	15.65	15.2	2.38
Measured Cg > 25%	3.35	30.6	1.02
Total Measured	19.02	17.9	3.40
Indicated 5.75% < Cg < 25%	40.29	14.6	5.89
Indicated Cg > 25%	6.33	31.6	2.00
Total Indicated	46.62	16.9	7.89
Indicated + Measured 5.75% < Cg < 25%	55.94	14.8	8.27
Indicated + Measured Cg > 25%	9.70	31.2	3.03
Total Measured + Indicated	65.64	17.2	11.30
<i>Inferred 5.75% < Cg < 25%</i>	<i>15.35</i>	<i>14.9</i>	<i>2.28</i>
<i>Inferred Cg > 25%</i>	<i>2.47</i>	<i>31.8</i>	<i>0.79</i>
<i>Total Inferred</i>	<i>17.82</i>	<i>17.2</i>	<i>3.07</i>

Notes :

1. The Mineral Resources provided in this table were estimated by M. Rachidi P.Geo., and C. Duplessis, Eng., (QPs) of GoldMinds Geoservices Inc., using current Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves, Definitions and Guidelines.
2. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues. The quantity and grade of reported Inferred Mineral Resources are uncertain in nature and there has not been sufficient work to define these Inferred Mineral Resources as indicated or Measured Mineral Resources. There is no certainty that any part of a Mineral Resource will ever be converted into Mineral Reserves.
3. The Mineral Resources presented here were estimated with a block size of 3mE x 3mN x 3mZ. The blocks were interpolated from equal-length composites (3 m) calculated from the mineralized intervals.
4. The Mineral Resource estimate was completed using the inverse distance to the square methodology utilizing three runs. For run 1, the number of composites was limited to ten with a maximum of two composites from the same drillhole. For runs two and three the number of composites was limited to ten with a maximum of one composite from the same drillhole.
5. The Measured Mineral Resources classified using a minimum of four drillholes. Indicated resources classified using a minimum of two drillholes. The Inferred Mineral Resources were classified by a minimum of one drillholes.
6. Tonnage estimates are based on a fixed density of 2.9 t/m³.
7. A pit shell to constrain the Mineral Resources was developed using the parameters presented in the PEA. The effective date of the current Mineral Resources is January 10, 2023.
8. Mineral Resources are stated at a cut-off grade of 5.75% C(g).

Estimates currently being at the market's peak as influenced by inflationary trends, NMG and its consulting firms have refined design, engineering, and construction parameters to enable cost optimization and competitive pricing.

Table 3: Economic Highlights of the Uatnan Mining Project

ECONOMIC HIGHLIGHTS	Uatnan Mining Project
Pre-tax NPV (8% discount rate)	C\$ 3,613 M
After-tax NPV (8 % discount rate)	C\$ 2,173 M
Pre-tax IRR	32.6%
After-tax IRR	25.9%
Pre-tax payback	2.8 years
After-tax payback	3.2 years
Initial CAPEX	C\$ 1,417 M
Sustaining CAPEX	C\$ 147 M
LOM OPEX	C\$ 3,236 M
Annual OPEX	C\$ 135 M
OPEX per tonne of graphite concentrate	C\$ 268/tonne
Concentrate selling price	US\$ 1,100/tonne
Annual revenues from Uatnan production	US\$ 550,000,000

All costs are in Canadian dollars with the exception of the graphite sale price which is provided in US dollars.

The PEA shows that the Uatnan Mining Project is technically feasible as well as economically viable. With natural flake graphite expected to enter a structural deficit in 2023 due to the continued growth of the lithium-ion battery sector (Benchmark Mineral Intelligence, December 2022), market perspectives and NMG’s active commercial discussions indicate favorable conditions for commercializing the Uatnan Mining Project production.

On the basis of these positive results, NMG intends to launch an updated feasibility study in compliance with the [option and joint venture agreement signed with Mason Graphite](#).

NMG is committed to extending its approach of open and proactive engagement with Indigenous Peoples and local stakeholders to the Uatnan Mining Project. The Company plans to maintain a transparent dialogue with the Innu First Nation of Pessamit as it advances the project development to ensure the respect of their rights, their culture, way of life and spirituality, the inclusion of their perspective and traditional knowledge, as well as the protection of the environment. NMG also pledges to expand its relationships with stakeholders from all horizons to foster mechanisms for collaboration and shape a project generating shared value.

The PEA entitled “NI 43-101 Technical Report – PEA Report for the Uatnan Mining Project”, with an effective date of January 10, 2023, was filed on SEDAR at www.sedar.com, on EDGAR at www.sec.gov and on [NMG’s website](#). PEA results as outlined in this press release were issued on January 10, 2023.

Scientific and technical information presented in this press release was reviewed and approved by André Allaire, P.Eng. (BBA), Jeffrey Cassoff, P.Eng. (BBA), Vera Gella, P.Eng. (BBA), Claude Duplessis, P.Eng. (GoldMinds Geoservices), and Merouane Rachidi, P.Geo. (GoldMinds Geoservices) Qualified Persons as defined under NI 43-101.

Jean Cayouette

NMG appointed earlier this month Mr. Jean Cayouette, Eng., Vice President, Metallurgy and Process in replacement of Alain Dorval, who recently retired. A graduate of Laval University in mining and metallurgical engineering, Mr. Cayouette has over 30 years of experience in the mining

industry. The design, start-up and optimization of various mineral processing plants have contributed to his technical and management experience in the fields of metallurgy, operations, maintenance, and environment. He is an accomplished corporate leader in operational optimization, mine site reclamation as well as sustainable development initiatives.

Eric Desaulniers, Founder, President and CEO of NMG, added: *“The Uatnan PEA results are extremely positive for our shareholders, our potential customers and stakeholders in the Manicouagan region. NMG is now shifting gears as it progresses rapidly on a multi-lane expressway, advancing all three phases of its business strategy simultaneously to capture a historical market opportunity. Bringing on expertise and depth such as Jean’s provides our technical teams with solid backup to migrate Phase 1 operations into Phase 2 commercial production, while informing the next stages of development for the Uatnan Mining Project. I’m delighted to see another talented leader joining Team Nouveau Monde in our quest to drive sustainability into the battery/EV space. Bienvenue Jean! Happy retirement Alain!”*

NMG Engagement with the Marketplace and Investment Sector

Critical minerals, the energy transition and NMG’s robust business strategy are gaining attention both in the marketplace and within investment circles. The Company’s leadership team is participating in BMO Global Metals, Mining & Critical Minerals Conference until March 1, 2023, to position NMG’s attractive integrated production model and associated opportunities.

Executives will join some 30,000 attendees at PDAC 2023 Convention in Toronto, Canada, from March 5 to 8, 2023, a world-renowned mineral exploration and mining event. NMG leaders will be at booth IE2830 and engage in a number of special events. Eric Desaulniers, President & CEO, will also present at the Critical Metals: Battery Materials Processing session on Tuesday, March 7, 2023, at 3:40 p.m.

And from March 12-14, 2023, NMG representatives will participate in the 35th Annual ROTH Conference in California, an event dedicated to targeted growth companies.

About Nouveau Monde Graphite

Nouveau Monde Graphite is striving to become a key contributor to the sustainable energy revolution. The Company is working towards developing a fully integrated source of carbon-neutral battery anode material in Québec, Canada for the growing lithium-ion and fuel cell markets. With low-cost operations and enviable ESG standards, NMG aspires to become a strategic supplier to the world’s leading battery and automobile manufacturers, providing high-performing and reliable advanced materials while promoting sustainability and supply chain traceability. www.NMG.com

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Cautionary Note

All statements, other than statements of historical fact, contained in this press release including, but not limited to those describing the impact of the foregoing on the Uatnan Mining Project economics, PEA results (as such results are set out in the various tables featured above, and are commented in the text of this press release), including CAPEX, OPEX, NPV and IRR, the estimated value of the Uatnan Mining Project, operations development scenarios for the Uatnan Mining Project, commercial and technical parameters, the attractive economics for the Uatnan Mining Project, LOM plans, the Company's intended marketing strategy, market trends, future graphite prices, the impact of the Uatnan Mining Project on the local communities, including job creation, the projected annual production of the Company's Phase-3 operations, the expected electrification strategy and its intended results and benefits, the potential results and benefits of the Company's proprietary technologies, the timelines and costs related to the various initiatives, deliverables and milestones described in this press release and their expected results, the Company's expected financial and operational performance, the nature of relationships with stakeholders such as the local community including the Innu First Nation of Pessamit, future demand for batteries and EVs, the objective of developing one of the largest fully integrated natural graphite operations in the World, the production of carbon-neutral anode material, Mineral Resource estimates (including assumptions and estimates used in preparing the Mineral Resource estimates), the general business and operational outlook of the Company, the Company's future growth and business prospects, the Company's ESG commitments, initiatives and goals, the Company's presence at the various conferences mentioned in this press release, and those statements which are discussed under the "About Nouveau Monde" paragraph and elsewhere in the press release which essentially describe the Company's outlook and objectives, constitute "forward-looking information" or "forward-looking statements" (collectively, "forward-looking statements") within the meaning of Canadian and United States securities laws, and are based on expectations, estimates and projections as of the time of this press release. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the time of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. These estimates and assumptions may prove to be incorrect. Moreover, these forward-looking statements were based upon various underlying factors and assumptions, including the current technological trends, the business relationship between the Company and its stakeholders, the ability to operate in a safe and effective manner, the timely delivery and installation at estimated prices of the equipment supporting the production, assumed sale prices for graphite concentrate, the accuracy of any Mineral Resource estimates, future currency exchange rates and interest rates, political and regulatory stability, prices of commodity and production costs, the receipt of governmental, regulatory and third party approvals, licenses and permits on favorable terms, sustained labor stability, stability in financial and capital markets, availability of equipment and critical supplies, spare parts and consumables, the various tax assumptions, CAPEX and OPEX estimates, the Uatnan Mining Project permits' status, all economic and operational projections relating to the project, local infrastructures, the Company's business prospects and opportunities and estimates of the operational performance of the equipment, and are not guarantees of future performance.

Forward-looking statements are subject to known or unknown risks and uncertainties that may cause actual results to differ materially from those anticipated or implied in the forward-looking statements. Risk factors that could cause actual results or events to differ materially from current expectations include, among others, those risks, delays in the scheduled delivery times of the equipment, the ability of the Company to successfully implement its strategic initiatives and whether such strategic initiatives will yield the expected benefits, the availability of financing or financing on favorable terms for the Company, the dependence on commodity prices, the impact of inflation on costs, the risks of obtaining the necessary permits, the operating performance of the Company's assets and businesses, competitive factors in the graphite mining and production industry, changes in laws and regulations affecting the Company's businesses, political and social acceptability risk, environmental regulation risk, currency and exchange rate risk, technological developments, the impacts of the global COVID-19 pandemic and the governments' responses thereto, and general economic conditions, as well as earnings, capital expenditure, cash flow and capital structure risks and general business risks. A further description of risks and uncertainties can be found in NMG's Annual Information Form dated March 22, 2022, including in the section thereof captioned "Risk Factors", which is

available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. Unpredictable or unknown factors not discussed in this Cautionary Note could also have material adverse effects on forward-looking statements.

Many of these uncertainties and contingencies can directly or indirectly affect, and could cause, actual results to differ materially from those expressed or implied in any forward-looking statements. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Forward-looking statements are provided for the purpose of providing information about management's expectations and plans relating to the future. The Company disclaims any intention or obligation to update or revise any forward-looking statements or to explain any material difference between subsequent actual events and such forward-looking statements, except to the extent required by applicable law.

The market and industry data contained in this press release is based upon information from independent industry publications, market research, analyst reports and surveys and other publicly available sources. Although the Company believes these sources to be generally reliable, market and industry data is subject to interpretation and cannot be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data-gathering process and other limitations and uncertainties inherent in any survey. The Company has not independently verified any of the data from third-party sources referred to in this press release and accordingly, the accuracy and completeness of such data is not guaranteed.

Disclosures regarding Mineral Resource estimates included in this press release were prepared in accordance with Canadian NI 43-101. The disclosures included in this press release use the terms "Feasibility Study," "Mineral Resource," "Inferred Mineral Resource," "Indicated Mineral Resource," "Measured Mineral Resource," in connection with the presentation of resources, as each of these terms is defined in accordance with the CIM Definition Standards on Mineral Resources and Reserves adopted by the CIM Council, as required by NI 43-101. Unless otherwise indicated, all resource estimates included in this press release have been prepared in accordance with the CIM Definition Standards, as required by NI 43-101.

NI 43-101 is a rule developed by the Canadian Securities Administrators that establish the Canadian standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the requirements of the United Securities and Exchange Commission (the "SEC"). Accordingly, mineral resource and reserve information included in this press release may not be comparable to similar information made public by United States companies reporting pursuant to SEC reporting and disclosure requirements.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Further information regarding the Company is available in the SEDAR database (www.sedar.com), and for United States readers on EDGAR (www.sec.gov), and on the Company's website at: www.NMG.com