

UNITED STATESSECURITIES AND EXCHANGE COMMISSIONWashington, D.C. 20549 FORM 6-K REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934 For the month of June 2025 Commission File Number: 001-40416 Nouveau Monde Graphite Inc. (Translation of registrant's name into English) 481 rue Brassard Saint-Michel-des-Saints, Quebec Canada J0K 3B0 (Address of principal executive office) Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-FA A DOCUMENTS TO BE FILED AS PART OF THIS FORM 6-K 99.1 Report of Voting Results dated June 17, 2025 99.2 Press Release dated June 17, 2025 A A SIGNATURE Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, there unto duly authorized. A A Nouveau Monde Graphite Inc. A A (Registrant) A A Date: June 18, 2025 /s/ Josée Gagnon A A Josée Gagnon A A Vice President, Legal Affairs & Corporate Secretary A A Exhibit 99.1 A ANNUAL GENERAL AND SPECIAL MEETING OF SHAREHOLDERS JUNE 17, 2025 A REPORT OF VOTING RESULTS in accordance with section 11.3 of Regulation 51-102 respecting Continuous Disclosure Obligations. Following the annual general and special meeting of shareholders of Nouveau Monde Graphite Inc. (the "Corporation") held on June 17, 2025 (the "Meeting"), we hereby advise you of the results of the votes cast at the Meeting. A 1. Election of Directors A Based on the proxies received and the votes cast at the Meeting, the following individuals were elected as directors of the Corporation until the next annual shareholders' meeting. Accordingly, the results are set out below: A Name of Nominee Outcome Votes in Favor % Votes in Favor Votes Withheld % Votes Withheld Daniel Buron Elected 109,209,358 99.94% 62,766 0.06% Eric Desaulniers Elected 109,221,111 99.95% 51,013 0.05% Paola Farnesi Elected 109,207,877 99.94% 64,247 0.06% Edith Jacques Elected 109,210,864 99.94% 61,260 0.06% Stéphanie Leblanc Elected 109,208,941 99.94% 63,183 0.06% Nathalie Pilon Elected 109,214,969 99.95% 57,155 0.05% Chantal Sorel Elected 109,208,172 99.94% 63,952 0.06% A 2. Appointment of the External Auditor and Authorization Given to Directors to set its Compensation A Based on the proxies received and the votes cast at the Meeting, PricewaterhouseCoopers LLP was appointed as an external auditor of the Corporation for the ensuing year and the directors were authorized to set its compensation, with the following results: A Votes in Favor % Votes in Favor Votes Withheld % Votes Withheld 113,460,899 99.92% 93,445 0.08% A 3. Ratification and Confirmation of the proposed resolution to approve the Omnibus Plan A Based on the proxies received and the votes cast at the Meeting, the resolution to amend the resolution for the approval of the Omnibus Plan, was ratified and approved with the following results: A Votes in Favor % Votes in Favor Votes Against % Votes Against 113,460,899 99.99% 300 0.01% A A 4. Ratification and Confirmation of the Corporation's Omnibus Plan, as per amended resolution A Based on the proxies received and the votes cast at the Meeting, the omnibus plan adopted by the Board of Directors of the Corporation on May 14, 2025, as amended at the Meeting by the shareholders, was ratified and confirmed with the following results: A Votes in Favor % Votes in Favor Votes Against % Votes Against 108,117,493 98.94% 1,154,631 1.06% A 5. Ratification and Approval of the Options granted to Directors, Officers and Employees of the Corporation A Based on the proxies received and the votes cast at the Meeting, the 1,922,500 stock options granted to directors, officers and employees of the Corporation approved by the Board of Directors on March 26, 2025 with an effective date of April 1, 2025 which are subject to the omnibus plan of the Corporation, were ratified and approved by the disinterested Shareholders with the following results: A Votes in Favor % Votes in Favor Votes Against % Votes Against 87,937,683 98.12% 1,685,638 1.88% A A Exhibit 99.2 A PRESS RELEASE For immediate release A NMG Discloses Annual General & Special Meeting Voting Results and Obtains Industry Recognition A + Appointment of the Directors and adoption of all resolutions submitted to shareholders + Nomination at Fastmarkets' Volta Awards in Best New Project, Innovation of the Year and Leader of the Year categories A MONTRÉAL, CANADA, June 17, 2025 a Nouveau Monde Graphite Inc. (the "NMG" or the "Company") (NYSE: NMG, TSX: NOU) held today its virtual Annual General and Special Meeting of Shareholders (the "Meeting") which was supplemented with a corporate presentation on market perspectives and the Company's progress toward bringing its Phase-2 Matawinie Mine and Bégin Battery Material Plant to final investment decision (the "FID"). Arne H Frandsen, former Chair of NMG, announced: "These are exciting and dynamic times, with Western economies reshaping their trade, economic development, energy, and defense agendas. NMG is well positioned, in a stable and recognized jurisdiction, to market its turnkey source of active anode material to manufacturers and governments hungry for minerals. I am delighted to see Daniel stepping up to lead the Board for this next chapter at NMG, best of success to Team Nouveau Monde!" Eric Desaulniers, Founder, President, and CEO of NMG, declared: "While current geopolitics are challenging market conditions, we see continued growth in electric vehicles (EVs) sales and deployment of energy storage systems for renewable power and data centers across the world. We maintain active engagement with our customers and targeted financial stakeholders to define and strengthen the commercial and financing framework of our integrated Phase-2 projects. And to guide our Company's next phase of development and growth, we welcome to the Board newly appointed experienced executives as Directors; bienvenue Paola and Judith! I take this opportunity to thank again our long-time investor Pallinghurst for their instrumental support over the years, as well as Jamie Scarlett for his contribution to the Company's sound governance." Daniel Buron, new Chair of NMG, stated: "I am happy to transition from Lead Independent Director to Chair of NMG to steer the Company amid this period of complex changes as we prepare for FID. I would like to also extend my appreciation to Arne, Andrew and Jamie for their guidance and contribution to the Board." A A Matters Voted upon at the Meeting and Results A Each of the seven nominees listed in the Company's management information circular dated May 14, 2025, provided in connection with the Meeting were appointed as Directors of the Company. A Shareholders also adopted all other resolutions submitted for their approval, including the appointment of PricewaterhouseCoopers LLP as the auditors of the Company to hold office until the close of the next annual meeting of the Company and the authority given to directors to set its compensation; the ratification and confirmation of the Company's omnibus plan, as amended at the Meeting by the shareholders; as well as the approval of stock options granted to directors, officers and employees. The complete voting results for each item of business are as follows: A ELECTION OF DIRECTORS A Name of Nominee Votes in Favor % Votes in Favor Votes Withheld % Votes Withheld Daniel Buron 109,209,358 99.94% 62,766 0.06% Eric Desaulniers 109,221,111 99.95% 51,013 0.05% Paola Farnesi 109,207,877 99.94% 64,247 0.06% Edith Jacques 109,210,864 99.94% 61,260 0.06% Stéphanie Leblanc 109,208,941 99.94% 63,183 0.06% Nathalie Pilon 109,214,969 99.95% 57,155 0.05% Chantal Sorel 109,208,172 99.94% 63,952 0.06% A Appointment and Compensation of PricewaterhouseCoopers LLP as Auditor A Votes in Favor % Votes in Favor Votes Withheld % Votes Withheld 113,460,899 99.92% 93,445 0.08% A AMENDMENT OF THE PROPOSED RESOLUTION ON THE OMNIBUS PLAN OF THE COMPANY A Votes in Favor % Votes in Favor Votes

Against % Votes Against 113,460,899 99.99% 300 0.01% Ratification and Confirmation of the Company's OMNIBUS Plan, AS AMENDED AT THE MEETING BY THE SHAREHOLDERS. Votes in Favor % Votes in Favor Votes Against % Votes Against 108,117,493 98.94% 1,154,631 1.06% Approval of Stock Options Granted to Directors, Officers and Employees. Votes in Favor % Votes in Favor Votes Against % Votes Against 87,937,683 98.12% 1,685,638 1.88% Details of the voting results on all matters considered at the Meeting are available in the Company's report of voting results, which is available under NMG's profile on SEDAR+ at www.sedarplus.ca and on EDGAR at www.sec.gov. Industry Recognition Fastmarkets, a leading cross-commodity price reporting agency in the metals and mining market, has nominated NMG for three Voltas Awards: Best New Project for the Matawinie Mine, set to supply the North American battery-to-EV supply chain with 106,000 tpa of graphite concentrate. » Innovation of the Year for the Company's hydroelectricity-powered, traceable ore-to-battery-material value chain at the future Phase-2 Matawinie Mine and Bécaud Battery Material Plant. » Leader of the Year for Eric Desaulniers, in recognition of his visionary development of an integrated and ESG-aligned value chain, from ore to active anode material, backed by strategic partnerships with OEMs. The awards are to be announced at Fastmarkets' Lithium Supply and Battery Raw Materials Conference 2025, to be held next week in Las Vegas. About Nouveau Monde Graphite Nouveau Monde Graphite is an integrated company developing responsible mining and advanced processing operations to supply the global economy with carbon-neutral active anode material to power EV and renewable energy storage systems. The Company is developing a fully integrated ore-to-battery-material source of graphite-based active anode material in Quebec, Canada. With recognized ESG standards and structuring partnerships with anchor customers, NMG is set to become a strategic supplier to the world's leading lithium-ion battery and EV manufacturers, providing advanced materials while promoting sustainability and supply chain traceability. www.NMG.com Contact MEDIA INVESTORS Julie Paquet VP Communications & ESG Strategy +1-450-757-8905 #140 jpaquet@nmg.com Marc Jasmin Director, Investor Relations +1-450-757-8905 #993 mjasmin@nmg.com Subscribe to our news feed: <https://bit.ly/3UDrY3X> Cautionary Note Regarding Forward-Looking Information This press release contains forward-looking information and forward-looking statements within the meaning of applicable securities legislation (collectively, "forward-looking statements"), including, but not limited to, the Company's ability to secure its project financing and to secure a positive FID, the completion of the Phase-2 Matawinie Mine and Bécaud Battery Material Plant, 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. Forward-looking statements are 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 are not guarantees of future performance and may prove to be incorrect. Moreover, these forward-looking statements are based upon various underlying factors and assumptions, including the business relationship between the Company and its stakeholders, the ability to obtain sufficient financing for the development of the Matawinie Mine and the Bécaud Battery Material Plant, the Company's ability to satisfy the due diligence processes of the stakeholders, and are not guarantees of future performance. A 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, availability of financing or financing on favorable terms for the Company, delays in the reaching FID, 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 31, 2025, including in the section thereof captioned "Risk Factors", which is available on SEDAR+ at www.sedarplus.ca 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. Further information regarding the Company is available in the SEDAR+ database (www.sedarplus.ca), and for United States readers on EDGAR (www.sec.gov), and on the Company's website at: www.NMG.com.