Northern Graphite Provides Development Update on Its Patented Porocarb(R) Product for All-Solid-State-Battery Technologies

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• Porocarb® represents potentially significant new revenue stream for Northern

Ottawa, May 2, 2024 - Northern Graphite Corp. (TSXV: NGC) (OTCQB: NGPHF) (FSE: 0NG) (XSTU: 0NG) (the "Company" or "Northern") is pleased to provide an update on the development, production, and commercialization of Porocarb®, a patented high-performance macro-porous hard carbon material aimed at boosting performance in next generation battery chemistries for electric vehicles ("EVS"), including both lithium ion and solid state batteries.

Since the launch of its Battery Materials Group ("NGCBM") in February, Northern has signed non-disclosure agreements with top-tier global battery manufacturers from South Korea, China, and several Western countries who are keen on utilizing Porocarb® as a performance additive in lithium-Ion batteries or as a protective carbon coating for All-Solid-State-Battery ("ASSB") anodes.

NGC Battery Materials Group was formed through the acquisition of the assets and R&D team of the battery division of Germany's Heraeus Group, and included a fully operational, state-of-the-art laboratory in Frankfurt. The acquisition included licensing for the IP to develop, produce, and sell Porocarb®, a high-performance porous hard carbon material developed over the last 10 years and patented by Heraeus to enhance the efficiency and speed of energy storage mechanisms.

"Since we launched our new battery materials group, we have been leveraging the deep, longstanding commercial relationships that the new team has brought Northern to position Porocarb® with prospective clients as a frontrunner in the development of next-generation, lithium-based energy storage and ASSB," said Northern Chief Executive Officer Hugues Jacquemin. "We are in advanced discussions with several major battery manufacturers who are assessing Porocarb® for its potential to extend cycle-life for current and future technologies. The market potential of Porocarb® lies in its unique applications in tailored battery electrode formulations."

A number of global automakers are working to commercialize ASSB chemistries that will enable longer driving distances, faster charging and an overall safer energy storage system. Based on information from SNE Research and EV Tank, the solid-state battery market is expected to grow from approximately 2 GWh today to an estimated 220 GWh by 2030, of which 60 GWh will be ASSB.

"Porocarb® has opened a whole new potential revenue stream for the Company that is separate but complimentary to our work towards becoming a major supplier of battery anode material ("BAM") to lithium-ion battery makers when our Baie-Comeau BAM plant is built," said Mr. Jacquemin. "While timing will depend on the qualification process with battery makers, Porocarb® has the potential to provide revenue to the Company sooner even than our natural graphite Lithium-lon battery anode material products."

Porocarb® plays a vital role in multiple battery applications (Fig.1). It acts as a protective layer in ASSBs, enhances energy density and cycle life as a host material for active materials, and serves as an additive in LIBs to improve overall cell performance.

Fig.1: Main markets for Porocarb in battery applications such as ASSBs, active material and LIBs.

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"We have made great progress in finalizing a specialized Porocarb grade employed as a protective carbon layer between the current collector and solid-state electrolyte in an anode-free ASSB design. The latest results with world leading South Korean and Chinese battery manufacturers indicated superior performance with Porocarb compared to other carbon materials and we are currently in the pivotal phase of product qualification with our clients," said Dr. Moritz Hantel, VP Innovation & Product Management of NGCBM.

"This positive feedback has led to an increase in orders for qualification material from battery cell makers assessing Porocarb for use in ASSBs. These developments underscore the promising future of Porocarb in the market," said Michael Grimm, President of NGCBM.

Northern is advancing toward its goal of becoming a vertically integrated, mine-to-market supplier to traditional downstream customers and to the emerging ‎‎market for battery anode material. The Company is progressing toward construction of a 200,000 tonne-per-year BAM plant in Baie-Comeau, Quebec, and is advancing technical relationships with multiple partners with the objective of securing the technology, engineering and financial partnerships necessary to develop BAM facilities in Baie-Comeau and elsewhere.

"Today, Northern is an integrated, pioneering technology company that is innovatively designing carbon products for energy storage systems, whether it be LIB or ASSB," said Mr. Jacquemin. "Our ability to meet customer needs, understand their requirements and swiftly implement solutions in our lab positions us a key player in the future of battery technologies."

About Northern Graphite

Northern, the only flake graphite producing company in North America, is a Canadian, TSX Venture Exchange listed company that is focused on becoming a world leader in producing natural graphite and upgrading it into high-value products critical to the green economy, including anode material for lithium-ion batteries/EVs, fuel cells and graphene, as well as advanced industrial technologies.

Northern expects to become one of the largest natural graphite producers outside of China when its Namibian operations come back online. The Company also has the large-scale Bissett Creek project in Ontario and substantial additional measured and indicated resources in Namibia and the Mousseau property in Quebec which are expected to be sources of continued production growth in the future. All projects have "battery quality" graphite and are located close to infrastructure in politically stable jurisdictions.

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For additional information

Please visit the Company's website at https://www.northerngraphite.com/home/, the Company's profile on www.sedarplus.ca our Social Channels listed below or contact the Company at (613) 271-2124.

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This news release contains certain "forward-looking statements" within the meaning of applicable Canadian

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Although the forward-looking statements contained in this news release are based on what management believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with them. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.

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