

TSXV NGC
OTC NGPHF
FRA ONG
XSTU ONG
northerngraphite.com

Northern Graphite Completes Preliminary Economic Assessment on Relocating Processing Plant for Namibian Operations

- New Plan Indicates Reduced GHG Emissions, Improved Sustainability and Enhanced Expansion Potential
- Move Supports Northern's Strategy to be a Competitive Supplier to Battery Anode Material ("BAM") Markets

August 28, 2023: Northern Graphite Corporation (NGC:TSX-V, NGPHF:OTCQB, FRA:0NG, XSTU:0NG) (the "Company" or "Northern) is pleased to announce the results of a new preliminary economic assessment ("PEA") that evaluated moving the processing plant for its Namibian operations located at Okorusu to the Okanjande mine rather than rehabilitating the mill in its current location.

The PEA indicates that economics remain attractive under the new plan, with higher capital costs but lower operating costs. In addition, greenhouse gas ("GHG") emissions are reduced, sustainability is improved, and the expansion potential of the project is substantially enhanced.

The PEA, issued July 31, 2023, was prepared by CREO Engineering Solutions and confirms the viability of moving milling operations directly to the Okanjande mine site, which eliminates the cost of trucking mineralized material 70km to Okorusu. This allows for a more sustainable operation that also includes the use of solar power and lower water consumption.

"Moving the mill also provides room for potential future expansion from the perspective of both processing and tailings capacity, which is something we do not have at the current location," said Northern Chief Operating Officer Kirsty Liddicoat. "The new approach also incorporates dry tailings into an integrated waste landform which means less water use and a more sustainable operation in support of the green transition," she added.

The Company is also looking at other ways to reduce its carbon footprint after the plant move, including the use of electric pit equipment and purchasing biofuel offsets on shipping concentrates from Namibia. The Okanjande/Okorusu operation is currently on care and maintenance and the goal remains to restart production in late 2024, subject to financing.

The Okanjande graphite mine is a key catalyst in Northern's strategy to become an integrated and sustainable mine-to-battery company, supplying markets in North America and Europe as they embrace the energy transition and widescale electrification. Graphite from Okanjande will also supply traditional markets, from refractory bricks for steelmaking, to heat management in consumer electronics, to friction and lubrication products for the global automobile industry.

"This PEA supports our strategy to develop Okanjande as a competitive asset that can be available to meet the demands of our customers in years to come," said Northern Chief Executive Officer Hugues Jacquemin. "Our new mining plan at

Okanjande will allow us to move quickly to serve the fast-growing market for battery anode materials and increase our ability to expand the facilities over time."

The Okanjande deposit hosts a weathered resource of 5.9Mt containing 248kt of graphite in the measured and indicated category and 0.5Mt of inferred resources containing 17kt graphite, a transitional resource of 1.2Mt containing 53kt of graphite in the measured and indicated categories and 0.1Mt of inferred resources containing 2kt of graphite (@2.6% TCG cut-off grade and \$1,250/t graphite price for weathered and transitional) and a fresh rock resource of 24.2Mt containing 1.3Mt of graphite in the measured and indicated categories and 7.2Mt of inferred resources with 0.4Mt of contained graphite (@3.1%TGC cut-off grade and \$1,250/t graphite price). The PEA is based on only processing 6.1MT of measured and indicated resources (.34Mt of contained graphite), producing an average of 31,000 tonnes per year of concentrate over a 10-year mine life.

"The substantial measured and indicated hard rock resource at Okanjande, which is not yet closed off by drilling, presents a clear opportunity to substantially increase production in the future and the Company intends to complete additional work and prepare a new PEA with respect to an expansion scenario," said Ms. Liddicoat.

"The ability to add 31,000tpy of production at a very reasonable capital cost creates a compelling case for the development of Okanjande," said Mr. Jacquemin. "Okanjande has a very large resource located in one of the most politically stable countries in Africa, with easy access to a deep-water port which provides substantial competitive advantages over most other African projects."

	Unit Of Measure (UOM)	Updated PEA
Measured and Indicated Resource – Weathered and Transitional	Mt, %TGC	2.54Mt @ 5.03% TGC
Measured and Indicated Resource - Fresh	Mt, %TGC	3.56Mt @ 5.44% TGC
Total Measured and Indicated tonnes	Tonnes	6,096,950

Before Tax / 8% discount rate		
NPV	USD	120,396,195
IRR	%	46.5%
After Tax / 8% discount rate		
NPV	USD	70,218,979
IRR	%	36%

Capital Expenditures (excl. Sustaining capital)	USD	34,250,368
Average annual concentrate production	Tonnes	31,315
C1 production costs	USD/tonne	666
Average grade	%	5.3%
Average recovery	%	92%
Graphite Flake price	USD/t TCG	1,550

Mineral resources that are not mineral reserves do not have demonstrated economic viability. While the PEA does not include inferred resources, the PEA is preliminary in nature and there is no certainty that the results of the PEA will be realized.

Technical Report and Qualified Persons

Northern has filed a technical report relating to the PEA. The technical report, entitled "Okanjande Graphite Project -

Preliminary Economic Assessment Study Update Report" – is effective June 30, 2023, issued July 31, 2023, and has been prepared for Northern in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") by CREO Engineering Solutions (Namibia) with contributions from The MSA Group (South Africa) and certain other independent consultants, and is available on SEDAR (www.sedar.com) under Northern's issuer profile as well as the Company's website.

CREO Engineering Solutions (Namibia) was responsible for the compilation of information and preparation of the overall PEA and the following Qualified Persons (as defined under NI 43-101), all of whom are independent of the Company, prepared or reviewed the preparation of the scientific and technical information in this press release regarding the Company's Okanjande Project with respect to their respective disciplines:

- Etienne Roux, B.Eng (Chem), SME Registered Member, Lead Consultant, CREO Engineering Solutions was responsible for the technical information pertaining to the Okanjande Report
- Ipelo Golang Rebecca Gasela, Pr. Sci. Nat., MGSSA, Senior Mineral Resource Consultant, The MSA Group was responsible for the Okanjande Resource Estimate
- Mark Mohring, PrEng MSAIMM, Consultant Mining Engineer, The MSA Group was responsible for the mining methods
- Robert Barnett, Pr. Sci. Nat., FGSSA Consulting Geologist, Independent Consultant was responsible for the technical information and co-responsible for the mineral resource.

About Northern Graphite

Northern 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 is the only significant graphite producing company in North America and will become the third largest producer outside of China when its Namibian operations come back online. The Company also has two large scale development projects, Bissett Creek in Ontario, and Okanjande in Namibia, that will be a source of continued production growth in the future. All projects have "battery quality" graphite and are located close to infrastructure in politically stable jurisdictions.

For media inquiries contact

Pav Jordan, VP of Communications Email: pjordan@northerngraphite.com

For other inquiries contact

Guillaume Jacq, CFO Telephone: (613) 271-2124

Email: info@northerngraphite.com

For additional information

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









Cautionary Note Regarding Forward-Looking Statements

This news release contains certain "forward-looking statements" within the meaning of applicable Canadian securities laws. Forward-looking statements and information are frequently characterized by words such as "plan", "expect", "project", "intend",

"believe", "anticipate", "estimate", "potential", "possible" and other similar words, or statements that certain events or conditions "may", "will", "could", or "should" occur. Forward-looking statements in this release include statements regarding, among others, the results of the PEA, the Company's intentions with respect to the resumption of production at Okanjande and the Company's intentions with respect to advancing its developments projects to production and developing the capacity to manufacture value added products. All such forward-looking statements are based on assumptions and analyses made by management based on their experience and perception of historical trends, current conditions and expected future developments, as well as other factors they believe are appropriate in the circumstances. However, these statements are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected including, but not limited to unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of other parties to perform as agreed; social or labour unrest; changes in commodity prices; unexpected failure or inadequacy of infrastructure and the failure of ongoing and contemplated studies to deliver anticipated results or results that would justify and support continued studies, development or operations. Readers are cautioned not to place undue reliance on forward-looking information or statements.

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.

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.