



LEADING EDGE MATERIALS CORP.

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TSX.V: LEM | Nasdaq First North: LEMSE | OTCQB: LEMIF

NEWS RELEASE

July 26, 2021

LEADING EDGE ANNOUNCES FILING OF PRELIMINARY ECONOMIC ASSESSMENT REPORT FOR WOXNA GRAPHITE ANODE PROJECT

Vancouver, July 26, 2021 – Leading Edge Materials Corp. (“Leading Edge Materials” or the “Company”) (TSXV: LEM) (Nasdaq First North: LEMSE) (OTCQB: LEMIF) is pleased to announce that the technical report for its Woxna Graphite project (the “Project”) titled “NI 43-101 Technical Report – Woxna Graphite” with effective date June 9, 2021, has been filed under the Company’s profile on SEDAR today (the “Report” or “PEA”). The Report supports the disclosure in the Company’s news release dated June 9, 2021. All figures in the Report are US dollars unless otherwise specified.

The news release on June 9, 2021, presented these highlights of the Report:

Main PEA Highlights

- The PEA indicates the potential viability of a Swedish operation producing battery grade graphite anode material utilizing an existing graphite mine and concentrator with the addition of a value-add processing facility offsite;
- The proposed process route in the PEA uses a thermal purification process which, combined with access to low cost hydropower offers a low carbon footprint for the Project to be further demonstrated in an upcoming life cycle assessment (LCA) report (Preliminary LCA results released June 21, 2021). The PEA also focused on improved waste management process for tailings further improving the sustainability ambitions of the Project;
- The Report shows a financially robust Project with average annual EBITDA of \$49m and a pre-tax Internal Rate of Return (IRR) of 42.9%;
- The PEA utilizes one out of four deposits currently owned by Woxna under granted exploitation concessions, where two of the other deposits also have indicated and inferred mineral resource estimates offering potential upside for further expansion in future development or studies;

Project Financial Highlights

- Pre- and Post-tax Net Present Value (NPV) of \$317m and \$248m using an 8% discount rate;
- Pre- and Post-tax IRR of 42.9% and 37.4%;
- Accumulated project revenues of \$1,425m;

- Average annual EBITDA of \$49m;
- Initial Capital Expenditures (CAPEX) of \$121m;
- Pre-tax Payback Period from first production of 2.24 years; and
- Operating cost per tonne of coated spherical purified graphite (CSPG) of \$2,519 after revenue credit from micronized graphite product

Operational Highlights

- Life of Project (LOP) is 19 years;
- Life of Mine (LOM) is 15 years;
- LOM average annual plant feed of 159,967 tonnes;
- LOM average annual CSPG product 7,435 tonnes;
- LOM average annual micronized graphite product 8,421 tonnes; and
- LOM average strip ratio of 3.7:1

The PEA is preliminary in nature, it includes inferred mineral resources that are 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 preliminary economic assessment will be realized.

The PEA was prepared by Zenito Limited in accordance with Canadian *National Instrument 43-101 Standards of Disclosure for Mineral Projects* and is now available on the Company's website (www.leadingedgematerials.com) and profile on SEDAR (www.sedar.com).

Qualified Persons for the PEA

- Zenito Limited (Zenito) - an independent firm of engineering consultants focussed on minerals processing and infrastructure projects, Zenito is engaged as the lead PEA consultant and for the processing and infrastructure. The Zenito Qualified Person is Christopher Stinton, BSc (Hons), CEng MIMMM.
- ReedLeyton Consulting Limited (ReedLeyton) - an independent firm specialising in estimation of mineral resources commissioned to review, validate, and update the PEA Mineral Resource statements. The ReedLeyton Qualified Person is Geoffrey Reed, B App Sc, MAusIMM (CP), MAIG.
- M.Plan International Limited (MPlan) - an independent firm of engineering consultants commissioned to review and update the PEA mine engineering. The MPlan Qualified Person is Mathieu Gosselin, Eng.
- Golder Associates AB (Golder) - commissioned to review the project environmental scope and review and design of the TSF to accommodate the production from the upgraded Woxna Concentrator and CVAP. The Golder Qualified Person is Henning Holmström, MSc, PhD, MAusIMM, MAIG.

ReedLeyton, MPlan, Golder and Zenito Qualified Persons are all independent as defined by NI 43-101, and have contributed to their corresponding sections of the PEA, and have reviewed and approved the scientific, technical and economic information contained in this news release.

**On behalf of the Board of Directors,
Leading Edge Materials Corp.**

Filip Kozlowski, CEO

For further information, please contact the Company at:

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About Leading Edge Materials

Leading Edge Materials is a Canadian public company focused on developing a portfolio of critical raw material projects located in the European Union. Critical raw materials are determined as such by the European Union based on their economic importance and supply risk. They are directly linked to high growth technologies such as batteries for electromobility and energy storage and permanent magnets for electric motors and wind power that underpin the clean energy transition towards climate neutrality. The portfolio of projects includes the 100% owned Woxna Graphite mine (Sweden), Norra Kärr HREE project (Sweden) and the 51% owned Bihor Sud Nickel Cobalt exploration alliance (Romania).

About Zenito

Zenito is a UK based multidisciplinary engineering consultancy specializing in the design of mineral processing plants and associated infrastructure. (www.zenito.co.uk)

Additional Information

The information was submitted for publication through the agency of the contact person set out above, on July 26, 2021 at 5.30 am Vancouver time.

Leading Edge Materials is listed on the TSXV under the symbol "LEM", OTCQB under the symbol "LEMIF" and Nasdaq First North Stockholm under the symbol "LEMSE". Mangold Fondkommission AB is the Company's Certified Adviser on Nasdaq First North and may be contacted via email CA@mangold.se or by phone +46 (0) 8 5030 1550.

Reader Advisory

This news release may contain statements which constitute "forward-looking information" under applicable Canadian securities laws, including predictions, projections and forecasts. Forward-looking information includes, but are not limited to, statements that address activities, events or developments that the Company expects or anticipates will or may occur in the future, including such things as the results of the PEA, mineral resource estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, permitting time lines, currency exchange rate fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, timing and possible outcome of pending litigation, title disputes or claims and limitations on insurance coverage and with respect to the results of the PEA, including future Project opportunities, future operating and capital costs, closure costs, the projected NPV, IRR, timelines, and the ability to obtain the requisite permits, economics and associated returns of the Project, the technical viability of the Project, the market and future price of and demand for graphite, the environmental impact of the Project, and the ongoing ability to work cooperatively with stakeholders, including the local levels of government, as well as plans, intentions, beliefs and current expectations of the Company, its directors, or its officers with respect to the future business activities of the Company.

The words "may", "would", "could", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" and similar expressions, as they relate to the Company, or its management, are intended to identify such forward-looking information. Investors are cautioned that any such forward-looking information is not a guarantee of future business activities and involves risks and uncertainties, and that the Company's future business activities may differ materially from those in the forward-looking information as a result of various factors, including, but not limited to, success of the appeals process; fluctuations in market prices; successes of the operations of the Company; continued availability of capital and financing; changes in planned work resulting from weather, logistical, technical or other factors; the possibility that results of work will not fulfil expectations and realize the perceived potential of the Project; changes in project parameters as plans continue to be refined; risk of accidents, equipment breakdowns and labour disputes or other unanticipated difficulties or interruptions; the possibility of cost overruns or unanticipated expenses; the risk of environmental contamination or damage resulting from the Company's operations and other risks and uncertainties; the failure of contracted parties to perform; other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of exploration and general economic, market or business conditions, as well as those factors disclosed in the Company's publicly filed documents. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurances that such information will prove accurate and, therefore, readers are advised to rely on their own evaluation of such uncertainties. The Company does not assume any obligation to publicly update or revise any forward-looking information except as required under the applicable securities laws.

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