



## LEADING EDGE MATERIALS CORP.

1305 – 1090 West Georgia Street, Vancouver, BC, V6E 3V7  
T +1 604 685 9316 | [www.leadingedgematerials.com](http://www.leadingedgematerials.com)  
TSX.V: LEM | Nasdaq First North: LEMSE | OTCQB: LEMIF

NEWS RELEASE

December 10, 2020

# LEADING EDGE MATERIALS COMMISSIONS LIFE CYCLE ANALYSIS ON WOXNA GRAPHITE PROJECT

**Vancouver, December 10, 2020 – Leading Edge Materials Corp. (“Leading Edge Materials” or the “Company”) (TSXV: LEM) (Nasdaq First North: LEMSE) (OTCQB: LEMIF)** is pleased to announce that it has recently commissioned Minviro Ltd. (“Minviro”), a London based globally recognized life cycle assessment (“LCA”) consultancy, to build an LCA model and deliver an LCA report for the Woxna Graphite project.

On December 10<sup>th</sup>, the European Commission proposed new legislation to ensure that batteries placed on the EU market will be sustainable along their entire life cycle, including mandatory requirements to declare their associated carbon footprint<sup>i</sup>. Earlier in 2020 Minviro published a white paper<sup>ii</sup> concluding that existing battery LCA studies might have underestimated the CO<sub>2</sub> intensity of production by up to six times for both natural and synthetic graphite.

Filip Kozlowski, CEO states *“As we transition towards climate neutrality and a more sustainable society, it is adamant to ensure this transition is done in a sustainable way by minimizing carbon footprint across the full battery value chain, from raw materials to finished batteries. Woxna Graphite has access to low cost and green hydropower, and with a planned thermal purification process, we have the opportunity for a unique competitive advantage based on minimizing carbon footprint of our graphite products. We are looking forward to the results of the life cycle analysis as a testament to how a sustainable raw material supply for the European battery industry could look like.”*

Dr Robert Pell, Founder & Director of Minviro further states *“Our past internal work has shown that graphite is often overlooked when assessing the environmental profile of battery materials. Carrying out a life cycle assessment (LCA) for the Woxna project is hence an important step to quantify and validate the environmental credentials of the graphite products from Woxna and see how they compare against other alternative sources of graphite for the battery industry.”*

Minviro will base their work on input generated from the ongoing work with the previously announced Preliminary Economic Assessment study on the Woxna Graphite project<sup>iii</sup>. The LCA work carried out by Minviro includes a cradle-to-gate life cycle inventory, a life cycle impact assessment for five impact categories of interest, one being carbon footprint, analysis of major inputs contributing to the different impact categories and recommended impact mitigation opportunities. The results will be delivered to the Company in form of an ISO-Compliant Full Life Cycle Assessment and Report. In addition, Minviro will benchmark the results for Woxna against other functionally equivalent industry LCA data, including a number of both natural and synthetic graphite alternative products for energy storage applications. This relative benchmark study will be reviewed by an external panel of independent experts.

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

Filip Kozlowski, CEO

**For further information, please contact the Company at:**

info@leadingedgematerials.com

[www.leadingedgematerials.com](http://www.leadingedgematerials.com)

**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 lithium-ion batteries and permanent magnets for electric motors and wind power that underpin the sustainability transition of society. The portfolio of projects includes the 100% owned Woxna Graphite mine (Sweden), Norra Kärr HREE project (Sweden), Bergby lithium project (Sweden) and the 51% owned Bihor Sud Nickel Cobalt exploration alliance (Romania).

**About Minviro**

Minviro ([www.minviro.com](http://www.minviro.com)) is a London based and globally recognized consultancy and technology company specialized in carrying out life cycle assessments in the technology metal space. The company provides quantitative environmental and climate impact data for mineral resource projects, battery manufacturers and OEMs to make environmentally informed decisions.

**Additional Information**

The Company's consolidated financial statements and related management's discussion and analysis are available on the Company's website at [www.leadingedgematerials.com](http://www.leadingedgematerials.com) or under its profile on SEDAR at [www.sedar.com](http://www.sedar.com)

The information was submitted for publication through the agency of the contact person set out above, on December 10, 2020 at 11:45 pm 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](mailto: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 statements regarding 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, fluctuations in market prices, successes of the operations of the Company, continued availability of capital and financing and general economic, market or business conditions. 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 update 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.*

---

<sup>i</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_2312](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2312)

<sup>ii</sup> [https://www.linkedin.com/posts/minviro\\_battery-grade-graphite-activity-6663773175865724928-7qFZ](https://www.linkedin.com/posts/minviro_battery-grade-graphite-activity-6663773175865724928-7qFZ)

<sup>iii</sup> <https://leadingedgematerials.com/leading-edge-materials-working-on-preliminary-economic-assessment-study-on-the-woxna-graphite-project/>