Leading Edge Materials Advances Expandable Graphite Research Using Graphite from Woxna Mine, Sweden

VANCOUVER, July 9, 2019 /CNW/ - **Leading Edge Materials Corp.** ("**Leading Edge Materials**" or the **"Company"**) (**TSXV: LEM**) (**OTCQB: LEMIF**) (**Nasdaq First North: LEMSE**) is pleased to announce the commencement of research with a leading European consultant, ProGraphite GmbH ("**ProGraphite**"), to produce expandable graphite using materials from the Woxna graphite mine in Sweden.

Leading Edge Materials has previously produced expandable and expanded graphite products using Woxna graphite as a feed stock. Expandable graphite is a potential value-add product for larger flake natural graphite from Woxna that will not go to the lithium ion battery anode markets. Demand for expandable graphite for fire resistant building products and textiles are both substantial and fast growing, while emerging markets exist as a precursor for graphene manufacturing.

Expandable graphite exploits some of the remarkable anisotropic properties of natural flake graphite. Expandable graphite is manufactured by treating crystalline graphite with mild non-toxic chemicals that position between individual graphite flakes. When exposed to heat, the chemical converts from a solid or liquid to a gas phase causing a dramatic accordion-like expansion of the graphite which becomes 200 to 400 times its previous volume.

When used as a fire retardant in building materials, the expandable graphite is incorporated to form a surface barrier layer in the event of a fire. Globally, governments are moving to limit the use of flammable building materials. Flame retardant building materials, incorporating expandable graphite, is a large volume and high growth market, with the China Building Materials Application Technology Research Institute stating in 2018 "China needs 40 million tonnes of fire-retardant building materials per annum, which will contain 5% expandable graphite."

Samples of graphite from the Woxna mine have been delivered to ProGraphite laboratory for characterization and testing. Graphite for graphene and expandable graphite is typically of a coarser flake size (greater than approximately 100 micron) than that required for lithium ion battery anode manufacture (typically 30 to 100 micron). A range of test conditions and intercalation chemicals are being applied to develop products suitable for various end markets.

Mr. Mark Saxon, Interim CEO stated, "Expandable graphite provides potential high value applications for graphite with larger flakes and at a lower purity than that required for battery anode materials. We are now working with a highly experienced European research group to ensure optimal materials can be produced for building product and graphene supply chains. This work runs in parallel with our ongoing work for battery anode materials and provides potential for a deeper product network."

On behalf of the Board of Directors, Leading Edge Materials Corp.
Mr. Mark Saxon, Interim CEO

About Leading Edge Materials

Leading Edge Materials is a Canadian public company focused on production of high value critical raw materials for the European market, with an operating base in the Nordic region, a region well recognized for its promotion and investment in innovation. LEM's flagship asset is the Woxna Graphite production facility located in central Sweden targeting the supply of specialty materials for lithium ion battery production. LEM's assets and research focus are towards the raw materials for Li-ion batteries (graphite, lithium, cobalt); materials for high thermal efficiency building products (graphite, silica, nepheline); and materials that improve the efficiency of energy generation (dysprosium, neodymium, hafnium). Investments are linked to the global shift to low-carbon energy generation and energy storage.

Additional Information

The information was submitted for publication through the agency of the contact person set out above, at 9th July 2019 at 4:00 am Vancouver time.

Leading Edge Materials is listed on the TSXV under the symbol "LEM" and Nasdaq First North Stockholm under the symbol "LEMSE". Mangold Fondkommission AB is the Company's CA on Nasdaq First North and may be contacted at +46 (0) 8 5030 1550.

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This news release may contain statements which constitute "forward-looking information", including statements regarding the 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 statements. Investors are cautioned that any such forward-looking statements are not guarantees of future business activities and involve risks and uncertainties, and that the Company's future business activities may differ materially from those in the forward-looking statements as a result of various factors, including, but not limited to, fluctuations in market prices, successes of the operations of the Company, the expectations, completion and implementation of the results regarding the research to produce expandable graphite using materials from the Woxna graphite mine in Sweden, 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.

Woxna has never defined a mineral reserve and the previous preliminary economic assessment on Woxna dated October 29, 2013, has been superseded by the Company's current technical report dated May 11, 2015. As the Woxna facility is not in production but remains on a production ready status, any future decision to recommence mining at Woxna will not be based on a preliminary economic assessment demonstrating the potential viability of mineral resources or feasibility study of mineral reserves demonstrating economic and technical viability. Under these circumstances, there is increased risk of technical and economic failure for the Woxna project, and the Company discloses additional risk factors relating thereto. The Company advises that it has not based its production decision on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit. Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that production will begin as anticipated or at all or that anticipated production costs will be achieved. Failure to commence production would have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve any anticipated production costs *would have a material adverse impact on the Company's cash flow and future profitability. Mineral resources that are not mineral reserves do not have demonstrated economic viability.*

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