

NEWS RELEASE

January 18, 2019

Leading Edge Materials Completes Ultra High Purity Graphite Anode Testwork Program on Woxna Graphite

Vancouver, January 18, 2019 – Leading Edge Materials Corp. (“**Leading Edge Materials**” or the “**Company**”) (**TSXV: LEM**) (**Nasdaq First North: LEMSE**) (**OTCQB: LEMIF**) is pleased to provide a summary of test work conducted on graphite from the Company’s 100% owned Woxna mine in Sweden during 2018. With the test program complete, Leading Edge Materials will now progress to an engineering study supporting the installation of a Battery Graphite Demonstration Plant at the Woxna site. This demonstration plant, when installed, will enable process conditions to be optimized and larger volumes of natural graphite anode material to be supplied to prospective lithium ion battery customers.

Woxna is a fully constructed mine, with all processing, waste management and infrastructure in place. During 2017, Woxna was granted an extension to its operating license until 2041.

During 2018, Leading Edge Materials completed research and development test work to enable comparison of graphite process alternatives and support the design of a Battery Graphite Demonstration Plant. Following a review of test work outcomes, the Leading Edge Materials Board of Directors have approved completion of an engineering study to prepare for installation of the demonstration plant at the Woxna facility.

Leading Edge Materials market research amongst lithium ion battery manufacturers has shown a substantial range of product purity, particle size distribution and price expectations. As a result, a high degree of process flexibility will be required to meet customer demands both now and as the European lithium ion battery industry matures. The Battery Graphite Demonstration Plant is being designed to ensure that samples will meet the specifications of customers in the battery and other specialty graphite consuming industries.

The engineering study includes engagement with equipment suppliers to detail cost and ensure scalability of key equipment. Operating parameters for the demonstration plant include:

- thermal purification capacity up to 100kg’s per day
- spheronising capacity up to 250 kg’s per day
- laboratory equipment to facilitate in house analysis of products

Blair Way, President and CEO, stated “*Our graphite processing research during 2018 has delivered the dataset needed to progress to the design of the Woxna Battery Graphite Demonstration Plant. The demonstration plant will allow us to optimize flowsheets before committing to mine-scale investments, bring processing expertise in house, and enable deeper customer engagement through the supply of hundreds of kilograms of natural graphite anode for in-line testing and qualification.*”

R&D Program Results

Ultra High Purity Graphite

Following graphite purification test work completed in early 2017, the Company engaged an independent European laboratory to complete a comparative thermal purification program on graphite from Woxna to define optimum time and temperature scenarios. Test work was designed to achieve ultra high purity with the lowest possible energy requirements.

The test program demonstrated a close relationship between furnace temperature, purity, and sample mass, with a lower impact from heating duration. Table 1 below demonstrates time and temperature relationships where an upper purity of 99.998%C was achieved from an original 92%C feed. The process is highly selective, and at operational scale the exact purity requirements of individual customers will be achievable at the lowest possible cost. Cost effective selective purity will enable Leading Edge Materials to access not only anode customers but other graphite markets including graphene, insulation and conductive inks.

Purification of natural graphite to battery anode grade is traditionally undertaken in China by chemical leaching. This process emits substantial waste streams that require treatment or disposal that creates a potential future

legacy for the lithium ion battery industry. Furthermore, purity above 99.95% carbon is challenging to achieve with chemical leaching, which limits the capacity of natural graphite to compete on performance with the synthetic graphite currently favored by the automotive battery industry. Thermal purification, as proposed by Leading Edge Materials, utilizing low cost, low carbon emission hydroelectric power is a sustainable and cost-effective way to purify natural graphite to levels comparative with synthetic graphite. Research indicates that ultra-high purity natural graphite can be a lower cost and lower carbon footprint substitute for Chinese manufactured synthetic graphite.

Figure 1: % Graphitic Carbon Content Achieved in 2018 Thermal Test Program

		TEMPERATURE					
		LOWER			HIGHER		
TIME	SHORTER					99.950	99.994
						99.995	99.998
		98.270	98.610	99.973	99.996	99.998	
		96.830	98.350	98.990	99.986	99.997	
LONGER		98.330	99.470				

Spheronising

As previously reported (Oct 22, 2018) the Company has undertaken a range of spheronising test programs during 2018. Four independent service providers were engaged to undertake tests utilizing spheronising equipment of three different styles. Test programs were designed to measure the capacity of each equipment to produce the particle size distribution profile essential for anode battery materials, and to achieve the highest possible recovery to anode.

The test work undertaken during 2018 demonstrated the operational merits of the various equipment, achieved recovery from 43% to 71%, and provided D50 size ranges from 15-25 micron with D10 ranges of 7-12 micron and D90 from 28-35 micron. These ranges meet specifications provided by potential customers.

Qualified Person

The technical content of this release has been reviewed and approved by Mr. Blair Way, B.Sc. (Geology) M.B.A., a Fellow of the Australasian Institute of Mining and Metallurgy, the Company's President and CEO and a Qualified Person as defined by National Instrument 43-101.

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

Mr. Blair Way, President and CEO

For further information, please contact the Company at:

1.604.685.9316

info@leadingedgematerials.com

www.leadingedgematerials.com

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. Leading Edge Materials currently operate in four divisions, Graphite, Lithium, Rare Earth and Cobalt.

Additional Information

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 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", 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, 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.