#### LEADING EDGE MATERIALS CORP.



1305 – 1090 West Georgia Street, Vancouver, BC, V6E 3V7
T +1 604 685 9316 | leadingedgematerials.com
TSX.V: LEM Nasdaq First North: LEMSE OTCOB: LEMIF

emerging materials, expanding markets

NEWS RELEASE July 23, 2018

# Leading Edge Materials Provides an Update on Woxna Graphite Battery Materials Project

Vancouver, Canada – Leading Edge Materials Corp. ("Leading Edge Materials") or ("the "Company") (TSXV:LEM) (OTCQB: LEMIF) (Nasdaq First North: LEMSE) is pleased to provide an update regarding ongoing activity at the Woxna graphite mine in Sweden.

Woxna is a fully constructed mine, with all processing, waste management and infrastructure in place. During 2017, the site was granted an extension to its operating license until 2041. Leading Edge Materials is now focused on process development for the sustainable production of customer-ready graphite anode material for lithium ion batteries.

Discussion with prospective European customers has confirmed that large sample volumes and commercial scale processes are required if battery materials are to gain industrial qualification. Leading Edge Materials is positioning Woxna to deliver the required volume of graphite anode material for testing by multiple prospective customers during 2019.

To help achieve this, the Company has recently completed an internal conceptual study to benchmark the suitability of the Woxna site and define the necessary research and engineering steps. Leading Edge Materials engaged Hatch (a global engineering consultancy) to provide professional engineering services.

Subject to finance and satisfactory technical results, the Company intends to operate a Battery Graphite Demonstration Plant at Woxna to promote engagement with future customers. The proposed Demonstration Plant will be of a scale that will produce near commercial quantities of graphite anode materials while enabling real time process optimization and definition of critical economic parameters. As a fully built mine, Woxna has excellent infrastructure, access to all utilities, and is very well suited for both demonstration scale and commercial scale plant installations.

Amongst other outcomes, the internal conceptual study recommends further laboratory scale testing of thermal purification. This test work will define how furnace operating parameters influence product quality and allow for a trade-off study that will direct the design of the Battery Graphite Demonstration Plant. In addition, further spheronising test work is recommended to constrain technical specifications and select operating equipment.

Both the purification and spheronising test work is now underway. Results of this test work will allow tight specifications to be shared with equipment manufacturers when quoting on equipment for the proposed Battery Graphite Demonstration Plant.

Work planned and underway for the Woxna graphite project includes:

- Additional spheronising test program. Results are expected during Q3 2018;
- Thermal purification test program. Results anticipated Q3 2018;
- Complete an internal trade off study to direct the design of a Battery Graphite Demonstration Plant. Study recommendations are expected late Q3 2018;
- Commence detailed design and equipment procurement for demonstration plant. Expected Q4 2018;
- Review and confirm environmental compliance of proposed demonstration plant installation at the Woxna site. Targeted Q4 2018;

Blair Way, President and CEO, stated "The recommendations of the internal study take advantage of a fully built graphite mine. Subject to technical results and financing, this work will place Woxna on a clear path to providing the battery industry with the volume of anode material needed for testing, qualification and establishment off take agreements. While laboratory scale test work is critical to establish process boundaries,

it is only through a Demonstration Plant that both process and product can be meaningfully assessed. We are now progressing the laboratory scale test work so that Woxna is positioned to supply substantial quantities of lithium ion battery anode material to potential customers in 2019."

On behalf of the Board, For further information, contact: 1.604.685.9316

or info@leadingedgematerials.com

"Blair Way"

Blair Way, President & CEO <u>www.leadingedgematerials.com</u>

## **Qualified Person**

The qualified person for the Company's project, Mr. Blair Way B.S. (Geology) M.B.A., a Fellow of the Australasian Institute of Mining and Metallurgy, the Company's President and CEO, has reviewed and verified the contents of this document.

### **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 recognised 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. Mangold Fondkommission AB is the company's Certified Adviser ("CA") as part of the listing requirements for Nasdaq First North.

#### **About Hatch**

Hatch is employee-owned and passionately committed to the pursuit of a better world through positive change. Hatch's experience spans over 150 countries around the world in the metals, energy, infrastructure, digital, and investments market sectors. Hatch's exceptional, diverse teams combine vast engineering and business knowledge, working in partnership with their clients to develop market strategies, manage and optimize production, develop new game-changing technologies, and design and deliver complex capital projects. Hatch is passionate about their corporate purpose and values, and believe in long-term relationships with their partners, and are committed to their clients' lasting success..

#### **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.

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.

Forward-Looking Information. This news release may contain forward-looking statements and information based on current expectations. These statements should not be read as guarantees of future performance or results. Such statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from those implied by such statements. Such statements include but are not limited to, unexpected geological conditions; the Company's expectations regarding exploration activities to advance critical material projects for energy storage markets, delays in

obtaining or failure to obtain necessary permits and approvals from government authorities. Although such statements are based on management's reasonable assumptions, there are risk factors which could cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information contained herein. All forward-looking information herein is qualified in its entirety by this cautionary statement, and the Company disclaims any obligation to revise or update any such forward-looking information or to publicly announce the result of any revisions to any of the forward-looking information contained herein to reflect future results, events or developments, except as required by law.