Leading Edge Materials Produces High Purity Nepheline Co-Product from Norra Karr Rare Element Project

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VANCOUVER, June 21, 2018 /CNW/ - Leading Edge Materials Corp. ("Leading Edge Materials") or ("the "Company") (TSXV: LEM) (OTCQB: LEMIF) (Nasdaq First North: LEMSE) is pleased to provide results from recent mineral processing test work carried out on samples from the Norra Kärr rare earth element ("REE") project in Sweden. Work was undertaken on the nepheline/feldspar by-product material, as part of a program to capture value add opportunities that Norra Kärr provides beyond REEs. A Pre-Feasibility Study completed on Norra Kärr in 2015 presented REE as the only economic product but identified a range of opportunities to convert much of the mined material into products for sale while minimizing the environmental footprint of the project.

Based on extensive previous testwork, the first stage of mineral processing (beneficiation) for Norra Kärr is magnetic separation, which partitions magnetic (iron-rich) minerals including those carrying REEs from non-magnetic minerals. Magnetic separation is a chemical free process where material is classified by response to a magnetic field.

The non-magnetic minerals at Norra Kärr include nepheline and feldspar, which are highly sought industrial minerals for ceramics, glass manufacture, plastics, cosmetics, paint and building products. Value is placed on a range of factors that include alkali content, aluminum content and iron content which together determine melting conditions and the degree of sample whiteness. When added to ceramic and glass products, nepheline lowers the melting point of silica both reducing the amount of energy required for glass production and increasing hardness and durability. Nepheline is also favoured as a paint additive as it is silica-free, and in Russia is used as a source for aluminum.

Recent testwork completed at the Geological Survey of Finland ("GTK") on a bulk sample originally collected under the EURARE Horizon2020 project delivered promising results. Nine tests were completed where the nepheline/feldspar sample was passed through a second phase of magnetic separation under varying conditions to remove any remaining iron impurity. This "clean-up" stage was highly effective in removing iron, which was lowered to a level consistent with peer materials that are sold within Europe today. Once sub-20 micron material was screened out, iron oxide ("Fe2O3") content of 0.1% was achieved with an iron oxide (ppm) to aluminum (%) ratio ranging from 45 to 50.

Norra Kärr is a nepheline syentite intrusion and the presence of potentially economic nepheline and feldspar has been recognised for many years. The project was held by Swedish mining company Boliden AB during the 1970s and 80s with a view to produce nepheline, feldspar and zirconium. As magnetic separation was not a well-established technology at the time, saleable materials could not be economically produced.

Europe is the largest global market for nepheline and feldspar, with supply from mines including Stjernøy in northern Norway, western Turkey and northwestern Russia.

Blair Way, President and CEO, states, "Our research focus is to optimize all parts of the Norra Kärr project, both financially and environmentally. Nepheline and feldspar together comprise around 60% of the rock at Norra Kärr, and finding a market for these industrial minerals is a very important step in our target to achieve a zero waste mine design. This latest round of research has produced samples that appear equivalent to product sold in Europe today, and we are very encouraged by this latest increase in resource efficiency of Norra Kärr."

On behalf of the Board,

"Blair Way"
Blair Way, President & CEO

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. Remium Nordic AB is the company's Certified Adviser ("CA") as part of the listing requirements for Nasdaq First North.

Additional Information

Leading Edge Materials is listed on the TSXV under the symbol "LEM" and Nasdaq First North Stockholm under the symbol " LEMSE". Remium Nordic AB is the Company's Certified Adviser on Nasdaq First North.

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