



NEWS RELEASE

May 17, 2022

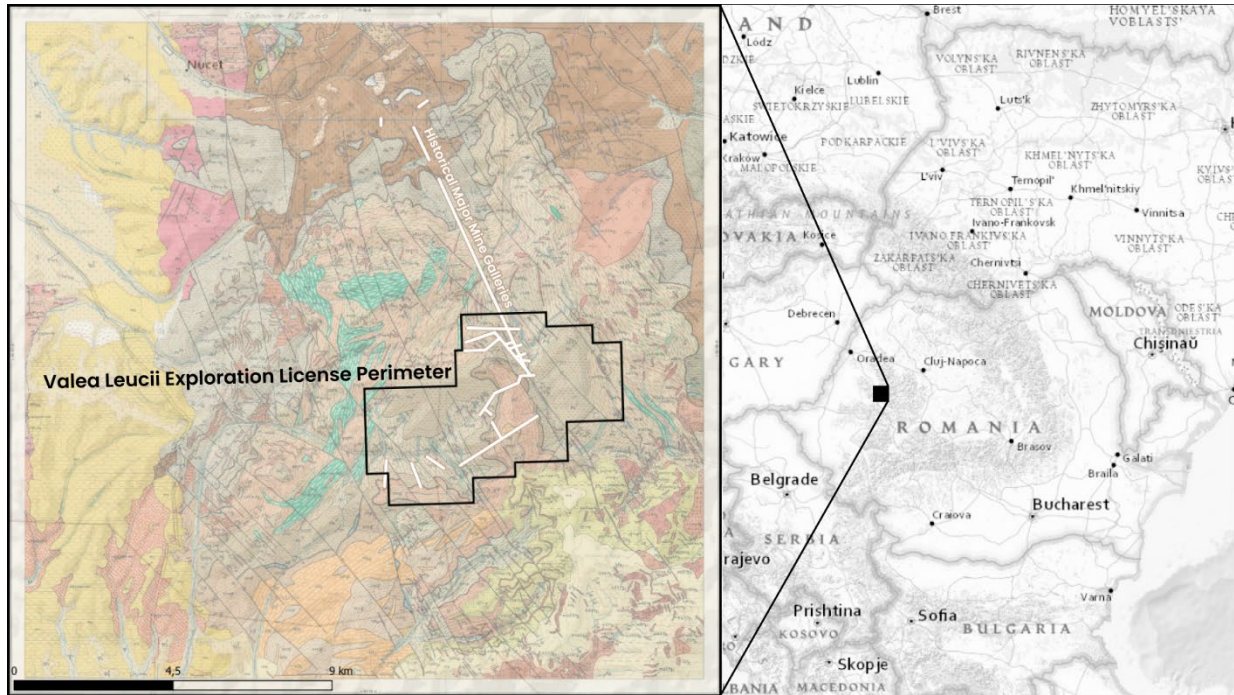
LEADING EDGE MATERIALS SIGNS EXPLORATION LICENSE FOR ROMANIAN NICKEL AND COBALT PROJECT

Vancouver, May 17, 2022 – Leading Edge Materials Corp. (“Leading Edge Materials” or the “Company”) (TSXV: LEM) (Nasdaq First North: LEMSE) (OTCQB: LEMIF) (FRA: 7FL) is pleased to report the signing of the Bihor Sud Exploration License (the “License”) between the Company’s 51% owned local joint-venture subsidiary LEM Romania SRL (“LEMRO”), and the National Agency for Mineral Resources (“NAMR”). The exclusive license was awarded to the Company after having been selected as the winning bid in a competitive tender round and has now been published in the official gazette of Romania.

The License perimeter covers a 25 square kilometer area (the “Project”) in the Northern Apuseni Mountains of Transylvania. The Apuseni Mountains are located in the northern extension of the Western Tethyan Metallogenic Belt, one of the world’s more prominent orogenic belts that hosts numerous significant past producing mines and newly discovered mineral deposits. LEMRO applied for the License with the goal to expand on indications of high-grade cobalt, nickel and polymetallic mineralization collected in the framework of its earlier prospecting license covering the same area. The project has excellent potential to enable a more secure and sustainable supply of these key battery raw materials from within the European Union.

Filip Kozlowski, CEO of the Company states: *“We are extremely pleased to finally having been granted the exploration license for the Bihor Sud project. When we started looking at the Project back in 2018 there was real excitement around what new discoveries this well-mineralized historic mining area could offer. Surging demand from the battery industry for high-energy density battery metals such as nickel and cobalt, combined with increasing geopolitical risks, have pushed prices higher for both metals over the last year. European battery production capacity is starting to come into production and there is an urgent need to develop more secure and sustainable raw material supply alternatives within the region. Romania’s geological potential is well-understood in the industry, and the positive support we have experienced from national and local authorities throughout the permitting process has been very encouraging. We look forward to immediately commence on an already planned detailed exploration program together with our experienced local JV partner, and hope to demonstrate what potential this opportunity can offer for all stakeholders and shareholders.”*

Located approximately 90 km south-east from Oradea which is the administrative capital of Bihor County, the Project lies within the Upper Cretaceous and Neogene Carpathian magmatic arcs which extend from Turkey to Hungary and are host to several well-known mines and mineral deposits such as the Timok-Bor-Majdanpek copper-gold zone, Skouries and Chelopec. The Northern Apuseni Mountains have documented high grade skarn and carbonate replacement mineral deposits and historic production of Cu, Mo, Ag, Au, Zn, U and Pb associated with Tethyan Arc intrusions. Within the License area, there is a significant amount of historical mine works including a substantial former underground uranium mine which stopped production in the 1990s. Approximately 15 km northwest from the License, The Company’s local joint-venture partner operates a high-quality dolomite mine, the Baita Skarn Mine, which has historic mining of Cu, Mo, Bi, Au, Ag, Zn, Pb and W. The UK company Vast Resources recommenced mining operations at its polymetallic Baita Plai mine in 2020 which is located approximately 9 km northwest from the License.

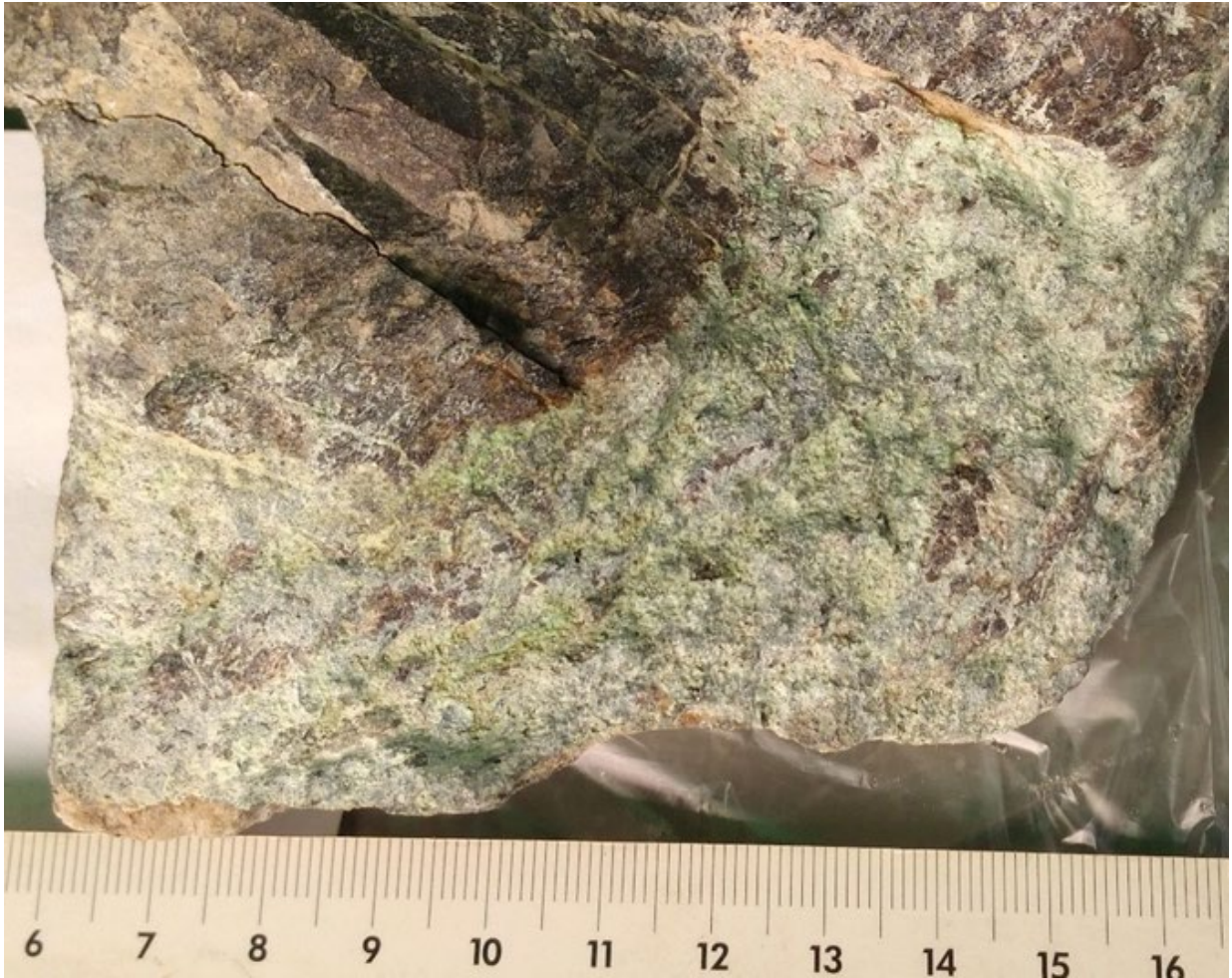


(Figure 1: Map showing the location of the Valea Leucii (Bihar Sud) exploration license. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, IPC, and S. Bordea, R. Dimitrescu, GH. Mantea, A. Stefan, J. Bordea, M. Bleahu, C. Costea)

Under the prospecting license, staff and consultants to LEMR compiled historic data, sampled historic mine waste dumps, completed preliminary ground geophysics and soil sampling. The success of the prospecting work greatly benefited from using the services of Radioactive Mineral Magurele SA, a state owned company under the Ministry of Energy, which has decades of experience and expertise for exploration activities locally and has all necessary permits to perform those according to the highest technical and safety standards. Historic mining tapped Co-Ni mineralization deposited at the top of a regional carbonate level and overlying dark schist in the form of replacement bodies and dissemination. Within a 5 x 2 km zone, grab samples were taken from 7 waste dumps near gallery mouths, mostly disseminated mineralization in dark schist and carbonate. Both, cobalt and nickel grades in these rocks, are often in the percent-range, increasing strongly as stringers occur (see Figure 2), which locally lead to massive Co-Ni-ore pockets.



(Figure 2: Stringers of Co-Ni mineralization in low grade metamorphic sediments.)



(Figure 3: Oxidized Co-Ni mineralization yielding greenish colours in low-grade metamorphic dark sediments.)

Results of the prospecting work are highly encouraging, which led to application for the exclusive exploration license. LEMR's bid in the tender round was evaluated based on technical and financial merits, with substantial credit given to the work completed under the prior prospecting permit that ultimately led to LEMR becoming the auction winner.

As part of the exploration license bid, a detailed exploration work program (the "Work Program") was submitted to NAMR. The Work Program presents planned activities over 5 years and associated budgets. A detailed plan for each year needs to be submitted to NAMR for approval, with the first annual work program being mandatory and subsequent yearly plans proposed based on results from exploration work during previous years. Leading Edge Materials is funding all work according to the JV Agreement (*see below*).

The submitted work program for the first year covers;

- Geological surface and underground mapping;
- Geophysical surveys;
- Geochemical surface trenching, channel and soil sampling;
- Surface and/or underground drilling;
- Historic drill hole surveying;
- Assaying and mineralogical analysis;
- Reviewing historical documentation which becomes available pursuant to having been granted the License;
- Technical planning for re-opening of historical mining galleries; and
- Land, environmental and other local permits required to commence exploration work.

Joint Venture Background

In 2018 the Company entered into a share purchase agreement (the "SPA") with a local Romanian arm's length party, Remat, to acquire an initial 51% interest in LEMR which was the holder of a prospecting permit covering the License perimeter. The Company, Remat and LEMR also entered into a shareholder joint venture agreement (the "JV Agreement") as announced on August 9, 2018 (see [news release](#)). Pursuant to the JV Agreement, Leading Edge Materials will be transferred an additional 39% ownership interest in LEMR (for an aggregate 90% ownership) triggered by the filing on SEDAR of a positive Feasibility Study technical report. Under the JV Agreement Leading Edge Materials has agreed to issue common shares in the Company upon achieving certain milestones on the Project, such as the granting of an exploration license, exploitation license, documentation of historic mineral resource estimates meeting certain Ni-Co and/or Ag-base metal resource tonnage thresholds, the filing of a NI43-101 compliant technical report, such a report meeting certain Ni-Co and/or Ag-base metal resource tonnages, and the filing of a positive NI43-101 compliant Feasibility Study.

Qualified Person

Martin S. Oczlon, PhD Geo, CEng MIMMM, a consultant to Leading Edge Materials and Qualified Person as defined in NI 43-101, has reviewed and verified the technical content of this press release.

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

The Company will attend the VRIC conference in Vancouver on May 17th and 18th and invites to meet us in booth 1025.

Follow us

Twitter: <https://twitter.com/LeadingEdgeMtls>

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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 batteries for electromobility and energy storage and permanent magnets for electric motors and wind power that underpin the clean energy transition towards climate neutrality. The portfolio of projects includes the 100% owned Woxna Graphite mine (Sweden), Norra Karr HREE project (Sweden) and the 51% owned Bihor Sud Nickel Cobalt exploration alliance (Romania).

Additional Information

The information was submitted for publication through the agency of the contact person set out above, on May 17, 2022, at 10:00 am 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 or by phone +46 (0) 8 5030 1550.

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