News Release

Electra Advances Phased Nickel Refining and Battery Recycling Strategy for North America

Initial engineering evaluates 20,000 tonnes of annual nickel production as the first phase of a broader critical minerals processing facility

Toronto, Ontario - (September 16, 2026) - Electra Battery Materials Corporation (NASDAQ: ELBM; TSX-V: ELBM) ("Electra" or the "Company"), a leader in North American critical minerals processing, today announced preliminary engineering results for the initial phase of a proposed two-phase nickel refinery to process mine-derived feedstock and recycled battery black mass into nickel metal and battery-grade nickel sulfate. The proposed facility would strengthen North American supply chains by supplying nickel for industrial, military and battery applications, helping reduce reliance on foreign processing.

The preliminary engineering study (FEL-1) evaluates the first-phase conversion of mine-derived feedstock into battery-grade nickel sulfate at a production capacity of approximately 20,000 tonnes per year of contained nickel. Preliminary process modelling indicates nickel and cobalt recoveries of 97% or higher, with recovered cobalt hydroxide providing a potential feedstock for Electra's cobalt refinery.

"We need the capacity to refine nickel for industrial, military and battery applications," said Trent Mell, CEO. "Electra is applying the expertise developed through our Ontario cobalt sulfate refinery and battery recycling work to advance a new source of nickel sulfate and nickel metal. Our goal is to strengthen critical mineral supply chains in the United States and Canada and reduce reliance on Chinese processing."

The proposed facility would address a gap in North America's capacity to convert nickel feedstock into products for domestic customers. Its intended product flexibility would serve both battery manufacturers requiring battery-grade nickel sulfate and industrial and military customers requiring nickel metal, including for aerospace applications.

The project is designed to establish capacity to process nickel intermediates that might otherwise be refined in China. By processing nickel closer to customers, the facility could help reduce exposure to geopolitical risk and strengthen the security and traceability of Western critical minerals supply chains.

Electra is advancing the financing and commercial strategy for this project in parallel with engineering. The Company continues to engage with governments on funding programs and with upstream and downstream partners on feedstock supply and offtake arrangements. These discussions are intended to align government support and private financing with the supply and customer commitments needed to develop competitive critical minerals processing capacity.

The proposed refinery would use conventional hydrometallurgical processes to refine feedstock from existing mining operations, drawing on Electra's cobalt refining and battery recycling expertise. This approach would use available feedstock while creating a processing option for future domestic mine supply. The project relies primarily on established processing methods rather than the commercialization of new technology.

Preliminary capital estimates for the first-phase nickel sulfate refinery range from approximately US$530 million to US$675 million across the feedstock configurations evaluated, based on annual production of approximately 20,000 tonnes of contained nickel. Nickel metal production and the second-phase recycling expansion will require separate capital estimates.

A second phase could expand the facility to process battery black mass, with the potential to add an additional 20,000 tonnes per year of contained nickel capacity, along with cobalt, lithium and graphite byproducts. This expansion would build on Electra's black mass demonstration work to recover critical minerals using hydrometallurgical processes. Recent U.S. restrictions on black mass exports underscore the need to limit critical minerals exports to support investment in domestic processing capacity.

Work completed to date includes preliminary process design, equipment sizing, site layout, infrastructure and logistics assessment, and capital and operating cost estimates. Further engineering is planned for nickel metal production to confirm product specifications, process scope and capital requirements.

The study uses a preferred location in the southeastern United States as its site basis. Final site selection remains subject to further assessment, as well as commercial and funding arrangements. Electra will continue to consider alternative locations in North America as it evaluates access to feedstock and customers, utilities, permitting requirements and the ability to accommodate the second-phase recycling expansion.

The next stage of work will focus on advancing site assessment and permitting planning alongside ongoing funding, feedstock and offtake discussions. As these parallel workstreams progress, Electra intends to refine equipment and utility requirements, effluent and tailings management plans, product specifications, and capital and operating cost estimates. Together, this work is expected to establish the site, feedstock and commercial basis required to advance the Project towards further engineering (FEL-3) and a potential development decision.

"Our focus is on securing the feedstock, customer commitments and financing needed to support a development decision," said Mell. "We are working with governments and potential commercial partners to establish the conditions for a competitive North American nickel refinery serving industrial, military and battery customers."

Electra's immediate priority remains the completion and commissioning of its Ontario cobalt sulfate refinery. The proposed nickel refinery and recycling expansion remain longer-term opportunities.

About Electra Battery Materials

Electra is a leader in advancing North America's critical minerals supply chain for lithium-ion batteries. The Company's primary focus is constructing North America's only cobalt sulfate refinery, as part of a phased strategy to onshore critical minerals refining and reduce reliance on foreign supply chains. In addition to the Refinery, Electra holds a significant land package in Idaho's Cobalt Belt, including its Iron Creek project and surrounding properties, positioning the Company as a potential cornerstone for North American cobalt and copper production.

Electra is also advancing black mass recycling opportunities to recover critical materials from end-of-life batteries, while continuing to evaluate growth opportunities in nickel refining and other downstream battery materials. For more information, please visit www.ElectraBMC.com.

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Cautionary Note Regarding Forward-Looking Statements

This news release contains forward-looking statements and forward-looking information (together, "forward-looking statements") within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws. All statements, other than statements of historical facts, are forward-looking statements. Generally, forward-looking statements can be identified by the use of terminology such as "seek", "expect", "anticipate", "budget", "plan", "estimate", "continue", "forecast", "intend", "believe", "predict", "potential", "target", "may", "could", "would", "might", "will" and similar words or phrases (including negative variations) suggesting future outcomes or statements regarding an outlook or statements that certain actions, events or results "may", "could", "would", "might", "occur" or "be achieved" (including negative variations). Forward-looking statements in this release include, but are not limited to, statements regarding the advancement of a preliminary engineering study for a proposed nickel sulfate refinery; the evaluation of production levels from such a refinery, the identification of a suitable site for such a refinery; and discussions with potential financing and offtake partners. Forward-looking statements are based on the Company's current beliefs and assumptions as to the outcome and timing of future events, including, but not limited to, that the anticipated timing for completion of engineering studies, the commercial viability of a nickel sulfate refinery in North America, the availability of government and commercial financing, and the ability to identify a suitable site for development. Forward-looking statements involve risks, uncertainties and other factors that could cause actual results, performance and opportunities to differ materially from those implied by such forward-looking statements. Factors that could cause actual results to differ materially from these forward-looking statements include, among other things: the commercial viability of a nickel sulfate refinery in North America, the availability of commercially feasible development sites, the negotiation of suitable supply and offtake arrangements with third-parties, the risks and uncertainties relating to commercial development; the need to comply with environmental and governmental regulations in Canada and the United States; fluctuations in the prices of commodities; operating hazards and risks; competition and other risks and uncertainties and other such factors as are set *forth in the Annual Information Form, as well as the management discussion and analysis and other disclosures of risk factors for the Company, filed on SEDAR+ at www.sedarplus.com. Although the Company believes that the information and assumptions used in preparing the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Except where required by applicable law, the Company disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.*