

Electra Announces Marty Rendall as CFO, Succeeding David Allen upon his Retirement

Toronto, Ontario – (December 23, 2024) – **Electra Battery Materials Corporation (NASDAQ: ELBM; TSX-V: ELBM)** (“**Electra**” or the “**Company**”) is pleased to welcome Marty Rendall, CFA, as its new Chief Financial Officer upon the retirement of David Allen, effective January 1, 2025.

Mr. Allen played a key role in securing a US\$20 million award from the U.S. Department of Defense, announced in August 2024, and laid the foundation for the resumption of construction at Electra’s flagship cobalt sulfate refinery in Ontario, Canada. David will work alongside Marty during a transition period to ensure a smooth process.

“I am honored to join Electra at such a pivotal moment, as the Company executes on its vision to address the geopolitical imperative of building resilient critical minerals supply chains outside of China,” said Marty Rendall. “With construction well advanced, Electra is well-positioned to achieve cash flow by 2026, a testament to the strength and commitment of the team. I look forward to applying my experience in leading high-performance teams through construction, commissioning, and into operation to contribute to Electra’s continued success.”

“It has been a privilege to serve as Electra’s CFO during this exciting period,” said David Allen. “I am proud of what we have accomplished as a team, and I have full confidence in the Company’s future with Marty’s contributions.”

“On behalf of the board of directors, I would like to thank David for his dedication and contributions to the Company,” said CEO Trent Mell. “His efforts have put Electra on a stronger footing and this well-timed transition to an experienced builder will serve our stakeholders well.”

Marty Rendall is a seasoned finance executive with extensive experience in the mining industry, spanning exploration, development, and operational stages across the Americas. Over his 17-year tenure as Chief Financial Officer at Victoria Gold, Marty played a pivotal role in transforming the organization from a small, early-stage exploration company into a leading Canadian gold producer with an enterprise value exceeding C\$1 billion at its peak. He was instrumental in advancing Victoria’s flagship Eagle Gold Mine, from exploration through permitting, development, construction, and into operations. Under his leadership, major milestones included over C\$1 billion in financings and executing two acquisitions of publicly listed companies. His accomplishments earned him the Viola MacMillan Award from PDAC, which is given to an individual or company for demonstrating strong leadership in management and finance in exploration and development of mineral resources.

Mr. Rendall, who holds a Chartered Financial Analyst designation, brings a proven track record in strategic planning, financial reporting, fundraising, and team development. His expertise includes leading diverse functions such as treasury, tax, IT, M&A, HR, and corporate governance. Marty is

known for his ability to build dynamic and effective teams and for his strategic approach to adding value to the organizations he serves.

Electra is building North America's first cobalt sulfate refinery, with a long-term vision that includes recycling battery materials and producing battery grade nickel for the North American and global electric vehicle battery market in a phased manner:

1. Completion of construction of the cobalt refinery to produce at an initial rate of 5,000 tonnes per annum of battery grade cobalt contained in cobalt sulfate.
2. Subsequent expansion to increase cobalt production to 6,500 tonnes per annum of battery grade cobalt sulfate, reaching the nameplate capacity of the crystallization circuit.
3. Recycling of battery black mass, recovering lithium, nickel, cobalt and other critical metals, supported by Aki Battery Recycling, a joint venture with the Three Fires Group to source battery waste and produce black mass for refining at Electra's refinery.
4. Expansion to a second cobalt sulfate facility in Bécancour, Quebec and/or a strategically located North American nickel sulfate refinery.

Electra operated a plant scale battery recycling trial at its refinery in 2023 and early 2024, processing more than 40 tonnes of black mass material to recover valuable elements such as lithium, nickel, cobalt, manganese, graphite, and copper. The primary objective was to demonstrate Electra's ability to produce high-quality nickel, cobalt, and lithium products on a plant-scale basis. This phase of the recycling project is largely complete, and ongoing work is geared towards supporting a continuous operation and feasibility study for a future commercial operation.

Electra's low carbon hydrometallurgical refinery in Canada is permitted and has an estimated current replacement value of approximately US\$200 million, based on a study conducted by Hatch. The Company is in the advanced stages to raise approximately US\$60 million to complete construction, of which US\$20 million was committed by the U.S. Department of Defense in August 2024. The cobalt refinery project continues to be derisked through the on-site receipt of most long lead-time equipment and by the 2023 commissioning of legacy refinery operations for the black mass demonstration plant.

In accordance with its Long-Term Incentive Plan, and in connection with the appointment of Mr. Rendall, the Company will issue 125,000 incentive stock options, adjusted for the share consolidation announced on December 20, 2024, at an exercise price equivalent to the post-consolidation closing price on the TSX Venture Exchange on December 31, 2024. The stock options will vest in three equal tranches on the first, second and third anniversary of the grant date over a four-year period. The grant is subject to the approval of the TSX Venture Exchange. Long-term incentive grants are an important retention and incentive tool for key employees, and a mechanism to align interests with shareholders.

About Electra Battery Materials

Electra is a processor of low-carbon, ethically-sourced battery materials. Currently focused on developing North America's only cobalt sulfate refinery, Electra is executing a phased strategy to onshore the electric vehicle supply chain and provide a North American solution for EV battery materials refining. In addition to building North America's only cobalt sulfate refinery, its strategy includes integrating black mass recycling, potential cobalt sulfate processing in Bécancour,

Quebec, and exploring nickel sulfate production potential within North America. For more information, please visit www.ElectraBMC.com.

Contact

Heather Smiles
Vice President, Investor Relations & Corporate Development
Electra Battery Materials
info@ElectraBMC.com
1.416.900.3891

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