Battery X Metals Achieves Graphite Recovery Breakthrough in Partnership with Global Top 20 University in Controlled Trials

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Highlights
1. Achieved an increased graphite recovery rate in controlled laboratory tests of up to 97% through optimized flotation processes, reducing flotation time significantly compared to prior tests.

2. Improved graphite purity in controlled laboratory tests by 15-25%, reaching ~69%, as confirmed by graphite burn off assays, while minimizing contamination from metal oxides.

3. Demonstrated superior separation performance compared to prior flotation tests, reinforcing Battery X Metals' proprietary eco-friendly flotation process development, with enhanced efficiency in concentrate and tailings management

Battery X Metals Inc. (CSE:BATX) (OTCQB:BATXF) (FSE:R0W, WKN:A3EMJB) ("Battery X Metals" or the "Company") an energy transition resource exploration and technology company, announces a breakthrough in graphite recovery laboratory tests in partnership with the Institute of Mining Engineering at a globally ranked Top 20 University (the "Global Top 20 University").

Further to the Company's news release dated February 24, 2025, recent laboratory testing conducted with unoxidized 500g Nickel, Manganese, and Cobalt (NMC)-dominant black mass samples using Denver Cell flotation devices in collaboration with the Global Top 20 University has demonstrated significant improvements in graphite recovery and purity using the Company's optimized eco-friendly flotation process. The latest flotation tests delivered a 97% graphite recovery rate, marking a substantial increase from prior tests, which achieved only ~40% recovery when applying solvent pre-washing methods.

In addition to improved recovery rates, the latest laboratory tests confirmed a graphite purity of ~69%, surpassing the 55%-59% purity observed in prior tests. Notably, the flotation time was reduced, with separation occurring within 5-7 minutes, compared to 13-19 minutes in previous tests, demonstrating improved flotation kinetics. The Company used graphite burn-off assays to determine purity, where samples were subjected to 750°C for two hours, measuring the percentage of residual oxides and confirming improved separation efficiency. Importantly, these results minimized contamination from metal oxides, showcasing the efficiency of Battery X Metals' proprietary process in separating graphite concentrate from black mass tailings.

Conversely, prior tests, which involved pre-washing black mass with a solvent, resulted in higher metal oxide recovery (~78%) but at the cost of significantly lower graphite recovery (~40%). This indicates that while solvent pre-washing may aid metal oxide separation, it negatively impacts graphite flotation efficiency.

Next Steps in the Collaborative Research and Development Program
The Company is now focusing on further refining its separation process to maximize both graphite and metal oxide recovery. Recent findings indicate that flotation issues in the first NMC sample were caused by graphite oxidation, with a potential binder also being a concern. To address this, upcoming tests will evaluate solvent cleaning to improve graphite purity and investigate a "reverse" flotation approach using surfactants to selectively recover oxides. These enhancements, along with the exploration of advanced surfactants and selective collectors, aim to optimize flotation efficiency and improve overall material recovery.

"This latest breakthrough is a significant step forward in our commitment to advancing sustainable battery material recovery," said Massimo Bellini Bressi, CEO of Battery X Metals. "Achieving 97% graphite recovery in laboratory tests is a major milestone in our mission to develop a cleaner, more efficient recycling solution for end-of-life lithium-ion batteries. Our ongoing partnership with the Global Top 20 University continues to yield positive results that aim to support a more circular and sustainable energy economy."

Graphite Recovery & Grade Comparison

Parameter	Recent Test #1 (Frother-Only)	Recent Test #2 (Frother & Collector)	Prior Test #1 (Frother & Collector, pre-washed w/ Solvent)
Graphite Recovery (%)	96.86%	97.02%	42.35%
Graphite Grade (%)	69.20%	68.66%	55.20%

Metal Oxide Recovery & Grade Comparison

Parameter	Recent Test #1 (Frother-Only)	Recent Test #2 (Frother & Collector)	Prior Test #1 (Frother & Collector, pre-washed w/ Solve
Metal Oxide Recovery (%)	38.03%	36.59%	75.44%
Metal Oxide Grade (%)	89.37%	89.57%	64.68%

Lithium-Ion Battery Recycling Industry Tailwinds and the Significance of Graphite Recovery
Battery X Metals, through its wholly-owned subsidiary Battery X Recycling Technologies Inc., is advancing sustainable lithium-ion battery recycling through its amended research collaboration agreement with the Global Top 20 University. The research focuses on proprietary froth flotation technology under development to recover critical battery-grade materials-graphite, lithium, nickel, cobalt, manganese, and copper-from end-of-life lithium-ion batteries, supporting a circular battery economy.

Graphite, comprising 95% of lithium-ion battery anodes[1], is often neglected in traditional hydrometallurgy and pyrometallurgy recycling methods[2]. Battery X Metals' process shows promise to enable the separation of cathode-active metal oxides from anode-active graphite without degradation, unlike high-temperature treatments[3] and chemical leaching[4] processes such as pyrometallurgy and hydrometallurgy.

In October 2024, Mercedes-Benz (FSE:MBG) opened Europe's first battery recycling plant, integrating mechanical-hydrometallurgical processes and becoming the first automotive manufacturer worldwide to establish an in-house battery recycling loop [5], underscoring the industry's shift toward battery recycling.

The global shift toward electrification is driving the clean energy transition, with lithium-ion batteries playing a central role in reducing reliance on fossil fuels[6]. Global lithium-ion battery demand is projected to rise 670% by 2030[7] with energy storage requirements rising from 700 GWh in 2022 to 4.7 TWh[7], primarily due to EVs[7]. Yet, recycling remains underutilized, with less than 5% of batteries currently recycled[8]. EVs and battery storage will account for nearly half of mineral demand growth from clean energy technologies over the next two decades[9], making the recovery of materials like graphite, lithium, nickel, and cobalt critical.

As the industry prioritizes battery recycling, Battery X Metals' eco-friendly technology stands out by recovering battery-grade graphite-anode material often lost in conventional methods. This positions Battery X Metals to address a major gap in the growing battery recycling market.

1 ECGA, 2 National Library of Medicine, 3 Rho Motion, 4 LA Ist, 5 Mercedes-Benz, 6 Energy X, 7 Mckinsey & Company, 8 CAS, 9 Mining Review Africa

About Battery X Metals Inc.
Battery X Metals (CSE:BATX)(OTCQB:BATXF)(FSE:R0W, WKN:A3EMJB) is an energy transition resource exploration and technology company committed to advancing domestic and critical battery metal resource exploration and developing next-generation proprietary technologies. Taking a diversified, 360° approach to

the battery metals industry, the Company focuses on exploration, lifespan extension, and recycling of lithium-ion batteries and battery materials. For more information, visit batteryxmetals.com.

On Behalf of the Board of Directors
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Disclaimer for Forward-Looking Information
This news release contains forward-looking statements within the meaning of applicable securities laws. These statements relate to the Company's objectives, strategies, and future plans, including the development, commercialization, and deployment of proprietary technologies, exploration initiatives, and financial objectives. Specific forward-looking statements include expectations regarding the ongoing research collaboration with the Global Top 20 University, further refinements of the Company's proprietary eco-friendly flotation process, anticipated improvements in graphite and metal oxide recovery, purity levels, and flotation kinetics, as well as the evaluation of alternative separation methods such as solvent cleaning and reverse flotation using surfactants. Additionally, forward-looking statements include the anticipated benefits of the Company's froth flotation technology in battery material recovery, including its potential applications in the battery recycling and mining industries, and its ability to contribute to a circular battery economy by recovering high-purity graphite and critical battery metals from end-of-life lithium-ion batteries. The release also includes statements regarding the Company's next steps in optimizing its separation process to maximize both graphite and metal oxide recovery, including exploring advanced surfactants, selective collectors, and refining process parameters to enhance efficiency. Further forward-looking statements relate to broader industry trends, including the projected increase in global lithium-ion battery demand, the growing importance of sustainable battery recycling, and the evolving regulatory landscape supporting critical mineral recovery. These forward-looking statements are based on current expectations, assumptions, and beliefs as of the date of this release. However, they involve known and unknown risks, uncertainties, and other factors that could cause actual results or events to differ materially from those expressed or implied. Risks include, but are not limited to, market conditions, fluctuations in commodity prices, and regulatory changes impacting battery recycling and material recovery technologies; technical challenges in the development, testing, and optimization of the Company's flotation process and separation methodologies; the ability to secure financing or government support to advance research and commercialization efforts; potential delays, unexpected findings, or setbacks in laboratory testing and pilot-scale validation of the Company's proprietary recovery processes; dependence on third-party collaborations, university research partnerships, and external suppliers for equipment and testing; competition in the battery recycling and critical minerals market, including advancements in alternative recycling technologies; and changes in consumer demand, global supply chains, or geopolitical factors affecting the adoption of sustainable battery recycling solutions. Battery X Metals assumes no obligation to update or revise any forward-looking statements to reflect events, circumstances, or changes in expectations, except as required by law. Investors are cautioned not to place undue reliance on these forward-looking statements and are encouraged to refer to the Company's public filings on SEDAR+ for further risk disclosures.

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