Battery X Metals Announces Provisional Patent Application with US Patent & Trademark Office for Lithium-Ion Battery Rebalancing Technology Innovations

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Highlights:

1. *Filed Provisional Patents for Battery Lifespan Extension Technology: Battery X Rebalancing Technologies has submitted two provisional U.S. patent applications covering proprietary software and hardware innovations designed to diagnose, rebalance, and extend the lifespan of lithium-ion and EV batteries.*
2. *National Research Council Validates Core Technology: Independent testing by the National Research Council of Canada confirmed the technology's ability to recover nearly all capacity lost due to cell imbalance-demonstrating its effectiveness, safety, and performance consistency.*
3. *Prototype 2.0 in Development with Enhanced Capabilities: The next-generation rebalancing unit, Prototype 2.0, is currently in development and will feature optimized hardware, improved state-of-health diagnostics, and upgraded connectivity-targeted for completion at the end of April 2025.*
4. *Strategic Rebranding of Wholly-Owned Subsidiary to Battery X Rebalancing Technologies Inc.: Following the 100% acquisition of its lithium-ion battery diagnostics subsidiary, the Company has rebranded it as Battery X Rebalancing Technologies Inc.-reinforcing a unified brand identity and strengthening its position across the battery technology value chain.*

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 that its wholly-owned subsidiary, Battery X Rebalancing Technologies Inc. (formerly Li-ion Renewable Technologies Inc., as disclosed herein) ("Battery X Rebalancing Technologies") has submitted an application for provisional patent filings (the "Patent Applications") with the United States Patent and Trademark Office ("USPTO") for its next-generation battery rebalancing software and hardware technology innovations.

Visionary Technologies Aimed to Advance the Energy Transition

Battery X Rebalancing Technologies is a development-stage technology company, at the forefront of the energy transition, supporting the electric vehicle (EV) revolution and developing innovative technologies to extend the lifespan of lithium-ion and EV batteries. Its mission is to extend lithium-ion and EV battery longevity.

The Patent Applications represent the culmination of multiple years of development, validation, and innovation by Battery X Rebalancing Technologies and mark a significant milestone toward solidifying its position in the market as a leading authority in lithium-ion and EV battery rebalancing and lifespan extension. The company's next-generation rebalancing technology-validated by the National Research Council of Canada ("NRC"), as further described below-reinforces its commitment to delivering real-world solutions that support battery longevity and sustainability.

The Problem: Rising EV Adoption Presents New Battery Lifecycle Challenges

In 2024, global electric vehicle (EV) sales reached approximately 17.1 million units, representing a 25% increase from 2023[1]. With cumulative global EV sales from 2015 to 2023 totaling an estimated over 40 million units,[2] a significant share of the global EV fleet is expected to exit warranty coverage over the coming

years.

By 2031, nearly 40 million electric, plug-in hybrid, and hybrid vehicles worldwide are projected to be out of warranty[3], exposing owners to the risks of battery degradation, reduced capacity, and costly replacement needs[4]. As the global EV fleet continues to expand, so too does the demand for advanced technical solutions that can help extend battery life, reduce ownership costs, and support a more sustainable electric transportation ecosystem.

The Solution: Pioneering Next-Generation Technologies to Support Lithium-Ion Battery Longevity

Battery X Rebalancing Technologies' proprietary software and hardware technology aims to address this challenge by diagnosing and extending the lifespan of EV batteries. This innovation is being developed with the aim to enhance the sustainability of electric transportation and the goal to provide EV owners with a more cost-effective, environmentally friendly ownership experience by reducing the need for costly battery replacements.

Battery X Rebalancing Technologies' core technology, validated by the NRC, focuses on two key areas: battery health diagnostics and cell rebalancing. The NRC validation demonstrated the technology's ability to effectively diagnose and correct cell imbalances in lithium-ion battery packs, recovering nearly all lost capacity due to cell imbalance and ensuring accurate capacity measurements, while maintaining performance consistency and adhering to safety standards. This validation was conducted on battery modules composed of 12 cells (100Ah each) and 15 cells (72Ah each), demonstrating its effectiveness at this modular scale. As EV battery packs and other applications are typically comprised of multiple modules with varying cell quantities, including configurations of 12 and 15 cells, the technology's capabilities to rebalance EV batteries remain applicable and effective.

Battery X Rebalancing Technologies has successfully developed a first-generation prototype diagnostic and rebalancing machine and, pursuant to the BJPN Second Agreement, is now progressing toward the development of a second-generation prototype ("Prototype 2.0"). This next phase includes key refinements and updates, such as optimized hardware dimensions, reduced weight, and advancements in related equipment, including enhanced state-of-health (SOH) diagnostics, airtightness testing, and improved connectivity. Prototype 2.0 is expected to be delivered by the end of April 2025, followed by rigorous testing protocols to ensure optimal performance and compatibility with multiple EV batteries. As Battery X Rebalancing Technologies continues to advance its proprietary hardware and software technology, it remains focused on delivering innovative and sustainable solutions to meet the growing demand for EV battery rebalancing and lifespan extension.

These advancements establish Battery X Rebalancing Technologies as a participant in lithium-ion and EV battery solutions, aiming to tackle the critical challenges of capacity degradation of battery packs and expensive replacements. By extending the lifecycle of battery materials within the supply chain, Battery X Rebalancing Technologies aims to support the energy transition and promote a more sustainable future.

Patent Applications

Battery X Rebalancing Technologies Inc.'s first patent application, method and system for battery pack adjustment, introduces a novel solution to address the common issue of imbalanced battery cells within a battery pack-an issue that leads to reduced capacity, safety concerns, and shortened lifespan. In most battery packs, cells charge and discharge at different rates due to variations in manufacturing, internal resistance, and temperature, which causes some cells to reach full charge or depletion before others. As a result, traditional battery management systems (BMS) cut off charging or discharging based on the weakest cell, wasting the remaining potential of other cells. This invention solves that problem through a smart system that continuously monitors and adjusts the state of charge (SOC) of each group of cells (referred to as "strings"). The system includes a display controller (which manages operations), a charger and discharger (handling overall energy flow), and an equalizer (which precisely adjusts each string). By allocating charge and discharge intelligently across the cells, the system ensures they all reach full capacity and deplete evenly, thereby maximizing usable energy, detecting early signs of degradation, enhancing safety, and extending the overall life of the battery pack.

The second patent application, two-wire charging and remote voltage detection, presents a streamlined

method to charge a battery and measure its voltage using only two wires-significantly reducing system complexity and hardware costs. In conventional battery systems, separate wires or sensors are typically required to monitor voltage during charging, which adds material costs and design challenges, especially in large-scale applications like electric vehicles or grid storage. This invention enables both functions over the same wire pair by briefly pausing the charge current, opening a switch, and using that moment to measure the battery's voltage through the same lines. A pulse isolation drive circuit is used to manage this operation safely and reliably, even when voltage levels are floating or unstable. The result is a simplified yet highly accurate system that maintains the integrity of voltage readings while eliminating the need for redundant hardware. This two-wire approach offers a more efficient and cost-effective solution for modern battery systems that demand reliability, safety, and scalability.

Name Change of Battery Rebalancing Technology Subsidiary to Battery X Rebalancing Technologies Inc.

Effective April 7, 2025, the Company's wholly-owned lithium-ion battery rebalancing technology subsidiary has changed its name from Li-ion Renewable Technologies Inc. to Battery X Rebalancing Technologies. The name change follows the Company's news release dated March 31, 2025, announcing the completion of its acquisition of all remaining common shares of the company, resulting in 100% ownership. The rebranding reflects Battery X Metals' ongoing effort to unify its operating divisions under the Battery X brand and aligns with its broader corporate strategy to enhance brand consistency, improve market visibility, and streamline communications across all business units.

Battery X Rebalancing Technologies is one of the Company's three core verticals and plays a key role in its integrated 360° approach to the battery metals value chain. The company is focused on the development and commercialization of patent-pending software and hardware technologies designed to extend the lifespan of lithium-ion and electric vehicle (EV) batteries. The company's core technology, validated by the NRC, focuses on two key areas: battery health diagnostics and cell rebalancing. The NRC validation demonstrated the technology's ability to effectively diagnose and correct cell imbalances in lithium-ion battery packs, recovering nearly all lost capacity due to cell imbalance and ensuring accurate capacity measurements, while maintaining performance consistency and adhering to safety standards. By rebalancing battery cells within the battery, the Company is addressing cell-level imbalances and mitigating the degradation of effective capacity within battery packs. The Company aims to enhance battery longevity, reduce waste, and support a more sustainable clean energy future.

With its first-generation prototype completed and a second-generation unit currently in development and anticipated to be delivered by the end of April 2025, Battery X Rebalancing Technologies is advancing a next-generation battery rebalancing technology innovation that aims to supports lower EV ownership costs, a circular economy, and the energy transition.

Battery X Rebalancing Technologies complements the Company's two other primary verticals:

- The exploration of North American critical battery metal projects; and
- The development of proprietary, eco-friendly technologies to recover battery-grade materials from end-of-life lithium-ion batteries.

"This rebranding ensures our subsidiaries are clearly aligned under the Battery X identity," said Massimo Bellini Bressi, Chief Executive Officer of Battery X Metals. "It reinforces our commitment to innovation and supports our long-term vision of delivering scalable, sustainable solutions across the full battery value chain."

1 Rho Motion - Global EV Sales 2024, 2 IEA Global EV Outlook 2024, 3 IEA, 4 Recurrent Auto

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

Massimo Bellini Bressi, Director

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Disclaimer for Forward-Looking Information

This news release contains forward-looking statements within the meaning of applicable securities laws. Forward-looking statements in this release relate to, among other things, the Company's objectives, strategies, and future plans regarding the development, validation, and commercialization of proprietary software and hardware innovations for lithium-ion battery diagnostics and rebalancing. Specific forward-looking statements include, but are not limited to, statements regarding the filing and potential outcomes of the provisional patent applications with the USPTO; the validation and performance of the Company's battery rebalancing technology; the development timeline, specifications, and anticipated capabilities of Prototype 2.0; the Company's ability to deliver enhanced hardware and software solutions, including improved diagnostics and connectivity features; the expected benefits of the Company's battery rebalancing solutions for EV owners and the broader electric transportation ecosystem; and the Company's positioning across the battery technology value chain through its rebranded subsidiary and integrated technology platform. These forward-looking statements are based on current expectations, estimates, assumptions, and projections that the Company believes to be reasonable as of the date of this release. However, such statements are inherently subject to significant business, technological, scientific, operational, economic, and regulatory risks and uncertainties. Actual results, performance, or achievements may differ materially from those expressed or implied by these forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to: uncertainties related to the patent application process and the scope of intellectual property protection ultimately granted; challenges or delays in the continued development, testing, and commercialization of the rebalancing technology or Prototype 2.0; inability to achieve expected hardware or software performance metrics; risks related to third-party validation or acceptance of the Company's technology; shifts in demand for EV battery diagnostics or servicing; changes in applicable laws or regulations; the impact of evolving market dynamics; and general business, economic, or geopolitical conditions. Forward-looking statements reflect the beliefs, assumptions, and expectations of management at the time they are made. The Company undertakes no obligation to update or revise any forward-looking information, whether as a result of new information, future events, or otherwise, except as required by applicable law. Readers are cautioned not to place undue reliance on forward-looking statements and are encouraged to consult the Company's continuous disclosure filings available on SEDAR+ (www.sedarplus.ca) for further information regarding risks and uncertainties related to the Company's business.

SOURCE: Battery X Metals