

# Battery X Metals' Portfolio Company LIBRT Engages Leading Patent Law Firm to File Patents for Innovative EV Battery Diagnostic and Rebalancing Software and Hardware

# **News Release Highlights:**

- Battery X Metals' portfolio company, LIBRT, engages a leading Canadian patent law firm to file
  patents for innovative EV battery state of health (SOH) diagnostic and rebalancing software and
  hardware.
- LIBRT's Prototype 2.0 is intended to integrate future patent-pending diagnostic and rebalancing technologies.
- LIBRT's advanced SOH diagnostic and rebalancing software and hardware is designed to extend the operational lifespan and optimize performance of electric vehicle (EV) batteries.

VANCOUVER, British Columbia – October 2, 2024 – Battery X Metals Inc. (CSE:BATX) (OTCQB:BATXF) (FSE:ROW, WKN:A3EMJB) ("Battery X Metals" or the "Company") is pleased to announce that effective October 1 2024, its portfolio company, Lithium-ion Battery Renewable Technologies Inc. ("LIBRT"), has engaged a leading Canadian patent law firm (the "Leading Patent Law Firm") to assist with filing patents for its innovative EV battery state of health (SOH) diagnostic and rebalancing software and hardware.

# Future Patent Filings for Lithium-ion and EV Battery Health Diagnostics and Rebalancing Innovations

With the support of the Leading Patent Law Firm, LIBRT plans to file patents for three key innovations, which encompass both software and hardware components designed to enhance LIBRT's lithium-ion and EV battery diagnostic and rebalancing machine capabilities. These innovations are:

- 1. **Software**: Advanced algorithms to assess the state of health (SOH) and optimize the lifespan of EV batteries.
- 2. **Hardware**: Proprietary equipment to implement rebalancing processes, ensuring optimal battery cell performance.
- 3. **Process Concept**: A comprehensive system integrating both software and hardware designed to provide a complete solution for battery diagnostics and rebalancing.

# Development of Prototype 2.0 – Advancing Lithium-Ion and EV Battery Health Diagnostics and Lifespan Extension through Rebalancing

Further to the Company's news release dated September 27, 2024, LIBRT's next phase of product development is Prototype 2.0, which is intended to integrate the software and hardware advancements described herein. Prototype 2.0 represents the culmination of several years of research and development and builds on the company's successfully developed initial prototype. It is designed to improve the

management of lithium-ion and EV batteries by providing advanced SOH diagnostic accuracy and rebalancing capabilities to assess capacity and extend the lifespan of electric vehicle (EV) batteries.

Prototype 2.0 intends to introduce several key enhancements, including:

- Advanced SOH diagnostic modules that assess the maximum available capacity of EV battery cells. These modules are expected to facilitate the repurposing of used EV batteries into second-life applications.
- Rebalancing technology that optimizes battery performance by restoring balance between individual battery cells, designed to extend their operational life and energy output.
- Improved design and user interface, featuring a more compact form factor, refined aesthetics, and enhanced ease of use for technicians and consumers alike.
- Additional technical enhancements including deciphering tools, connectivity tablets, airtightness testing modules, and components that ensure commercial readiness.

LIBRT believes Prototype 2.0 will mark a significant milestone in the company's product development lifecycle.

# **Market Opportunity**

#### The Problem: Rising EV Adoption Brings New Challenges

The global transition to clean energy is rapidly accelerating, with batteries playing a pivotal role in reducing fossil fuel dependence<sup>1</sup>. Demand for lithium-ion batteries is projected to skyrocket by 670% by 2030<sup>2</sup>, as global energy storage needs surge from 700 GWh in 2022 to 4.7 TWh<sup>2</sup>. EV will drive much of this demand<sup>2</sup>, requiring 4,300 GWh by 2030<sup>2</sup>. Regulatory initiatives, such as the US Inflation Reduction Act and Europe's "Fit for 55" program, along with the EU's 2035 ban on internal combustion engine vehicles<sup>1</sup>, are accelerating this growth.

Yet, the rapid expansion of EV adoption brings new challenges. By 2031, nearly 40 million EVs, plug-in hybrids, and hybrids worldwide will surpass their manufacturer warranties<sup>3</sup>, leaving owners susceptible to battery degradation. As a result, the demand for advanced battery diagnostics and renewal technologies will grow, extending battery lifespans and promoting the sustainability of electric transportation. The company believes this technology will offer a cost-effective, environmentally friendly alternative for EV owners by reducing the need for expensive battery replacements.

# The Solution: Pioneering a New Era of Lithium-ion & EV Battery Longevity

LIBRT's proprietary technology addresses this challenge by diagnosing and extending the lifespan of EV batteries. This innovation is designed to enhance the sustainability of electric transportation and provide EV owners with a more cost-effective, environmentally friendly ownership experience by reducing the need for costly battery replacements. LIBRT's core technology, validated by the National Research Council of Canada (NRC)<sup>4</sup>, focuses on two key areas: battery health diagnostics and cell rebalancing. This approach is designed to mitigate the degradation of effective capacity in battery packs and address imbalances within battery cells, improving battery longevity.

<sup>1</sup> EnergyX

<sup>2</sup> McKinsey & Company

#### **About Battery X Metals Inc.**

Battery X Metals Inc. (CSE:BATX) (OTCQB:BATXF) (FSE:ROW, WKN:A3EMJB) is committed to advancing the clean energy transition by developing proprietary lithium-ion battery technologies and exploring domestic resources for battery and critical metals. It's portfolio company Lithium-ion Battery Renewable Technologies Inc. (LIBRT)¹ is developing proprietary technology to diagnose the health and extend electric vehicle (EV) battery lifespan. Battery X Recycling Technologies Inc., its wholly-owned subsidiary, has partnered with a global Top 20 university to develop a proprietary eco-friendly battery-grade material recovery technology from black mass.

Battery X Metals also owns 100% of the Y Lithium Project in Saskatchewan (5,855 hectares), the Nunavik Leaf River Project (3,500 hectares) and Abitibi Reservoir-Dozios Project (3,500 hectares) in Quebec, and the NI 43-101 compliant Belanger Property in Red Lake, Ontario (2,100 hectares). The Company has an equity stake in Premier Silver Corp., which owns the Mallay Mine & Processing Plant in Peru, part of the 10,562.4-hectare Tres Cerros Au-Ag Project.

1 49% owned portfolio company

# About Li-ion Battery Renewable Technologies Inc.

Li-ion Battery Renewable Technologies Inc. is a development-stage battery technology company based in Vancouver, BC, focused on becoming a leader in lithium-ion battery diagnostics and renewal technologies. LIBRT utilizes innovative and proprietary technology to diagnose and extend the lifespan of electric vehicle (EV) batteries. Its battery cell rebalancing technology addresses capacity degradation caused by cell imbalances, helping to extend battery life, reduce the need for costly replacements, keep batteries out of landfills, and minimize the demand for mining critical metals. Additionally, LIBRT is developing advanced diagnostic equipment for EV battery services.

#### 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 information and statements as defined under applicable Canadian securities laws. Forward-looking information typically includes statements with forward-looking terminology such as "expects," "believes," "anticipates," "plans," "intends," "foresees," "potential," "will,"

"may," and similar expressions. Such forward-looking information may include, but is not limited to, statements regarding: (i) the anticipated filing of patents related to its EV battery diagnostic and rebalancing technologies; (ii) the development and integration of LIBRT's patent-pending innovations into Prototype 2.0; (iii) the expected performance and benefits of LIBRT's software and hardware solutions in extending EV battery lifespan and enhancing performance; (iv) LIBRT's commercialization strategies and future market opportunities for its EV battery diagnostic and rebalancing technologies; and (v) other statements regarding the Company's plans, strategies, and objectives. Forward-looking information is based on certain material assumptions made by management and considered reasonable at the time of publication. These assumptions include, without limitation, the successful development and testing of LIBRT's technologies, the availability of sufficient financial resources, market acceptance of the technologies, favorable patent filing outcomes, and continued collaboration with industry partners. While the Company considers these assumptions reasonable, they inherently involve significant risks and uncertainties that could cause actual results or events to differ materially from those projected in the forward-looking information. Factors that may cause actual results to differ materially from forwardlooking information include, but are not limited to: technical challenges related to product development and testing, delays in patent filings or approval, market competition, changes in regulatory environments, availability of financing, and broader economic or market conditions. Readers are cautioned not to place undue reliance on forward-looking statements, which are based on expectations as of the date of this news release and are subject to change without notice. The Company does not undertake any obligation to publicly update or revise any forward-looking information, except as required by applicable securities laws.