

# Battery X Metals Achieves Full Capacity Recovery on a Real-World Imbalanced Battery from the #2 Out-of-Warranty Electric Vehicle Model in the US in Preliminary Trial

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## News Release Highlights:

1. Battery X Rebalancing Technologies' patent-pending Prototype 2.0 successfully restored 100% of imbalance-related capacity on a real-world 96-cell Nissan Leaf battery pack, demonstrating precise cell-level voltage alignment and effective capacity recovery.
2. 1.95 ampere-hours (Ah) of capacity was restored, representing a 3.9% increase in effective capacity on a battery pack that was relatively well-balanced, underscoring the system's potential on more degraded packs.
3. All 96 battery cells were rebalanced to 4.20 volts, the industry-recognized full charge state for lithium-ion batteries, validating the system's accuracy and performance.
4. Results support the potential scalability of Prototype 2.0 across high-volume EV platforms. The next phase of validation includes full charge/discharge testing to confirm capacity gains and assess long-term battery lifespan extension.

[Battery X Metals Inc.](#) (CSE:BATX) (OTCQB:BATXF) (FSE:5YW, WKN:A40X9W) ("Battery X Metals" or the "Company") an energy transition resource exploration and technology company, announces that, further to its news release dated May 2, 2025 confirming the delivery of its second-generation, patent-pending lithium-ion battery rebalancing machine ("Prototype 2.0") by its wholly owned subsidiary Battery X Rebalancing Technologies Inc. ("Battery X Rebalancing Technologies"), and its news releases dated May 23, 2025 and May 27, 2025, regarding expanded development efforts to achieve compatibility with the Nissan Leaf -the second most common out-of-warranty electric vehicle (EV) in the United States-Battery X Rebalancing Technologies has achieved full capacity recovery in a preliminary trial (the "Trial") on a retired real-world imbalanced 96-cell Nissan Leaf battery pack, composed of lithium manganese oxide (LMO) and lithium nickel oxide (LNO) materials (the "Nissan Leaf Battery Pack").

The Trial results (the "Results") were performed using Prototype 2.0 on the Nissan Leaf Battery Pack, The Nissan Leaf Battery Pack was first charged at 12 amperes using Battery X Rebalancing Technologies' cycling module to simulate a standard electric vehicle charging cycle. Once the first cell reached the voltage target of 4.20 volts (the "Voltage Target"), a rebalancing current between 0 and 3 amperes was applied individually to the remaining cells until all 96-battery cells successfully reached the Voltage Target. The Voltage Target lies within the standard operating range for LMO and LNO lithium-ion cells of 3.0 volts to 4.20 volts, with 4.20 volts commonly recognized as the full capacity in the industry<sup>1</sup>.

According to the diagnostic report provided by the vendor of the Nissan Leaf Battery Pack (the "Battery Vendor Diagnostic Report"), the reported measured effective ampere-hour capacity of the Nissan Leaf Battery Pack prior to rebalancing was 50.34 ampere-hours (Ah). This served as the baseline capacity for the Trial. Following the Trial, Prototype 2.0's integrated software determined that 1.95 Ah of additional capacity had been successfully restored. While the Battery Vendor Diagnostic Report did not quantitatively indicate a loss of capacity, it indicated that the Nissan Leaf Battery Pack was operating at 50.34 Ah with minor voltage imbalance that placed the voltage below the Voltage Target. Rebalancing the cells to the Voltage Target achieved a 3.9 percent improvement in usable capacity.

The restored 1.95 Ah corresponds to the full theoretical rebalancing increase based on the Voltage Target achieved, and represents full recovery of the minor voltage imbalance indicated on the Battery Vendor Diagnostic Report. These results were determined by the Trial based on achieving the Voltage Target across

all 96-battery cells, along with a software feature of Prototype 2.0 that shows the ampere-hours (Ah) capacity restored through rebalancing for each individual cell, with the largest discrepancy being 1.95 Ah, based on the Voltage Target. Battery X Rebalancing Technologies interprets this result as confirmation of Prototype 2.0's ability to restore all imbalance-induced lost capacity through precise voltage alignment and battery-cell level rebalancing.

## Results

Trial Parameter	Value / Description
Effective Capacity Before Rebalancing	50.34 ampere-hours (Ah)
Capacity Restored Through Rebalancing	1.95 ampere-hours (Ah)
Increase as Percentage (%) of Effective Capacity	3.9%
Effective Capacity After Rebalancing	52.29 ampere-hours (Ah)
Imbalance-Related Capacity Recovery <sup>1</sup>	100%

## Next Steps

To further validate the Results, the Battery X Rebalancing Technologies intends to conduct further trials to complete a full charge/discharge cycle to empirically confirm whether the 50.34 ampere-hour capacity reported in the Battery Vendor Diagnostic Report remains consistent following rebalancing. Given that all 96-battery cells have been rebalanced to the Voltage Target, Battery X Rebalancing Technologies does not anticipate any material variance, and remains confident in its ability to restore all imbalance-induced lost capacity through precise voltage alignment and battery-cell level rebalancing on the Nissan Leaf Battery Pack. However, this process will provide definitive confirmation.

Additionally, the full charge/discharge cycle will help identify any potentially defective battery cells within the pack that may require replacement. While there is currently no indication of any defective cells, this diagnostic step will serve as a further safeguard in confirming the measured effective ampere-hour capacity stated in the Battery Vendor Diagnostic Report.

Battery X Rebalancing Technologies continues to rely on the Battery Vendor Diagnostic Report as a credible third-party baseline and has no reason to believe it is inaccurate. Nevertheless, Battery X Rebalancing Technologies plans to validate the report through its own independent testing protocols to ensure accuracy.

## Developing Next-Generation Technologies to Support Lithium-Ion Battery Longevity

"This Trial marks a significant milestone in validating Battery X Rebalancing Technologies' technology under real-world conditions," said Massimo Bellini Bressi, CEO of Battery X Metals. "Even with a relatively well-balanced Nissan Leaf battery pack, the system was able to recover nearly 2 ampere-hours of capacity - an improvement that underscores the precision and potential of our patent-pending lithium-ion rebalancing solution. As we expand testing to more aged and imbalanced battery packs, we expect to identify greater capacity losses that this technology is specifically designed to address. This is just the beginning of what battery rebalancing can offer the EV ecosystem - extending battery life, improving performance, and reducing waste."

As disclosed in the Company's May 9, 2025 news release, Battery X Rebalancing Technologies entered into a non-commercial, collaborative scope of services agreement (the "Factor E Agreement") with Factor E Motors, an automobile service centre specializing in out-of-warranty Tesla vehicles. The collaboration is focused on advancing the Company's patent-pending rebalancing software and hardware, with initial efforts targeting Tesla Model 3 and Model X battery packs in Factor E's possession.

Further to the Company's May 23, 2025 news release, development efforts were expanded to include

functionality for the Nissan Leaf-the second most common out-of-warranty EV model in the United States. The Results were attained from Trials performed on the Nissan Leaf Battery Pack acquired from an arm's-length third party for \$1,120.

The Trial was performed in collaboration with Factor E Motors, and in addition to conducting a full charge/discharge cycle to empirically confirm the Battery Vendor Diagnostic Report, Battery X Rebalancing Technologies' is now focused on ongoing validation of standard operating procedures (SOPs) and post-rebalancing processes. This includes conducting pre- and post-rebalancing diagnostics and supporting the execution of the rebalancing process. These efforts are intended to refine commercial workflows and further enhance Battery X Rebalancing Technologies' proprietary rebalancing technology in preparation for broader deployment.

These Results mark a critical step in validating system compatibility across diverse battery chemistries and configurations, particularly in high-volume EV models nearing or beyond the end of their manufacturer warranties. Management believes the Results demonstrate both the technical effectiveness and commercial potential of the Battery X Rebalancing Technologies' patent-pending rebalancing platform. By validating the restoration of aging battery packs across multiple EV platforms, Battery X Rebalancing Technologies aims to pioneer a new market segment focused on extending battery life, enhancing performance, and reducing costly replacements, contributing to a more sustainable electric mobility future.

Building on the preliminary success of this Trial, Battery X Rebalancing Technologies is preparing to test its rebalancing technology across a wider variety of battery chemistries, configurations, and real-world high-volume electric vehicle models.<sup>1</sup>

<sup>1</sup> Battery University

About Battery X Metals Inc.

Battery X Metals (CSE:BATX)(OTCQB:BATXF)(FSE:5YW, WKN:A40X9W) 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](http://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 Canadian securities laws. Forward-looking statements relate to future events or performance and include statements regarding: the development, functionality, performance, and commercial potential of Prototype 2.0; the anticipated results of further rebalancing trials on the Nissan Leaf Battery Pack and other high-volume electric vehicle models; the Company's plans to conduct a full charge/discharge cycle to validate capacity measurements; the ability of Prototype 2.0 to detect and recover imbalance-related capacity across various battery chemistries and configurations; the continued development, refinement, and standardization of rebalancing-related standard operating procedures (SOPs); the scope and outcomes of the Company's collaboration with Factor E Motors; the future scalability of the rebalancing technology; the Company's ability

to collect data on lifespan extension and quantify average capacity improvements; the development of commercial workflows and partner deployments; the emergence of a new market segment focused on battery rebalancing; and the Company's ability to achieve commercial deployment, establish industry adoption, secure strategic partnerships, and generate future revenue. Forward-looking statements are based on management's reasonable assumptions, estimates, expectations, analyses, and opinions as of the date of this news release. They are subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: the ability to complete and validate further rebalancing trials; the effectiveness and accuracy of the Prototype 2.0 software and voltage rebalancing system; the ability to replicate initial Trial results at scale or under different battery conditions; possible variance in third-party diagnostic reports; potential identification of defective cells that require replacement; the acceptance of rebalancing as a cost-effective and trusted solution for EV battery maintenance; the pace of regulatory and industry adoption; and general business, technological, competitive, and economic conditions. There can be no assurance that the Company's rebalancing technology will perform as expected in future tests, that validation efforts will yield consistent results, or that the Company will achieve successful commercialization or sustained revenue from its rebalancing platform. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law. Investors are encouraged to consult the Company's continuous disclosure filings available under its profile at [www.sedarplus.ca](http://www.sedarplus.ca) for additional risk factors and further information.

SOURCE: Battery X Metal

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