

Electra Introduces EVE-Ai - EAGLE Battery Pass: Transforming EU Battery Passport Compliance into a Strategic Advantage

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EINPresswire.com/ -- [Electra](#) Introduces EVE-Ai- [EAGLE Battery Pass](#): The Solution to Turn EU Battery Passport Compliance into a Strategic Advantage.

As the EU Battery Passport regulation approaches, Electra announces EVE-Ai - EAGLE Battery Pass (European Advance Governance and Lifecycle Evaluation), a comprehensive solution designed to help companies meet and capitalize on compliance requirements. Built on Electra's proprietary EVE-Ai product family and fully integrated with EVE-Ai Fleet Analytics, EAGLE-Battery Passport enables battery manufacturers, fleet operators, and industry stakeholders to fulfill mandatory Battery Passport requirements while unlocking valuable insights that drive operational efficiency, safety, and long-term sustainability.

Understanding the EU Battery Passport: What, When, and Why

Starting in 2027, all batteries with over 2 kWh capacity entering the EU market must include a digital record, or "Battery Passport," that tracks lifecycle data from production to recycling. This regulation demands companies collect, report, and share standardized battery data to improve sustainability, performance, and transparency across the value chain. Starting as early as 2025, forward-thinking companies can adopt these standards to stay ahead of the regulatory curve

Electra is a data provider of Dynamic Battery Data (Health and Performance)

Front End UI for Customer

- Dynamic Data: Environmental impact, recycling
- Dynamic Data: Health and Performance
- Static Data: Traceability Materials, Design

Integration of data models and information

System Infrastructure

- Dynamic Mandatory Data
- Additional Data value: Remaining Useful Life, Risk Analysis and Fault Prediction
- API solutions to connect and deploy data
- White label backend solution provider

Electra values for the Battery Passport

BESS, EV, Battery Data, AWS, ELECTRA, Electra Algorithm performed in the Cloud

Battery Passport Dynamic Informations calculated are sent back to be ready and available for the end user

EVE-Ai™ Additional Information Provided

- Dynamic Mandatory Information* SoC (SOH), SOC, Internal Resistance, SOC, Number of Full-charge-discharge cycles
- RUL, Risk Analysis

How the flows of information works

EVE-Ai™ EAGLE Battery Pass

Enhanced Battery Passport Solution

- Comprehensive Data Management:** Automatic capture and storage of essential dynamic data, simplifying reporting and ensuring compliance.
- Data Automation and Accuracy:** Reduced human error and enhanced data integrity through automated recording and storage.
- Remaining Useful Life:** Calculates and updates battery's estimated operational lifespan for maintenance scheduling and warranty management.
- Risk Analysis:** Proactive monitoring and risk assessment, preventing downtime up to 3 months in advance and extending battery life by 40%.

Capitalize on the EU Battery Passport Compliance with EAGLE - Battery Pass

and position themselves as leaders in sustainable practices.

Turning Compliance into Competitive Advantage with EVE-Ai - EAGLE Battery Pass

The EU Battery Passport requirements divide battery data into static and dynamic fields. While static data covers basic identification and manufacturing details, dynamic data—which must be continuously updated over the battery lifecycle—presents a more complex challenge. Electra's EAGLE-Battery Pass solution, powered by Electra EVE-Ai and fully integrated with EVE-Ai Fleet Analytics, provides a streamlined approach to these complex requirements. By fully managing the critical dynamic data fields of the Battery Passport, EAGLE-Battery Pass simplifies compliance and enhances transparency. The platform automatically captures and updates battery performance metrics, enabling businesses to meet EU standards and leverage compliance for operational gains.

How EVE-Ai Fleet Analytics Enhances the Value of EAGLE-Ai Beyond Compliance

By using EVE-Ai Battery Pass provides a robust tool that meets both mandatory compliance requirements and additional strategic needs. Key dynamic metrics tracked by the platform include:

- State of Certified Energy (SoCE) / State of Health (SoH): Real-time tracking of battery health and longevity, essential for safe operation and warranty management.
- State of Charge (SoC): Continuous monitoring of battery capacity to optimize usage and prevent unexpected failures.
- Internal Resistance: Measurement at the battery pack level to manage performance and prevent safety issues.
- Charge-Discharge Cycles: Detailed logging of complete cycles to assess battery wear and support maintenance planning.

Value beyond compliance

Beyond regulatory compliance, EAGLE-Battery Pass is fully integrated with EVE-Ai Fleet Analytics. It transforms the EU Battery Passport into a tool for strategic growth, advanced data analytics, and AI-driven insights. Additional benefits include:

- Predictive Maintenance with Remaining Useful Life (RUL): Estimating battery lifespan allows businesses to proactively plan replacements, reducing downtime and extending battery life by up to 40%.
- Risk Analysis for Operational Reliability: Identifying potential performance risks in real-time enables companies to address issues before they escalate, ensuring safer, more reliable operations.

These analytics empower companies to reduce downtime, enhance battery lifespan, and optimize asset utilization—all while meeting stringent EU regulations

"With EVE-Ai - EAGLE Battery Pass, we're not just helping companies meet compliance; we're giving them the tools to elevate their operations and drive meaningful, data-backed decisions," said Fabrizio Martini, CEO of [Electra Vehicles](#). "EAGLE goes beyond regulatory demands,

providing advanced analytics and predictive insights that empower companies to optimize performance, increase battery lifespan, and proactively manage risks—all essential for staying competitive in today's evolving market”.

Powered by AWS for Security, Scalability, and Data Integrity

Built on AWS's scalable cloud infrastructure, EAGLE-Battery Pass facilitates easy data storage, processing, and sharing, all while meeting EU data governance requirements. AWS's secure cloud services enable companies to maintain data lineage, supporting transparency and integrity across the battery value chain and enhancing collaboration with partners.

A Strategic Platform for a Sustainable Battery Future

Electra's EVE-Ai - EAGLE-Battery Pass transforms EU Battery Passport compliance into a strategic asset for companies across the battery lifecycle. With robust data management, automated accuracy, real-time insights into Remaining Useful Life, and proactive risk analysis, EVE-Ai - EAGLE-Battery Pass not only ensures compliance but also optimizes battery performance, extends lifespan, and reduces operational costs—positioning businesses for success in a sustainable, data-driven future.

EVE-Ai - EAGLE Battery Pass supports seamless collaboration across the entire battery value chain, from manufacturers to recyclers. Tailored data-sharing options and secure API integrations enable transparent, compliant information exchange while preserving proprietary data, meeting regulators, battery producers, OEMs, and fleet operators' distinct needs.

Discover more here: <https://www.electravehicles.com/products/eagle-battery-passport/>

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