

European Union Battery Passport



Navigate the EU Battery Regulation with Confidence

Battery passports will be mandatory starting February 2027 under the EU Battery Regulation (Article 77). FRDM empowers manufacturers, importers, and supply chain partners to meet these complex requirements and turn compliance into a competitive advantage.

In force since August 2023, the EU Battery Regulation (Regulation (EU) 2023/1542) is the first global framework regulating the entire lifecycle of batteries—from raw material sourcing to end-of-life recovery.

It mandates that batteries placed on the EU market must:

- Meet carbon footprint transparency standards
- Comply with strict supply chain due diligence requirements (Articles 49–52)
- Include digital product passports (DPPs) by February 18, 2027 for:
 - Electric vehicle (EV) batteries
 - Light means of transport (LMT) batteries
 - Industrial batteries with capacity >2 kWh

What Is a Battery Passport?

A battery passport is a digital record that stores lifecycle data about a battery's:

- Composition and raw materials
- Carbon footprint
- Performance and durability
- Circularity and end-of-life processes
- Supply chain due diligence

It supports the EU's twin transition to a circular and digital economy and applies to:

- EV batteries
- Light means of transport (e-bikes, scooters)
- Industrial batteries over 2 kWh

How FRDM Helps You Build a Battery Passport

1. MAP COMPLEX SUPPLY CHAINS

FRDM's knowledge graph technology connects thousands of suppliers and raw material sources to help you identify and document battery inputs from mine to module.

2. AUTOMATE DUE DILIGENCE & ESG REPORTING

FRDM delivers real-time data on:

- Country of origin
- Human rights and environmental risks
- Compliance with Article 49–52 (Due Diligence, Risk Management, Verification)
- Third-party certifications

3. TRACK CARBON FOOTPRINTS AT SCALE

- Meet Battery Passport requirements for lifecycle emissions:
- Manufacturing and distribution (company-specific data)
- Raw material acquisition and recycling (primary or secondary data)
- FRDM integrates with your emissions data to streamline reporting.

4. ENABLE CIRCULARITY AND SECOND LIFE TRACKING

FRDM captures data on:

- Recycled content (e.g. cobalt, lithium, nickel)
- Materials composition
- Reuse, remanufacturing, and dismantling pathways

This supports resource efficiency and helps you manage post-consumer obligations.

5. CENTRALIZE PASSPORT ATTRIBUTES

Store and update the 80+ required attributes in a secure, accessible, and auditable system. FRDM helps you organize data into the seven official clusters:

- General battery & manufacturer info
- Compliance & certifications
- Carbon footprint
- Supply chain due diligence
- Materials & composition
- Circularity
- Performance & durability

Save Time and Money with FRDM

Building a battery passport program in-house can cost hundreds of thousands annually in staff, software, and data licensing.

With FRDM, you get:

- Instant access to regulatory-aligned templates and passport-ready data structures
- Integrated third-party data (risk indices, certifications, emissions) without costly subscriptions
- Automated due diligence that saves hundreds of analyst hours per year
- No need to build your own tech stack, data pipeline, or supplier engagement framework

50–70% costs compared to internal development

Avoid the risk and cost of non-compliance penalties

Reduce manual FTEs 75%

Ready for 2027 and Beyond

FRDM is your partner in meeting evolving regulatory expectations, with tools that go beyond compliance to unlock value:



**Better data for
informed decisions.**



**Smoother audits
and reporting**



**Increased
transparency across
your supply chain**

FRDM: Your Defense Against Hidden Forced Labor Risk

At FRDM, we make supply chains transparent. Our platform maps from finished goods to raw materials and screens for forced labor risk at every tier. We monitor real-time trade flows, match suppliers against government watchlists, and help you comply with regulations—without relying on audits.

Don't wait for supply chain shocks to happen.

**Contact Us now to protect your supply chain
—and the people behind it.**



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