

Compliance Requirements for LMT Batteries — EU Battery Regulation 2023/1542

Georgia & Molly | August 2026

Scope & Definition

An **LMT battery** is a battery that is (i) sealed, (ii) weighs 25 kg or less, (iii) is specifically designed to provide electric power for traction of wheeled vehicles powered by an electric motor alone or by a combination of motor and human power (including type-approved category L vehicles), and (iv) is not an "electric vehicle battery."

The Regulation applies to all battery categories including LMT batteries, including batteries incorporated into or added to products.

Market access gate: Batteries may only be placed on the market or put into service if they meet (a) the sustainability and safety requirements in Articles 6–10 and 12 and (b) the labelling and information requirements in Chapter III.

1. Sustainability Requirements

1.1 Carbon Footprint (Article 7)

Sub-requirement	Detail	Applicability Date
Carbon footprint declaration	Must be drawn up for each battery model per manufacturing plant, including manufacturer info, battery model, plant location, life-cycle carbon footprint in kgCO ₂ e/kWh over expected service life, carbon footprint by life-cycle stage, EU DoC identification number, and a web link to a public version of the supporting study.	18 August 2028 (or 18 months after entry into force of relevant delegated/implementing acts, whichever is later).
Carbon footprint performance class label	LMT batteries must bear a conspicuous, clearly legible and indelible label indicating the battery carbon footprint (kgCO ₂ e/kWh over expected service life) and declaring the carbon footprint performance class, supported by technical documentation (Annex VIII).	18 February 2030 (or 18 months after entry into force of relevant delegated/implementing acts, whichever is later).
Maximum carbon footprint threshold	Technical documentation must demonstrate the declared life-cycle carbon footprint is below a maximum threshold to be set by delegated act; the Commission is to adopt the delegated act by 18 February 2030.	18 August 2031 (or 18 months after entry into force of the delegated act, whichever is later).
Exemption	Carbon footprint requirements in Article 7(1)–(3) do not apply to batteries that were already placed on the market or put into service before being prepared for re-use/repurposing/repurposed/remanufactured.	N/A

1.2 Recycled Content (Article 8)

Sub-requirement	Detail	Applicability Date
Recycled content documentation	LMT batteries containing cobalt, lead, lithium, or nickel in active materials must be accompanied by documentation on the percentage shares of those materials recovered from battery manufacturing waste or post-consumer waste, for each battery model per year and per manufacturing plant, using methodology/format set by delegated act.	18 August 2033
Mandatory minimum recycled content shares	Technical documentation (Annex VIII) must demonstrate minimum recycled-content shares in active materials of: • 26% cobalt • 85% lead • 12% lithium • 15% nickel (per battery model per year and per manufacturing plant).	18 August 2036
Exemption	Recycled-content obligations in Article 8(1)–(3) do not apply to batteries already placed on the market or put into service before being prepared for re-use/repurposing/repurposed/remanufactured.	N/A

1.3 Performance and Durability (Article 10)

Sub-requirement	Detail	Applicability Date
Performance parameters disclosure	LMT batteries must be accompanied by a document containing values for electrochemical performance and durability parameters in Annex IV Part A, and technical documentation must explain the technical specs/standards/conditions used to derive those values (including elements in Annex IV Part B).	18 August 2024
Mandatory minimum performance values	LMT batteries must meet minimum values for Annex IV Part A parameters set by delegated act.	18 August 2028 (or 18 months after entry into force of the delegated act, whichever is later).
Commission obligation	The Commission must adopt a delegated act by 18 February 2027 establishing the minimum values for the electrochemical performance and durability parameters that LMT batteries must attain.	By 18 February 2027

1.4 Substance Restrictions (Article 6 / Annex I)

Batteries must comply with substance restrictions in Annex I (in addition to REACH Annex XVII and ELV Directive restrictions), i.e., they must not contain restricted substances unless the restriction's conditions are met. This applies immediately upon market placement.

2. Safety Standards

2.1 General "No Risk" Rule

For aspects not covered by Chapters II and III, batteries placed on the market or put into service must not present a risk to human health, safety of persons, property, or the environment.

2.2 Conformity Assessment Methods

For verifying compliance [including with Article 10 performance/durability, Article 13 labelling/markings, and Article 14 state of health/lifetime], tests, measurements, and calculations must use reliable, accurate, reproducible, state-of-the-art methods. Conformity with published harmonized standards (or common specifications) gives a presumption of conformity to the extent covered.

2.3 Replaceability and Removability (Article 11)

Sub-requirement	Detail
Removability by independent professional	Any person placing on the market products incorporating LMT batteries must ensure LMT batteries (and individual cells in the battery pack) are readily removable and replaceable by an independent professional at any time during the product's lifetime. "Readily replaceable" means substitutable by a compatible battery without affecting functioning, performance, or safety.
Availability of spare parts	Those placing on the market products incorporating LMT batteries must ensure LMT batteries are available as spare parts for at least five years after placing the last unit of the equipment model on the market, at a reasonable and non-discriminatory price for independent professionals and end-users.
No software impediment	Software must not be used to impede replacement of an LMT battery (or key components) with another compatible battery (or key components).

2.4 State of Health / Battery Management System (Article 14)

Sub-requirement	Detail	Applicability Date
BMS data availability	Up-to-date data for Annex VII parameters determining state of health and expected lifetime must be contained in the battery management system (BMS) of LMT batteries.	18 August 2024
Read-only BMS access	Read-only access to Annex VII parameter data via the BMS must be provided on a non-discriminatory basis to the legal purchaser (including independent operators/waste management operators or their third parties), to enable energy storage access, residual value/lifetime evaluation, and to facilitate preparation for re-use/repurposing/remanufacturing.	18 August 2024

3. Labelling, Marking, and Information Obligations (Chapter III — Article 13)

Obligation	Scope	Applicability Date
General information label (Annex VI Part A)	Batteries must bear a label with general information set out in Annex VI Part A.	18 August 2026 (or 18 months after entry into force of the implementing act, whichever is later).
Capacity label (LMT-specific)	LMT batteries must bear a capacity label.	18 August 2026 (or 18 months after entry into force of the implementing act, whichever is later).
Separate collection symbol	All batteries must be marked with the separate-collection symbol (with specified sizing rules, and packaging substitution where the battery is too small).	18 August 2025

Heavy metal marking (Cd / Pb)	All batteries containing more than 0.002% cadmium or more than 0.004% lead must be marked with Cd or Pb beneath the separate-collection symbol.	18 August 2025
Carbon footprint performance class label	See Section 1.1 above.	18 February 2030
QR code	All batteries must be marked with a QR code; for LMT batteries the QR code must provide access to the battery passport under Article 77, and the QR-linked information must be complete, up-to-date and accurate.	18 February 2027
Battery passport (digital record)	Each LMT battery placed on the market or put into service must have an electronic record ("battery passport") containing model-level and individual-battery information as set out in Annex XIII. The economic operator placing the battery on the market must ensure the passport information is accurate, complete, and up to date, accessible through the QR code.	18 February 2027
Battery passport content	Annex XIII specifies publicly accessible model-level battery passport information including: Annex VI Part A label information, material composition/chemistry/hazardous substances/critical raw materials, carbon footprint info, responsible sourcing info (via the due diligence report), recycled content info, performance/lifetime parameters, the EU declaration of conformity, and waste-prevention/management information.	18 February 2027

4. Supply Chain Due Diligence (Chapter VII — Articles 48–52)

Threshold and timing: Chapter VII due diligence does not apply to economic operators with net turnover under EUR 40 million [preceding the last financial year] and not part of a group exceeding EUR 40 million on a consolidated basis. Assuming the company **meets** this threshold, the following apply:

From **18 August 2027**, in-scope economic operators that place batteries on the market or put them into service must fulfill the due diligence obligations in Articles 48(2)–(3) and Articles 49, 50, and 52, and must set up and implement battery due diligence policies.

4.1 Management System (Article 49)

The operator must:

- Adopt and communicate a company battery due diligence policy (covering Annex X raw materials and risk categories);
- Align it with internationally recognized due diligence instruments;
- Assign top-management responsibility and keep records for at least 10 years;
- Establish supply-chain controls/traceability identifying upstream actors;
- Embed the policy/risk measures into supplier contracts;
- Establish a grievance/early-warning/remediation mechanism (based on UNGPs).

The traceability and control system must be supported by documentation including: raw material description; supplier identity/address; country of origin and transaction chain; quantities in the battery; third-party verification reports for suppliers; and additional information for conflict-affected/high-risk areas if supplier reports are not available.

4.2 Risk Management (Article 50)

The operator must: identify and assess supply-chain risks (Annex X risk categories); implement a strategy to prevent/mitigate/address adverse impacts; report to top management; adopt risk management measures consistent with recognized instruments; implement and monitor a risk management plan (including possible suspension/disengagement after failed mitigation); and conduct additional assessments as needed.

4.3 Third-Party Verification (Article 51)

Notified-body verification must cover all activities, processes, and systems used to meet Articles 49, 50, and 52; determine conformity; and may include checks and stakeholder information gathering. The notified body identifies improvement areas and follows OECD audit principles, issues a verification report and (if compliant) an approval decision.

Economic operators must retain documentation evidencing compliance (verification report/approval decision and audits) for **10 years** after the last battery manufactured under the relevant policy is placed on the market.

4.4 Disclosure Obligations (Article 52)

On request, the operator must provide market surveillance/national authorities the verification report and approval decision, audit reports, and evidence of compliance with a Commission-recognized due diligence scheme.

Annually, the operator must publicly report (including online) on:

- Its due diligence policy with steps taken to comply (Articles 49–50);
- Significant adverse impacts and how they were addressed;
- A summary of third-party verifications (including the notified body's name), with due regard to confidentiality;
- If it can demonstrate raw materials are derived from recycled sources, conclusions must be publicly disclosed in reasonable detail.

5. Extended Producer Responsibility (Chapter VIII)

5.1 Definition of "Producer" and Core EPR Duty

"Producer" includes manufacturers, importers, and distributors who first supply batteries in a Member State, including via distance contracts directly to end-users in a Member State.

Producers have extended producer responsibility for batteries they make available on the market for the first time in a Member State.

Producer financial contributions must cover costs of: separate collection/transport/treatment (net of certain revenues); compositional surveys (Article 69(5)); end-user information (Article 74); and data gathering/reporting to competent authorities (Article 75).

5.2 Registration

Producers must **register** in each Member State where they first make batteries available; they may only make batteries available in that Member State if they (or their authorized EPR representative) are registered there.

5.3 Producer Responsibility Organization (PRO)

Producers may appoint an authorized PRO to fulfill EPR obligations on their behalf; PRO fees must be modulated at least by battery category and chemistry (and may take into account rechargeability, recycled content, preparation for re-use/repurposing/remanufacturing, and carbon footprint).

For individual compliance, producers (and for collective compliance, PROs) must apply for **authorization** from the competent authority, including evidence that collection-system requirements for LMT batteries are complied with and arrangements are in place to attain/maintain collection targets.

6. Collection, Treatment, and Waste Management Minimums

6.1 Collection System Obligations (Article 60)

Producers of LMT batteries (or their PRO) must ensure all waste LMT batteries are collected separately in each Member State where they first make them available, by:

- Establishing a take-back/collection system;
- Offering free-of-charge collection to specified entities/collection points;
- Providing free suitable containers;
- Collecting with appropriate frequency;
- Collecting LMT batteries removed from WEEE;
- Ensuring subsequent treatment in a permitted facility under Article 70.

The take-back/collection system must consist of collection points set up in cooperation with specified actors (including distributors, public authorities, voluntary points, WEEE and ELV facilities) and must cover the whole territory (not only profitable areas), considering population density, expected volumes, and accessibility/proximity for end-users.

End-users must be able to discard waste LMT batteries free of charge without being obliged to buy a new battery.

6.2 Minimum Collection Targets

Minimum collection rate targets for waste LMT batteries:

Deadline	Minimum Collection Rate
31 December 2028	51%
31 December 2031	61%

[Collection rate calculated per Annex XI.]

6.3 Treatment and Recycling Minimums (Article 70 / Annex XII)

Collected waste batteries must not be disposed of or subject to energy recovery.

Permitted facilities must meet at least Annex XII Part A treatment requirements (and best available techniques); where batteries are collected in a waste LMT, they must be removed in line with applicable ELV/WEEE rules.

Permitted facilities must accept waste batteries and ensure preparation for re-use/repurposing or recycling; recyclers must achieve recycling-efficiency and material-recovery targets in Annex XII Parts B and C.

Milestone	Recycling Efficiency Target
31 December 2025	65% by average weight for lithium-based batteries
31 December 2030	70% for lithium-based batteries

Milestone	Material Recovery Targets
31 December 2027	90% cobalt, copper, lead, nickel; 50% lithium
31 December 2031	95% cobalt, copper, lead, nickel; 80% lithium

7. Reporting Obligations

7.1 Annual Reporting to Competent Authorities (Article 75)

Each year, producers of LMT batteries (or their PRO) must report to the competent authority at least:

- Amount of LMT batteries first made available in the Member State (net of intra-year exports before end-user sale);
- Waste LMT batteries collected;
- Collection rate;
- Delivered to permitted facilities for treatment;
- Exported for treatment/preparation for re-use/preparation for repurposing;
- Delivered to permitted facilities for preparation for re-use/repurposing.

Producer reporting must include batteries incorporated into vehicles/appliances and waste batteries removed from them.

Reporting must be submitted within **six months** after the end of the reporting year, via electronic systems and formats specified by competent authorities.

7.2 Annual Public Due Diligence Report (Article 52)

In-scope economic operators must annually review and publicly report on their battery due diligence policy, including steps taken, significant adverse impacts and how addressed, and a summary of third-party verification (including the notified body's name).

7.3 Market Surveillance / Documentary Reporting

Manufacturers must retain technical documentation (Annex VIII) and the EU declaration of conformity for **10 years** from the date the battery is placed on the market, and must make these available to authorities on request.

8. Green Public Procurement Relevance

Contracting authorities and entities procuring batteries (or products containing batteries) under the EU public procurement directives must take account of life-cycle environmental impacts. Procurement procedures for batteries/products within the scope of Articles 7–10 must reference the first delegated act establishing award criteria (once applicable) in technical specifications and award criteria, to procure batteries/products with significantly lower life-cycle environmental impacts.

The Commission is to adopt delegated acts establishing award criteria for procurement procedures based on sustainability requirements in Articles 7–10, 12 months after adoption of the latest of the delegated acts under Articles 7(2), 8(1), 9(2), and 10(5).

Practical implication for manufacturers/importers: Demonstrating strong carbon footprint performance class ratings and recycled content shares ahead of the relevant dates will position LMT batteries competitively for public tenders once the award criteria delegated act is in force.

9. Core Manufacturer/Importer Obligations — Summary Checklist

Manufacturers must:

- Ensure batteries comply with Articles 6–10 and 12/14;
- Provide instructions and safety information;
- Ensure marking/labelling under Article 13;
- Draw up technical documentation (Annex VIII);
- Perform conformity assessment (Article 17);
- Draw up EU declaration of conformity (Article 18);
- Affix CE marking (Articles 19–20);
- Retain technical documentation and EU DoC for **10 years**.

Importers must only place compliant batteries on the market and must verify, before placing on the market, that:

- The manufacturer performed conformity assessment;
- The battery bears CE marking and is labelled/marked per Article 13;
- Required documentation, instructions, and safety information are provided;
- Manufacturer identification and traceability markings are in place.

Consolidated Timeline for LMT Battery Compliance

Date	Obligation
18 August 2024	Performance/durability parameters disclosure (Art. 10); BMS state-of-health data (Art. 14)
18 August 2025	Separate collection symbol marking (Art. 13)
18 August 2026	General information label and capacity label (Art. 13)
18 February 2027	QR code marking; Battery passport (Art. 13 / Art. 77)
18 August 2027	Supply chain due diligence obligations (Chapter VII)
18 August 2028	Carbon footprint declaration (Art. 7); Minimum performance values (Art. 10)
31 December 2028	51% waste LMT battery collection target
18 February 2030	Carbon footprint performance class label (Art. 7)
31 December 2030	70% recycling efficiency target (lithium-based)
31 December 2031	61% waste LMT battery collection target; 95%/80% material recovery targets
18 August 2031	Maximum carbon footprint threshold (Art. 7)
18 August 2033	Recycled content documentation (Art. 8)
18 August 2036	Mandatory minimum recycled content shares (Art. 8)