

DRAFT BATTERY REGULATION 2023 IN TEN POINTS (2020/0353)

The new European Battery Regulation affects the European availability of raw materials, the (economic) circularity, and the sustainability of the entire battery value chain.



battery types



product standardisation
& collection



recycling & reuse

INTRODUCTION: THE MAIN POINTS OF THE EUROPEAN BATTERY REGULATION (summary)

According to the press release of the European Commission, the new Extended Producer Responsibility (EPR) regulatory framework shall come into force in mid-2025.

The main focus of **the new European Battery Regulation** is, in the wider context of the European Green Deal and the EU Circular Economy Plan:

1. to harmonise **European product standards for all types of batteries**,
2. to set up a well-functioning **internal European market for secondary raw materials for batteries**
3. to decrease the **negative environmental effects in the production, use and end-of-life phase of all batteries**.

Discarded or waste batteries may therefore no longer be landfilled or incinerated and must be processed with limited emissions. Batteries are used in a global market, they are produced everywhere, and their raw materials come from all regions of the world. The EU is therefore also working on drawing up a European Critical Raw Materials Act.

The new Battery Regulation shall therefore also have an influence on the product regulations, transport regulations, environmental or environmental law, and regulations concerning waste, recycling and reuse/refurbishment.

In terms of content, the Battery Regulation relates to, among other things:

- **definitions of battery categories**
- The **“reusing” of batteries** in all aspects,
- the **collection and recycling**,
- the rules for a **well-functioning Extended Producer Responsibility (EPR)** for discarded battery management bodies such as Bebat vzw,
- **reducing the carbon footprint** of batteries,
- **minimum performance and durability requirements** (including lifespan),
- **recover a percentage of the recycled material, the removability and replaceability of batteries from devices/apparatus**,
- **safety requirements**,
- **provision of information to the battery user regarding environmental and safety aspects**,
- **socially responsible and sustainable procurement of batteries by government agencies**,
- **due diligence in the battery value chain**, especially in the extraction of raw materials.
- a **CE marking**

REGULATION IMPLEMENTATION: Article 79 of the Regulation explicitly states that the Regulation as a whole applies from **6 months after entry into force** (20 days after publication): there is the conformity assessment (Chapter IV- see below), and **Chapter VI(A), applicable from 24 months** after the entry into force of the Regulation. **Chapter VIII** (waste management) applies **from 24 months after entry into force of the Regulation**. The current regulation for batteries will not be withdrawn until 24 months after its publication, which therefore makes it possible to continue to place batteries on the market under that regulation.

1. NEW BATTERY CATEGORY/CATEGORIES IN THE BATTERY REGULATION

In light of the current evolution and innovation in the market, **new battery categories** have been included in the Battery Regulation. Due to the predicted growth of the market of “emobility” in combination with the current characteristics of the batteries used to power electric vehicles, the European Commission has decided to take this development into account and create a new category of “traction batteries” (**NL. “EV batteries”**) alongside the current battery categories (portable, industrial and automotive batteries) as part of the existing battery directive. According to the definition in Art. 3 nr. 14 of the Regulation, a “battery for an electric vehicle” (**EV battery**) is a battery specifically designed to power hybrid and electric road transport vehicles. Therefore, these batteries would no longer be classified as industrial batteries as they are today under the Battery directive. In addition, batteries seen mainly in the electric two-wheeler sector (e-bikes, e-mopeds, e-scooters, etc.) (the so-called “**Light Means of Transport (LMT)” or Light Vehicles (LV)**) will be classified under a new and completely separate battery category, again to take into account the significant market share and predicted growth in this market.

THE REGULATION THEREFORE HAS 5 CATEGORIES OF BATTERIES (CHAPTER I)

- **“SLI battery” or Automotive battery:** any battery used solely for providing power for the starting, lighting or ignition of a motor vehicle and that can also be used for auxiliary or back-up purposes in vehicles or other means of transport or machinery (called in the Regulation **SLI –Start Light Ignition batteries**); (usually lead batteries)
- **“Electric Vehicle battery” (EV battery):** A battery specifically designed to power Category L hybrid and electric road vehicles with a weight exceeding 25 kg, or of hybrid/electric vehicles from Category M, N or O. Not included: batteries from machines and boats, which are classified as industrial batteries, or batteries for light vehicles weighing less than or equal to 25 kg.
- **“Portable battery”:** any battery that:
 - is sealed,
 - weighs less than or equal to 5 kg,
 - is not specifically designed for industrial purposes, and
 - is neither an electric vehicle battery or a light vehicle battery or an SLI battery;
- **“Industrial battery”** means a battery specifically designed for industrial use and all other batteries with a weight above 5 kg that is not a light vehicle battery, an electric vehicle battery or an SLI battery; Within this category **“Batteries for stationary Energy Storage Systems” (ESS)** are defined as follows: an industrial battery with internal storage specially designed to store and supply electrical energy from the power grid, or to store and supply electrical energy to the end user, wherever this battery is used or by whom it is used.
- **“Light vehicle batteries (LMT)”:** any battery that is sealed and has a weight of less than or equal to 25 kg, designed to provide electrical power for the traction of wheeled vehicles that can be propelled by the electric motor alone or by a combination of motor power and human power, including approved Category L vehicles within the meaning of Regulation (EU) nr. 168/2013, and which is not a battery of an electric vehicle.

2. SUSTAINABILITY AND SAFETY REQUIREMENTS (CHAPTER II)

The durability and safety requirements in **Chapter II** of the Battery Regulation form the regulatory heart of the new Regulation and introduce, in addition to the raw material restrictions already described in the current Battery Directive, **completely new regulatory requirements** for the market product, “battery”. This concerns in particular:

- **Carbon footprint** over the entire life cycle of electric vehicle batteries (> 2 kWh), batteries for light vehicles, industrial batteries (> 2 kWh) and energy storage batteries (> 2 kWh) (ESS) i.e. from the extraction of raw materials to the production of the actual battery components, and the transport to the end user to the collection, recycling and disposal of used batteries. 18 months after entry into force of Regulation (Article 7):
 - **Information requirement** in the form of a carbon footprint statement (after 18 months after entry into force for EV batteries, after 30 months for industrial batteries (> 2 kWh), after 60 months for batteries for light vehicles and after 84 months for ESS batteries (> 2 kWh).
 - **Classification into carbon footprint performance classes** (after 36 months for EV batteries, after 48 months for industrial batteries (> 2 kWh), after 78 months for batteries for light vehicles and after 102 months for ESS batteries (> 2 kWh).
 - **Maximum threshold value** for life cycle carbon footprint (after 54 months for EV batteries, after 66 months for industrial batteries (> 2 kWh), after 96 months for batteries for light vehicles and after 120 months for ESS batteries (> 2 kWh)).

- **Recycled content** in new industrial batteries (after 60 months), in new EV batteries (after 60 months), in new batteries for light vehicles (after 120 months) and in new SLI batteries (after 60 months) in terms of **cobalt, lead, lithium and nickel**. During the first phase, only the statement (**documentation**) of the actual recycled content is required; in a further two subsequent stages, progressively higher minimum recycled content will be required for new batteries (Article 8). This obligation also applies to “importers”; from now on they will no longer be allowed to place batteries on the European market that do not comply with European rules. The EU value chain currently sources most of its batteries from the Far East. Producers from outside the EU shall therefore have to comply with these European sustainability targets for batteries, which shall certainly require good contractual agreements in the future for all those placing batteries on the market in European countries. In the context of this recycled content, industrial batteries must be subject to the following staged requirements (the Parliament even proposes to extend these requirements to certain portable batteries):

- **From 60 months after entry into force for industrial batteries (> 2 kWh), from 60 months for EV batteries and SLI batteries, from 120 months for batteries for light vehicles**, batteries must be accompanied by **documentation** stating how much cobalt, lead, lithium or nickel each contains (if any) from recycled waste.
- **From 96 months after entry into force**, industrial batteries > 2 kWh, EV batteries and SLI automotive batteries must contain a minimum proportion of recycled materials, namely 16% cobalt, 85% lead, 6% lithium and 6% nickel.
- **From 156 months after entry into force** these types of batteries will be required to have an increased amount of recycled content, and the minimum will increase to 26% cobalt, 12% lithium and 15% nickel (lead remains at 85%).

- PERFORMANCE AND DURABILITY REQUIREMENTS.

PORTABLE BATTERIES

- **From 60 months after entry into force:** portable batteries (excluding button cells) for general use (4.5 Volts (3R12), D, C, AA, AAA, AAAA, A23, 9 Volts (PP3)) may only be placed on the market if they meet the electrochemical performance and durability parameters that have been set by the Commission.
- **Specific requirements shall be determined for each category via a delegated act**, which shall be adopted by the Commission within 48 months of entry into force for portable batteries.
- **31 December 2030:** the Commission shall carry out a study to assess the feasibility of any measures to phase out the use of general purpose non-rechargeable portable batteries, and shall submit a report to the European Parliament and the Council with proposals of appropriate measures, including any legislative proposals.

RECHARGEABLE INDUSTRIAL, BATTERIES FOR LIGHT VEHICLES (LMT) AND EV BATTERIES

- **Information requirement regarding the performance parameters** (in Appendix 4 – Part A of the Battery Regulation) regarding the electrochemical processes and robustness of rechargeable industrial batteries (after 30 months), batteries for light vehicles (after 42 months)
- 12 months after entry into force, rechargeable industrial batteries for internal Energy Storage Systems (ESS) must comply with minimum safety parameters that shall be determined by the Commission.
- 12 months after entry into force, these types of batteries must be accompanied by documentation containing the electrochemical performance and durability parameters values.
- **Removability and replaceability of portable batteries and batteries for Light Means of Transport (LMT);** in this regard, it should be noted that this is essentially a liability for the producer of electrical and electronic equipment and light vehicles (usually two-wheelers such as e-bikes). Products with portable batteries and batteries for light vehicles must be designed so the batteries can be removed and replaced easily by the end user at any time during the life of the product, and they must be accompanied by instructions and **safety information on the use, disposal and replacement** of the batteries. This information must be available permanently online.

There are very few limited exceptions to these regulations:

- there is a partial exemption to allow a product to be designed so that battery replacement is performed by an independent professional (and not by the end user) for products designed to operate in an environment subject to splashes, streams of water or immersion in water, and those that are intended to be washable and rinseable (when necessary to ensure safety), as well as for a limited category of medical devices and medical devices.
- there is a full exception when continuity of power supply and a permanent connection between the product and the battery is required to ensure safety, or for products that, for data integrity reasons, collect and deliver data as their main function.

42 months after entry into force of the Battery Regulation, portable batteries and batteries for light vehicles must be designed in such a way that consumers can remove and replace them easily without assistance.

• **Safety of stationary Energy Storage Systems.** (or ESS)

Extensive (detailed) amendments have been proposed in this area. In particular, this concerns the applicability of the individual obligations for the different battery types and the respective starting dates of the validity of the individual obligations or the transitional periods to be specified.

The safety requirements in the proposed Battery Regulation, as mentioned in Article 4 and Article 12. Article 4, a general purpose requirement, covers all types of batteries.

Article 12 only concerns stationary **battery systems (ESS)** and refers to **Appendix V** with specific safety parameters (such as prevention of short circuit, heating, etc.). A producer can claim the battery is safe after it has carried out all the tests described in Appendix V of the proposed Battery Regulation (10 in total). The implementation of these tests does not have to take account of any specific safety aspects of the battery and the context in which it is located. **Appendix V may be amended by the European Commission in the light of technical and scientific progress** (e.g. new or updated standards). This means the following:

- The safety requirements applicable to all types of batteries (Article 4) will not be further elaborated in more detail via a more detailed requirement or a reference to an assessment framework, approach or standard. This means (as is the case for the current Battery Directive) that the general approach for **product safety from the Product Safety Directive** will be used.
- **The specific safety requirements in Article 12 only apply to stationary battery systems. (ESS)**
- No distinction is made between the battery chemistry and the various hazards that may be associated with it.

The safety requirements are guaranteed by means of a self-declaration, while the sustainability requirements (CO2 footprint, recycling and raw materials/risk areas) require verification by a **Notified Body (NB)**, after which the **CE marking** can be assigned to the battery.

Sustainability and safety requirements in the proposed Battery Regulation

		Article 17 Conformity Assessment	
		Appendix VIII, Part A, Self-declaration	Appendix VIII, Part B Verification by NB
Artikel 6	Substance Restrictions	X	
Artikel 7	Carbon footprint of batteries for electric vehicles, Light Means of Transport (LMT) and rechargeable industrial batteries		X
Artikel 8	Recycled content in industrial batteries, Batteries for electric vehicles and SLI batteries		X
Artikel 9	Performance and robustness requirements for portable batteries for general use	X	
Artikel 10	Performance and robustness requirements for LMT batteries, rechargeable industrial batteries and batteries for electric vehicles	X	
Artikel 11	Removability and replaceability of portable batteries and batteries for light vehicles (LMT)	X	
Artikel 12	Safety of stationary battery systems for energy storage (see Appendix V: Safety Parameters)	X	
Artikel 13	Labelling and marking of batteries	X	

IMPORTANT FOR PRODUCERS OF PRODUCTS WITH A BATTERY INSIDE

- A producer of a product in which the battery is incorporated understands the context of use better than the battery manufacturers who supply the battery for the product/device/apparatus/vehicle or work equipment/tool. However, the current Battery Directive and Battery Regulation do not impose any specific requirements on the producer of the battery to provide safety information to the next party in the chain who incorporates the battery into their end product (which in turn falls under its own legislation).

This means producers of a product in which the battery is incorporated therefore have to set the safety requirements for the battery based on the use of the product.

- The Welfare at Work Codex is also applicable to professional use of tools with a battery for additional protection. This requires the employer to draw up an inventory of the use of the work equipment and to check the supplier's information against how the work equipment is actually used by the employees. The employer then uses this to identify any possible risks posed by the work equipment, and subsequently any measures required to use the work equipment safely based on the information provided by the supplier. (Risk Assessment). The Battery Regulation does not contain any specific requirements that oblige the producer to pass the correct safety information along the chain to the professional end user so the professional end user can carry out the risk assessment.

3. LABELLING AND INFORMATION REQUIREMENTS FOR BATTERIES (CHAPTER III)

The provisions of **Chapter III** concerning the **labelling and information requirements** are intended to extend the existing labelling requirements by numerous elements. The relevant **Appendix VI** (*) in the Regulation for example, requires the hazardous substances in the battery (defined in Art. 3 No. 52 via a reference to certain hazard classes of Regulation (EC) nr. 1272/2008), **the date of manufacture, and future placing on the market) to be reported on the battery.**

(*)(**Appendix VI A**) General battery information: Battery label information: Place of manufacture (geographical location of a battery manufacturing facility); production date (month and year); Weight; Performance values; Chemistry; Hazardous substances in the battery other than mercury, cadmium or lead; extinguishing agent in the event of a fire

In addition, there is a new requirement for **mandatory product labelling** – in the future, every battery must be provided with a **QR code (Appendix VI C)**, and this QR code must provide access to all the labelling information and additional information (e.g. identification by serial number) and reports that must be provided or prepared in the context of complying with other obligations under the Battery Regulation. Under the current set-up, the QR code labelling **shall not remove the need for physical labelling elements on the battery** (or, in exceptional cases, on the packaging and/or accompanying documentation), even though the QR code is linked to all the required labelling elements. **This means double labelling/markings.** In this context, the question arises whether 100% duplication of the labelling elements listed in Appendix VI Parts A and B on the battery and through the **QR code** really offers added value, or whether certain elements can also be covered only via the QR code in favour of clear physical labelling, or despite this, whether the QR code can be used as an emergency solution if it is not possible to label the battery with all the mandatory elements. (=Article 7, 8 and 10)

As required under the current battery directive, batteries must be marked with the **crossed garbage can symbol (Appendix VI(B))**, and batteries containing cadmium and lead levels above a set parameter must be marked with the respective chemical symbol for the metal involved.



In addition to the labelling requirement, **for rechargeable industrial batteries, EV batteries, and batteries for light vehicles (LMT), a Battery Management System (BMS)** will be made mandatory so that **data** about the **parameters that can determine the ageing state of the battery and the expected life** will be available, and this data must always be accessible to the battery purchaser. (the obligation to provide information in Article 73 of the Battery Regulation rests on the original producer all the way to the “refurbisher”)

This is intended to support the second-hand market for used industrial batteries, EV batteries and batteries for light vehicles. This obligation seems somewhat in contrast to the obligation to use recycled raw materials from used batteries. This means all other batteries, such as electric bicycles, scooters, and small batteries used in other means of transport, can be refurbished (reused) by third parties under less stringent safety requirements.

In addition, by 31 December 2027, the Commission will also assess the feasibility and potential benefits of setting up “deposit systems” for batteries, especially general purpose portable batteries. To achieve this, the Commission will report to the European Parliament and the Council and consider taking appropriate action, including the adoption of legislative proposals.

4. ASSESSMENT OF CONFORMITY UNDER THE BATTERY REGULATION & CE MARKING (CHAPTER IV)

In order to strengthen confidence in the battery market, to strengthen the obligation of producers to comply with the requirements of the Battery Regulation, and to facilitate enforcement by market surveillance authorities, **Chapter IV** contains a draft of the **obligation to assess the conformity of batteries**. In conjunction with the specifications in Appendix VIII, Articles 15 and 17 provide **two types of conformity assessment procedures** for the assessment of conformity under the Battery Regulation, which are dependant on the applicable obligations and the batteries involved – either **a pure internal production check (self-certification)**, or **an internal production check with supervised verification by a “notified body” (NB notified body)**. (see overview in box above in Point 1) **Regardless of the specific procedure, an EU declaration of conformity and CE marking shall become mandatory for batteries in the future**. In this regard, the Battery Regulation shall eventually be aligned with the other legislation that prescribes the use of a **CE marking**.

The CE marking shall be visibly, legibly and indelibly affixed to the battery. In cases where this is not possible or justified due to the nature of the battery, it shall be marked on the packaging and documentation accompanying the battery.

5. DUTY OF CARE OBLIGATIONS IN THE VALUE CHAIN (Chapter VII)

An important aspect of the Battery Regulation is that **Art. 47 & 48 in conjunction with Appendix X** of the Regulation provides for **extensive due diligence obligations** in the value chain, which must be satisfied by **all market participants (except SMEs with a turnover below €40 million) that market certain batteries** (i.e. making them available on the EU market for the first time). On the one hand, the **due diligence obligations** in the value chain relate to the relevant supply chains for **cobalt, natural graphite, lithium, nickel and certain chemical compounds from these raw materials**, and on the other hand on aspects such as **human rights, environmental concerns, human health and occupational health and safety**. The new requirements contain significant deviations at a detailed level, despite being aligned with the existing Regulation (EU) 2017/821 to establish the due diligence supply chain obligations for Union importers of tin, tantalum, tungsten, ores and gold from conflict-affected and high-risk areas (the so-called “Conflict Minerals” Regulation) and the existing proposal for a due diligence and accountability directive to be applicable to companies.

There is a risk that this shall lead to a huge increase in communication costs in the supply chain. The Battery Regulation states that compliance with these due diligence obligations must be checked by a **Notified Body** to ensure compliance with the relevant requirements.

Article 38 et seq. (Chapter VI) lists all the necessary obligations that must be met by producers/importers/distributors and re-use operators that want to place a battery on the market or put one into service. (e.g. technical documentation from Appendix VIII and the CE declaration to be kept available for the national authorities for 10 years, model identification or serial number, values of parameters, information to the market surveillance authority, etc.)

6. BATTERY PASSPORT

Bebat also highlights the obligation in **Art. 78 of the Battery Regulation** to **link a battery passport to industrial batteries (> 2 kWh), EV batteries and batteries for light vehicles (LMT) 42 months after the entry into force of the Regulation**. The passport must be **accessible online** via an identification/access code printed or engraved on the battery. The battery passport must contain detailed information about the name of the battery producer and the composition of the battery, information about the carbon footprint, the expected lifespan, and certain information about the operation of the battery.

7. BATTERY LIFE - WASTE STAGE (Chapter VIII)

Battery producers have extensive producer responsibility. An economic operator-producer who places a battery on the market for the first time in the territory of a Member State by preparing the battery for reuse, or by repurposing or reproducing the battery, shall be considered as the producer of such a battery for the purposes of this Regulation and shall have Extended Producer Responsibility (EPR). (recycling of batteries for light vehicles (LMT), industrial batteries and EV batteries Article 73)

The EU member states are required to draw up a **“register”** to monitor compliance of producers with regulations concerning the management of waste batteries. The register will be managed by “the competent authority” of the EU Member State. **Producers are required to register**, and the registration is granted upon submission of an application.

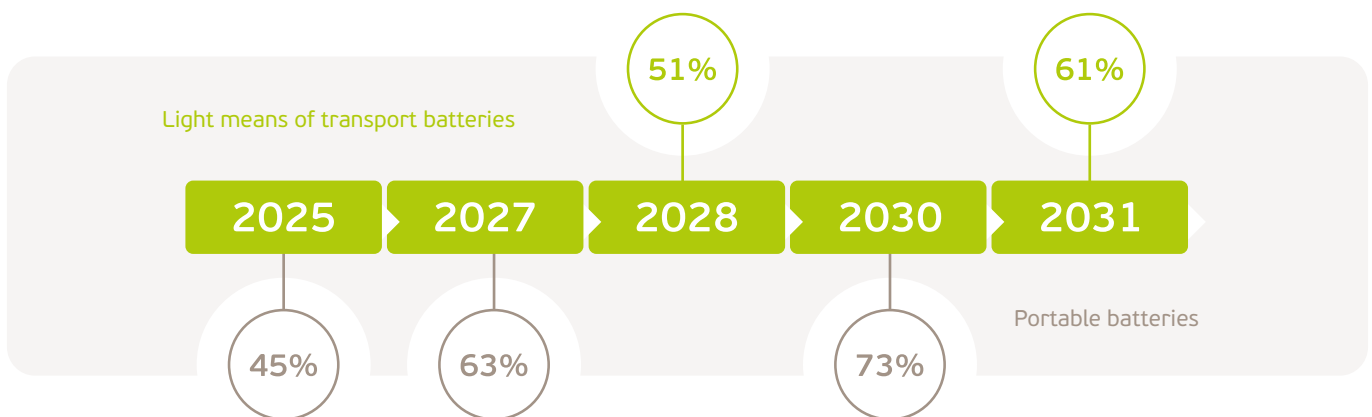
The producer must provide the following information upon registration:

- Location data of producer, as well as telephone number and other contact details.
- Producer identification code, trade register number and European or national tax number.
- In case of authorisation, the details of the authorised party.
- The type of batteries the producer wants to put on the market.
- The brand under which the batteries are to be marketed.
- Information on how the producer fulfils its responsibilities under Article 47.

This registration serves to check compliance with the obligations detailed in **Chapter VIII** of the Regulation. **Each country shall determine how this shall be organised.**

The Battery Regulation also introduces several new measures regarding discarded batteries. These include the following obligations:

- The Regulation establishes the extended responsibility of “producers” (*) for batteries that will be delivered to a market of a Member State for the first time (=Article 56);
- An obligation arises for the producers to ensure and facilitate targets for waste collection (take-back obligation) of various types of batteries (=Articles 57 and 58);
- This goes hand in hand with an obligation for Member States to ensure **45% of waste portable batteries** are collected before 31 December 2023, **63%** before 31 December 2027 and **73%** before 31 December 2030 (=Article 55). (Based on or with reference to the PoM-put on market figures per country averaged over three previous years.) For batteries for light vehicles (**LMT batteries – “light means of transport batteries”**: e-bikes, scooters, etc.) Member States must ensure that **51%** are collected by 2028 and **61%** by 2031. This is based on the calculation methodology of what the Commission calls “available for collection”.
- Articles 74 and 75 state respectively which prevention information and waste management information per battery type must be provided to the end user or consumer by the producer and/or battery management bodies such as Bebat. (organisation of collection network, information about labelling, recycling and importance of reuse.



Extended Producer Responsibility (EPR) is imposed on **the “producer”** (who is not necessarily the “manufacturer”). It actually means the person who places batteries on the market for the first time in a Member State. In order to fulfil their obligations, producers can also organise themselves collectively (**Articles 56 and 57**) in an organisation for producer responsibility (such as Bebat vzw/asbl). This responsibility includes in particular, the obligations to finance and organise the separate collection and treatment of waste batteries, to report to the competent authority, to promote (raise awareness of) the separate collection of batteries, and to provide information about everything related to the end of battery life.

The producers must ensure, individually or through a producer responsibility organisation (such as Bebat vzw/asbl), that **all waste portable batteries** are collected, regardless of their nature, voltage, brand or origin. To this end they shall, free of charge for the end user, set up a **network of collection points in collaboration with other actors involved, including distributors, establishments for the collection of waste electrical equipment and end-of-life vehicles, government agencies (municipalities/intermunicipal companies) and voluntary collection points**. Producers and their collective organisation(s) (e.g. Bebat vzw) are also obliged to make the necessary practical arrangements for the collection and transport of waste batteries from these collection points to ensure the waste portable batteries and batteries for light vehicles (LMT) are subsequently processed and recycled. **Producers of waste portable batteries and batteries for light vehicles (LMT) are obliged to meet the collection targets mentioned above.**

The collection arrangements depend on the **permission or acknowledgement** of the competent authority responsible for verifying that the producers are fulfilling their obligations regarding the **collection of waste portable batteries**, including the achievement of the objectives. **In Belgium, this is done by the environmental administrations of the Regions. (OVAM (VL), Leefmilieu Brussel and DSD (WL)).**

The producers of **automotive batteries (SLI batteries), industrial batteries, batteries for electric vehicles (EV batteries) and now batteries for light vehicles (usually two-wheeled) (LMT batteries)** will also be obliged to organise the collection of all discarded batteries individually or through a producer responsibility organisation (for example Bebat vzw/asbl).

The collection is free of charge for the end user and without obligation to buy a new battery. The producer takes the waste automotive batteries (SLI), industrial batteries, batteries for electric vehicles (EV batteries) and batteries for light vehicles (Light Means of Transport (LMT)) off the end users or from accessible collection points in co-operation with distributors of these types of batteries, treatment and recycling facilities for waste electrical and electronic equipment and for waste vehicles, government authorities, and third parties who carry out waste management on their behalf.

A producer, in the case of the **individual compliance** with the obligations under the Extended Producer Responsibility (EPR), and battery management bodies (such as Bebat vzw) that have been appointed in the event of the **collective fulfilment** of Extended Producer Responsibility (EPR) obligations, provide a guarantee (**Article 58.7**) to cover the costs incurred by the producer in connection with waste management activities or in case of non-compliance with Extended Producer Responsibility (EPR) obligations, including in the case of permanent cessation of its activities or insolvency. **Member States may impose additional requirements on this guarantee.**

The costs covered by the producer for the EPR obligations are shown separately to the end user at the point of sale of a new battery.

At the latest 24 months after entry into force of the Regulation, the Member States shall lay down the rules for **the sanctions applicable to infringements of this Regulation** and take all necessary measures to ensure they are implemented. The sanctions laid down shall be effective, proportionate and dissuasive. Member States shall immediately notify the Commission of those rules and measures and of any subsequent amendment affecting them.

8. REUSE OF BATTERIES & RECYCLING (Chapter VIII)

• REUSE

Article 73 of the Battery Regulation also contains requirements concerning the activities known as “reuse” (preparing for re-use) and “preparing for repurpose” (reuse for another destination) to give a second life to **industrial batteries, batteries for light vehicles and batteries for electric vehicles (EV batteries)**. It contains the rules to facilitate this reuse, including the obligation for the producers of the batteries concerned to inform economic operators involved in the reuse about how to grant access to **the data of the Battery Management System** ^(*) to review the condition (“**State of Health**”) of a battery. **The provisions here also state the requirements for anybody who reuses or performs reproduction activities to ensure battery testing, battery performance testing, packaging and transfer of batteries and their components in accordance with appropriate quality assurance and safety instructions.** The people or entities performing reuse activities shall ensure the reused battery complies with the new Regulation and other relevant regulations, as well as any current and future technical standards that are in force for their specific re-use when they are returned/placed on the market. The safety requirements described in Article 73 of the Battery Regulation regarding reuse (**preparing for reuse and preparing for repurpose**) only applies to industrial batteries, electric vehicle batteries (EV batteries), and batteries for light vehicles (LMT). This sets the same safety requirements for new batteries and re-use and repurpose batteries.

()=definition: “Battery Management System”: an electronic device that regulates or manages the electrical and thermal functions of the battery to ensure battery safety, performance and longevity, and that manages and stores data about the parameters for determining the health status and expected life of batteries as referred to in Appendix VII, and which communicates with the vehicle, light means of transport or device in which the battery is installed, or with a public or private charging infrastructure;*

If, however, it is shown that a battery for reuse or reproduction **was placed on the market before entry into force** of certain requirements related to the carbon footprint, content of recycled material, performance and robustness, and due diligence in the supply chain, **the obligations** under those provisions after reuse or reproduction **are not applicable** on the relevant (reused) battery. In order to document that a battery has ceased to be waste after repurposing or reproduction, the economic operator (new “producer”) carrying out the relevant operation shall, upon request from a competent authority, demonstrate the following:

- 1) proof of the **“self-assessment” (Bebat has developed a model document for this)** and tests of battery condition and product status (according to Article 6 of the EU Waste Framework Directive),
- 2) a guarantee that the battery shall be used (by means of an invoice or sales agreement), and
- 3) that the battery is adequately protected against damage during transport and loading and unloading.

This information is made available on equal terms to end users and third parties acting on their behalf as part of the technical documentation accompanying the reused battery when placed on the market or put into service.

An economic operator placing a battery on the market from preparation for re-use or reproduction-repair, remanufacturing, is considered the producer of said battery for the purposes of this Regulation and has an Extended Producer Responsibility EPR or acceptance obligation.

- RECYCLING (Appendix XII)
Waste portable and industrial batteries must be collected and recycled, and the recycling process must comply with (i) minimum efficiency standards and (ii) **minimum recovery levels of cobalt, copper, lead, lithium and nickel.**

By 31 December 2027, recycling processes must be able to recycle at least 90% cobalt, 90% copper, 90% lead, 50% lithium and 90% nickel. By 31 December 2031, this will be 95% for cobalt, copper, lead and nickel and 80% for lithium.

The minimum levels of recovered resources such as cobalt (16%), lead (85%), lithium (6%) and nickel (6%) from production and consumer waste must be reused in new (industrial, EV and SLI) batteries. These targets shall be gradually increased and other types of batteries shall also have to meet these requirements.

With respect to **recycling efficiency (%) expressed in average weight**, the following percentages are laid down in the Regulation for the following battery chemistries **by 31 December 2025**:

- (a) recycling of **75%** for lead batteries;
- (b) recycling of **65%** for lithium based batteries;
- (ba) recycling of **80%** for nickel-cadmium batteries;
- (c) recycling of **50%** from other waste batteries.

By 31 December 2030

- (a) recycling of **80%** for lead batteries;
- (b) recycling of **70%** lithium based batteries.

When **recycling occurs outside the EU**, waste portable and industrial batteries must be able to meet the recycling targets (as shown above) when exported from the EU, but only if the exporter can confirm that the treatment has taken place under conditions equivalent to the requirements of the Battery Regulation. Parliament has proposed a higher standard requiring the exporter to “provide documentary evidence approved by the competent authority of the destination” demonstrating that the relevant requirements have been met. Parliament is also attempting to ensure compliance with relevant requirements for the protection of the environment and human health in other EU legislation.

9. DELEGATED ACTS

In accordance with Article 89, the Commission is competent to establish delegated acts. This means the European Commission can impose stricter verification requirements that do not have to go through the political legislative process (via the European Parliament and Council). For several provisions in the Battery Regulation, the Commission can adopt delegated acts to give substance and guidance to important aspects of the Battery Regulation. For example, amendments can be made to Appendix VIII by introducing additional verification steps in the conformity assessment modules.

10. TECHNICAL STANDARDS

Standards and norms have been developed for the safe design, production, transportation, use, collection and degree of recyclability of all types of batteries. These standards are established at European and international level.

For electrical and electronic products, the European and international standardisation bodies work together, because these products serve a global market. These are the International Electrotechnical Commission (IEC) and the European Committee for Electrotechnical Standardisation (CENELEC) and European Committee for Standardisation (CEN) and to a lesser extent the International Standards Organisation (ISO). To achieve standardisation for batteries, these bodies have formed the Technical Committee TC 21 and the sub-committee SC21a. These committees develop standards for a wide range of battery systems: from automotive to portable individual batteries.

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