



BATTERIES DIRECTIVE: CURRENT SITUATION AND PERSPECTIVES

The **European Union** regulates **batteries** and their **waste** through [Directive](#) 2006/66/EC, of the European Parliament and of the Council, of 6 September 2006.

The **Directive** intends to contribute to the protection of the quality of the environment, minimizing the negative impact of batteries, accumulators and their respective waste, and harmonizing the requirements regarding the placing of these goods on the market.

To this end, the Directive prohibits the sale of batteries containing hazardous substances, defines measures for **collection** and **recycling**, sets targets for these activities, and establishes provisions on battery **labeling** and removal from equipment.

The Directive also aims to improve the environmental performance of all **operators** involved in the life cycle of batteries and accumulators. Manufacturers of batteries and accumulators and producers of other products that incorporate batteries or accumulators are responsible for **managing** the waste of batteries and accumulators they place on the market.

This Directive is currently transposed into the national legal system by Decree-Law No. 152-D/2017, of December 11, which we explore here.

Meanwhile, the European Commission conducted an assessment on the application of the Directive, having concluded with positive results in terms of the environment, the promotion of recycling and the functioning of the internal market for batteries and recycled materials. However, some limitations were identified, namely regarding technological innovations, such as the batteries of electric vehicles.

As a result, the European Commission presented a [proposal](#) for the Sustainable Batteries Regulation, the news of which we also develop below.

- Decree-Law No. 152-D/2017, of 11 December

Legal regime in force in Portugal, which transposes Directive 2006/66/EC, of the European Parliament and of the Council, of 6 September 2006.

Liability of economic operators

All those involved in the product's life cycle, from its conception, manufacture, distribution, marketing and use to the handling of the respective waste, are **co-responsible for its management**, and must contribute to the functioning of the management systems.

Producers, for example, are obliged to manage their waste through an **individual system** (individually assuming management responsibility) or an **integrated system** (transferring responsibility for waste management to a licensed management entity), subject to authorization or license, respectively, or through a **deposit system**, if applicable.

Batteries and accumulators

Manufacturers are, as a rule, subject to the following **legal obligations**:

- They should progressively contain **fewer hazardous substances**, in particular by replacing heavy metals such as mercury, cadmium and lead;
- They must **facilitate** the removal of waste batteries or accumulators by end-users or by qualified professionals independent of the manufacturer;
- They must be accompanied by **instructions** informing the end user, or independent qualified professionals, about the type of batteries or accumulators incorporated in the equipment and about the safe removal of their waste.

Waste from industrial or automotive batteries and accumulators for private end-users

Producers, through individual or integrated management systems, must ensure the existence of a **network for the selective collection** of their waste and bear the inherent costs of installation and operation, with **private end users** being the ones who forward the waste they hold, without any charges.

Waste from selectively collected batteries and accumulators must be packed in airtight containers, with a composition that does not react with the components of said waste, and stored with the liquid inside and in a vertical position, with closed openings facing upwards.

Labeling

Producers are obliged to **label** batteries and accumulators placed on the European market with the respective **symbol** for marking these goods (crossed-out rubbish bin).

Treatment, recycling and disposal

The **treatment** of this waste must include, at a minimum, the extraction of all fluids and acids, being carried out in installations with suitable impermeable surfaces and cover or in suitable containers.

Recycling processes must reach certain minimum yields.

Disposal by landfilling or incineration of waste from industrial and motor vehicle batteries and accumulators is prohibited.

Manufacturing, treatment and recycling technologies

Producers should promote research and development of **new manufacturing technologies**, as well as the treatment and recycling of their waste, with a view to improving the environmental performance of batteries and accumulators throughout their life cycle.

End of life vehicles (ELVs)

Vehicle **producers** are **responsible** for the ELVs **management** circuit. It is up to the owners or holders of this waste, including distributors and traders, to forward it.

In turn, **ELVs treatment operators** are responsible for adopting the appropriate measures to favor the effective reuse of reusable components and the valorization of non-reusable components, with a preference for recycling.

- **Proposal for Sustainable Batteries Regulation**

As mentioned, Directive 66/CE, of the European Parliament and of the Council, of 6 September 2006, establishes standards for batteries and their waste. However, this Directive is not sufficiently adapted to current circumstances, namely the accelerated expansion of electric motor vehicles and large lithium batteries.

For example, currently, taking into account the composition of these batteries, only 50% of each battery needs to be recycled.

According to the **European Commission**, the new Batteries Regulation should provide, namely:

- a) **New category for electric vehicle batteries:** 5kg limit to differentiate between portable and industrial batteries;
- b) **Collecting portable batteries:** 65% target by 2025;
- c) **New collection reporting system** for car, electric vehicle, and industrial batteries;
- d) **Efficiency of recycling and material recovery:**
 - (i) Lithium-ion battery recycling efficiency: 65% in 2025;
 - (ii) Recovery rate of Co, Ni, Li, Cu materials: 90%, 90%, 35% and 90% in 2025, respectively;
 - (iii) Recycling efficiency of lead acid batteries: 75% in 2025;
 - (iv) Lead materials recovery rate: 90% in 2025;
- e) **Mandatory carbon footprint statement** for industrial batteries and electric vehicles;
- f) **Performance and lifetime** of industrial rechargeable batteries and electric vehicles: Mandatory information and requirements;
- g) **Mandatory declaration of recycled content levels** in automotive, electric, and industrial vehicle batteries by 2025;
- h) **Specifications under extended producer responsibility** for industrial batteries and enforced removal obligation;
- i) **Mandatory due diligence** in supply chains.

All these future legislative and regulatory changes will lead to necessary adjustments in the activity of all economic operators, from the production of batteries to their treatment, recycling, recovery and reuse of their waste ●

Article written in accordance with the legislation in force on 27 July 2021.