

# BATTERIES DIRECTIVE REVIEW

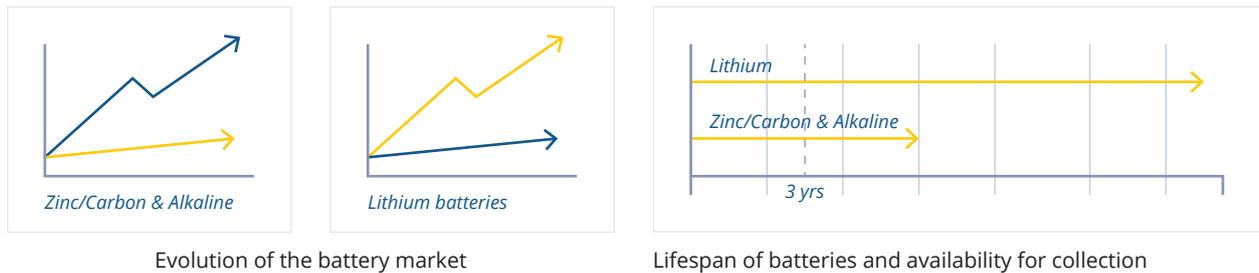
The collection schemes for waste batteries, represented by Eucobat, that are realizing the extended producer responsibility on a daily basis want to highlight the main issues for the review process for the Batteries Directive (2006/666/EU).

## Collection target for waste batteries

“The actual Batteries Directive defines the ‘collection rate’ as a percentage of the quantities of portable batteries put on the market during the last three years.”



## INADEQUACY OF THE CURRENT COLLECTION TARGET



## POSITION EUCOBAT

“A collection target can only be adequate if it is related to the quantities of waste batteries available for collection.”

“End of life batteries” can easily be calculated based upon the available historical data of batteries put on the market and the lifespan per chemistry.

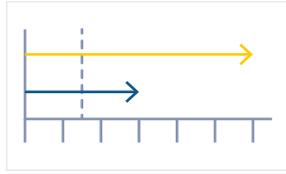
“Batteries available-for-collection” can be rated taking into account the quantities of exported second hand or waste electrical appliances.

$$\begin{matrix} \Sigma & \text{"End of life batteries" = 80\% of batteries put on the market *} & + & \text{"Batteries available for collection" = 80\% of end-of-life batteries *} & = & \text{"Batteries available for collection" = 65\% of batteries put on the market} \end{matrix}$$

\* Eucobat study on battery lifespan, 2017

\* ProSUM Study 2018

## Elements influencing the collection rate



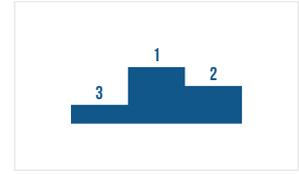
Lifespan of the batteries and evolution of the battery market.



WEEE collection rate.



Removal batteries from WEEE.



Impact of competition



Interpretations of definitions.



General consumer awareness towards waste.



Density of the collection network.



Intensive consumer awareness campaigns.

## The visible environmental fee for batteries

“The Extended Producer Responsibility (EPR) is an environmental policy approach in which a producer’s responsibility for a product is extended to include the post-consumer stage of a product’s life cycle.”

### ADVANTAGES OF THE VISIBLE ENVIRONMENTAL FEE



#### Environment

A visible environmental fee, indicating the collection and recycling costs, ensures that economical and cost related elements are not the sole driving factors in the management of the waste batteries.



#### Consumers

Invoice the net costs related to the collection and recycling of the waste batteries separately, without a profit margin of the different steps in the distribution chain.



#### Authorities

A visible fee on the invoices of the economical actors simplifies the market surveillance activities.



#### Economic actors

The visible fee limits the impact on existing commercial relations between economical actors involved in the distribution of new batteries.

### POSITION EUCOBAT

“Eucobat proposes that Member States be allowed to require a visible compliance fee to be mentioned on invoices from producers to purchasers of batteries.”

The visible compliance fee shall include all costs for collection, sorting, treatment, monitoring, reporting, communication, sensibilisation and management incurred by the producers or by third parties acting on their behalf. The costs mentioned shall not exceed the best estimate of the actual costs incurred. The mandatory visible compliance fee applies only to batteries for which producers actively organize collection.

## Batteries in electrified vehicles

The most dynamic market for batteries is the one of the batteries for so-called electrified vehicles. These electrified vehicles include electric, hybrid and plug-in hybrid vehicles, as well personal cars as buses and trucks.

The characteristics of these batteries require another approach for the end-of-life management than the traditional portable batteries.



- 1 Batteries from electrified vehicles need dismantling before the chemical recycling process, contrary to most portable batteries.
- 2 The transport of these waste batteries is regulated by complicated ADR rules.
- 3 These batteries do not contain valuable materials, which leads to high costs for the recycling process.

Extended Producer Responsibility (EPR) means that each producer is responsible for the financing of the end-of-life management of the products that he has put on the market.

### POSITION EUCOBAT

#### Separately invoicing

Separately invoicing the net collection and recycling costs will benefit the market. Eucobat requests that the visible compliance fee on the invoices should remain possible.

#### Financial guarantee

1. Producers need to ensure the financing of the collection and recycling.
2. Eucobat proposes that this registration is linked to the registration of the vehicle.

Repurposing end-of-life batteries from electrified vehicles could increase the sustainability of these batteries and could provide a potential way to reduce first-cost hurdle of these electrified vehicles. However, it should be made clear:



At what moment the EPR of the first producer comes to an end.



Who bears the EPR for the batteries put on the market for second use, and how the marking of the batteries and the registration of the producer is taken care of.



Who bears the EPR for the modules, stacks and cells that are removed during the repurposing process and that are not being reused.



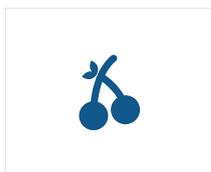
How the financial guarantees of the first and the second producer are regulated.

Eucobat proposes that “end-of-waste” criteria would be defined at European level and should be based upon technical and safety standards for new batteries.

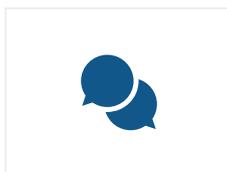
## Fair competition: Member States need to ensure that:



All waste batteries are collected, including the batteries with a negative residual value and those discarded in poorer populated regions.



Cherry picking is avoided, as well related to the battery chemistries as to the collection points.



Communication is a shared responsibility of all compliance organizations and all producers, that are accountable for a contribution.



A collection network with sufficient collection points ensures the consumer convenience.



All compliance organizations and producers make the necessary efforts to correspond the mix of waste batteries collected to the mix of batteries POM by them.

## ♻️ Recycling targets



WEEE growth results in growth of battery volumes.



Recycling results in extraction of reusable raw materials from waste, but also implies recovering small quantities of non-marketable materials.

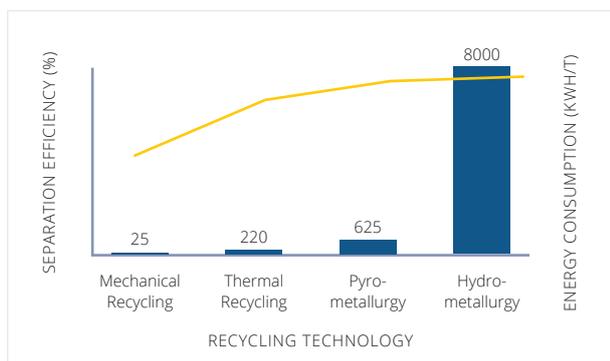


Energy consumption is one of the most significant parameters.



### Consequence

Processes that allow the recovery of a high number of different materials are very energy intensive leading to high recycling cost.



“ There is an urgent need for processes that balance energy consumption and cost on the one hand with an ecologically worthwhile raw material recovery on the other hand.”

■ Energy Consumption  
— Separation Efficiency

## POSITION EUCOBAT

“Eucobat pursues a future-oriented recycling strategy, taking into account the full environmental impact of the recycling process and the economical value of the materials contained in the batteries.”

## ♻️ Other topics

Following other topics require specific attention:

- the “producer” definition, which should be aligned with the WEEE Directive,
- the classification of the batteries in different categories,
- the collection responsibilities for the retailers and the municipalities,
- the communication and sensibilisation, of which the requirements cannot be defined in a harmonized way for all countries,
- the removal of batteries from WEEE,
- the information requirements towards national producers, in order to allow them to report correctly to the compliance organizations and the member states, and
- the marking of battery packs and the cells contained, in order to allow correct sorting and recycling,
- the relation with other EPR regulations, as batteries cannot be considered as components, sub-assemblies, accessories or consumables of (W)EEE or (end-of life) vehicles, and should be governed by the Batteries Directive.

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