

EUROBAT feedback on the draft Delegated Regulation under Article 71(4) of the Batteries Regulation and the draft JRC science for policy report of March 2024 on the implementation of Article 71 of the Batteries Regulation

April 2024

EUROBAT thanks the Commission for the opportunity to share feedback on the draft Annex to the Delegated Regulation supplementing the Batteries Regulation to establish the methodology for the calculation and verification of the rates for recycling efficiency and recovery of materials of waste batteries, and the format of the documentation, as discussed during the expert group meeting of 21 March 2024.

EUROBAT would like to raise two issues on the draft delegated act: one linked with the proposed formula to calculate the rate of recycling efficiency, and how to define what should be accounted as input and output fractions (1), and the other linked with the absence of a definition of “first recycler” in the draft delegated act (2).

1- Calculating the rate for recycling efficiency: restructuring the formula around a positive list of input fractions

The recycling efficiency formula (Chapter II) and the definition of input and output fractions should be based on materials for which there is established recycling technologies.

As highlighted in slide 12 of the European Commission presentation of 21 March, recycling of lithium iron phosphate (LFP) batteries and lithium metal batteries would not manage to achieve the recycling efficiency targets of 65% by 2025 or 70% by 2030, neither at cell, module or pack level, if the formula laid out in the Annex to the draft delegated act were to be taken up without modifications.

The reason the existing processes do not reach the 65% RE is that these technologies make use of commonly available materials for which the benefits (financial and/or societal) of recycling is marginal at best. This is the case for iron (Fe) and phosphorus (P) in LFP batteries as well as sulfur (S) and chlorine (Cl) in primary lithium batteries.

EUROBAT calls on the European Commission to structure the formula for calculating the recycling efficiency around a positive list of materials for the input fraction, that could be expanded in line with technical progress. Otherwise European recycling of lithium-iron-phosphate and primary lithium batteries will be disincentivised, and recycling would be outsourced to third countries.



The positive list should be based around materials for which established recycling technologies are available. For example, EUROBAT agrees that carbon from carbon sources should not be included in such a positive list due to the absence of mature recycling industry for graphite.

If a recycling facility does not meet the target, it operates illegally.

Our legislative framework should not shut the door for battery technologies which move away from expensive resources that are in limited supply (Co, Ni ...) towards cheaper resources which have a much more ubiquitous availability (Fe, S, Cl ...).

2- The missing definition of first recycler:

Calculation rules for recycling efficiency/material recovery targets assign a huge responsibility to the so-called first recycler. Not only is the first recycler responsible for obtaining data and doing the calculation. The first recycler will also be the first operator to be contacted by enforcement authorities if clarification is needed.

The Battery Regulation definition of recycler (Art. 3.58) makes reference to carrying out recycling in a permitted facility. Definition 57 under Article 3 defines a permitted facility as an establishment “that is permitted in accordance with Directive 2008/98/EC (Waste Framework Directive) to carry out the treatment of waste batteries;”.

We are not aware that the Waste Framework defines a permitting scheme for waste battery recycling; it describes permitting principles for waste management installations and is addressed to the Member States. Also national permitting is not to permit “battery recycling”, national permitting refers to IED processes that are used (furnaces, hydrometallurgy,...) to recycle batteries.

Even companies that are “preparing for recycling” (Art. 3.53) or doing “treatment” (Art. 3.54) can be economic operators that handle waste. Depending on the processes used, they hold permits under national legislation transposing of 2008/98.

So we concur with Mr. Pant’s suggestion to insert a definition of “first recycler” in the delegated act, to bring the necessary clarity for the implementation of the methodology.

As a first recommendation in that direction, EUROBAT considers that the definition should not have the effect of assigning first recycler status to dismantlers of battery packs, such as facilities dismantling aluminum casings and cables from the pack of the waste battery – but not carrying any waste processing activities. We don’t see any benefits from that, as dismantlers are not equipped to deal with the responsibilities assigned to the first recycler. Likewise, sites conducting plastic recycling activities should not be considered as first recyclers.



The first recycler would need information from the dismantler, as the dismantling step counts towards the recycling efficiency calculation.

Overall, the definition of first recycler should not disincentivise dismantling of aluminum casings and push recyclers to shred the complete casings together with the cells to increase the recycling efficiency. Dismantled cables and aluminum casings should count towards recycling efficiency calculation. This should not be overlooked by policy-makers when developing a definition of “first recycler”.

3- Accounting for slag

Slag should not be included in the calculation of battery recycling efficiency. The reason is that slag is a by-product of pyrometallurgical process, which has very low utilization value and mostly will be used as inert material for construction or treated as waste for disposal. In addition, the slag contains a very limited amount of metals, such as lithium, and categorizing the slag as an output product will reduce the incentive to recycle, thus hindering the development and innovation of slag recycling technology.

About EUROBAT

EUROBAT is the association for the European manufacturers automotive, industrial and energy storage batteries. EUROBAT has more than 50 members from across the continent comprising more than 90% of the automotive and industrial battery industry in Europe. The members and staff work with all stakeholders, such as battery users, governmental organisations and media, to develop new battery solutions in areas of hybrid and electro-mobility as well as grid flexibility and renewable energy storage.

