

18 October 2024

Feedback to the Commission's Draft Delegated Act on the calculation methodology of rates for recycling efficiency and recovery of materials of waste batteries

FEAD, the European Waste Management Association, representing companies engaged in the collection, treatment, recycling, and disposal of waste batteries, welcomes the Commission's proposed Delegated Act on the methodology for calculating recycling efficiency and material recovery rates for waste batteries. While our industry is strongly committed to advancing the recycling and recovery of valuable materials, FEAD regrets not having been included in the technical consultations for the elaboration of this proposal. As such, we provide several recommendations to adapt the delegated act. In particular, we suggest refining the definition of black mass and first recycler to avoid ambiguity and ensuring that the inclusion of certain materials in recycling efficiency calculations is not left to the discretion of operators but is clearly regulated.

1. Definitions

Definition of Black Mass and Intermediate Fractions

FEAD recognises that the draft Delegated Act correctly classifies black mass as an '*intermediate fraction*'. However, we advise caution regarding the potential premature or incorrect qualification of black mass as an '*output fraction*'. Black mass, being a mixture of cathodic and/or anodic materials, requires further processing before it can be fully recovered. To avoid any misinterpretation, we recommend that the current draft Delegated Act includes safeguards to ensure that black mass is not prematurely classified as an output fraction.

In addition, black mass is defined as '*a mixture of cathodic and anodic materials (...)*', whereas in certain cases, depending on the treatment applied or the origin of the battery waste, the black mass may be a mixture of cathodic materials only. This specific case is therefore not covered by the definition of black mass as proposed in the draft. The definition should be amended accordingly.

Definition of First Recycler

Given the critical role of the first recycler in ensuring transparency and accurate data transmission within the battery recycling system, it is essential that this role is clearly understood and uniformly recognized across the entire value chain. FEAD suggests that the definition of the "first recycler" should be made more explicit, with additional concrete examples of operators within the value chain who would or would not qualify as the first recycler. These clarifications could be provided in future communication on the practical implementation of the methodology for calculating recycling efficiency, helping to avoid ambiguity and ensuring consistency across the sector.

2. Method for calculating the rate of recycling efficiency for waste batteries in relation to a recycling process

Recycling of Oxygen, Carbon, Iron, Phosphorus, Chlorine and Sulfur

The current draft leaves it to the recycler to decide whether or not to include '*oxygen, carbon from carbon sources at cell level, iron from iron sources at cell level, phosphorus, chlorine, and sulphur*' in the calculation of the recycling efficiency. FEAD believes that the inclusion or exclusion of these

materials should not be left to the discretion of operators. Instead, the **delegated act should explicitly define the criteria for whether these elements should be included** in input and output calculations.

Some of these materials—such as iron, phosphorus, chlorine, and sulfur—cannot yet be efficiently recovered through cost-effective processes. Allowing the inclusion of these materials to be optional in recycling efficiency calculations may result in irrelevant and incomparable recycling efficiency rates. This is especially true for LFP batteries, where iron and phosphate represent up to 20% of the total mass and yet cannot be easily recovered. Excluding these elements at the discretion of the first recycler would fail to accurately capture the material cycle of the batteries and the true efficiency of the recycling process.

Additionally, this could negatively impact existing recycling practices by allowing black masses from different battery chemistries to be mixed without significant consequences for recycling efficiency on paper. As a result, recycling targets could be met without developing efficient solutions for elements that are more challenging to recover—such as through hydrometallurgical methods, which require relatively pure black masses. Furthermore, this could disincentivize producers from designing recyclable batteries by effectively excluding components for which no viable recycling solution exists.

We therefore **urge that the methodology include clear criteria on whether these elements** (oxygen, carbon from cell-level carbon sources, iron from cell-level iron sources, phosphorus, chlorine and sulphur) **should be included**, depending on the battery chemistry and in line with the recycling targets set by the Batteries Regulation. Such clarification is crucial to support the traceability of materials in batteries and to ensure that the targets of the Batteries Regulation are designed to improve battery recycling and eco-design of batteries.

3. Method for calculating the rates of recovery of materials (cobalt, copper, lithium, nickel and lead) from the recycling of waste batteries

Quality of the recovered materials

The draft Delegated Act states that the "recovered material shall have a TM content as high as technically feasible while avoiding excessive costs." While FEAD appreciates the Commission's goal of promoting high-quality recycling of target materials, this wording lacks a clear technical basis and provides little practical guidance for operators. To ensure consistency and effectiveness, concrete controls or standards should be established to define minimum quality requirements for recycled materials. Achieving high recycling rates must go hand-in-hand with high-quality material recovery to ensure that the recycling of batteries meets both environmental and industry objectives

5. Method of filling in documentation for calculating recycling efficiency and recovery of materials from waste batteries

Clarity on Reporting Responsibilities in Complex Recycling Chains

The industry emphasizes that battery recycling is a complex, multi-stage process, often involving multiple facilities across different regions, both within and outside the EU. As batteries are dismantled and processed at various locations, it becomes increasingly difficult for the first recycler to consistently trace and report data through to the final recycling stage for each material. To avoid data duplication and ensure that every step in the process is fully documented, clear guidance is needed on how reporting should be coordinated among operators across different jurisdictions. This will help ensure transparency and accountability throughout the entire recycling chain.

A particular point of concern is the ambiguity surrounding responsibility for data collection and reporting when the **first recycler is located outside the EU but is handling EU-origin batteries**.

It is unclear which entity is accountable for gathering and submitting data, and which regulatory authority should receive it. Addressing this issue with clear reporting protocols for cross-border operations would help the industry in ensuring compliance with other EU legislation.

Conclusion

FEAD welcomes the Commission's commitment to improving battery recycling through the proposed Delegated Act. However, to ensure its effectiveness and practical implementation, several key areas require clarification and adjustment. The definition of black mass and first recycler could be refined to avoid misinterpretation, and criteria for including certain materials in recycling efficiency calculations should be clearly established. Furthermore, ensuring high-quality material recovery and providing clear guidance on reporting responsibilities across complex recycling chains are essential for achieving both environmental and industry goals. FEAD remains committed to collaborating with the Commission to enhance the regulatory framework and support the advancement of battery recycling in Europe.

FEAD is the European Waste Management Association, representing the private waste and resource management industry across Europe, including 19 national waste management federations and 3,000 waste management companies. Private waste management companies operate in 60% of municipal waste markets in Europe and in 75% of industrial and commercial waste. This means more than 320,000 local jobs, fuelling €5 billion of investments into the economy every year.

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