

The Consumer Voice in Europe

MORE SUSTAINABLE BATTERIES: LOADING...

BEUC's position on the EU proposal for a Batteries Regulation



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Why it matters to consumers

From smartphones and toothbrushes to laptops and e-scooters, batteries are present in many consumer products. With the uptake of battery electric vehicles or batteries to store energy at home, we are set to increasingly depend on them in the 21st century. For batteries to successfully power the green transition, risks to consumers and the planet also need to be minimised, such as manufacturing emissions or safety risks.

Batteries, therefore, need to be more sustainable by design. For consumers, this means batteries should first of all be safe, as well as longer lasting, removable, replaceable, reusable and recyclable. The European Commission's proposal for a regulation on Batteries is a key opportunity to achieve these objectives.

Summary

The upcoming Batteries Regulation presents a key opportunity to shift towards more sustainable batteries, needed for more sustainable consumer products and for a smoother transition towards cleaner energy and mobility. BEUC recommends:

- 1) Batteries need to be more sustainable from the design stage
 - Longer lasting and easily replaceable batteries are needed to extend the lifetime of products. Setting minimum values for durability and performance, as well as easy replaceability requirements, is needed for all batteries. Non-rechargeable batteries must be phased out.
 - All batteries need to be safe for consumers. The Batteries Regulation must also work in close coordination with the existing REACH restrictions.
- 2) Consumers need clear information on the spot
 - Essential information should always be on the product, package or label and not hidden behind a QR Code.
 - Information on state of health and expected lifetime of batteries should apply to batteries powering electric vehicles, light means of transport as well as popular consumer electronics and electrical devices with high interest for reuse.
 - On a carbon footprint label, dedicated research should assess consumers' perception and understanding of such label before its introduction, as well as whether additional sustainability parameters should also be added to such label.
- 3) Due diligence requirements should apply to all batteries, including portable ones, as these must also be more socially fair and avoid environmental harm.
- 4) Collection of batteries should always be available and free of charge for consumers.
- 5) Market surveillance authorities should make sure to monitor and enforce compliance both online and offline.

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1. Introduction

At the end of 2020, the European Commission presented a new legislative proposal to review the existing legal requirements on batteries. This initiative is central to the European Green Deal, given that:

- Batteries power many consumer products and they will also help the EU transition to a more sustainable lifestyle in terms of mobility (carbon emission reduction through electric vehicles) as well as push for renewable energy.
- These batteries powering such shift must be more sustainable across their lifecycle, with the lowest possible environmental impact: lasting longer, being repaired, reused or repurposed when needed while always being safe to users.

The new proposal on batteries builds on the current Batteries Directive and it aims to extend and strengthen requirements on batteries across their lifecycle. This is particularly timely given the rising demand of batteries, which is set to increase 14-fold by 2030.¹

We welcome that many types of batteries are considered in the proposal, including electric vehicle batteries, portable batteries² (incl. those from a smartphone or tablet), other automotive batteries as well as those for home energy storage. The regulation also applies to batteries incorporated in or added to other products. This regulation therefore presents a great opportunity to harmonise requirements for batteries across many consumer goods, ensuring that they match the ambition of the Circular Economy Action Plan, contributing to longer-lasting, more sustainable products.

In this paper we highlight important aspects of this proposal for a regulation and share our recommendations as to how to improve it.

2. More sustainable batteries by design

Batteries should always be safe for consumers, as well as longer lasting, removable, replaceable, reusable and recyclable. In this section we expand further on these aspects.

2.1. Safety for all batteries

Batteries should always be safe for consumers. The proposal includes a dedicated article (art. 12) on safety of stationary battery energy storage systems – batteries which will allow consumers to store energy at home. It requires that these batteries are accompanied by technical documentation demonstrating that they are safe during their normal operation and use, as well as evidence from relevant testing.

We welcome this requirement but also highlight that basic safety requirements and accompanying information **apply to all batteries**, including those embedded in small consumer products as well as electric vehicles.

¹ Compared to 2018 levels and mostly driven by electric transport:
https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2312 (factsheet)

² Portable batteries are defined in the proposal as 'any battery that is sealed, weighs below 5 kg, is not designed for industrial purposes and is neither an electric vehicle battery nor an automotive battery.'

BEUC recommends that safety requirements apply explicitly to *all* batteries, not just those for home energy storage.

2.2. Consumers need longer lasting batteries

Longer lasting products are beneficial for consumers who can save money and avoid the frustration of devices breaking down too soon, while reducing waste. Longer-lasting batteries embedded in products such as an electric vehicle or a smartphone, will help extend the lifetime of the whole product.

Batteries can also be an expensive part of the products they power (for instance in the case of battery electric vehicles, the battery pack portion of the total price can account for 21% of the price).³

As outlined below, we provide recommendations to improve the performance and durability for portable batteries as well as electric vehicle batteries.

2.2.1. Portable batteries: all should be covered

We support the introduction of performance and durability requirements for batteries of general use (art. 9), including for example setting minimum values for battery capacity or endurance in cycles. Consumers will benefit given that all products relying on these batteries will be better performing and more durable.

However, it is crucial that performance and durability requirements **apply to all portable batteries** including those found in very important consumer products such as laptops or smartphones, as well as those powering light means of transport like e-bikes or e-scooters⁴. This could establish a harmonised minimum ground which can then be strengthened through product-specific Ecodesign implementing measures. In addition, legal guarantee rights should also always cover battery issues as they might lead to the non-conformity of the whole product.

In the case of **batteries powering light means of transport**, it is unclear according to the current definitions (art. 2) whether they fall under electric vehicle or portable batteries. We believe they should be classified as portable batteries, given that they are likely to be stored within households like portable batteries. We also recommend that the current definition includes light means of transport without a seat, otherwise it will exclude important vehicles such as e-scooters on which the user is standing. Additionally, the 5kg limit should be removed from the definition.⁵

In terms of timeline, compliance with minimum parameters by 2027 would be very late. The current proposal envisions a staged approach where information requirements only would be the first step, followed by the adoption of actual minimum requirements in 2025 and compliance from 2027. We suggest considering an earlier timeline, with compliance from no later than 2025 instead.

³ <https://about.bnef.com/blog/battery-pack-prices-cited-below-100-kwh-for-the-first-time-in-2020-while-market-average-sits-at-137-kwh/>

⁴ While portable batteries of general use tend to be alkaline batteries, those powering smartphones or e-scooters are usually lithium-ion. A dedicated annex could develop this performance and durability requirements of lithium-ion batteries.

⁵ Some batteries for e-scooters are heavier than 5kg, so this limit specified for portable batteries should not apply for batteries powering light means of transport.

Finally, we welcome steps towards phasing out the use of non-rechargeable portable batteries of general use but would like an assessment of dedicated measures to be done by 2025, rather than by 2030 as proposed.

BEUC demands that performance and durability requirements apply to *all* portable batteries, including those powering light means of transport.

Measures to phase out non-rechargeable portable batteries of general use should be assessed by 2025.

2.2.2. Electric vehicle batteries: information is not enough, design requirements matter too

We also welcome performance and durability requirements for electric vehicle and rechargeable industrial batteries (art. 10), including rated capacity, energy round trip efficiency or indications of their expected lifetime under the conditions for which they have been designed.

However, actual minimum values have only been set for industrial batteries. In the case of electric vehicle batteries, manufacturers will only need to provide *information* on each of the aspects considered for durability and performance, as well as the methodology used for the calculation. It is crucial that **performance and durability minimum value requirements apply also to electric vehicle batteries**, particularly as the demand for these vehicles will significantly increase in the coming years. While electric vehicles will be important for a green transition, we need further ambition to improve the sustainability of their batteries, including durability and performance.

For electric vehicle batteries, actual minimum values on performance and durability need to be set, instead of requiring manufacturers to provide only information.

2.3. Easily removable and replaceable batteries for repair and reuse

Removable and replaceable batteries are crucial to extend the lifetime of consumer electronics as well as vehicles, for instance for repair but also for reuse. Otherwise, a dead battery which is too hard to replace can easily lead to discarding a whole product, frustrating consumers while putting a strain on natural resources.

We therefore strongly welcome the requirements proposed for the removability and replaceability of portable batteries (art. 11) by the end user or independent operators. However, it should also be clarified that **batteries should be removable without the need of special tools and always ensuring safety**. Such replacement must also be possible without causing any damage to the product or battery.

All types of batteries should also be as standardised as possible to facilitate an affordable replacement. Any end user should also be able to access information such as the state of the functionality and lifetime of the battery through the battery management system⁶. Easy removability and replaceability of batteries by professional repairers (including independent ones) is also crucial to foster a competitive market that increases options for consumers to extend the lifetime of their products affordably and easily.

⁶ As defined in the EC proposal for a batteries regulation, a battery management system is an electronic device that controls the electric and thermal functions of the battery, as well as the data on key parameters linked to the lifetime and performance, and that communicates with the vehicle or appliance in which the battery is embedded.

In terms of scope, **these requirements should be extended to portable batteries powering light means of transport**, considering the significant market of these products such as e-scooters.

Whereas the current art. 11 only sets requirements for portable batteries, **at least basic removability and replaceability requirements should also be set for electric vehicle batteries**. These batteries should also be designed in a way that makes it possible to replace the whole battery or parts of it, e.g. a module.

BEUC strongly approves of requirements on removability and replaceability for portable batteries, which should also apply to batteries powering light means of transport.

Electric vehicle batteries should also be removable and replaceable when needed to extend the lifetime of the vehicle.

2.4. Earlier timeline to reusing recycled content in batteries

The recyclability of batteries is an important aspect to improve towards more sustainable batteries. Promoting recycled content is a strategic measure towards a better use of resources, especially considering the ever-increasing demand for batteries. We therefore welcome the requirements (art. 8) to inform consumers about the amount of recycled cobalt, lead, lithium and nickel within electric vehicle and automotive batteries. Furthermore, we welcome the proposal to establish minimum shares of recycled content to promote recyclability.

However, we believe that 2025 is too late for the adoption of an implementing act on the methodology for the calculation and verification of recycled content and **2023 should be the deadline instead**. As a first step this measure should apply to electric vehicle batteries and it should then be considered whether these same requirements should apply also to portable batteries.

BEUC recommends an earlier adoption in 2023 of the implementing act to establish the methodology for the calculation and verification of recycled content in electric vehicle batteries.

2.5. Managing hazardous substances: close coordination is needed with existing processes

We support a swift and efficient approach to manage hazardous substances in batteries (art. 6), and we recommend that this approach should be implemented in **close coordination with the existing REACH restriction process**, as this EU regulation already oversees the restriction of chemicals which could harm human health or the environment. Such coordinated approach should however under no circumstances limit Member States' powers to initiate restrictions under REACH.

It is further imperative that the restriction process covers all harmful effects, such as endocrine disruption or persistence and bioaccumulation, and not just the hazard properties listed in art. 2(41). In parallel, sufficient resources should be allocated to the European Chemicals Agency to implement the new restriction procedure, while Member States must also increase available resources to ensure compliance.

We would also like to see a fast-track option – as it exists already within REACH to restrict hazardous substances in products which are most likely to be used directly by consumers, particularly portable batteries.

The precautionary principle should also clearly underpin the Batteries Regulation, allowing the EU to take early and precautionary action before a risk becomes prominent – that is, before use of a chemical becomes widespread, and not just against risks that already exist and are not ‘adequately controlled’.⁷ This should be explicitly stated in the dedicated article 6 or in art. 1.

The Batteries Regulations should also be aligned with the Chemicals Strategy, ensuring that the most harmful chemicals are only used when strictly necessary and when there are no alternatives acceptable from an environmental and health standpoint (i.e. essential use). Industry alone must be responsible for demonstrating that a use is essential, according to pre-defined criteria decided by the Legislator. Finally, the same limit values for hazardous substances should always apply, regardless of whether the batteries are made of virgin or recycled materials.

BEUC recommends that the Batteries Regulation works in close coordination with the existing REACH restriction process and must under no circumstance limit Member States’ powers to initiate restrictions under REACH.

We would also like to see a fast-track option, as it exists already within REACH to restrict hazardous substances in products that could be used directly by consumers, particularly portable batteries.

3. Informed consumers

Consumers can benefit from information to guide their purchases of products containing batteries. We therefore strongly support labelling requirements, information on the general condition and performance of the battery (state of health) and expected lifetime of batteries, as well as transparency on the carbon footprint, with the following recommendations.

3.1. Labelling requirements for all batteries: crucial information should not hide behind a QR code

We welcome the introduction of labelling requirements for all batteries (art. 13), particularly on the minimum average duration for portable batteries, as well as information on hazardous substances and critical raw materials. Safe use instructions should also be part of this information required for all batteries.

The proposal for a Batteries regulation suggests introducing a QR code for all batteries. While this system could be useful to provide additional information, **the most important aspects should still be on the label or product itself** directly available to the consumer without a digital barrier⁸.

⁷ [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006R1907R\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006R1907R(01))

⁸ For more information please check our dedicated BEUC paper: <https://www.beuc.eu/publications/beuc-x-2021-016-why-moving-essential-product-information-online-is-a-no-go.pdf>

It is proposed that implementing acts to establish harmonised specifications for the labelling requirements are adopted by 2025 and enforced by 2027. However, we would like to see an earlier adoption by 2023 and enforcement by 2025.



The symbol for 'separate collection' of batteries is well known to consumers and it should be visible on the battery. Complementing the symbol, we find it important that additional information is easily accessible for consumers to know how to dispose of batteries properly.

BEUC welcomes the introduction of labelling requirements for all batteries. However, essential information should always be on the product or label, not hidden behind a QR Code. Safe use instructions should always be provided too.

BEUC recommends that harmonised specifications for labelling requirements are adopted by 2023 and enforced by 2025.

3.2. State of health and expected lifetime: information on the state of the battery can facilitate second-hand use

We very much welcome the requirement to provide information on the general condition (state of health) and expected lifetime of batteries (art. 14), which can contribute to promote second-hand markets. This requirement should critically apply not just to batteries powering electric vehicles or industrial batteries but **also to batteries powering light means of transport and popular electric and electronic devices** like smartphones or laptops.

For example, in the case of buying second hand, a consumer would be able to consider the remaining capacity of a battery to inform expectations on lifetime, price and their potential use of the product. These indications should always be available for consumers in a clear accessible and standardised manner.

BEUC welcomes the proposed requirement to provide information on the state of health and expected lifetime of batteries however this should apply also to batteries powering light means of transport as well as popular consumer electronics or electrical devices with high interest for reuse.

3.3. Shedding light on the carbon footprint of batteries

The European Commission rightly proposes the introduction of information requirements on the carbon footprint of batteries (art. 7). We believe **this information can help consumers consider the environmental impact of batteries in their purchasing decisions**, by for instance preferring to buy an electric car or e-bike from a brand which sources batteries produced more sustainably than another. In the case of electric vehicles, producing batteries with a lower carbon footprint will be crucial for the overall sustainability of this increasingly popular mode of transport.

We therefore welcome the requirement to declare carbon footprint values and develop a label, as well as the ambition to set maximum thresholds for lifecycle carbon footprint values by 2027.

However, any information should be reliable, comparable and comprehensible for consumers. **Dedicated consumer research should assess the understanding and consumer friendliness of a carbon footprint label.** It should also look into whether other sustainability parameters should be indicated on a broader sustainability label instead of a standalone carbon footprint label.

This requirement is currently envisioned only for electric vehicles and rechargeable industrial batteries. We welcome this first step but encourage the European Commission to consider extending this requirement to other batteries embedded in products of high relevance to consumers, such as portable batteries (like those of smartphones or laptops) and including batteries of light means of transport.

A review of the Car Labelling Directive is also needed to include information on carbon and environmental information linked to cars, including electric vehicles⁹.

BEUC recommends that the European Commission assesses consumers' perception and understanding of a potential carbon footprint label before its introduction. It should also consider whether additional sustainability parameters should be indicated on a broader sustainability label.

4. Due diligence: portable batteries must be more socially fair and environmentally responsible

The complexity of global supply chains and the lack of binding standards make it extremely difficult for consumers to select products that have been produced in an environmental-friendly and socially fair manner. A difference could be made by requiring companies who place products on the market, to consider, prevent and mitigate possible negative impacts on human rights and the environment.

We therefore welcome the proposed obligation (art. 39) for economic operators placing industrial and electric vehicle batteries on the market to establish supply chain due diligence policies. However, **such obligations should also apply to economic operators of portable batteries.**

We expect these obligations to also be in line with the upcoming European Commission's proposal on due diligence. BEUC strongly supports this initiative and has identified some key principles that should be followed to include consumer needs and expectations.¹⁰

BEUC approves of requirements on due diligence to ensure that minimum social-ecological criteria have been met by all companies during production. Such requirements should also apply to portable batteries.

⁹ https://www.beuc.eu/publications/beuc-x-2019-Q60_new_label_to_choose_the_best_and_cleanest_car_models.pdf

¹⁰ https://www.beuc.eu/publications/beuc-x-2021-024_the_consumer_checklist_eu_due_diligence.pdf

5. End-of-life management must be easy

Consumers can play a part in the circular economy when it comes to disposing of batteries, contributing to material recovery. However, **this process needs to be consumer friendly, easy and free of charge**. We welcome the requirements for end-of-life management (chapter VII), with the observations and recommendations below.

5.1. Collection of portable batteries

We strongly approve of the obligation for producers to ensure the collection of all waste portable batteries (art. 48), including through the establishment of dedicated battery collection points. Consumers should not face barriers when returning batteries and as such this service should be free of charge. Deposit return schemes could also be introduced to incentivise collection. The relevant disposal information should be easily accessible and clear to consumers (see section 3.1 above for more detail).

In terms of the establishment of collection targets, the 2023 goal of 45% collection should increase to 55% given that most EU countries already reached and exceeded such target in 2018¹¹. Additionally, we believe that the review of the 2030 target of 70% collection should take place earlier, in 2027, to ensure the EU is on the right track to reach it.

We welcome that the Commission shall consider by 2030 whether to set a separate collection target for batteries powering light means of transport and will introduce a dedicated calculation methodology.

BEUC supports the obligation for producers to ensure the collection of portable batteries in an easy way and free of charge for consumers. Collection targets could be more ambitious.

5.2. Collection of electric vehicle and home energy storage batteries

It is good news that producers of automotive and electric vehicle batteries must collect them free of charge (art. 49), without imposing on consumers to buy a new battery nor to have purchased the battery directly from them.

In the case of batteries for home energy storage, disposal should be easy and free of charge for the consumers, as indicated in the proposal for industrial batteries: "Where waste industrial batteries require prior dismantling at the premises of private, non-commercial users, the obligation of the producer to take back those batteries shall include covering the costs of dismantling and collecting waste batteries at the premises of those users".

BEUC welcomes the obligation for producers to ensure the collection of electric vehicle batteries free of charge.

¹¹ Waste statistics recycling of batteries and accumulators (2020): https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Waste_statistics_-_recycling_of_batteries_and_accumulators

5.3. End-of-life information

We approve of the proposed obligation to make information available to consumers on the prevention and management of waste batteries (art. 60). Information examples include good practices to extend the use phase, disposal steps, and the meaning of labels and safety instructions to handle waste batteries. We also welcome the obligation on retailers supplying batteries to also provide information both in their physical retail premises and their online marketplaces. This information should be displayed permanently.

BEUC welcomes end-of-life information to end users, including advice for extending the use phase, and the impact of incorrect disposal. BEUC recommends that such information be provided permanently both in the brick-and-mortar retail premises and online.
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6. Market surveillance

The proposed inclusion of batteries in the scope of the new Market Surveillance Regulation 2019/1020 will rightly improve controls at the EU external borders and the traceability of batteries along the supply chain which is important for the effective rollout of this legislation. It is also an improvement that the new market surveillance regulation allows authorities to better control e-commerce platforms. With more and more consumers shopping online, including on websites delivering non-EU products directly to consumers, the European Commission needs to make sure that what is illegal offline is also illegal online. However, the market surveillance regulation still leaves loopholes regarding enforcement against traders located outside the EU and where batteries do not go through fulfilment centres (warehouses for storage and distribution) prior to being sent to EU consumers.

We therefore call on the EU to hold online marketplaces liable in case the manufacturer who places noncompliant batteries on the market fails to take appropriate action.

BEUC is currently advocating for an encompassing legal reform which provides for liability of online marketplaces in the Digital Services Act, the General Product Safety Regulation and the Product Liability Directive. The final text of the Batteries regulation should be made consistent with those ongoing legal reforms and ensure that there will not be loopholes concerning the enforcement possibilities against sellers of batteries on online marketplaces.

According to consumer research and testing¹², online marketplaces fail to adequately respond to reports about dangerous products and allow items to remain on sale or they reappear. We therefore think **future market surveillance activities should monitor and enforce compliance on online marketplaces selling batteries** as a stand-alone product, as well as when embedded in consumer products.

Finally, consumers should also have a way to report non-compliance in an easy way to competent authorities.

BEUC recommends that compliance is monitored and enforced also in online marketplaces. Consumers should have an easy way to report non-compliance to competent authorities.

¹² https://www.beuc.eu/publications/unsafe_and_illegal_activities_online.pdf



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