



CCMI/178

Sustainability requirements for batteries in the EU

OPINION

European Economic and Social Committee

Sustainability requirements for batteries in the EU

[COM(2020) 798 final]

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1. Conclusions and recommendations

- 1.1 The EESC supports the measures set out by the regulation [COM(2020) 798 final - 2020/0353 (COD)] proposed by the European Commission (EC).
- 1.2 The EESC considers avoiding fragmentation of the internal market through possible divergent approaches by Member States to be a key issue to be addressed by all stakeholders.
- 1.3 The EESC calls for more precise and functional governance instruments and arrangements to be set out to implement the new regulation, involving all the different stakeholders.
- 1.4 The EESC proposes that these challenges be addressed by further strengthening the role and resources of the European Chemicals Agency (ECHA).
- 1.5 On issues related to health, safety and working conditions in the production process, as well as the recycling and repurposing of batteries, the EESC proposes strengthening the role of the European Agency for Safety and Health at Work (EU-OSHA).
- 1.6 Concerning the application of the duty of due diligence for monitoring the battery supply chain, the EESC calls for full transparency in the implementation of this monitoring system.
- 1.7 Recycling, refurbishing and re-use make it possible to secure the upstream value chain. It is essential to support research and development on ecodesign. The EESC suggests that this should take the form of an "important project of common European interest" (IPCEI).
- 1.8 With regard to the jobs and skills requirements aimed at promoting the development of a sustainable European battery industry, the EESC proposes broadening and strengthening the role of the European Centre for the Development of Vocational Training (CEDEFOP) and the role of the relevant European sectoral social dialogue committees in line with the just transition process integrated into the European Green Deal.
- 1.9 In the context of the Commission's Pact for Skills initiative and the European projects ALBATTIS, DRIVES and COSME, the EESC considers it a particular priority to frame and implement training projects on ecodesign and battery recycling, that are provided with sufficient financial resources to ensure their success, with the active involvement of the social partners and in cooperation with any national schemes or certain employment catchment areas that are directly concerned.
- 1.10 In line with the EU's carbon neutrality commitments, the EESC proposes rapidly introducing maximum carbon footprint thresholds for battery manufacturing and upstream material supply logistics and increasing the resources allocated by the Commission to rapidly develop and implement the tools for assessing and monitoring the carbon footprint of the battery industry.
- 1.11 The EESC considers it necessary to establish producer liability that is compatible with the promotion of ecodesign. In this context, it seems necessary to separate the end of life of batteries from the end of life of the devices that use them.

- 1.12 The EESC proposes that the concept of "end-of-use" be introduced in addition to "end-of-life" in order to promote the re-use, refurbishing or second life and recycling of batteries.
- 1.13 The provisions of the draft regulation concerning labelling should include an obligation to better inform people about the potential risks of hazardous substances other than cadmium, lead and mercury and other safety risks to allow for informed choices and better use of batteries.

2. Introduction

- 2.1 On 10 December 2020, the European Commission presented a proposal for a Regulation of the European Parliament and of the Council [COM(2020) 798 final 2020/0353 (COD)] concerning batteries and waste batteries, repealing Directive 2006/66/EC of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and modifying Regulation (EU) 2019/1020 of 20 June 2019 on market surveillance and compliance of products.
- 2.2 The proposed regulation aims to develop an EU framework covering the whole life cycle of batteries, including harmonised and more ambitious rules for batteries, components, battery waste and recycled materials.
- 2.3 The main objectives of this regulation are to improve the sustainability of batteries throughout their life cycle, ensuring minimum sustainability requirements for batteries placed on the EU internal market, to increase the resilience of the EU battery supply chain by promoting the circular economy, and to reduce environmental and social impacts at all stages of the life cycle of batteries.
- 2.4 This includes encouraging the production of high quality and efficient batteries and placing them on the EU market, enhancing and exploiting the potential of EU primary and secondary battery raw materials, ensuring that they are efficiently and sustainably produced, and ensuring the proper functioning of secondary raw material markets and related industrial processes.
- 2.5 With this regulation, the Commission is committed to promoting innovation and the development and implementation of EU technical expertise.
- 2.6 This should make it possible, in line with the circular economy, to reduce the EU's dependence on imports of strategically important raw materials and rare earths and to implement appropriate collection and recycling of all waste batteries.
- 2.7 In order to reduce environmental and social impacts, the regulation should contribute to responsible sourcing, promote the efficient use of raw materials and recycled materials, reduce greenhouse gas emissions throughout the life cycle of batteries, reduce risks to human health and the quality of the environment and improve the social conditions of the communities concerned.

3. General comments

- 3.1 Over the next decade in Europe, battery technology will be one of the main catalysts of the green energy transition. By enabling the electrification of transport, where appropriate, and the use of renewable energy as reliable energy sources, the use of batteries should contribute to achieving the EU's objectives under the Paris Agreement on climate change.
- 3.2 According to Commission Vice-President Maroš Šefčovič, in view of the progress made under the European Battery Alliance (EBA) set up by the Commission in 2017, the EU should be able to meet up to 80% of its needs within five years.
- 3.3 This strategic autonomy will be built together with the EBA to provide legal instruments to bring together the automotive, raw materials and chemical industries of the Member States to design and implement 100% European value chains, with the first European battery production plants expected to come into operation in 2021 or 2022.
- 3.4 The EESC supports the measures set out in the regulation proposed by the Commission in terms of their capacity to cope with the many challenges posed by the rise in global battery production and consumption.
- 3.5 However, in line with the EU's strategic autonomy, the EESC warns that they need to be strengthened and implemented quickly in order to avoid not only an increase in the technological, industrial and energy dependence of battery users in the EU on Asian or American producers, but also the relocation of European car plants to third countries close to battery production sites, with negative economic, social and environmental consequences, as already pointed out in a previous EESC opinion¹. In addition, the interests of European businesses must also be protected by making full use of all relevant EU instruments. In this respect, the EESC also wants to express its concerns about the way the Commission intends to verify and enforce the requirements regarding carbon footprint, the levels of recycled content and due diligence in the supply chain. In this respect, the EESC insists on robust compliance investigations of imported products to avoid unfair competition from abroad.
- 3.6 Solar panels, wind farms and batteries are crucial for our new industrial paradigm². They rely on raw materials and other materials, know-how and added value from countries mainly outside the EU. Currently only about 1% of world production of lithium batteries is located in Europe³. Alongside the development of a European stationary battery industry, with a view to efficient and secure implementation of existing and future electricity grid plans, the EESC recommends that a framework for a complementary V2G (vehicle-to-grid) approach be established at EU level.

¹ [OJ C 353, 18.10.2019, p. 102.](#)

² [OJ C 364, 28.10.2020, p. 108.](#)

³ [OJ C 282, 20.8.2019, p. 51.](#)

- 3.7 The EESC supports the proposals for more sustainable transport and the Strategic Action Plan for Batteries aimed at narrowing the European energy gap and creating a value chain for batteries. The decarbonisation of transport and the transition to clean energy are among the core elements of the third mobility package, the European Green Deal and the Sustainable and Smart Mobility Strategy. This initiative is part of the wider ambition of the Circular Economy Action Plan⁴.
- 3.8 The European Circular Economy Stakeholder Platform can play a role in communication on these topics⁵.
- 3.9 An appropriate system is also needed to inform end users about the quality of batteries available on the market and enable consumers to better understand their role in the collection of battery-related waste.
- 3.10 The best way to ensure that the batteries manufactured are "clean" is to comply with European environmental standards and rules, as promoted, for example, by the circular economy approach going from the mines to the end of battery life. To achieve this goal, large-scale investment from industry is essential, while the Commission's role is to lay down proper boundary conditions, such as technical standards⁶.
- 3.11 The EESC supports the Commission's proposal for a regulation to consider the challenges of critical raw materials used in batteries as defined in the European Commission Communication of 3 September 2020 – *Critical raw materials resilience: charting a path towards greater security and sustainability*. The critical raw materials contained in the batteries are lithium, cobalt, natural graphite and antimony, and the two main parameters taken into account when determining criticality are economic importance and supply risk.
- 3.12 The EESC has already expressed support for opting for legal requirements to boost the market for secondary raw materials, especially for packaging, vehicles, construction materials and batteries⁷.
- 3.13 Due to their intermittent nature, renewable energies and their development pose a real challenge in terms of storage. Storage is a strategic issue for the European Union, in order to permanently guarantee the security of the EU's supply and the viability of the energy market, both technically and in terms of budget. The EESC points out that – alongside its advantages – energy storage can have significant financial, as well as environmental and health costs. For this reason, it calls for impact assessments to be carried out systematically, not merely to assess the competitiveness of the technologies, but also to evaluate their impact on health and the environment. The EESC also considers it important to assess the effect that these technologies have on the creation of

4 [OJ C 62, 15.2.2019, p. 254.](#)

5 <https://circulareconomy.europa.eu/platform/en>

6 [OJ C 262, 25.7.2018, p. 75.](#)

7 [OJ C 364, 28.10.2020, p. 94.](#)

activities and jobs. The EESC supports the need for greater harmonisation of Member States' energy storage rules. The EESC also calls for a Europe-wide public dialogue on energy (the European Energy Dialogue) to allow individuals and the whole of civil society to take ownership of the energy transition and to influence future decisions on energy storage technologies⁸. The quality of battery labelling should help with this.

- 3.14 The economic challenges are substantial: the Commission estimates that global demand for batteries will increase 14-fold by 2030 compared to its 2018 level and the EU is expected to account for 17% of this demand. The number of lithium batteries is expected to multiply by 700 between 2020 and 2040.
- 3.15 To assess the impact of the implementation of the new legislation on jobs and skills needs, the regulation is based on two reference studies published by CEPS⁹ and RREUSE¹⁰ as well as the work carried out by the EBA.
- 3.16 The CEPS study estimates that the development of battery collection and recycling activities will have an impact on the creation of direct and indirect jobs: approximately 850 jobs with a recycling rate of 55% and 5500 jobs with a rate of 75%.
- 3.17 On the other hand, according to the study by the organisation RREUSE, repair and reuse of batteries creates five to ten times more full-time equivalent jobs than collection and recycling, which raises the question of the political issues involved in measures that favour the collection and recycling industry over that of the repair and reuse of batteries.
- 3.18 Regarding the skills gap, this mainly concerns ecodesign work on batteries to maximise their sustainability and optimal use.
- 3.19 To improve investment in production capacity for sustainable batteries, in view of the social and environmental risks, it is necessary to bring projects related to batteries in line with the EU's taxonomy¹¹ for sustainable activities, taking the InvestEU programme into account.

4. Specific comments

- 4.1 The EESC calls for more precise and functional governance instruments and arrangements to be set out to effectively and efficiently implement all of the measures established in the new regulation.
- 4.2 Thus, the EESC proposes that these challenges be addressed by revising the role of the European Chemicals Agency (ECHA), located in Helsinki, which is responsible for the

⁸ [OJ C 383, 17.11.2015, p. 19.](#)

⁹ CEPS: Drabik E. and Rizos V., *Prospects for electric vehicle batteries in a circular economy*, 2018.

¹⁰ RREUSE: *Briefing on job creation potential in the re-use sector*, 2015.

¹¹ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020.

implementation of the European Reach Regulation (2005, revised in 2018) on chemical substances, to include the registration, assessment, monitoring and control of the new standards and rules laid down in the new regulation on battery sustainability.

- 4.3 The development of a sustainable battery industry must address the problem of compliance with EU occupational health and safety standards posed by the protection of workers who have contact with batteries and recyclable raw materials in industrial or vehicle batteries. The European Agency for Safety and Health at Work (EU-OSHA), located in Bilbao, has carried out expert studies on the subject that must be taken into account in order for the regulation to provide appropriate rules. The EESC therefore also proposes to strengthen the role of EU-OSHA.
- 4.4 Concerning the application of the duty of due diligence for monitoring the battery supply chain and for an independent audit, monitoring and control system under the auspices of the European Commission, in line with the rules laid down in the OECD's guidelines on this subject¹², the EESC calls for full transparency in the implementation of this monitoring system.
- 4.5 With regard to the jobs and skills requirements for implementing the measures in the Regulation aimed at promoting the development of a sustainable European battery industry, the EESC proposes broadening and strengthening the role of CEDEFOP in this field, and the role of the relevant European sectoral social dialogue committees (on electricity, the metal industry, the chemicals industry, the extractive industries, etc.) in line with the just transition process integrated into the European Green Deal. Vocational education institutions in the Member States will have to implement similar training projects in student curricula to guarantee the availability of trained workers for a sustainable European battery industry.
- 4.6 As part of the European Commission's Skills Pact, the projects ALBATTIS (Alliance for Batteries Technology, Training and Skills), DRIVES (Development and Research on Innovative Vocational Educational Skills) and COSME (the multiannual European plan for the competitiveness of businesses and SMEs) have been launched. The EESC considers it a particular priority to frame and implement training projects on the new skills relating to ecodesign as well as to battery diagnostics with a view to repair, refurbishment and recycling, with the active involvement of the social partners and in cooperation with any national schemes or certain employment catchment areas that are directly concerned.

Research and innovation are needed to improve the sustainability, quality and safety of the products and processes and to reduce costs. The aim is to immediately give priority to research and development on batteries, with a holistic approach across the whole battery value chain, and significant and continuous investments over time, covering both short- and long-term research priorities.

- 4.7 Batteries and hydrogen will have complementary functions in the field of energy storage. The aim will be to maximise synergies between these two technological solutions.

¹² OECD, 2018, *OECD Due Diligence Guidance for Responsible Business Conduct*.

- 4.8 New digital technologies should help speed up developments in the battery sector, from accelerated discovery of materials to optimising cross-sector use of battery systems to support the energy grid.
- 4.9 Recycling, refurbishing and re-use make it possible to secure the upstream value chain. It is essential to support research and development on ecodesign. The EESC suggests that this should take the form of an "important project of common European interest" (IPCEI). The aim is to develop expertise to optimise the recovery of batteries by redirecting them, if possible, towards refurbishment, a second life or even better recovery of their components, and to implement processes that are optimised from an environmental point of view, guaranteeing the safety of employees and leading to an economic model that helps make this activity viable in Europe. This includes managing to implement competitive industrial processes that make it possible to produce battery grade materials through recycling with greater support for companies working in an integrated and closed-loop manner.
- 4.10 In line with the EU's 2050 carbon neutrality commitments (with the intermediate target of a 55% reduction in GHG by 2030), the EESC proposes rapidly introducing maximum carbon footprint thresholds (July 2027 is too late given the objectives set by the European Council on 11 December 2020) for battery manufacturing and upstream material supply logistics, and increasing the resources allocated by the Commission to rapidly develop and implement the tools for assessing and monitoring the carbon footprint of the battery industry. Priority should be given to access to strategic battery materials from (urban or natural) mines situated on the market where the batteries are manufactured and recycled. These measures will help to simplify and minimise logistics flows. With regard to the manufacturing of batteries, a major factor in their carbon footprint, the regulation should promote energy-efficient processes and favour the use of decarbonised electricity sources.
- 4.11 The EESC considers it necessary to establish producer liability that is compatible with the promotion of ecodesign, and in particular with an incentive to design batteries that can make it possible to retrofit, remanufacture and reuse batteries. This need relates to the second life of batteries, which should be promoted. In this context, it is necessary to separate the end of life of the batteries from the end of life of the devices, thus not relegating batteries to the status of waste when the devices that carry them reach the end of their life. When the battery or the device it is part of reaches the assumed end of its life, it will be the producer's responsibility to demonstrate that the battery should have the status of waste. This must be demonstrated by an assessment or tests carried out on the battery and by demonstrating in a document that it is technically impossible, taking into account current technologies and the industries which could be outlets for them, to reuse the battery by means of retrofit or remanufacturing operations compatible with the conditions of these markets. Thus, the concept of "end-of-use" should be introduced in addition to "end-of-life" in order to promote the re-use, refurbishing or second life and recycling of batteries. This requires the new regulation to integrate these new stakeholders and activities.

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The president of the European Economic and Social Committee
