

# IEEP's response to the public consultation 'Batteries - modernising EU rules'

**1 March 2021** | IEEP welcomes the opportunity to submit its opinion to the European Commission's <u>public consultation survey</u>. The consultation survey covers the proposed regulation concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020.

Within the framework of this consultation, the IEEP has consolidated its comments under two broad themes that ought to be considered in the adoption process of the proposal:

- 1. Recognising the material limitations of the sector and its high material cost, both in Europe and beyond.
- 2. Considering the important equity implications in relation to the employment and environmental risks and opportunities.

#### Introduction

Batteries are one of the pillars of the low-carbon energy transition. In the future, large-scale batteries will be one of the fundamental underpinnings of our energy system, both to store energy and to provide a mobile source of energy for transport. They have the potential to make our energy system much cleaner both at source and at point of use if deployed with sustainability in mind. Major investments are needed now to ensure that sustainable batteries are available at scale in time to reach the net-zero targets by 2050. However, vigilance is required to ensure that the battery revolution has as limited a material impact as possible, as well as providing a just foundation for equitable, resilient industrial activity in Europe.

Under the assumption that an average lifetime for Internal Combustion Engines (ICE) is around 15 years and that any deadline for ICE sales in the EU market later than 2035 would not be compatible with reaching net zero emissions by 2050, an exponential increase in the demand for lithium-ion batteries is highly likely. The EU must recognise the strict materials limits to simply replacing the ICE car fleet,

with an electric one. This stands for other products as well. Lithium-ion batteries already account for around half of the world's scarce supply of cobalt, the mining of which has been widely linked with human rights violations in the Democratic Republic of Congo and elsewhere. Mining in the 'lithium triangle' beneath the dry salt flats of Argentina, Bolivia and Chile is already depleting the groundwater on which local communities depend. In Europe, hard rock mine projects for Lithium exist in Austria, Portugal, Serbia and Finland.<sup>1</sup> These sources would however represent a fraction of the Europe's needs. Europe should reject a transition based on limitless material extraction and ensure consistency across legislation and policy instruments; this notably includes redesigning mobility around public transport, cycling, walking and – where necessary – car sharing over ownership.

## **High Material Cost**

The European Union (EU) has limited capacity to produce the amount of raw materials necessary to satisfy its entire projected demand for batteries. Raw materials sourcing outside the EU will be much needed. Compliance with the highest social and environmental standards is thus of utmost importance. We welcome the Commission decision to include a mandatory approach to due diligence that must necessarily cover the whole value chain.

To reduce the impact of natural resource extraction, we agree that the uptake of markets for secondary raw materials must be supported. Improvements in the collection, treatment and recycling are key to reduce our material footprint and increase, to an extent, the EU's strategic autonomy. In this regard, EU funding for innovative recycling methods and technologies will have an important value added for European industry in complementing private R&D efforts. Europe is at the dawn of the age of batteries, and investments in research will likely start to pay off in the 2030s and 2040s, when Europe needs to be cut emissions down to the last percentage points.

Although we understand that mentions to EU funding, Horizon Europe or R&D investment needs are done elsewhere (e.g., Strategic Action Plan on Batteries, EU Industrial Strategy, European Battery = Alliance) we miss references on funding efforts for R&D in several fields of the proposed regulation, namely on the fields of recollection, recycling and carbon impacts of batteries.

We welcome the set of mandatory targets for collection rates of 65% in 2025 and 70% in 2030 for portable batteries. However, although provisions for the improvement of the reporting system for EV, automotive and industrial batteries are included, we regret to see that explicit collection targets for these batteries are discarded. The Commission confirms that explicit targets would effectively increase the collection of transport, EV and industrial batteries and that the assumption in the current Batteries Directive that 100% of these types of batteries are collected

<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/energy/sites/default/files/documents/raw\_materials\_and\_recycling\_roadmap\_2.pdf

under the 'no losses policy' is wrong. Hence, in addition to mandatory reporting requirements, explicit collecting targets would effectively contribute to meeting all the objectives of this initiative: preservation of environmental quality, efficient and responsible use of resources and strengthening the market.

Within this context, we also welcome the set of mandatory targets of recycled content for 2030 and 2035 alongside the establishment of a mandatory declaration of recycled content for the short term.

## A socially and environmentally just battery sector

The unprecedented economic crisis arising from the COVID-19 pandemic makes the creation of jobs an urgent priority. The expected transformation of the transport sector in the EU is expected to affect over 13m jobs.<sup>2</sup> As in other segments of the transport sector, the battery sector will require policymakers at all levels to insist on a strong framework of social dialogue to ensure workers are at the forefront of change. A particular attention to the social implications of the sourcing, production and recycling of batteries should be considered.<sup>3</sup>

It is essential to provide the regulatory and communication support to small and medium enterprises (SME) to adopt and implement the regulative implications of the New Batteries Directive. This will spur innovation and the development of a rich ecosystem of actors in the sector. The battery sector will be an important sector of economic activity in the decades ahead, and it will greatly enhance the EU's economic vitality and resilience if economic activity can be spread across a vibrant SME ecosystem rather than concentrated in a few large conglomerates.

In coordination with the Industrial Strategy, the New Batteries Directive should aim to foster locating new production and recycling hubs in depressed regions and less well-off countries through incentives and subsidies. With an ever-growing number of EU member states announcing coal phase-outs, regions previously reliant on mining that may experience sever job losses or needs of retraining workers are the ideal locations to host industries like battery construction and recycling.

Research points to the benefits of clustering industrial and innovation activity in certain geographical regions in the EU, to enable the development of the EU's battery segment within the electric vehicle value chain.<sup>4</sup> As the low-carbon technology race is still being run, and certain European regions have the potential to specialise in certain low-carbon technologies, early action can help translate this potential into an actual competitive edge. These findings call for an appropriate

<sup>4</sup> https://www.cisl.cam.ac.uk/resources/publication-pdfs/cisl-competitive-sustainability-report.pdf

<sup>&</sup>lt;sup>2</sup> https://www.etui.org/sites/default/files/Just%20transition%2000%20introduction.pdf

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/energy/sites/default/files/documents/raw\_materials\_and\_recycling\_roadmap.pdf

implementation of intra-EU equity considerations when enabling the development of the sector across EU Member States.

In battery electric vehicles powered by renewable energy, production and end of life account for more than 80% of emissions<sup>5</sup>. Large-scale battery production for these vehicles has major environmental, social and economic consequences for the extraction and expanded use of certain natural resources such as cobalt and lithium.<sup>6</sup> These challenges need to be considered in this legislation, or there risks being a significant gap in addressing the sustainability challenges and real emissions of tomorrow's transport and battery sectors.

#### More info

IEEP's response to the European Commission's public consultation drew on a number of IEEP publications, which can be consulted on the IEEP website.

The response was compiled and submitted by Antoine Lucic, Jesus Urios, Thorfinn Stainforth. For more information on IEEP's work on this area please contact Thorfinn Stainforth (tstainforth@ieep.eu).



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<sup>&</sup>lt;sup>5</sup> European Environment Agency. *Range of life-cycle CO2 emissions for different vehicle and fuel types*. (20th July 2020). <u>https://www.eea.europa.eu/signals/signals-2017/infographics/range-of-life-cycle-co2/view</u>

<sup>&</sup>lt;sup>6</sup> Hensley, R., Knupfer, S., & Pinner, D. (2018) THREE SURPRISING RESOURCE IMPLICA-TIONS FROM THE RISE OF ELECTRIC VEHICLES. McKinsey Quarterly.