

EUROPEAN COMMISSION

> Brussels, XXX [...](2024) XXX draft

# COMMISSION DELEGATED REGULATION (EU) .../...

# of XXX

#### supplementing Regulation (EU) 2023/1542 of the European Parliament and of the Council by establishing the methodology for the calculation and verification of the carbon footprint of electric vehicle batteries

(Text with EEA relevance)

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission.

# EXPLANATORY MEMORANDUM

# 1. CONTEXT OF THE DELEGATED ACT

Batteries are one of the key enablers for sustainable development, green mobility, clean energy and climate neutrality. The Regulation on Batteries and Waste Batteries<sup>1</sup> (hereafter "the Regulation") introduces a harmonised regulatory framework for dealing with the entire life cycle of batteries that are placed on the market in the Union, including requirements on the life cycle carbon footprint of batteries. The Commission is requested to develop the methodology for the calculation and verification of the carbon footprint of several categories of batteries, starting with the methodology for electric vehicle batteries. Annex II to the Regulation includes essential elements for the methodology, including for to rely on the latest version of the Commission Product Environmental Footprint method and the necessity to reflect technical and scientific progress in the area of life cycle assessment.

# 2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT

As this is a technical act, it did not need to be supported by an impact assessment or an open public consultation.

The delegated act draws on a report of the Joint Research Centre (JRC) of the Commission that was prepared with the input of stakeholders, including two workshops and a dedicated stakeholder consultation. Subsequently, the expert group on waste, in its formation including representatives of businesses and civil society, was consulted on the report of the JRC.

The draft delegated act was published for public feedback on the Better Regulation Portal from [..] to [..] 2024. Subsequently, [..]. The proposal was lastly discussed in a meeting of the expert group on waste on [..] 2024.

# 3. LEGAL ELEMENTS OF THE DELEGATED ACT

The delegated act is adopted pursuant to point (a) of the fourth subparagraph of Article 7(1) of the Regulation, which empowers the Commission to adopt a delegated act establishing the methodology for the calculation and verification of the carbon footprint of electric vehicle batteries, in accordance with the essential elements set out in Annex II of the Regulation.

Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC (OJ L 191, 28.7.2023, p. 1.).

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#### (Text with EEA relevance)

#### THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2023/1542 of the European Parliament and of the Council of 10 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC<sup>2</sup>, and in particular Article 7(1), fourth subparagraph, point (a), thereof,

Whereas:

- (1) The expected massive deployment of batteries in sectors such as mobility and energy storage is expected to lead to the reduction of carbon emissions. In order to maximise the effects of that reduction], it is necessary that the overall life cycle of those batteries have a low carbon footprint.
- (2) Regulation (EU) 2023/1542 lays out requirements for manufacturers to declare the carbon footprint for certain categories of batteries. Following those requirements, the Commission is required to establish the methodology for the calculation and verification of the carbon footprint of several categories of batteries, starting with the methodology for electric vehicle batteries.
- (3) The essential elements for the carbon footprint methodology specify in particular to follow the Product Environmental Footprint (PEF) method set out in Commission Recommendation (EU) 2021/2279<sup>3</sup>.
- (4) Regulation (EU) 2023/1542 expresses the carbon footprint of batteries in kg CO<sub>2</sub>equivalent per one kWh of the total energy provided by the battery over its expected service life. For electric vehicle batteries, the amount of kWh they produce over their service life depends on their capacity, how often they are charged and discharged, and on their durability. The frequency of charging depends on the use pattern of the vehicle in which the battery is incorporated and is not dependent on a specific battery model. Therefore, it is appropriate to specify a typical value for this parameter, differentiated between vehicle categories. The durability of an electric vehicle battery is affected by both calendar and cycle aging combined, for which there is no

<sup>&</sup>lt;sup>2</sup> OJ L 191, 28.7.2023, p. 1, ELI: http://data.europa.eu/eli/reg/2023/1542/oj.

<sup>&</sup>lt;sup>3</sup> Commission Recommendation (EU) 2021/2279 of 15 December 2021 on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations (OJ L 471, 30.12.2021, p. 1, ELI: http://data.europa.eu/eli/reco/2021/2279/oj)

harmonised test. Therefore, it is necessary to rely for durability on the length of the commercial guarantee.

- (5) The PEF method contains rules for accounting for electricity from the grid, including the use of contractual instruments to demonstrate that a particular electricity product was used. It stipulates that such contractual instruments may only be used if it is ensured, inter alia, that they are the only instrument that carries the environmental attribute claim associated with the quantity of electricity generated. However, in many jurisdictions outside the Union currently this cannot be ensured, entailing a risk of not well-substantiated environmental claims. Therefore, it is appropriate not to allow for the use of contractual instruments in the carbon footprint methodology for batteries.
- (6) The PEF method requires the end-of-life stage to be modelled through a circular footprint formula that allocates the carbon footprint burdens or credits of recycling between the product being recycled and the use of the recycled materials in a new product. The PEF method specifies that the allocation between the two has to be based on the market situation of supply and demand for the recycled materials concerned, which means, based on the current market situation and outlook, for metals present in the batteries that burdens or credits have to be allocated largely to the recycled battery, while for plastics they have to be allocated equally between the recycled battery and the product in which the recycled materials will be used.
- (7) The essential elements in Regulation (EU) 2023/1542 require a mix of the use of company-specific data and secondary data to be used for the calculation of the carbon footprint in order obtain an accurate result while limiting administrative burden. It is appropriate to specify further when company-specific data should be used, when secondary data should be used, and when a choice between the two is allowed. In certain cases, company-specific data of suppliers is considered confidential and they are not shared with downstream operators. In order to ensure a smooth process for the calculation of the carbon footprint it is appropriate to require that such data be shared in aggregated form with operators downstream and to provide that notified bodies and market surveillance authorities are granted access to all such data,
- (8) Regulation (EU) 2023/1542 contains conformity assessment procedures, including general rules for notified bodies to assess whether the manufacturer has complied with its obligations, including those on carbon footprint. The Regulation requires Commission to establish the methodology for verification of the carbon footprint. It is appropriate to detail in such methodology what notified bodies as a minimum should verify and for which parts it is essential that the verification includes an on-site assessment by them or their subsidiaries or subcontractors. Further, it is appropriate to specify the details for the study supporting the carbon footprint that manufacturers have to prepare in order to ensure that notified bodies and market surveillance authorities receive the information necessary to verify compliance.

### HAS ADOPTED THIS REGULATION:

#### Article 1

The methodology for the calculation and verification of the carbon footprint of electric vehicle batteries is laid down in the Annex.

### Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States. Done at Brussels,

> For the Commission The President Ursula von der Leyen