

## ANNEX to the Commission Delegated Regulation 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 – Recommendations on electricity modelling and other important considerations

RECHARGE position paper  
November 2024

**RECHARGE** – the leading voice of the advanced rechargeable and lithium batteries value chain in Europe – welcomes the Commission’s intent of the draft proposal for the establishment of a methodology for the calculation and verification of the carbon footprint of electric vehicle batteries that will help differentiate clean European production from less climate-friendly batteries from third countries.

Currently, the nascent European battery is facing both internal and external challenges and this uneven level playing field threatens Europe’s competitiveness. Especially the decision to “close” the US market for Chinese products (100% import duties for Chinese EVs and 25% import duties for Chinese batteries) are leaving the European Single Market as the only sizeable market for heavily supported Chinese batteries and EVs.

At a time when European initiatives to create a strong domestic European battery industry are running into strong headwinds<sup>1</sup>, the shaping of the delegated acts<sup>2</sup> for the calculation and verification of battery carbon footprint should therefore strive to leverage the low carbon content of the EU grid to make it a strong, sustainable differentiator to the benefit of EU industry (see grid emission factor values for several countries in table 1).

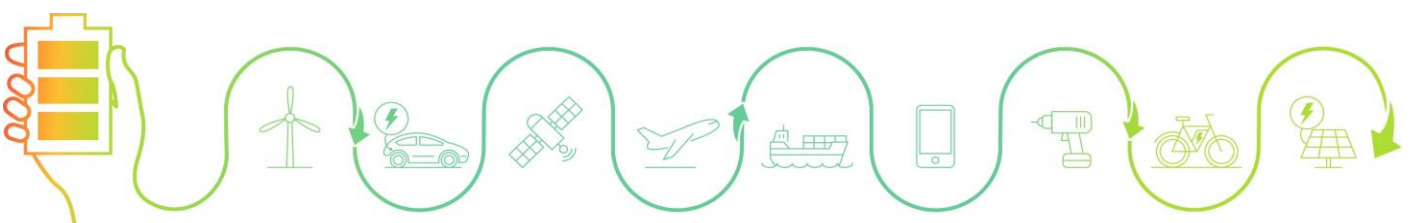
A balanced compromise solution that both protects the growing European battery against unfair external competition and simultaneously avoids a further fragmentation of the European Single market could become the differentiating factor that supports the growth of a sustainable European battery industry and constitute the long-term competitive advantage for sustainable batteries produced in Europe.

RECHARGE therefore wants to present a proposal that strikes the right balance between creating an incentive for Member States (MS) to improve their grids whilst protecting industries located there against the disadvantage of operating in a higher emission grid, as such MS performance is rooted in history.

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<sup>1</sup> <https://battery-news.de/en/2024/09/16/powerco-scales-back-battery-production-plans-in-germany/>  
<https://www.reuters.com/markets/europe/northvolt-cut-1600-jobs-sweden-2024-09-23/>  
<https://www.reuters.com/business/autos-transportation/ev-battery-maker-acc-halts-german-factory-delays-italy-plant-2024-06-04/>

<sup>2</sup> ‘Delegated acts’ in this position paper refers to the three separate acts addressing respectively EV, industrial and LMT batteries, as required by art 7 of the Battery Regulation.



RECHARGE expects that the significant differentiation shown in the table below (relative to the EU emission factor, a multiplier of 1.75 for the US, and a multiplier of almost 3 for China) is likely to survive several decades, especially in light of the objectives set for EU MS decarbonization.

Table 1 [grid emission factor values for several countries]

Grid emission factors (IEA-2024)	2022	2023
Sweden	12	12
Germany	367	329
Poland	633	552
Estonia	656	427
<b>EU-27 average</b>	<b>250</b>	<b>205 (provisional)</b>
<b>USA</b>	<b>355</b>	-
<b>China</b>	<b>592</b>	-

## The RECHARGE Proposal

The RECHARGE recommendations for a location-based approach are structured as follows:

1. Three phases to move from EU average to a national average<sup>3</sup> (points A to C)
2. Exclusion of any market-based or other mechanisms that would undermine the differentiation based on the low-carbon EU grid potential (points D to F)
3. An additional consideration on the impact of secondary (default) values if used (point G)

### 1. Three phases to move from EU average to a national average (points A to C)

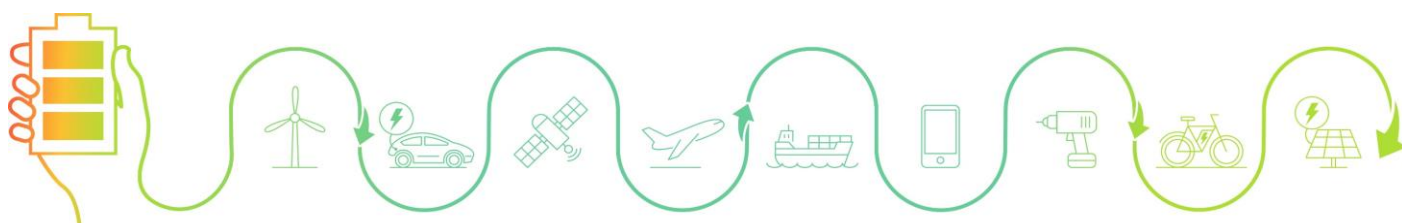
**A/. Phase 1 ensures European protection:** a short first phase, which will last for three years after the publication of the delegated act, will require that all industrial actors use their national grid location-based mix<sup>4</sup> for the calculation of scope 2 GHG emissions.

For industrial actors located in the EU, these would have to use the EU grid (location-based) mix.

**Rationale:** for an initial period of three years, all EU based industrial actors would be based in the exact same position relative to the calculation of scope 2 emissions (see table 1). This is to ensure a level playing field between MS. Furthermore, MS have binding 2030 climate targets to fulfill and

<sup>3</sup> EU-27 or country shall be the sole level at which grid emission factor shall be calculated. Countries shall not be split into smaller areas, as such disaggregation flexibility could be used to carve out artificially low GHG subgrids.

<sup>4</sup> Reference to 'mix' in this position paper always refer to the 'consumption mix', which takes into consideration electricity imports into and exports from the area considered.



national energy & climate plans (NECP) to implement. The transition phase should be correlated to the national energy transition plans. This is why RECHARGE recommends the phasing in of national grid average to start three years after the publication of the delegated act (see phase 2 below).

**B/. Phase 2 introduces a progressive transition period:** in this longer second phase the usage of a weighted average of each country specific national location-based grid mix with the EU grid mix is introduced. The transition phase should be correlated to the NECPs. To ease the transition for MS that still need to accelerate their path to carbon neutrality RECHARGE proposes that the increase of the relative weight of the national mix will follow a path that starts slow over the first years, but then follows an accelerating path upwards in line with the binding EU climate targets.

Recommended weights over time are introduced in table 2.

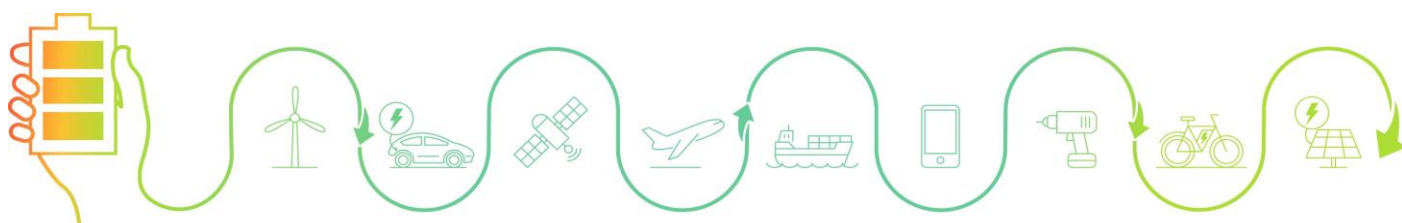
During this phase 2 period, industrial actors in a MS would be free to choose between this weighted EU/MS national average and the applicable location-based grid mix of that MS.

**Rationale:** industrial actors located in a MS where the decrease of the national emission factor is slow could still enjoy (gradually reduced) protection by using the weighted EU/national average.

Conversely, industrial actors located in a MS that have already reached a high level of decarbonization could start to capture the low emission factor of that MS.

Table 2 [phase 1 & 2 illustrated over time with recommended weights of national & EU mix]

Phase	Year	% EU mix	% national location-based mix
Phase 1	1	100 %	0 %
	2	100 %	0 %
	3	100 %	0 %
Phase 2	4	95 %	5 %
	5	90 %	10 %
	6	85 %	15 %
	7	75 %	25 %
	8	60 %	40 %
	9	40 %	60 %
	10	20 %	80 %
Phase 3	11 and later	0 %	100 %



**C/. Phase 3: Thereafter (starting year 11), mandatory use of the national location-based grid mix:** after the transition period (phase 1 & 2), all actors will be required to use the national location-based grid mix, with no fallback option.

## 2. Exclusion of any market-based or other mechanisms that would undermine the differentiation based on the low-carbon EU grid potential (points D to F)

Market-based mechanisms that that would allow non-EU manufacturers to circumvent the differentiation based on the low carbon EU grid should be rejected, and any other GHG reduction mechanisms should be very strictly regulated against possible abuse.

**D/. Exclusion of PPAs:** no market-based mechanism shall be permitted<sup>5</sup>, as this would introduce the possibility for non-EU actors located in highly carbonized grid countries to thwart the benefit of being connected to a decarbonized grid.

**Rationale:** Indeed, one should not underestimate the possibility for national Energy Attribute Certificates<sup>6</sup> (EAC) systems that track the generation, trades and cancellation of EACs to adjust to qualification requirements that would be set by the EU (through the creation of an independent national registry, the calculation of a residual mix, the creation of open rule of procedure, the right of appeal ...). Such adjustments would only take 2 or 3 years to be implemented for a country eager to adjust, rendering ineffective any differentiation for EU actors.

**E/. Exclusion of direct connections:** No direct lines shall be permitted, as this would introduce the possibility for non-EU actors with less stringent and lengthy permitting procedures in their countries to build direct lines at a much faster pace than currently possible in EU MS and thus creates a competitive disadvantage for European actors. Additionally, direct connections between industrial sites and (remote) low carbon electricity production assets cannot be shared with other users, and may hence be operated in a suboptimal model .

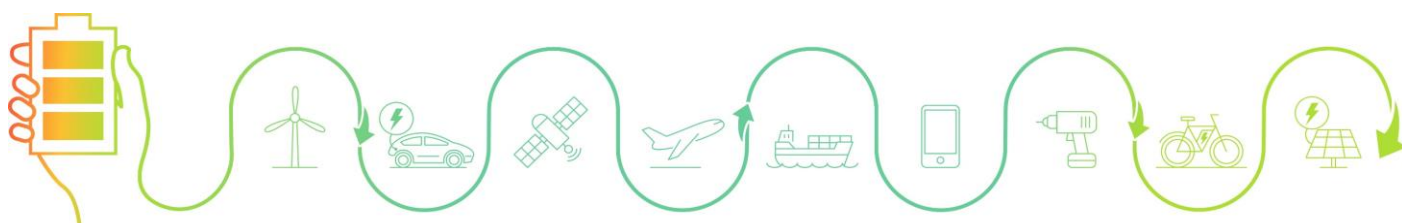
Moreover, when the low carbon electricity production asset cannot deliver the required energy (as the underlying technology is likely to be intermittent wind or PV power), the customer will be using the electricity supplied by the grid for which he will only have paid a fraction of the cost, which is hardly justifiable.

**Rationale:** Direct lines connection in the EU are subject to MS and local authorities granting permits which can take many years. There is a high risk that players in non-EU countries will use the direct lines connection possibility to claim decarbonized production, and they will be able to do it in much shorter time frames compared to in Europe. Secondly, electricity supplied by direct connection should not be recognized as low carbon electricity for the reasons presented above.

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<sup>5</sup> Naked trading of EACs, bundled trading of EACs in physical or synthetic PPAs, and other variation of the same are not supported.

<sup>6</sup> Energy Attribute Certificates (EAC) : the generic name of what is known as GoO in the EU.



**F/. Possible exclusion of onsite low carbon electricity generation:** There is a high risk that within the context of a very large industrial site, which may be able to generate 10% of its electricity use through onsite PV (or other renewable energy sources) production, that this low carbon electricity will be physically assigned to those production lines dedicated to serve EU customers, effectively allowing, if the output of these lines is also in the range of 10% of the site's total output of batteries, to render these batteries destined for Europe CFP-zero.

**Rationale:** To prevent such circumventing of the rules, the definition of an industrial site must be articulated in such a way that no splitting of a site is allowed, and no artificial allocation of specific energy sources to subsets of the site can be allocated.

Should such a definition for an "industrial site" not be workable and should the prohibition of such artificial allocation not be enforceable, it would be wiser to exclude onsite low carbon electricity generation from the CFP calculation.

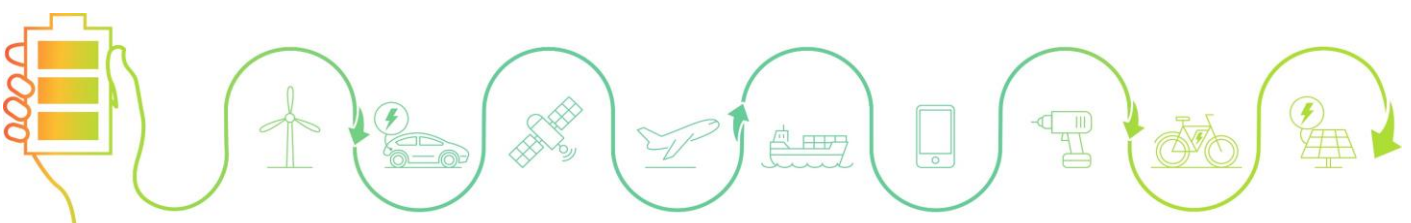
### 3. Important additional considerations (point G)

#### **G/. Consideration on the impact of secondary (default) values if used**

Materials subject to due diligence should not be allowed to use secondary (default) Carbon Footprint values but should use actual primary values. For materials that are subject to due diligence obligations, for which the chain of custody will have to be established and recorded, it will be possible to assess and communicate the Carbon Footprint of those materials downwards along the supply chain, all the way to the battery manufacturer.

**Rationale:** secondary (default) values for materials are essentially based on data gathered in western mining companies, which do not reflect the practices of many mining and refining operations powered by carbon-intensive electricity.

Since accurate representation of raw material impacts can result in over 100% increase in the battery carbon footprint, it is of paramount importance to use representative numbers for RM production. RECHARGE therefore recommends using the primary data of materials subject to diligence under the EU Batteries Regulation.



# RECHARGE

ADVANCED RECHARGEABLE & LITHIUM BATTERIES ASSOCIATION



## ABOUT RECHARGE

RECHARGE is the European industry association for advanced rechargeable and lithium batteries. Founded in 1998, it is our mission to promote advanced rechargeable batteries as a key technology that will contribute to a more empowered, sustainable and circular economy. RECHARGE's unique membership covers all aspects of the advanced rechargeable battery value chain in Europe: from suppliers of primary and secondary raw materials, to battery, equipment and original equipment manufacturers (OEMs), to logistic partners and battery recyclers. [www.rechargebatteries.org](http://www.rechargebatteries.org)

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