Technical Note
Procedure for applying the environmental contribution modulation criteria
Professional Electrical and Electronic Equipment

24/03/2020

Version 1.0
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1. **Context**

As of 2010, an eco-modulation scheme was introduced for household electrical and electronic equipment, before being expanded in 2015. Eco-modulation is an incentive tool aimed at promoting a circular economy using the eco-contribution fee scale. Its objective is to promote producers’ ecodesign processes in terms of waste prevention, equipment decontamination, and service-life extension. Through this scheme, producers can thus receive some return on investment from their ecodesign endeavours.

Following the publication of the eco-modulation decree of the 29th October 2019, environmental contribution modulation also applies to professional electrical and electronic equipment.

This technical note from take-back system (or Producer Responsibility Organization) in charge of Waste Electrical and Electronic Equipment (WEEE) follows a consultation involving Electrical and Electronic Equipment producer federations and associations, recycling business federations, the French Ministry for the Environment and the French Environment and Energy Management Agency (ADEME), among others. Its purpose is to provide the requisite clarifications to help the **Professional Electrical and Electronic Equipment** producers concerned gain a better understanding of the implementation of this modulation.

**The final version of this report was submitted to the French Ministry for the Environment and ADEME prior to distribution.**

In this report, the term “category” of electrical equipment has the same meaning as in Annex II of Directive 2012/19/EU, transposed into Article R543-172 of the French Environmental Code.

The EEE concerned by this note and covered by the eco-modulation scheme are listed in the respective scales of the take-back systems approved for professional WEEE.
2. Summary of criteria and ranges (Annex III of eco-modulation decree of the 29th October 2019)

<table>
<thead>
<tr>
<th>Professional equipment in question</th>
<th>Contribution modulation criteria</th>
<th>Contribution modulation ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Electronic displays (*)</td>
<td>Contractual documents providing for the availability of essential spare parts for the use of the appliance for a period greater than or equal to the following minimum period after the final unit of the model has been placed on the market: 10 years 10 years</td>
<td>Bonus of -10% and subsequently -20% from the 1st January 2021</td>
</tr>
<tr>
<td>- Refrigerating appliances with a direct sales function (*)</td>
<td>15 years 15 years 6 years 8 years</td>
<td></td>
</tr>
<tr>
<td>- Chest freezers (*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Welding equipment (*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Printing systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Emergency lighting systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 to 10 appliances containing at least 20% plastic by mass and containing flame retardants</td>
<td>Absence of bromine in all plastic parts of more than 25 grams containing flame retardants, excluding electronic cards and power cables.</td>
<td>Bonus of -10% and subsequently -20% from the 1st January 2021</td>
</tr>
<tr>
<td>Category 1 to 10 appliances containing at least 20% plastic by mass</td>
<td>At least 20% by mass of all of the plastic in the appliance is derived from post-consumer recycled plastic.</td>
<td>Bonus of -10% and subsequently -20% from the 1st January 2021</td>
</tr>
</tbody>
</table>

(*) The appliances in question are those defined by the legislation in force or the draft version thereof submitted for consultation, in accordance with Directive 2009/125 of the 21st October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products.
3. General rules

3.1. Combination of modulations

Where products are eligible for multiple modulation criteria, they are entitled to combine modulations according to the following terms:

<table>
<thead>
<tr>
<th>Number of criteria fulfilled by the product</th>
<th>2020 (commencing the 1st July 2020)</th>
<th>From 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bonus of -10%</td>
<td>Bonus of -20%</td>
</tr>
<tr>
<td>2</td>
<td>Bonus of -15%</td>
<td>Bonus of -30%</td>
</tr>
<tr>
<td>3</td>
<td>Bonus of -20%</td>
<td>Bonus of -40%</td>
</tr>
</tbody>
</table>

Examples:
In 2021, a category 1 appliance with 30% by mass of all of the plastic contained in the appliance derived from post-consumer recycled plastic, would be entitled to a **bonus of 20%**.

In 2021, a category 1 appliance free from bromine in all plastic parts of more than 25 grams containing flame retardants **AND** with 30% by mass of all of the plastic contained in the appliance derived from post-consumer recycled plastic, would be entitled to a **bonus of 30%**.

3.2. Declaration process

In their declarations, producers will undertake via their take-back system’s reporting tool to provide:

a. Proof of the authenticity of the declaration signed by a duly authorised legal representative of their company, by their chartered accountant, or by their statutory auditor.

b. The list of catalogue references meeting the modulation criteria, per category within the meaning of Annex 1 of Directive 2012/19/EC, and per type of product concerned as described in this technical note.

At the request of their take-back system, producers should provide the following for the products concerned by the criteria, at the producer’s expense:

c. Evidence of the product classification according to eco-modulation criteria (see below the evidence required according to the criteria and products concerned).

The take-back system can verify the authenticity of declared information at any time by means of an audit conducted directly by the take-back system or by a third-party entity commissioned by the take-back system, both respecting the business confidentiality of the audited producers.

Failure to adhere to these undertakings, in the event of an audit and observation of a lack of compliance with the requirements defined above, will result in a procedure to collect the eco-contribution fees avoided on grounds of unjustified implementation of eco-modulation, plus customary legal late payment interest in accordance with the take-back systems’ specifications.

All documentary evidence must be written either in French or English. Otherwise, a certified translation of these documents must be provided.
In the absence of documentary evidence of the compliance of an appliance with the modulation criteria applicable thereto, as set out in this note, the appliance in question must be declared at the least favourable scale.
4. Specific rules by criterion

4.1. Criterion - Availability of spare parts

4.1.1. Criterion

Contractual documents committing the producer to provide essential spare parts to use the appliance for a period greater than or equal to the following minimum period, after the final unit of the model has been placed on the market:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Minimum period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic displays</td>
<td>10 years</td>
</tr>
<tr>
<td>Refrigerating appliances with a direct sales function</td>
<td>10 years</td>
</tr>
<tr>
<td>Chest freezers</td>
<td>15 years</td>
</tr>
<tr>
<td>Welding equipment</td>
<td>15 years</td>
</tr>
<tr>
<td>Printing systems</td>
<td>6 years</td>
</tr>
<tr>
<td>Emergency lighting systems</td>
<td>8 years</td>
</tr>
</tbody>
</table>

4.1.2. Appliances concerned and spare parts

i) Electronic displays

The appliances concerned are the appliances covered by REGULATION (EU) 2019/2021 laying down ecodesign requirements for electronic displays.

The essential spare parts for the use of the appliance concerned by availability consist of all parts referred to as “spare parts” and listed in Annex II, paragraphs D. 5.(a)(1) and D. 5. (a)(2) of REGULATION (EU) 2019/2021 laying down ecodesign requirements for electronic displays.

ii) Refrigerating appliances with a direct sales function

The appliances concerned are the appliances covered by REGULATION (EU) 2019/2024 laying down ecodesign requirements for refrigerating appliances with a direct sales function.

The essential spare parts for the use of the appliance concerned by availability consist of all parts referred to as “spare parts” and listed in Annex II, paragraphs 2.(a)(1) and 2.(a)(2) of REGULATION (EU) 2019/2024 laying down ecodesign requirements for refrigerating appliances with a direct sales function.

iii) Chest freezers

The appliances concerned are professional chest freezers as cited in Article 1, paragraph 2.(a) of REGULATION (EU) 2019/2019 laying down ecodesign requirements for refrigerating appliances.

The essential spare parts for the use of the appliance concerned by availability consist of all parts referred to as “spare parts” and listed in Annex II, paragraphs 3.(a)(1) and 3.(a)(2) of REGULATION (EU) 2019/2019 laying down ecodesign requirements for refrigerating appliances.
iv) Welding equipment

The appliances concerned are the appliances covered by Regulation (EU) 2019/1784 laying down ecodesign requirements for welding equipment.

The essential spare parts for the use of the appliance concerned by availability consist of all parts referred to as “spare parts” and listed in Annex II, paragraph 2.(a)(1) of Regulation (EU) 2019/2019 laying down ecodesign requirements for welding equipment.

v) Printing systems

The appliances concerned are as follows:

- **Ink-jet printer**
  Consists of a device that transfers data to a paper or other* substrate using inks, gels or solid inks (waxes).

- **Monochrome printing device**
  Consists of a device capable of transferring data to paper or other* substrate by monochrome printing only.

- **Colour printer**
  Consists of a device capable of transferring data to paper or other* substrate by colour printing.

- **Multifunction printer**
  Device that performs two or more main functions, including printing (see equipment above). A multifunction printer (MFP) may have a physically integrated form factor or it may consist of a combination of functionally integrated components.

* Textile and foodstuff type substrates and 3D printing are excluded

The spare parts concerned by availability consist of all of the following parts:

- Paper tray/cassette/drawer
- Power supply unit/power supply
- Motherboard/logic board/formatter
- Duplex printing unit, if applicable
- Printer hard drive, if applicable
- External main power cable
- Paper separator
- Control panel/controls/screen/panel
- Document feeder/Automatic document feeder (ADF) for multifunction printers

vi) Emergency lighting systems

The appliances concerned are as follows:

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-contained emergency escape route lighting (BAES evacuation)</td>
<td>NF C 71-800, NF EN 60598-2-22</td>
</tr>
<tr>
<td>Self-contained emergency lighting in open areas (BAES ambiance):</td>
<td>NF C 71-801, NF EN 60598-2-22</td>
</tr>
<tr>
<td>Self-contained emergency lighting in residential buildings (BAEH)</td>
<td>NF C 71-805, NF EN 60598-2-22</td>
</tr>
<tr>
<td>Self-contained lighting for sleeping premises (BAES + BAEH)</td>
<td>UTE C 71-803</td>
</tr>
</tbody>
</table>
The essential spare parts for use of the appliance concerned by availability consist of all of the following parts. These spare parts are not necessarily identical to the original parts, but fulfil the same function.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Spare parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-contained emergency escape route lighting (BAES evacuation)</td>
<td>Storage battery and Light sources and Escape route pictogram</td>
</tr>
<tr>
<td>Self-contained emergency lighting in open areas (BAES ambiance):</td>
<td>Storage battery and Light sources</td>
</tr>
<tr>
<td>Self-contained emergency lighting in residential buildings (BAEH)</td>
<td>Storage battery and Light sources</td>
</tr>
<tr>
<td>Self-contained lighting for sleeping premises (BAES + BAEH)</td>
<td>Storage battery and Light sources and Pictogram</td>
</tr>
<tr>
<td>Centrally powered emergency lighting - (L.S.C.)</td>
<td>Light sources and Escape route pictogram (if appliance has a pictogram)</td>
</tr>
<tr>
<td>Central power supply systems</td>
<td>Storage battery</td>
</tr>
</tbody>
</table>

### 4.1.3. Required documentary evidence

The spare parts mentioned above and the period of availability from the date it was last placed on the market must be specified in the following documents:

<table>
<thead>
<tr>
<th>Preferred document</th>
<th>Otherwise, the following documents may be used as evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Terms and Conditions of Sale</td>
<td>Single agreement and/or category-based/specific contract</td>
</tr>
<tr>
<td></td>
<td>Special Terms and Conditions of Sale</td>
</tr>
<tr>
<td></td>
<td>Product user guide (publicly accessible)</td>
</tr>
</tbody>
</table>
4.2. Criterion - Absence of bromine in plastic parts containing flame retardants

4.2.1. Criterion
Absence of bromine in all plastic parts of more than 25 grams containing flame retardants, excluding electronic cards and power cables.

4.2.2. Appliances concerned
Category 1 to 10 appliances containing:
1) Plastics representing over 20% of the mass of the appliance AND
2) Plastics containing flame retardants

Examples:

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Concerned</th>
<th>Not concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliance containing 10% plastic by mass. All plastic parts contain flame retardants</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Appliance containing 40% plastic. One plastic part of more than 25 grams contains flame retardants.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Appliance containing 30% plastic by mass. All plastic parts contain flame retardants.</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

4.2.3. Required documentary evidence

i) Appliance eligibility
For each product reference, product specifications with the mass of all plastic parts, the mass of each part containing flame retardants, and the total product mass.

ii) Absence of flame retardants
Technical evidence of the absence of brominated flame retardants. If the materials are not included in the MSDS (Material Safety Data Sheet), an undertaking in respect of the absence of brominated flame retardants from the suppliers of the materials in question.
4.3. Criterion - Incorporation of post-consumer recycled plastic

4.3.1. Criterion
At least 20% by mass of all of the plastic in the equipment is derived from post-consumer recycled plastic.

4.3.2. Appliances concerned
Category 1 to 10 appliances containing at least 20% plastic by mass.

4.3.3. Required documentary evidence

i) Appliance eligibility
For each product reference, product specifications with the mass of the plastic parts, and the total product mass.

ii) Recycled content calculation
\[
R_{\text{plast,post}} = \frac{\sum k m_k \times r_{\text{post},k}}{m_{\text{plast,post}}} \times 100\%
\]
where
- \( R_{\text{plast,post}} \) is the post-consumer recycled plastic content of the appliance;
- \( r_{\text{post},k} \) is the post-consumer recycled plastic content\(^1\) of the kth material or part, (expressed as %);
- \( m_k \) is the mass of the kth material or plastic part;
- \( m_{\text{plast,post}} \) is the total mass of plastics of the appliance.

NOTE: In the formula of \( R_{\text{plast,post}} \), multiplying by 100% expresses the post-consumer recycled plastic content as a percentage.

iii) Traceability chain
A traceability system capable of tracking recycled plastic materials from the time that they are identified as such until their final incorporation must be implemented. The producer’s internal traceability procedure must be available and provided in the event of an audit and must contain at least the following information:
- Date of recycled content calculation
- Description of calculation hypotheses, simplifications and cut-off thresholds
- Selected calculation period (period selected for mass balance calculations)
- Calculation details
- For each plastic part including post-consumer recycled plastic:

\(^1\) For the definition of post-consumer recycled material, refer to standard EN 45557: 2019 - General method for assessing the proportion of recycled materials content in energy-related products, containing details of the scope of the term “post-consumer material” in sections 3.1.1.4, 5.3.3 and A.5.1
- Declaration by the part manufacturer specifying its post-consumer recycled plastic content
- Copy of the recycled plastic purchase contract placed by the part manufacturer for procurement, identifying the post-consumer recycled origin of the material.