

OCAD3E



Study on eco-modulation in the management of household WEEE

**Summary report of the study
conducted on behalf of
OCAD3E**

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1 - Context of the Study

This document is a synthesis report of the study carried out on behalf of OCAD3E by:

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This report focuses on the ways to improve the eco-modulation system for the household WEEE sector and provides a summary of the main findings relating to the various aspects analyzed in this study.

Context of the study

Since 2010, the contributions paid by producers of household electrical and electronic equipment (EEE) to eco-organizations have been subject to "eco-modulation", which takes the form of a bonus and malus system based on eco-design criteria for this equipment. This system, which is still unique in Europe, is designed to encourage manufacturers to make design choices to improve the environmental performance of their products at the end of their life cycle.

In 2019, the products targeted by eco-modulation represented more than 40% of the tonnage of products put on the market, i.e. approximately 55% of the amount of eco-participation. On average, for product categories for which a modulation scheme applies (bonus or malus), 45% of products in these categories have been declared with a bonus or malus. Therefore, 55% of the products in these same categories have been declared without a bonus or malus.

This system will probably have to evolve in the years to come, in a context where:

- At the European level, published research and ongoing studies advocate for a generalization and harmonization of this type of system (Article 8a of the Waste Framework Directive states that Member States must ensure that these provisions are put in place by 5 January 2023 at the latest ;
- In France, law n° 2020-105 of 10 February 2020 relating to the fight against waste and for the promotion of the circular economy, known as the "AGEC" law, extends the eco-modulation system to all sectors and implements indexes relating to repairability (2021) and durability (2024);

In this context, ecosystem and Ecologic, under the aegis of OCAD3E, have decided to gather information on the lessons learned after 3 full years of the application of the eco-modulation system (2016, 2017 and 2018) in the household WEEE sector.

The objectives of this study were as follows:

- to analyze the eco-efficiency of the current eco-modulation system,
- to identify ways of improving the system.

2 - Summary of possible improvements to eco-modulation

The table hereafter summarizes possible improvements to the system proposed by the consultants following the findings of the study.

An Essential Improvement - Working on a European scale

Ability to make eco-design practices evolve Difficulty of implementation

Expansion, standardization and stabilization of the eco-modulation system at the European level: an essential improvement for effectively encouraging new practices.

Expansion: The product ranges are international or European. It is difficult for international brands to design their products exclusively for the French market. The scale which is best adapted to ensure an effective incentive is that of the European market.

Standardization: Eco-modulation criteria must be consistent at the European level, in terms of how they are described and controlled. The diversity of criteria in the different European countries makes it impossible for a marketer to design or have a product designed to meet all of them.

Stabilization: Designing the products requires a significant investment by the marketers, which is not truly compatible with a system that is subject to frequent changes. The criteria defined for eco-modulation must remain stable to give marketers time to develop product ranges able to satisfy these criteria.

Furthermore, Article 8a (4) of the Waste Framework Directive states that "where the obligations for the extended responsibility of the producer are fulfilled collectively, financial contributions shall be modulated, where possible, for each product or group of similar products, taking into account, inter alia, their durability, reparability, reusability, recyclability, and the presence of hazardous substances". Member States are supposed to ensure that extended producer responsibility schemes established before 4 July 2018 are compliant with this Article by 5 January 2023 at the latest.

Finally, a study (Study to Support Preparation of the Commission's Guidance for Extended Producer Responsibility Scheme¹ conducted by Eunomia at the request of the European Commission and whose report was published in April 2020 proposes recommendations similar to those of the present study, namely:

- A need for the harmonization of the criteria,
- Application of the right number of appropriate criteria to limit complexity,
- The study also mentions the issue of the economic impact, notably linked to the magnitudes of the modulation, the stability of criteria (short term vs. long term), the ability to provide proof, the need for control, etc.).

It should be noted that this European study proposes criteria for EEEs, the majority of which fall within the scope of the 4 main criteria proposed below (Reparability, Durability, Recyclability and Circularity).

Strong

Medium to High (launch of a specific WG within the WEEE forum - need for efficient collaboration between stakeholders)

¹ <https://op.europa.eu/fr/publication-detail/-/publication/08a892b7-9330-11ea-aac4-01aa75ed71a1/language-en>

Simplifying the system

Ability to make
eco-design
practices evolve

Difficulty of
implementation

Simplifying the application
of the criteria

- 9

Propose a clear and understandable approach for all categories, based on four categories of criteria:

- Reparability
- Durability
- Recyclability
- Circularity

This new approach is likely to facilitate the task of informing the consumer, since the AGECE law provides for consumers being informed of the bonus and malus applied to the products concerned.

Without modifying the current criteria, almost all of them can be classified according to one of the four categories. These reflect the main issues as studied and discussed at French and European levels, and the evolution of the criteria will have to be based on the work conducted on regulations and standardization in France and the European Union.

Organize and generalize
modulation according to 4
main themes

.An example of a new classification of the criteria could be:

- Reparability
 - [new] Taking into account a future reparability index: Five products targeted from 2021 in France, three of which are currently modulated: washing machines, smartphones, and laptops
 - [new] Taking into account work at the European level (JRC and CEN/CENELEC for the development of a method for assessing reparability)
 - [existing] Existing criteria relating to the availability of technical documentation from authorized repairers, the availability of spare parts essential for the use of the equipment, and the capacity for a total dismantling of the product using standard tools available on the market
- Durability
 - [new] A durability index in 2024 in France

Average

Average
*(Requires a
revision of the
tariff)*

-
- [new] Taking account of work conducted at the European level (CEN/CENELEC standards)
 - [existing] Existing criteria for upgrading the product with common tools, availability of software updates, standardized connections, etc.

 - Recyclability
 - [New] Taking into account of work at European level (CEN/CENELC standards)
 - [existing] Existing criteria relating to the absence of plastic parts containing brominated flame retardants, the absence of paints and coatings incompatible with recycling, etc.
 - Circularity
 - [existing] Existing criteria for the inclusion of post-consumer recycled plastic
-

Strengthening Membership

Ability to make
eco-design
practices evolve

Difficulty of
implementation

Develop a contact database of "technical advisors"	Establish a database of qualified contacts amongst producers (technical advisors in addition to administrative advisors) to address eco-design issues, in addition to the one used for the contractual and financial management of the marketing of products. It is a common practice within other eco-organizations and appears to be a priority for the WEEE sector given the international scope of the markets.		
Reinforce communication and training among marketers	<ul style="list-style-type: none"> ● Technical pedagogical documentation explaining the cases in which a bonus/malus is applied and the accepted methods of providing proof ● Resources for exchanges through webinars on eco-modulation ● Personalized follow-up to engage companies 	Average	Low
Use of audits to raise awareness	Train auditors to disseminate best practices, documents, and key resources on eco-design to members.		
Share feedback to stimulate best practices	Encourage the sharing of best practices by means of standard format data sheets shared during webinars or conferences.		

Recommendations concerning audits

		Ability to make eco-design practices evolve	Difficulty of implementation
Limit the most frequent sources of error	Include in the workflow of declarations for the marketing of the product a specific request for confirmation for equipment benefiting from eco-modulation: a sworn statement and the possibility of sending supporting documents as soon as the declaration is made.		Low
Facilitate the provision of supporting documents	Not to make, from the outset, the transmission of supporting documents compulsory at the time of declaration but to allow and encourage it (on a voluntary basis). The simplification of the criteria and associated supporting documents would, however, facilitate their provision.		Average (Requires the implementation of a document management system in association with the declaration)
Clarify and update the procedure/documentation for modulation support	<ul style="list-style-type: none"> Regular (e.g. annual) updating of the OCAD3E documentation, based on feedback from auditors). Adapt it as a clear instructional guide for the members. 	Low (These recommendations may improve the system globally, but their main aim is to simplify and make the audit process more reliable).	Low
Clarify and update internal procedures within eco-organizations	<ul style="list-style-type: none"> Harmonize the items to be checked and the content of audit reports relating to eco-modulation to enable the pooling of information and the sharing of lessons learned. Clarify the rules for correcting and regularizing declarations following the detection of anomalies. 		Low
Increase the number of specific eco-modulation audits	Set a minimum number of annual audits to be carried out on producers eligible to apply for eco-modulation (<i>this recommendation will become obsolete if the system is extended to all categories</i>).		Average

3 - Methodology and main findings

The study comprises five sections, the main findings of which are summarized below.

Section 1: Analysis the database of the marketing declarations of eco-organizations 2016/ 2017/ 2018

An analysis of the anonymized marketing declaration data submitted by each eco-organism was carried out.

This detailed analysis of marketing declarations covered the years 2016, 2017, 2018. For some product families, these were the first 3 years of the implementation of eco-modulation.

The analysis shows the value of a medium-term approach and a stable system over time. In fact, after 3 full years of declaration, the study reveals certain limits to clearly identifying the levers and factors affecting the evolution of the number of products declared as eco-modulated per product family (declarative practices, design practices and/or market share of the different products, etc.).

Certain behaviors (increase in the number of products declared within the scope of the malus fee, two families of products with similar eco-modulation criteria showing different trends in the proportion of eco-modulated products) **show that we are still in a learning and appropriation phase, which relates to the design timeframe for producers** (the design of a product and its actual launch on a market can take several years).

Nevertheless, the study has allowed us to identify a group of marketers making eco-modulation declarations for all their units put on the market, a trend that has increased over the years. For the other marketers who declare eco-modulation for some of the units they put on the market, there are great differences in the proportions of products benefiting from eco-modulation in the different families of products.

Section 2: Analysis of the producer's perspective regarding the implementation of eco-modulation

Various means have been put in place to consult the producers concerned by the eco-modulation of household EEES: initially a telephone survey of a sample of 30 producers was conducted at the end of 2019, this was followed by an online survey, a workshop with the professional associations of the sector, and additional qualitative interviews.

Feedback from producers shed additional light on section 1 of the study:

- **Extending the scheme on a European scale is essential to trigger significant changes in product design.** To initiate these changes, the system must be considered by companies as a complementary incentive to the existing triggering factors: requests by consumers or distributors, or regulations. Because of the markets in which producers operate, these requirements on the part of "consumers" or regulators most often operate on a European scale. It is therefore essential to extend the scope of the system to the whole of Europe.

- **Declarative practices are not always correlated with the technical reality of the products**, with some companies preferring to pay the highest price for the marketing of all their products (see next point) for the sake of simplicity.
- Finally, **a simplification of the system** (less diversity in the criteria and fewer combinations) would be a major asset to **make the system more attractive** and would also make it possible to **improve the reliability of the data provided** (logical sequences of criteria that would be easier to justify).

Overall, while eco-modulation has enabled certain trailblazers to benefit from the incentive nature of the system, extending it **Europewide and simplifying it would accelerate its dynamics among producers, thus contributing more broadly to changing declaration, design and commercial practices** (e.g. provision of spare parts).

Section 3: Economic impact analysis for marketers and eco-organizations

An economic impact assessment was conducted for marketers as well as an analysis of the economic impact for eco-organizations based on the interviews and the survey.

The costs of eco-modulation for marketers

The following conclusions regarding the costs of eco-modulation for marketers may be drawn:

- Companies do not explicitly quantify the costs of changing the design or business practices for products that benefit from a bonus or avoid a malus within the eco-modulation system. In fact, changes may be the result of concomitant factors (as explained in the previous chapter: consumer/distributor demands, regulations, etc.) and may not be specific to eco-modulation, which makes precise costing difficult.
- The administrative costs related to the declaration of the product or following an audit appear to be small for most marketers² questioned. These costs are mainly related to providing supporting evidence, which in some cases can be high due to the administrative burden, depending on the complexity of the chain of actors involved in the manufacturing of the product (subcontracting).

Thus the administrative costs incurred by the eco-modulation system now appear to be relatively low for most of the marketers questioned, with the exception of certain cases where the search for proof of product compliance can represent a prohibitive cost (resulting in some companies choosing to pay malus fees rather than gather the evidence to prove the eligibility of their products for eco-modulation):

- **For certain types of criteria:** inclusion of recycled materials, absence of controlled substances
- **For certain market situations:** cases where the French market is deemed too small for the product concerned to justify the cost of searching for the information,
- **For certain types of marketers:** some of the importers/retailers interviewed indicated that they had more trouble obtaining the supporting documents requested.

The costs of eco-modulation for eco-organizations

² *It should be noted that the sample of marketers questioned was made up of large companies having invested in an information system to manage the eco-modulation administrative process, making the annual cost of producing the declarations relatively low.*

In the scheme's current form, the difference in turnover between the surplus generated by the malus fees and the "loss of earnings" caused by the bonus fees does not represent a significant risk to the financial stability of eco-organizations.

However, a significant extension of the scheme, particularly in economic scope, could have the following impacts:

- **Risk of a disruption of the economic balance of eco-organizations**, this risk manifests itself when the difference in turnover between the surplus generated by the malus fees and the "shortfall" generated by the bonus fees reaches the equivalent of one month of total annual costs,
- **Risk of a disruption in the balance in competition between eco-organizations**, a significant part of the amount of the eco-contribution being fixed contractually, without any relation to the performance of each eco-organization³,
- **Risk of distortion of the nature of eco-participation**, which is the financing of the end-of-life processing of EEEs, and structural difficulties in applying the mechanism in the event of a flat-rate eco-modulation being set, independently of the eco-contribution.

Thus, if such an extension of the system were to be considered, the impact in terms of the risks mentioned above and of possible mechanisms to remedy them would need to be studied in greater depth, by conducting more detailed simulations.

Section 4: Critical analysis of eco-modulation control (audits of marketing declarations) and proposals for improvement

In addition to the interviews carried out with producers, which also covered audit procedures, an analysis of the audit reports on marketing declarations and in-depth interviews with eco-organizations and audit service providers made it possible to identify areas for optimization likely to facilitate and make the control of declarations more reliable.

These improvements (regular updating of the OCAD3E memo, adapting it as an instructional guide better suited to the members, harmonization of points to be controlled and the content of audit reports, special audits of producers eligible for eco-modulation, etc.) make perfect sense in the context of a broadening of eco-modulation at a European level. This should lead to a greater number of companies wishing to benefit from the incentives in the eco-modulation scheme and who would therefore seek to change their practices (more bonus fees, fewer malus fees).

Section 5: Identification of "usable" environmental criteria in labels, certifications and standards

Finally, section 5 describes and analyses the standards, labels and certifications that can be used to define eco-modulation criteria and/or serve as a means of proving compliance with one or more eco-modulation criterion.

³ *The amount of the eco-contribution reflects the costs of management of the end of life of the appliance by the eco-organization, which is a competitive market. If the economic amplitude of eco-modulation is set at a very high rate, a large part of the amount of the eco-participation then reflects the practices of the eco-organization's members in in their declarations of products with bonuses or maluses*

The use of type I and III labels to develop eco-modulation criteria, or as a means of proof for eligibility according to these criteria, are efficient tools. However, they may prove to be limited, in particular because of a limited number of products targeted or a lack of use by stakeholders.

Two other interesting possible improvements emerged from the study:

- **The use of the new circular economy standards applicable to products relating to energy consumption, the NF EN 4555x series, to develop eco-modulation criteria relating to the relevant categories.** They have the advantage of being recognized by producers and reflect ongoing discussions on issues linked to eco-modulation. However, they should be broken down by product category to be useful in developing eco-modulation criteria. This deserves due consideration because this breakdown by product category could take between 3 and 5 years to carry out.
- **Private standards also show a potential for developing eco-modulation criteria insofar** as they reflect some of the expectations of civil society on the themes of the reparability and durability of products. Furthermore, the methods for assessing reparability and durability are similar to those expressed in the NF EN 4555x standards cited above. However, their potential use with a view to developing eco-modulation criteria depends on their appropriation by marketers. It will also be interesting to see whether these standards will be able to cover a maximum number of product families within a short time.