



# Fee modulation in the French Extended Producer Responsibility scheme for WEEE to promote re-use and recycling

The French WEEE EPR system has set different fee modulations to promote the reparability and durability of electrical and electronic products.

## OBJECTIVES

In Extended Producer Responsibility schemes, producers or companies putting goods on a market have to pay fees that will then fund the collection and recycling of these products. These fees usually depend on the weights and/or the type of products, but other parameters can be taken into consideration: for instance, **eco-modulated fees** can promote more sustainable products by setting a bonus/malus system when the product or the producer is not complying with specific requirements that would either make re-use and recycling simpler or more challenging.

Such eco-modulated fees can be implemented for EEE to promote e.g. longer life-time for products.

## BACKGROUND INFORMATION

Waste from electrical and electronic equipment (WEEE) is regulated by a European Directive aiming to prevent its generation, promote the efficient use of resources and the recovery of secondary raw material through re-use and recycling, and improve the environmental performances of products. The EU WEEE Directive was introduced in 2002 and revised in 2012 (Directive N°2012/19/EU).

In France, the WEEE EPR system is regulated by the articles L.541-10-2 and the articles R.543-172 of the Environmental Law (*Code de l'Environnement*). The EPR scheme for household WEEE is managed by three Producer Responsibility Organisations (PROs) (Ecologic, ecosystem, PV Cycle that focuses on photovoltaic panels), that collect the fees from the producers, and finance and/or operate the collection, sorting, and recycling of WEEE. Eco-modulated fees are in use since 2015.

## IMPLEMENTING BODIES

The eco-modulated fees are defined in the legal specifications of the EPR system by the Ministry of the Ecologic Transition, that is also in charge of enforcing and monitoring its application. The EPR fees are collected by the three PROs: Ecologic, ecosystem, and PV Cycle.

## KEY INFORMATION

- **Topic:** re-use, recycling
- **Waste fraction:** WEEE (waste from electrical and electronic equipment or e-waste)
- **Target group:** producers, companies putting EEE on the market
- **Instruments:** economic instruments, EPR

## DATE OF IMPLEMENTATION

Since 2015.



## KEY STAKEHOLDERS INVOLVED

The legal specifications are defined by the Ministry of the Ecologic Transition in a consultative manner involving key stakeholders of the EPR scheme: Producer Responsibility Organisations, producers, retailers, recyclers, and representatives of local authorities managing municipal waste.

## GENERAL CONTEXT

There is room for improvement for WEEE recycling, that is partly due to challenges with collection, but also caused by other parameters linked with the design and manufacturing of EEE. Several parameters tend to hinder the possibilities of re-use and recycling of EEE, especially:

- lack of information from manufacturers on reparability or on the content of hazardous substances;
- unavailability of spare parts over time;
- design making dismantling not possible or challenging (e.g. the need of specific tools, the use of adhesives, the accessibility of the different parts);
- the diversity of types of materials (e.g. of plastics) and the combination of materials that cannot be processed together;
- the presence of toxic substances.

Eco-modulated fees are one way to promote more adequate design and production of EEE to extend their life-time.

## DESCRIPTION OF THE ACTIVITIES

The current eco-modulated fees are defined as follows:

Type of EEE	Criteria	Modulation of the fee
Fridge and freezer	Presence of refrigerant fluid FLC>15, or Technical documentation not available for authorised repairers, or Spare parts essential for the use of the equipment not available	+20%
Washing machine and dishwasher	Availability of essential spare parts for 11 years	-20%
	Integration of post-consumer recycled plastic (10% threshold)	-20%
Vacuum cleaner	Presence of plastic pieces below 25 gr containing brominated flame retardant, or Technical documentation not available for authorised repairers, or Spare parts essential for the use of the equipment not available	+20%
Coffee / tea making appliances	Availability of essential spare parts for 5 years and availability of technical documentation	-20%
Computers	Absence of paint or coating preventing the recycling and re-use of plastic parts <100 gr, and integration of post-consumer recycled plastic (10% threshold) and update of the hardware with common tools, including flash readers, chips and cards	-20%
Tablets	Presence of brominated flame retardants in the plastic structure, or Absence of software updates essential for the use of the equipment	+100%
Printer	Dismantling can be done with standard tools available in commerce and availability of spare parts during 5 years after the end of production of the printer	-20%
Phone	Absence of standard plugs, or Absence of software updates essential for the use of the equipment	+100%
TV	Availability of technical documentation to the authorised repairers and of the spare parts (such as electronic cards) during more than 5 years, or Integration of post-consumer recycled plastic (10% threshold)	-20%
Drillers	Technical documentation not available for authorised repairers, or Spare parts essential for the use of the equipment not available	+20%
Gaming console	Technical documentation not available for authorised repairers, or Spare parts essential for the use of the equipment not available, or Presence of brominated flame retardants, moulded parts	+20%
Lamps	LED sources only	-20%



## MAIN ACHIEVEMENTS AND RESULTS

It is difficult to assess how much the eco-modulated fees contributed to increase re-use and recycling performances over the past years. In 2019, the re-use and recycling rate of collected WEEE reached around 80% and has been stable for the past years, but the treated quantities have continuously increased.

ADEME (the French Environmental Protection Agency) recognises that the eco-modulations had a positive impact for the recycling of sorted plastic extracted from WEEE, due to the reduction of hazardous substances such as flame retardants in EEE.

The recent "Anti-Waste Law" (*Loi Anti Gaspillage pour une Economie Circulaire*) voted in 2020 plans to introduce new measure to promote eco-design of EEE, by providing better information to the public. A reparability index was introduced in 2021, and will afterwards be replaced by a sustainability index, to reflect the durability of specific products (smartphones, washing machines, etc.). It will also include obligation on warranty and on information on spare parts. The eco-modulations might also be revised to be stricter.

## KEY FACTORS OF SUCCESS

Defining clear criteria for assessing the reparability or recyclability of EEE products is complex, and requires collaborative efforts from the different players of the value-chain for each category of product. Such collaborations between producers of EEE, recyclers, and re-use organisations should be promoted for the definition of more appropriate criteria taking into consideration forthcoming innovation on product design and recycling.

## BOTTLENECKS, LIMITATIONS AND CHALLENGES

The implementation of such a system might be complex and challenging for producers, especially because of the heterogeneity of EPR fees across Europe, which requires them to comply with very different fee systems. Reaching an agreement of criteria can also prove to be challenging and requires concertation with the different key players. Without an EPR system for WEEE, it seems extremely challenging to set and enforce such requirements to producers.

## LESSONS LEARNED AND REPLICABILITY

This good practice seems to be extremely difficult to implement without a pre-existing EPR system for WEEE, and a proper monitoring and control system to ensure that the eco-modulated fees are well applied.

## REFERENCES, LINKS TO FURTHER INFORMATION

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