ECONOMIC INCENTIVES LEADERSHIP GROUP
EUROPEAN CIRCULAR ECONOMY STAKEHOLDER PLATFORM

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EPR SCHEMES

CURRENT STATE AND RECOMMENDATIONS FOR IMPROVEMENT

ECESP
EUROPEAN CIRCULAR ECONOMY STAKEHOLDER PLATFORM

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EPR - an overview

Extended Producer Responsibility (EPR) schemes are a necessary tool to implement "polluter pay principle" as long as proper environmental externalities pricing mechanism is not introduced

A major obstacle to achieving a circular and carbon-neutral economy lies in the lack of proper pricing for environmental externalities. Without proper pricing mechanisms, product design fails to fully incorporate principles of circularity, end-of-life products are not collected and possibly pollute the environment while their economic value is being lost. Extended Producer Responsibility (EPR) schemes can serve as a vital link between the design phase, use and the end-of-life stage of products, enhancing circularity.

EPR is a policy tool that extends the producer's financial and/or operational responsibility for a product to encompass the management of its post-consumer stage, aiming to support the achievement of national or EU recycling and recovery targets. This responsibility can be financial and/or organisational and can cover all aspects of EoL management: collection, sorting and treatment/recovery.

EPR schemes are currently used for products where externalities are relatively high. However, their scope is being gradually broadened.

EPR - an overview

EPR schemes take different shapes, however collective collaboration of individual producers within Producer Responsibility Organisations is the most widespread EPR scheme form

EPR can be implemented in two main forms: individual, and collective. In an **individual EPR system**, a company subject to EPR obligations takes sole responsibility for managing the end-of-life of the products it places on the market. In a **collective EPR system**, a group of producers fulfils its obligations through an EPR scheme that operates on its behalf. A collective EPR scheme is often set up by competent authorities of a EU member state in accordance with Article 8 of the Waste Framework Directive (WFD).

In order to strengthen the re-use and the prevention, recycling and other recovery of waste, EU member states may take legislative or non-legislative measures to ensure that any natural or legal person who professionally develops, manufactures, processes, treats, sells or imports products (producer of the product) has extended producer responsibility.

EPR is designed to provide responsibility on individual producers. However, in practice, producers often collaborate within Producer Responsibility Organizations (PROs) to achieve their waste management obligations. Their main obligations include meeting material recovery targets on behalf of the industry, coordinating take-back and collection systems with local authorities, assisting companies with eco-design measures, and reporting to national authorities.

EPR - an overview

EPR schemes basic ambitions are:

Ensure circular waste management

EPR can further incentivize the separate and proper waste collection to ensure materials are not cross-contaminated and are most easily recoverable. Coupled with Member State recycling/reuse targets EPR can be an especially effective tool.

Pushing circular eco-design

Having producers financially and/or operationally responsible for the proper waste management of their discarded products incentivises a reconsideration on the design and material use used in products to best facilitate material recovery. This can be achieved through fees to be not solely modulated based on volumes placed on the market but based on the sustainability features of the products placed on the market (eco-modulation of fees).

Achieve circular targets

EPR can either incentivize the attainment of already set Member State material recovery targets or ensure greater adherence to the waste hierarchy is achieved by producer-set targets. This has already effectively diverted waste from landfills for a variety of waste streams. It can further incentivize the development and deployment of new material recovery options/technologies.

EPR schemes rationale

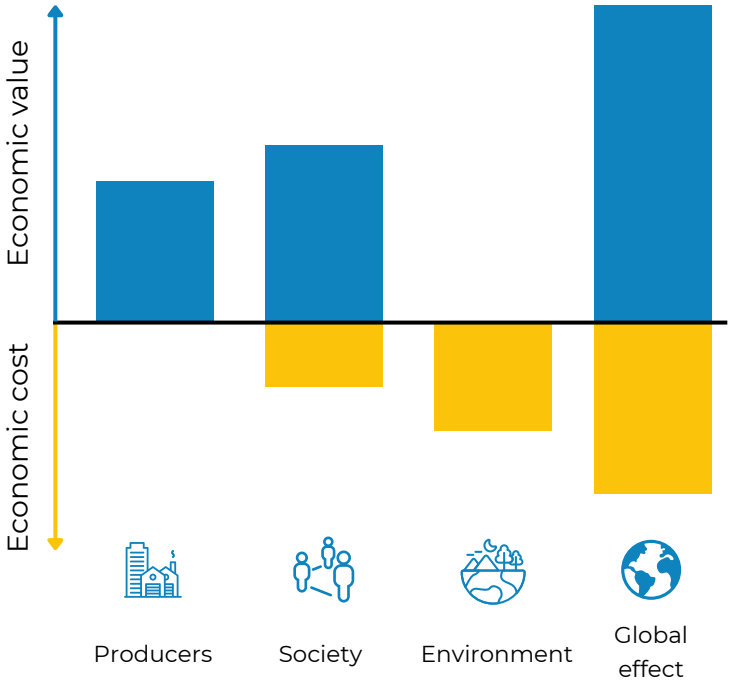
EPR schemes require producers to take on the responsibility for the end-of-life of their products. Those schemes shift the cost of waste management from the end consumer to the producer, in line with the polluter pays principle. Afterall it is the producer who largely determines the good's repairability, material content, reuse potential, etc.

EPR concept is based on the assumption that waste streams generated have a negative value, or the cost of waste management is higher than the potential income from recovered resources. Unfortunately this is still the usual case for most types of waste generated. As a result, market mechanisms will not ensure proper collection and treatment of such waste. EPR schemes are needed to fill this gap. They do so by requiring producers to finance the management of waste resulting from their products as well as educating users on proper handling.

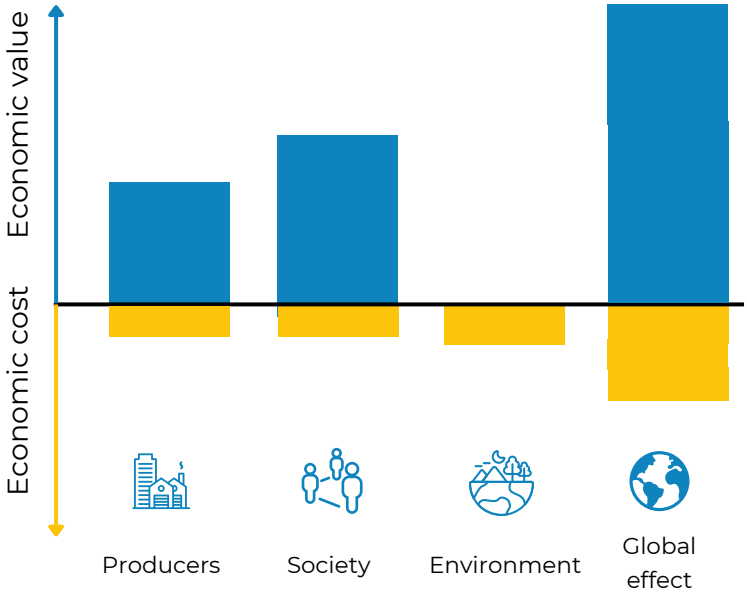
EPR schemes aim to decrease externalities of production and consumption and transfer the cost of handling those externalities from the society and the environment to the producers. This directly benefits the planet and in effect improves the conditions we all live in.

Market mechanism are not enough to limit externalities of end-of-life products that are considered worthless

EPR schemes rationale



Before the EPR scheme introduction producers typically bear no or only a fraction of costs of negative social and environmental effects of their production. This situation is disadvantageous for everyone but them.



After the EPR scheme introduction producers bear financial/organisational responsibility for their externalities. This influences ecodesign practices, take-back and reuse systems, recycling, education, etc. In effect negative outcomes of production and consumption are decreased. At the same time the global net economic value of products improves.

EPR schemes are currently one of only few options to internalise the negative effects of production and consumption. In other words, ensuring that the price of products reflects not only the cost of their design, resources used, production, marketing and so forth but also the cost of counteracting pollution, greenhouse gases emissions, biodiversity loss etc.

Legislative background

EPR as a policy instrument first appeared in Europe in the 1990s in a few European Member States. This was first outlined within EU legislation within the Waste Framework Directive . EPR was defined in this legislation as follows:

> 'Extended producer responsibility scheme' means a set of measures taken by Member States to ensure that producers of products bear financial responsibility or financial and organisational responsibility for the management of the waste stage of a product's life cycle.

Certain waste-specific EU legislation further requires or suggests EPR schemes to be set up. This is currently the case for, Waste Electronic and Electrical Equipment (WEEE), End-of-Life Vehicles (ELVs), Batteries or Packaging and Packaging Waste Directive (PPWD), Urban waste water treatment directive and the Textile Strategy.

Many of these legislations were recently revised or are currently undergoing revision processes which are looking to expand EPR obligations and/or to implement eco-modulation of the EPR fees.

Eco-modulation is a financial tool within EPR systems that aims to mirror the true cost of products' externalities by differentiating the EPR fee basing on their specific characteristics. By modulating this fee the cost coverage becomes more granular to reflect the differences between goods. It operates by modulating the fee, creating a higher fee for producers who introduce products that fall short of specific environmental objectives, while offering lower fees to those who market products that align with these goals. This approach creates an incentive for producers to adopt environmentally friendly practices and design as well as prioritise sustainable materials

Legislative background

Eco-modulation systems for EPR can be implemented in different forms. Recyclability, reducing presence of hazardous substances, consumer awareness, uptake of recycled content, and product lifespan measures are notable examples of advance fee modulation criteria. These criteria guide producers and influence better investments into Design for Recycling (DfR), increase the uptake of recycled content, and/or increase the lifetime and dismantability or reusability of products.

Implementing these actions is often costly and requires redesign, production process modification, etc. Therefore, eco-modulation to be effective warrants an economic incentive in the form of a lower EPR fee, that results in long term net savings for the producers.

European Member States have already started to develop such eco-modulation rates for a variety of waste streams (packaging, electrical and electronic equipment (EEE), graphic paper, and batteries).

Eco-modulation criteria	Use example
Specification of characteristics that determine recyclability	Packaging schemes in Belgium, the Netherlands, Italy, France, Portugal, Sweden
Presence of hazardous substances	EEE, packaging and graphic paper schemes in France
Consumer awareness	Packaging in France, Poland
Recycled content ratio	Packaging schemes in Germany, France; Textiles in France
Product lifespan	EEE and batteries in France, Packaging in Italy, Estonia, France, Belgium; tyres in Portugal

Recommendations

Moving beyond cost-efficiency as the main driver for EPR schemes

Historically, cost-efficiency has been the main driver for EPR schemes. However, as the scope of EPR expands to include responsibilities such enhancing circularity via fee modulation, this focus on cost-efficiency alone often conflicts with broader circularity goals.

01 Reflect the full environmental and social costs associated with products

Across Europe, EPR schemes are progressively adapting to these new multi-faceted objectives. Yet, in order to accelerate that transition towards circularity targets assigned to EPR schemes, it is essential to reflect the full environmental and social costs associated with products.
For streams covered by EPR, fees do not, in most instances, cover the full social and environmental costs associated with products placed on the market, thus failing to adequately implement the polluter pays principles for these products streams. In the pursuit of cost minimization, the EPR fee becomes too low to effectively implement the polluter-pays principle. It is thus essential to ensure that EPR fees are properly calibrated to drive sustainable change for the stream at stake. Concretely, this requires amendment of Article 8a of the WFD, which caps the total fee by the total costs of waste management.

02 Combat free-riding

Since EPR is a cost, it is instrumental to guarantee a level playing field among all producers in each sector. Ensuring that all producers pay their fair share, reflecting their externalities, is crucial in that respect. Thus, enforcement and sanctions against free riders as well as adequate measures to ensure that online sales and their platforms are compliant with EPR obligations are essential.

Recommendations

03 Ensure that the magnitude of the modulated fee drives change

In order to ensure that eco-modulation drives circularity, it is essential to guarantee that the base fee which will be modulated reflects the true social and environmental cost in the products' price, thus incentivising the most circular products and against the least ones. If the fee does not mirror the true cost of the product and in effect represents only a minor portion of the products' price, eco-modulation won't have any impact.

As per the ECOLOGIC report "(...), the size of the fee modulation should be carefully estimated so that overall costs are covered and at the same time it drives efforts towards circular economy and waste prevention." While a number of examples are provided of eco-modulation that drives circularity by maximizing sustainable design, it will be important from a consistency standpoint to link eco-modulation with circularity criteria defined in the forthcoming Ecodesign Regulations adopted based on the Sustainable Products' Initiative and the European Sustainable Products' Regulation. This will have the merit of better harmonising key elements of fees' modulation.

04 Improve the governance of EPR schemes

As acknowledged in recent notes, the current governance of most EPR schemes does not foster a cooperation across the value chain, which is at the core of circularity. From an operational standpoint, for eco-modulation to be effective, a multi-stakeholder approach is required to define clear criteria to boost waste prevention, recycling and the use of recycled materials.

One of the most straightforward manner to foster such a multistakeholder approach is to guarantee that the governing body of EPR schemes comprises representatives from NGOs as well as of the waste management and recycling sector. This is already the case for instance in the EPR Scheme dealing with end-of-life vehicles (ELVs) in Belgium – FEBELAUTO – where representatives of the car recycling industry are among the Board Members. Member states with competing EPR schemes, which make this approach challenging, may have to find other solutions.

Recommendations

05 Harmonize the EPR rules

Products falling under EPR benefit from the free movements' rights and obligations and thus are traded and compete in the internal market. Thus, it is essential to gradually harmonise EPR rules at EU level, be it the scope of EPR, the modulation of the fees discussed earlier on, the granularity of the fee structure and the magnitude of the fee modulation as well as the frequency of reporting. This of course should concern non-EU producers as well.

06 Combine the potential of EPR with other economic policies

While a more holistic approach to EPR is essential, EPR should be complemented by other measures, in particular financial incentives to foster sustainable products and services.
Specifically, it is instrumental to consider implementing:

- tax system modifications (e.g. lower VAT for circular goods or switching from taxing labour to taxing extracted raw materials);
- emission trading schemes changes to reward industrial processes which save both carbon emissions and resources, etc., instead of incentivising processes which may reduce emissions but keep relying on the transformation of extracted raw materials which come with extremely high environmental impacts.

True pricing of externalities requires financial incentives that EPR alone cannot achieve.

Recommendations

07 Transparent and non-discriminatory tender procedures

The tender procedures organised by EPR schemes for services like material recovery, disposal of waste, etc. should be conducted in a transparent, non-discriminatory manner and foster fair competition. These principles are essential for creating a level playing field between small and medium-sized enterprises (SMEs) and larger operators, who typically have greater advantages in securing tenders due to factors such as broader geographical reach and more developed infrastructure.

08 Ex-post checks of EPR schemes efficiency

In order to ensure that EPR schemes deliver on the missions attributed to them, ex-post scrutiny of EPR schemes functioning should be conducted by competent authorities both toward the scheme itself and the stakeholders working with the scheme.

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