Best use of incentives by producer responsibility organisations (PROs)

In a nutshell

Summary overview
It is best practice for producer responsibility organisations (PROs) to enhance the performance of their extended producer responsibility (EPR) scheme by setting up incentives (going beyond legal requirements) that drive increased separate collection, reuse and recycling rates for the waste collected under the EPR. Actions that PROs can implement include: • motivating citizens to source separate waste more and better through innovative communication actions, such as competitions among territories; • close cooperation (financial, technical and/or logistic) with public authorities at regional/local level; • cooperation with social economy actors for the collection and reuse of products; • incentivising producers to design more sustainable products (e.g. via “fee modulation”); • benchmarking environmental achievements of different areas covered by the EPR scheme, e.g. at the level of the territories of public authorities at a regional/local level.

Waste management area							
Cross-cutting	MSW - strategy	MSW - prevention	MSW - collection	**MSW - EPR**	MSW - treatment	CDW	HCW

Applicability
The actual leverage that a PRO has on the EPR depends on the national setup and legal allocation of roles and responsibilities. For the application of some incentives, proper allocation of finances is needed. For this, the governance structure of the PRO may play a role (owned by producers or not, for or not for profit, etc.).

Specific environmental performance indicators

- Recycling rate (% of waste that is actually recycled or sent for recycling out of the total waste covered by the EPR scheme);
- Preparation for reuse rate (% of waste that is delivered as input to a centre for preparation for reuse out of the total waste covered by the EPR scheme).
- (applicable at the local level for a specific local area where the EPR scheme is in place) Share of EPR-covered products found in residual waste based on composition analysis (% of the total quantity of mixed waste);
- (applicable for a specific national, regional or local area where an EPR scheme for packaging waste is in place) Share of EPR-covered packaging that is targeted by the selective separate collection system (% of the total quantity of EPR-covered packaging put on the market).

Description

Extended producer responsibility (EPR) reflects the idea that producers who put products on the market should assume responsibility for their products beyond the commercialisation stage and in particular for their end-of-life treatment (Lindhqvist, 2000). The rationale behind this is that, when faced with the obligation to treat their products at the post-consumption phase, producers will have an incentive to reconsider their products' design up front – thus promoting environmental improvements of product systems in the long run. Rather than implying one single policy design, EPR can take various forms and can be applied through a combination of policies and instruments in order to adapt to differing local contexts, legislative climates, economic situations or legal constraints (OECD, 2016). Today, EPR is applied globally to manage waste from different product types.

The application of EPR very often involves a requirement for the producers[1] to establish systems for the collection (and recycling) of their waste with a view to achieving certain targets (i.e. a "take-back mandate"). For reasons of practicality, they usually join a producer responsibility organisation (PRO) in order to comply with this requirement. A PRO is a collective body operating nationally which takes charge of meeting the legislative requirements of producers on their behalf and against a financial contribution on their part. As a result, once a producer has joined a PRO (typically through the payment of a fee corresponding to the type/quantity and characteristics of the products they put on the market), the PRO becomes the entity which is legally responsible and thus needs to ensure that the legislative targets and requirements are fulfilled. Legal requirements usually include reaching specific rates of collection and/or recycling (depending on the type of product), bearing the costs of end-of-life management, contributing to communication and awareness-raising actions. In the future it is expected that requirements on producers will increase, together with increasing ambitions for recycling and the trend towards more cost coverage by producers (e.g. for cleaning of littering).

A PRO collaborates/interacts with a whole range of different stakeholders – producers, waste management operators, public authorities, citizens. Each of them has corresponding roles and responsibilities and can accordingly (and only to a certain extent) have an influence on the whole system and other participating actors.

The resulting system of contractual arrangements and operational solutions is referred to as an EPR system or scheme. In EU countries, such EPR schemes are set up at national level[2] and cover a wide range of products[3]. Their implementation and set-up varies a lot across the EU Member States (actors involved, their roles and responsibilities, and performances).

Be informed

Communicate

Monitor

Manage data, Report, Coordinate, Communicate, Contract, Pay services …

Collect/ Treat

Take back products

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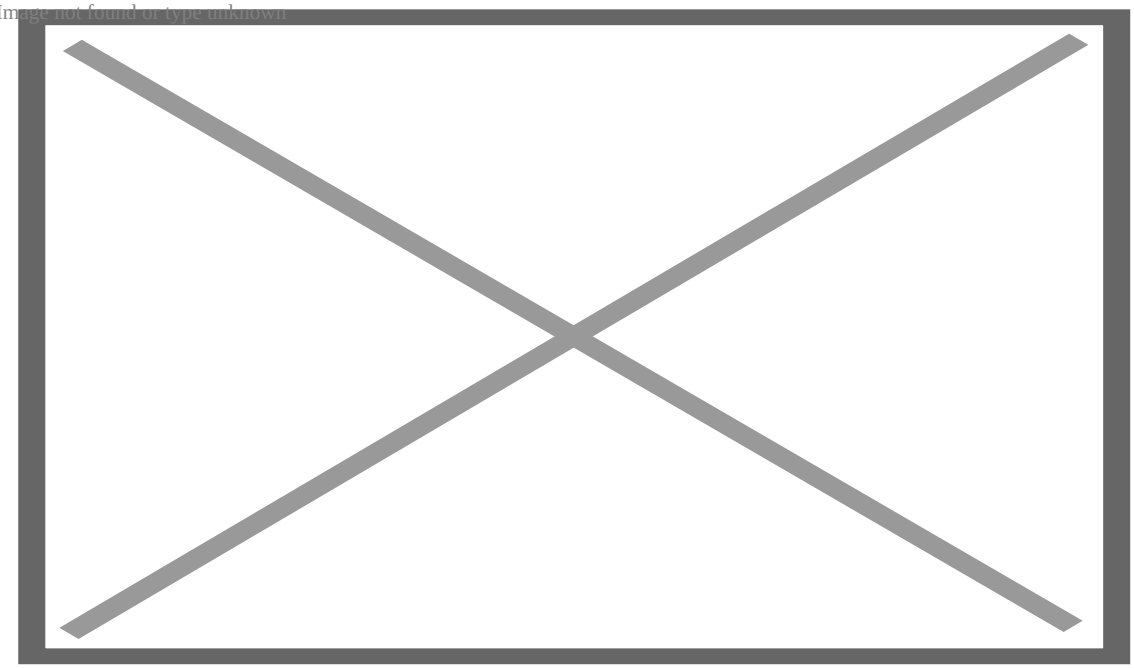

Across the different setups of EPR schemes, a PRO usually has three main functions (BIO by Deloitte, 2014):

- to finance the collection and treatment of the product at the end of its life;
- to manage corresponding data, including financial (membership, contractual) and technical (recovery options) information;
- to organise and/or supervise these activities.

Consequently, the PRO plays a central role in the system and acts as an intermediary between the rest of the stakeholders. Therefore, there is scope for the PRO to enhance the performance of the EPR scheme – **in addition to legal requirements** – by setting a number of incentives for the different stakeholders involved.

At a local level, a PRO can interact with a number of actors in order to improve performance in the territory, as shown by the examples below:

- Motivation of **citizens** to source separate waste more and better through innovative communication actions. It is often foreseen in the national legislation that the PRO contributes (financially) to communication with and

awareness-raising of citizens. This is often done in close cooperation with public waste management (WM) authorities since they are typically in charge of communicating environmental / waste management issues to the citizens. However, the PRO can take some additional actions to boost the involvement of citizens. Direct motivation for individual citizens can be especially effective, for example through the organisation of competitions with prizes awarded for the highest collection.

- Close cooperation with **public authorities at a regional/local level**. This can be the case when the PRO provides support to the local waste management authority for the collection, recycling and/or reuse of different products in the specific territory. The support can be financial (in addition to what is required by law), technical (benefitting from the expertise accumulated), logistical (provision of materials) or other. In addition, open dialogue with national and local stakeholders is important to exchange information and cooperate to find common solutions.
- Cooperation with **social economy actors** for collection and reuse of products in a certain territory since reuse activities are typically local initiatives (Step, 2016). This is especially relevant for products with high reuse potential such as WEEE.

Examples on a national level include the following:

- Incentives to **producers**, mainly concerning the design of their products. This happens typically via “modulation” of the producer fees, i.e. setting varying fees reflecting the real end-of-life management costs of products with a view to rewarding those producers who make eco-design efforts. In addition, by centralising knowledge and expertise in the area, the PRO can also provide consultancy services and guidance in order to support producers in improving the design of their products. It can benefit from its central position to have access to the data and best practices of its members and serve as a platform for exchange and dissemination to the others.
- The PRO can play a role in benchmarking environmental achievements in its network of public authorities at regional/local level – by pointing out the best performers in order to motivate others to follow.

[1] In practice, the take-back obligation applies to manufacturers, importers, intermediaries and retailers of different products. In this report for the sake of simplicity, the party on which the EPR obligation falls is referred to as the “producer”.

[2] Globally, there are cases of EPR schemes at a subnational level (ex. individual States in the US or Canada). In Europe there are different forms of implementation of the EPR principle at a local/ regional level (ex. as a voluntary agreement with some producers). However, up to this moment there are no records of full-scale implementation of classic EPR schemes at other level than the national.

[3] Three EU waste Directives – on waste electrical and electronic equipment (WEEE), batteries and end-of-life vehicles – explicitly mandate or encourage the application of EPR. EPR is further widely used to transpose the European Packaging and Packaging Waste Directive although the Directive itself does not impose EPR.

Environmental benefits

Setting EPR schemes is regarded as a relevant way to **decrease disposal** and improve the **recycled** quantities of a given type of product/waste. This entails an increase in environmental benefits linked to the production of recycled materials which substitute virgin materials and allow energy savings during production processes. Additionally, thanks to the rise in recycled materials, the amount of residual waste to be disposed of is reduced. For instance, in the last two decades, following the introduction of an EPR system for household packaging in Germany, the national recycling quota of sales packaging (from households and small businesses) rose from 37.3 % to almost 80 % (GVM, 2014).

Schemes boosting **reuse[1]** also have a potentially significant environmental benefit. Reuse of products conserves embodied energy and material and thus avoids the extraction of resources necessary for the production of new products. In particular for WEEE, reuse provides environmental benefits that are much higher than the benefits from recycling. This is because recycling of electronic equipment with presently available technologies implies the partial destruction of the embodied value of materials (through shredding) and still going through a manufacturing process afterwards, with the

associated environmental impacts (as compared to the environmental impacts of reuse due to refurbishing and manufacture of replacement parts) (CM consulting, 2014). Furthermore, reuse activities have social benefits since they create employment opportunities (often in social economy enterprises) and can potentially make products more affordable to low-income households and institutions.

In the longer term, it is expected that EPR will provide producers with incentives to reconsider the **design** of their products and will thus trigger overall environmental improvements in the global product systems. For simple products such as lightweight packaging, there has been an effect mostly in terms of weight reduction (GVM, 2016; Pro-Europe, n.a). However, the evidence of the past 25 years of existence of EPR systems worldwide only confirms this effect to a limited extent (OECD, 2016). In any case, it is difficult to make a direct link between product design and the contribution of EPR and of other factors (such as the financial considerations of using less material resources). As for more complex products such as WEEE, the eco-design effect of EPR schemes has been even more limited (Tojo, 2004; OECD, 2016).

[1] This best practice focuses on the improving traditional or centralised reuse of products, e.g. diverting fractions towards preparation for reuse. Therefore, packaging reuse through deposit-refund systems is out of the scope of the study.

Side effects

Improving the management of one or several waste fractions in relation with an EPR scheme can lead to various cross-media effects, e.g. related to the increasing number of collection schemes that might lead to more emissions linked with collection and transport.

Other cross-media effects, such as energy use, linked with the processing (sorting, dismantling and pre-treatment) of waste might also occur but will vary depending on the waste streams considered.

However, the cross-media effects are likely to be outweighed by the environmental benefits if the waste streams are diverted from disposal to recycling.

Applicability

The actual leverage that a PRO has on the EPR depends on the national setup and legal allocation of roles and responsibilities. For the application of some incentives, proper allocation of finances is needed. For this, the governance structure of the PRO may play a role (owned by producers or not, for or not for profit, etc.).

Economics

The economic indications will vary greatly depending on the way the best practice is implemented and the exact setup of the EPR scheme itself.

Generally, any financing by PROs originates from the fees that producers pay into the system (if it is assumed that the PRO does not make any losses). Therefore, any decision to engage in additional activities not foreseen by legislation can potentially impact the amount of these fees. However, since the aim of these activities is to improve performance, the rationale is that new incomes will also be generated (linked to the sales of reused products and the increase in recycled quantities) which would in turn compensate for incurred costs.

The funding by PROs is usually linked to results – this can be used as a guarantee for their initial investment.

Driving forces for implementation

The first objective of a PRO is to reach the waste targets set in national legislation. For one-off annual reporting and when taking a short-term perspective, these could in many cases be easily achieved (e.g. through cherry-picking techniques focusing on easy-to-reach waste). However, in order to be able to comply with those targets in the long term and to ensure the sustainability of the system, PROs will (often) have to address more problematic situations such as those occurring at a more local level or concerning fundamental elements (such as eco-design). Therefore, there are a number of reasons why a PRO would want to do something more than is required by the law, like the below for instance:

- Given the wide array of EPR schemes in Europe, engaging in additional activities in order to improve results can be a way to promote its own model (e.g. non-competing, not for profit).
- In countries where performances are not that good or there is PRO accreditation from public authorities, it is important that the PRO demonstrates its long-term commitment and wish to improve.
- In countries where there is competition between PROs, they might want to differentiate themselves with a positive image towards both their “customers” (producers) and public authorities.
- By supporting local authorities, the PRO reaches its own objectives of improving separate collection of the waste they are in charge of (both in quantitative and qualitative terms). Consequently, also the quantity and quality of waste going to recycling/reuse is also improved, as well as the associated revenues for the PRO.
- Boosting local employment especially with reuse. Indeed the reuse sector has a significantly higher job creation potential than recycling, incineration and landfill (Reuse, 2015). US figures show that for 10 000 tonnes of waste products and materials, 1 job would be created if incineration was used compared to 6 jobs in land?ll, 36 jobs in recycling, and up to 296 in refurbishment and reuse. Similarly, data from Belgium suggests even greater potential for reuse, at 800 jobs for 10 000 tonnes. While PROs might not be directly concerned by the creation of new jobs, this is an argument they can use to promote their sustainable image and acceptance by other stakeholders.
- Engaging in additional actions is a way for PROs to respond to possible public pressure (e.g. from NGOs, civil society).

Reference organisations

Belgium

- Ressources: a federation of social economy companies active in reuse, repair and recycling in the territory of the Brussels-Capital and Walloon region.
- Bebat: Belgian PRO for waste batteries. It has several initiatives to increase collection of batteries, in particular targeting schools: http://www.bebat.be/fr/programmescolaire and http://www.rtl.be/plugrtl/page/la-grande-recolte-inter-ecoles-avec-bebat-et-plug-rtl/1158.aspx#concept. It also provides collection infrastructure and service to bigger generators of waste batteries (stores, companies, schools): http://www.bebat.be/fr/dois-je-devenir-un-point-de-collecte
- Recupel: Belgian PRO for WEEE. It organises competitions for municipalities: http://www.recyclonsensemble.be/ and has a programme for separate collection of WEEE at retailer stores (together with Bebat): http://www.pointderecyclage.be/fr

France

- Eco-Emballages: French PRO for packaging. Provides a system of incentives to producers to improve the design of their products: http://www.ecoemballages.fr/bienvenue-dans-votre-espace-entreprises
- Ecofolio: French PRO for graphic paper. It supports municipalities in order to improve separate collection performances locally: http://www.ecofolio.fr/collectivites/accompagner-changement

- Eco-Systèmes: French PRO for WEEE. It applies a system of eco-modulated fees according to a set of environmental criteria: http://www.eco-systemes.fr/partenaires-et-professionnels/producteurs/comprendre-la-modulation

Italy

- CONAI: the Italian National Consortium for packaging recycling (umbrella PRO for packaging) provides support and co-financing to municipalities for improving the separate collection of packaging waste: http://www.conai.org/enti-locali/sostegno-alla-raccolta-e-al-riciclo
- Comieco: PRO for paper and cardboard packaging organises several initiatives for promoting paper collection in municipalities – such as an annual prize: http://www.comieco.org/cartoniadi/ and co-financing of municipalities for improving paper collection: http://www.comieco.org/il-nostro-ruolo/l-attivita-dei-convenzionati/news/bando-comieco--anci-2016.aspx#.WAhs0cm9Q5x

Spain

- EcoEmbes: the PRO for packaging recycling provides guidance on effective communication for municipal technicians: https://www.ecoembes.com/es/planeta-recicla/tag/manual-tecnico-de-comunicacion-efectiva

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