



Factsheet 01 | How can roles and responsibilities in packaging value chains be defined?

This factsheet outlines the basic principles of EPR for packaging and describes the possible roles of stakeholders within the packaging value chain. It discusses a number of options for assigning responsibilities as well the steps that need to be taken in order to build a consensus and prepare the ground for the establishment of an EPR system. It also identifies common pitfalls and conflicts within existing EPR schemes and suggests how they can be resolved.

In many countries, the management of municipal solid waste, including packaging waste, is the responsibility of the state, and is usually carried out at municipal/local authority level.¹ The packaging waste is either directly collected by the relevant state authority or by private companies working on the state's behalf. The costs of such systems are borne by the local authorities and/or national government, with citizens contributing financially through their municipal solid waste fees or taxes.

Producers of packaged goods and other stakeholders along the packaging value chain are only held responsible for ensuring their products meet certain health and safety standards.



Figure 1: Stakeholders in the packaging supply chain

¹ This document focuses solely on the packaging waste stream (all packaging materials). Other waste streams, such as residual waste, organic waste, WEEE, bulky waste, etc. may be the responsibilities of other entities, such as municipalities, local authorities or producers and importers of the specific goods concerned.



In such systems, funding often only covers the collection of municipal solid waste, transport and disposal at landfills or open dumpsites. Local authorities frequently lack expertise and resources. Recycling often relies on the informal sector, within which multiple stakeholders collect, sort and recycle materials with a sufficiently high material value, often under inadequate welfare and environmental conditions. Transitioning towards sustainable waste management and a circular economy therefore requires a new approach, one that involves all stakeholders at every stage of the packaging value chain.

Extended producer responsibility (EPR) is a policy instrument for the sustainable organisation and financing of specific waste streams, such as discarded packaging. It **obliges producers to assume responsibility for their products up to and including the end-of-life stage of their product cycle**. In EPR systems, producers are responsible not only for health and safety issues associated with their products. Moreover, producers are responsible for the management of packaging waste, including collection, sorting and recycling, as well. Thus, EPR systems tie producers into financing and organising management systems for packaging waste, a development with significant implications for the other stakeholders involved in the value chain.

Implementing an EPR system **enhances the interactions between different stakeholders, as well as assigning them new responsibilities**. The precise nature of these responsibilities varies to reflect the institutional landscape in each individual country and exactly how the EPR system operates in practice. As EPR schemes for packaging only cover part of the total volume of municipal solid waste, they need to be integrated into broader waste management and circular economy policies.

Assigning new roles to producers and importers

Obliging producers to assume responsibility for their packaging waste forces them to take on a new role in the value chain. The term **'producer' refers to any company that introduces packaged goods for consumption to a national market. Also, the product will be discarded in the same national market**. It is irrespective of whether the product is produced domestically or imported. This definition helps to maintain a level playing field between companies importing packaged products (importers) and companies that package their products within the country concerned (domestic producers). As these companies are obliged to assume extended responsibility under the EPR system, they are referred to as the **'obliged companies'** within the system. > See Factsheet 03 A suitable legal framework should be drawn up to underpin the EPR system and make it mandatory for obliged companies to ensure compliance, including appropriate monitoring mechanisms and enforcement powers. > See Factsheet 05

The change in the role fulfilled by the obliged companies has a **knock-on effect on the roles and responsibilities of the other stakeholders** right along the packaging value chain. This is why a successful EPR system needs the active participation of all stakeholders.

Table 1: Overview of stakeholders' roles and responsibilities in the packaging value chain

Stakeholders	Roles & responsibilities in an EPR system	
 	<p>Raw material suppliers, manufacturers, and converters of packaging material</p>	<p>The first step in the value chain. Provide packaging material for domestic producers and importers – either from virgin raw materials or secondary resources (recyclates). Recyclates are used where applicable according to the grade required for the relevant application – e.g. only food grade recyclates can be used for food packaging. The design of their packaging is a crucial determinant of the reusability and recyclability of the resultant packaging waste.</p> <p>By using recyclates they can 'close the loop' as part of the circular economy.</p>

Stakeholders	Roles & responsibilities in an EPR system	
	<p>Producers, and importers of packaged goods (obliged companies)</p>	<p>Introduce packaged goods to the market by selling packaged imported products or locally produced products to retailers. They are responsible for ensuring that their packaging waste is properly collected, sorted and recycled. They may assume this responsibility directly themselves or pay a third party to carry out the responsibility on their behalf (see <i>individual and collective responsibility</i>).</p> <p>Producers and importers can also influence packaging design and demand that a minimum proportion of recycled material is used in the packaging they purchase.</p> <p>This applies to packaging waste from households, but also to waste from equivalent places of origin (e.g. restaurants, local food vendors, hospitals).</p> <p>These stakeholders are responsible for demanding improvements in packaging design and that packaging from manufacturers and converters of packaging materials should be easily recyclable.</p>
	<p>Distributors & retailers of packaged goods</p>	<p>Supermarkets and stores represent the interface between the private sector and end consumers of packaged products. In many EPR systems, retailers are also under an obligation to take back packaging, for example, by providing separate bins for glass, paper, plastics and other material fractions.</p> <p>They also need to educate their customers about environmentally sound ways of handling packaging waste.</p>
	<p>Consumers</p>	<p>Consumers must dispose of packaging correctly, ideally by separating the waste at source to ensure high-quality recycling.</p> <p>They need to be aware of strategies for waste reduction and observe strict hygiene standards.</p>
	<p>Waste management operators</p>	<p>Collect and recycle packaging in accordance with the highest possible standards, thus ensuring high-quality recycling. This responsibility also extends to companies operating in the informal sector.</p>
	<p>Local authorities/municipalities</p>	<p>Provide linkages between consumers and waste management operators through communications and the provision of information, and by supporting collection.</p>
	<p>Government and other public authorities</p>	<p>Responsible for legislation governing the EPR system, and for supervising its operation (if the system is mandatory).</p>

EPR in practice

Defining roles and responsibilities is a political process involving multiple stakeholders. The specific roles and responsibilities assigned to each stakeholder always depend on the circumstances at play, including the applicable legal and institutional frameworks. For instance, the framework defines if waste is collected by the municipal authorities or not. Responsibilities also have to be consistent with the structures of the existing or planned EPR system and its various components, since the way systems are set up and operate in practice vary between countries.

Although operational EPR systems vary significantly between countries, all EPR schemes should be designed to strike a balance, simultaneously managing producers' obligations at the same time as ensuring that environmental policies are implemented as appropriate and in line with the 'polluter pays' principle. Accordingly, the basic principles of EPR systems are almost the same in every country:

- Every producer pays a fee when introducing a packaged good into the market. This fee is proportional to the amount of packaging being introduced.
- The fee covers the collection, sorting and recycling of the packaging waste.
- Collection, sorting, and recycling or energy recovery of packaging waste remains the responsibility of the producer(s) concerned. However, the activity required to exercise this responsibility can be delegated to other companies or organisations.

EPR systems can be implemented based on individual responsibility, collective responsibility, or a mixture of the two. The decision as to the most appropriate model for an individual system should be discussed as part of a political, multi-stakeholder dialogue, and the exact details of the model agreed upon should be clear to all stakeholders.

An EPR system based on individual responsibility

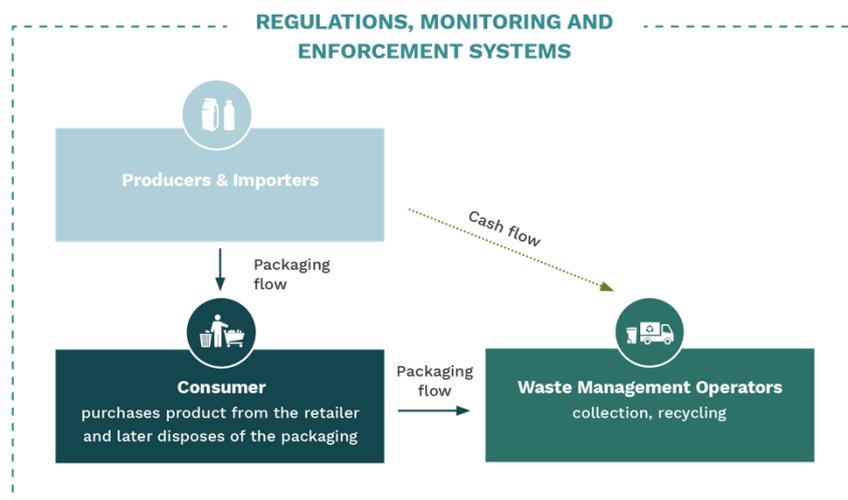


Figure 2: Individual responsibility

In its simplest form, an EPR system is based on producers taking **individual responsibility** by **directly interacting** with producers and importers and the institution that generated the respective waste. In a system based on individual responsibility, obliged companies either collect waste themselves or pay a waste management operator to collect waste and fulfil take-back obligations. Making the obliged companies take

responsibility directly provides an incentive for them to invest in ways of reducing the amount of packaging they use, and to ensure that their packaging is designed for recycling or reuse.

This model requires the obliged companies to be fully aware of exactly how much of their packaging becomes waste, where this transition occurs specifically, and how to access these areas. However, in practice this is not always possible. Moreover, household packaging waste and waste from similar points of origin usually contains many different types of packaging, made by various brands, so returning it all to the consumer goods companies that introduced it to the market in the first place would be very difficult and inefficient from a logistical perspective. To do so, all packaging waste would have to be sorted by brand (i.e. by obliged company) at every individual collection point

in the system, so that the obliged companies (or the waste management companies operating on their behalf) could separate their own waste out from the rest and collect it individually.

Therefore, EPR systems based on individual responsibility are much more suitable for industrial packaging (where packaging is often made of mono-materials and producers know where waste is generated) than they are for dealing with household packaging. In most cases, handling household waste requires a different, more practical model based on **collective responsibility**.

An EPR system based on a collective responsibility

As the name implies, a collective responsibility scheme transfers the waste management responsibilities of the producers and importers to a third body within the EPR system, in the form of the **Producer Responsibility Organisation (PRO)** or **system operator**. Under this system, the PRO assumes responsibility for organising all waste management activities within the system. This structure means obliged companies can fulfil their responsibilities by working together to manage the waste generated jointly. **EPR systems based on collective responsibility bring a ‘new’ stakeholder into the EPR system**, when compared with systems based on individual responsibility.

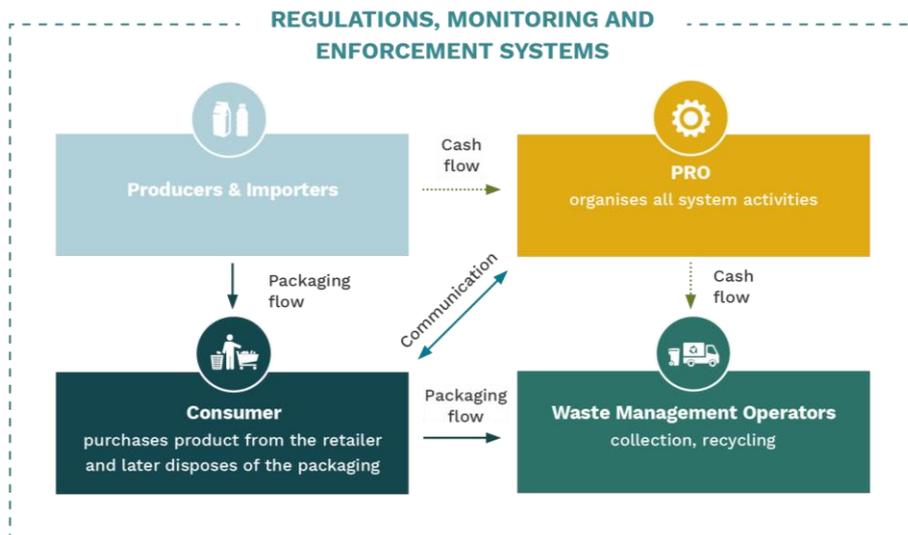


Figure 3: Collective responsibility managed by a PRO

Since the PRO organises packaging waste management activities on behalf of all participants in the system, there is no need to sort the waste by brand. In turn, this leads to a **significant reduction in the cost and logistical challenges associated with managing packaging waste**. This is why, in most countries, household packaging waste is managed using a collective EPR system.

> See Factsheet 02

Individual vs collective responsibility

When it comes to allocating roles and responsibilities in an EPR system, the key factor is whether the system is based on individual or collective responsibility. As mentioned above, managing household packaging waste using an individual responsibility system is very challenging, and often not feasible from a practical point of view. Most effective EPR systems for household packaging waste are therefore based on the principle of collective responsibility.

Table 2: Individual vs collective responsibility schemes

Criteria	Individual responsibility	Collective responsibility
Financial aspects	Producers and importers pay directly for their packaging waste to be collected and treated.	Producers and importers pay their waste collection fees to the PRO, which pays the waste management operators to collect and treat waste.
Organisational aspects & practicalities	Producers and importers need to know the exact distribution of their packaging and be able to access it, wherever it may be. This poses logistical challenges, especially when products are distributed in small quantities, because the logistics infrastructure required to process small volumes is very similar to that required for larger volumes and carries similar costs.	The PRO carries out the system's operational activities on behalf of the producers and importers, resulting in significantly reduced costs and simpler logistics.
Monitoring and enforcement	A state agency needs to monitor, and if necessary, enforce, that every single obliged producer and importer fulfils all of their tasks and responsibilities.	The PRO needs to fulfil all the tasks and responsibilities assigned to it, and its performance is monitored, and if necessary, enforced, by a third party, such as state a body or external auditor.

Common pitfalls and conflicts and how to resolve them

The most common difficulty in establishing an operational EPR scheme, containing clear roles and responsibilities, is reaching an unambiguous agreement as to which companies are, and are not, obliged under the system. This requires a clear definition of what constitutes an obliged company, as well as cooperation between multiple ministries and/or agencies to identify the companies concerned.

Other pitfalls and conflicts may be related to country-specific conditions, such as geography and the political and socio-economic climate.

Further reading

OECD (2016). Extended Producer Responsibility. Updated guidance for efficient waste management.

Basel Convention (2019). Practical Manual on EPR.

IEEP (2019). How to implement extended producer responsibility (EPR). A briefing for governments and businesses.

Kenya Association of Manufacturers (2019). Kenya Plastic Action Plan.



Imprint

Published by:

Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH
PREVENT Waste Alliance
Friedrich-Ebert-Allee 32 + 36
53113 Bonn
Germany

Tel. +49 61 96 79-0
Fax +49 61 96 79-11 15

info@giz.de
contact@prevent-waste.net
www.giz.de
<https://prevent-waste.net/en/epr-toolbox/>

cyclos GmbH
Westerbreite 7
49084 Osnabrück
Germany
<https://cyclos.de>

Authors:

Agnes Bünemann, Jana Brinkmann, Dr. Stephan Löhle and Sabine Bartnik.

Credit design cover photo & figures: creative republic Frankfurt

Bonn, Germany 21 September 2020