

Transcript - Sustainable Packaging 101 - Extended Producer Responsibility

Date of video: May 12th 2022

Goal of the Session

This session provides a brief overview of Extended Producer Responsibility (EPR). It consists of 15 minutes of content followed by 15 minutes of Q&A to help participants quickly grasp the topic.

Speakers

- **Rachel Goldstein:** North America Policy Director, responsible for advocacy strategy in North America as part of the corporate public affairs team.
- **Felix Bizati:** Global Circular Packaging Director, part of the senior corporate packaging team.
- **Alison Lin:** Corporate Senior Packaging VP, also part of the packaging team.

Municipal Responsibilities (explained by Felix)

Before diving into EPR, it's important to understand the role of municipalities in waste management. Municipalities are usually responsible for managing waste and their main priority is to provide sanitation services efficiently, minimizing costs and environmental impact.

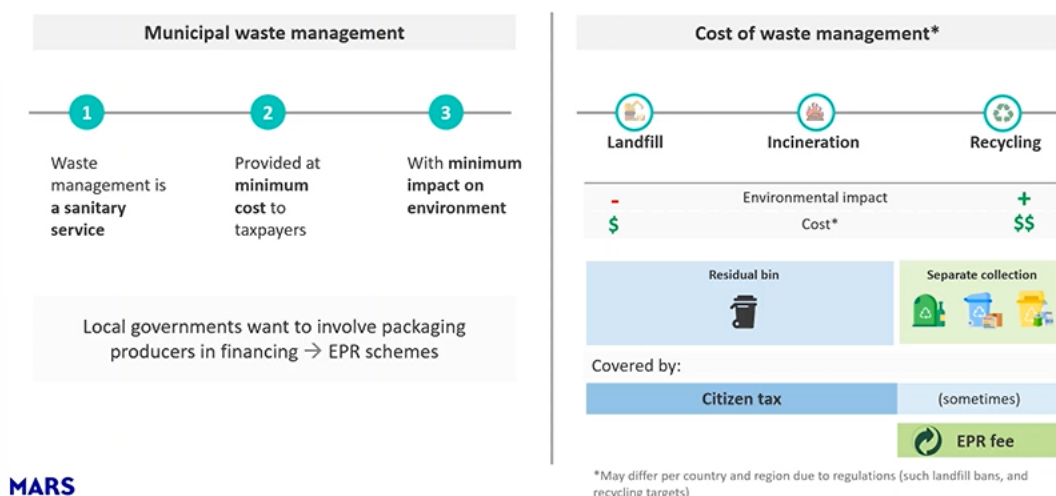
Waste Management & Costs (explained by Felix)

Municipalities handle waste in three main ways:

1. Landfilling: Waste is stored in designated areas.
2. Incineration: Waste is burned, sometimes generating energy in the process.
3. Recycling: The most environmentally friendly option, but also the most expensive.

The cost of managing non-recyclable waste is often covered by municipalities. However, in some regions, like Europe, brand owners may cover the higher costs of recycling due to its expense.

Why is EPR needed? Because recycling is not a profitable business



What is EPR? (explained by Felix)

EPR stands for Extended Producer Responsibility. It shifts the responsibility of managing packaging waste, including recycling, from municipalities to the producers (brand owners). Producers are not only responsible for getting their products to market, but also for handling the recycling and waste management of their packaging.

How EPR Works (explained by Felix)

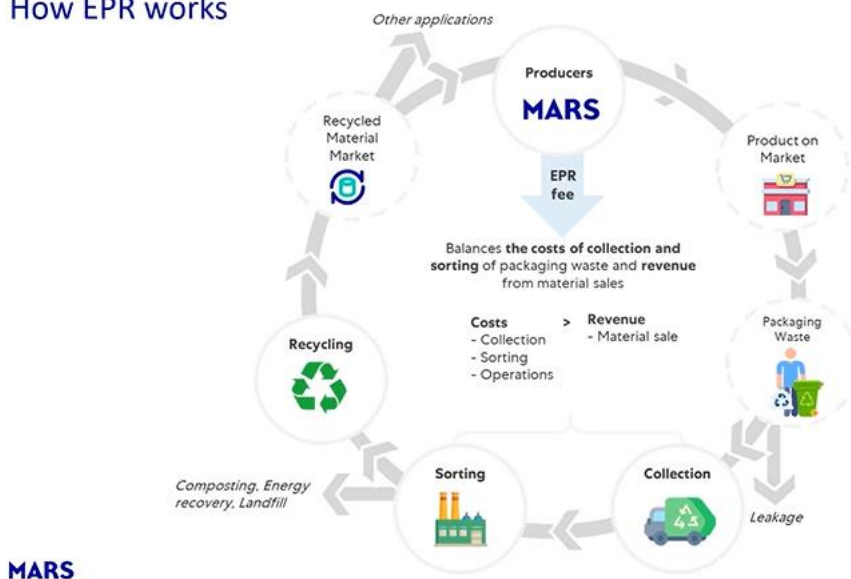
Here's a simplified breakdown of the process:

- Producers and Companies: Producers of packaging and companies that sell products to consumers are involved.
- Consumer Disposal: Consumers dispose of the product packaging in waste bins.
- Waste Collection: The packaging is collected and sent to a sorting facility to separate different materials (e.g., plastics, metals, paper).
- Recycling Facilities: Sorted materials are then sent to recycling plants. In some cases, the recycled materials may be reused in new products, closing the loop.

Why EPR is Important (explained by Felix)

The cost of the waste management process (collection, sorting, recycling) is higher than the revenue generated by selling recycled materials. This creates a negative cost. Without EPR, municipalities would opt for cheaper waste treatment methods, like landfilling, instead of recycling. EPR ensures that producers bear the financial burden of recycling, encouraging more sustainable waste management practices.

How EPR works



Packaging Costs and the Recycling Value Chain (explained by Felix)

Understanding the Costs

Recycling packaging materials can be expensive. Let's take Belgium as an example:

1. Indirect Costs: These include setting up the recycling system, which also involves educational campaigns to inform the public about proper recycling practices.
2. Direct Costs: These include the physical operations—bins for collection, trucks to transport waste, fuel for the trucks, and investments in sorting facilities. For Belgium, the total cost of operating this recycling system is around €230 million.

Revenue vs. Costs

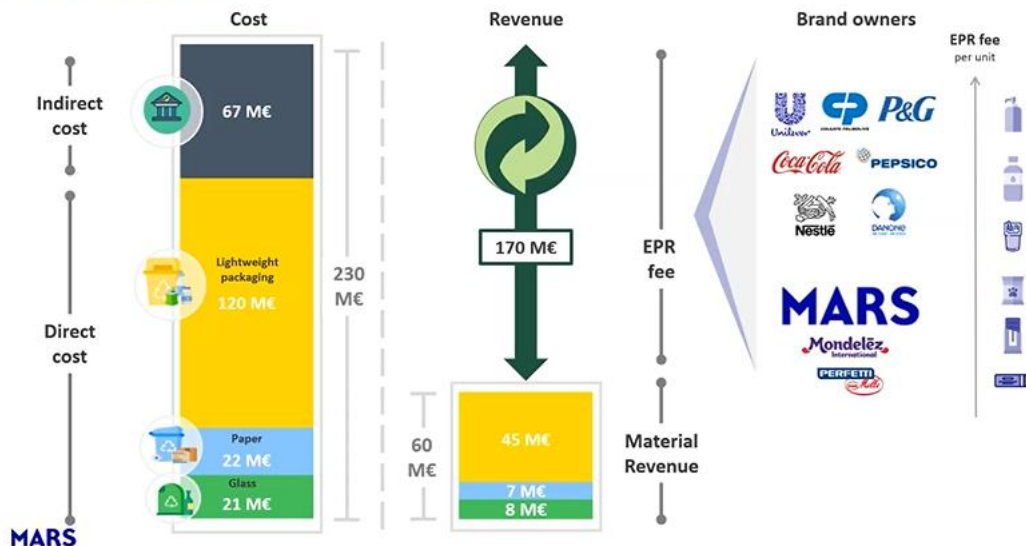
While the system collects and sells recyclable materials like plastic, metal, and glass, the revenue

generated from selling these materials is only about €60 million. This creates a gap of €170 million, which is covered by *Extended Producer Responsibility (EPR) fees*.

How EPR Fees Work

Brand owners pay EPR fees based on the weight of the packaging they put on the market. Heavier packaging, like plastic bottles, results in higher fees. For example, flexible packaging from companies like Mars or Mondelez, which is much lighter, incurs lower EPR fees. This means that lighter packaging contributes less to the €170 million shortfall compared to heavier packaging.

How EPR works



Key Aspects of EPR Fees (explained by Felix)

There are two important factors to consider when discussing EPR fees:

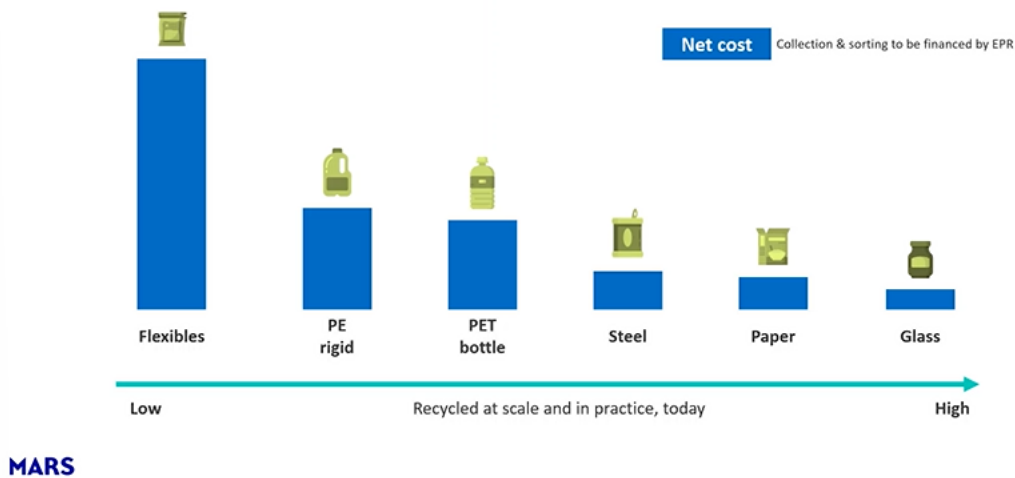
1. Total Cost of the Recycling System

In Belgium, the total cost of operating the recycling system is €230 million. However, this could increase if Belgium decides to include additional costs, such as the cost of cleaning litter from streets. This means it's crucial to define what costs are included in the system, as they directly affect the EPR fees. The goal is to keep these costs as low as possible because it's the brand owners who cover these expenses.

2. Fair Distribution of EPR Fees

Once the total cost is established and the gap (currently €170 million) is calculated, the next step is determining how to fairly distribute the fees among brand owners. It's important to understand why companies like P&G, Coca-Cola, or Unilever pay a certain amount and why companies like Mars pay a different amount. The way these fees are distributed is a key factor in ensuring fairness across different brands.

Packaging with well-established recycling streams and high recyclate values, will have a lower 'net cost'



Mars Packaging Portfolio and Costs (explained by Felix)

At Mars, 80% of our products are packed in *flexible packaging*. However, flexible packaging is one of the most expensive to manage in terms of recycling. When you consider the costs of collecting and sorting, along with the limited revenue from recycling it, flexible packaging has some of the worst financial performance compared to other materials like glass, paper, or steel.

As shown in the graph, the collection and sorting costs for flexible packaging can reach between €500 and €1000 per ton. In contrast, rigid plastic packaging has lower net costs because it generates revenue when sold in the recycling market.

Given Mars' reliance on flexible packaging, it's likely that our EPR costs will increase in the future due to the high expenses involved in collecting, sorting, and recycling these materials.

Why Mars Supports EPR and Eco-Modulation (explained by Rachel)

Currently, the process of collecting, sorting, and recycling packaging—especially plastic packaging—is not profitable. This means someone has to cover the cost. The most effective and systemic way to do this is through the *Extended Producer Responsibility (EPR)* scheme, which is why Mars supports EPR. It is essential to have EPR in place and ensure that the necessary infrastructure is implemented.

Mars' Responsibility in Waste Management

For Mars, responsibility doesn't end when our products are sold; it extends to the management of packaging waste. Collecting financial contributions from brand owners and distributing them fairly is key. This is where *eco-modulation* comes into play—EPR fees are based on the type of packaging placed on the market, with higher fees for packaging that is more expensive to recycle.

Global Impact of EPR on Mars

EPR systems are set up differently in each country, and how the fees are distributed among brand owners is critical to maintaining our license to operate. Today, Mars pays around €20 million in EPR fees, but if EPR systems were implemented globally, that cost could rise to €200 million. This presents a significant risk of increased costs in the future, making it crucial to address this fairly and ensure that the system works for Mars' types of packaging.

Why does Mars support EPR and eco-modulation?

-  1 Incentivises the development of infrastructure
 -  2 Most effective means of financing the system
 -  3 We have a responsibility to mitigate our impact
 -  4 Eco-modulation is the most accurate way to calculate fees
 -  5 Protects our license to operate
- MARS**

EPR in Practice: How It Works in the US (explained by Rachel)

Extended Producer Responsibility (EPR) is gaining traction in the United States, particularly at the state level. EPR is essential for funding recycling systems, which are a critical part of Mars' sustainable packaging plans. While EPR exists in other markets, the US has historically only applied it to items like batteries, mattresses, and paint—not packaging.

Recent Developments in US EPR

In 2021, two states—Maine and Oregon—passed EPR legislation, though their approaches were different. This has created a patchwork of requirements for brands. As more states introduce EPR bills, Mars is actively involved in the discussions. States like California, Colorado, Connecticut, Hawaii, New York, Maryland, and Washington are showing strong interest in EPR to help close funding gaps in recycling systems. There is no federal leadership on EPR yet, but some federal bills are being introduced, including the Break Free from Plastic Pollution Act. Mars is also working closely with The Recycling Partnership on a potential new bill that aligns more closely with our EPR priorities.

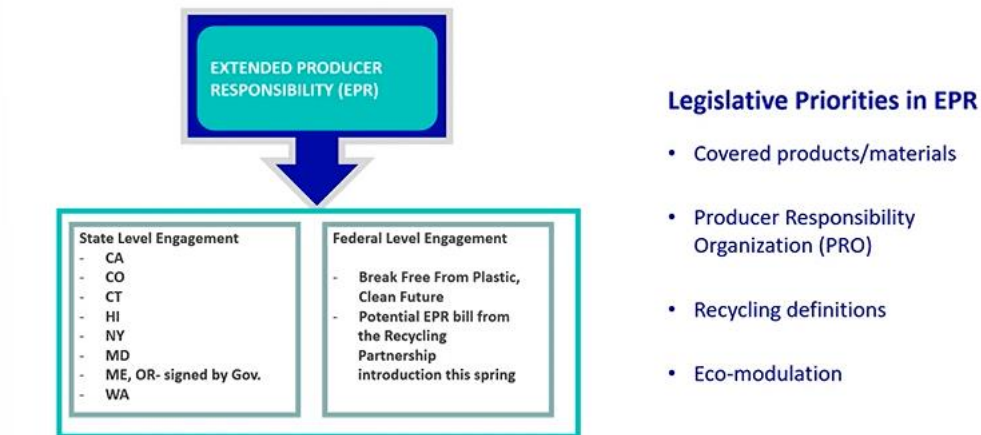
Key Priorities for Mars in EPR

Mars is focused on ensuring that EPR supports systemic changes to recycling, not just targeting plastics but covering all materials and substrates. Some of our key priorities include:

- **Industry-Led Producer Responsibility:** In states like Maine, EPR doesn't allow brands much control over how recycling funds are spent. This is not ideal for Mars. In contrast, Oregon's system aligns better with our goals of investing in recycling improvements.
- **Comprehensive Recycling Definitions:** We want to make sure all recycling technologies that can process different materials are included in the EPR system.
- **Eco-Modulation:** We support rewarding producers for making packaging design changes that facilitate recycling, encouraging brands to innovate sustainably.

Mars advocates for EPR because it helps fund the necessary investments in recycling systems, supporting our broader goal of sustainable packaging.

EPR Legislation in the U.S. Market



MARS

Q&A

Why EPR Should Cover All Materials, Not Just Plastics

While some materials, like paper and cardboard, are highly recyclable, there are still challenges with recycling smaller formats, which often escape current recycling systems. For example, even though paper is recyclable and has high recycling rates, smaller pieces of paper may not be effectively captured or recycled today.

The goal of EPR is to ensure investment in systemic changes to collection and sorting systems so that all materials, including those that are harder to recycle, can benefit. By covering the entire portfolio of materials, not just plastics, we can ensure that recycling becomes more efficient and inclusive for every type of packaging.

Why EPR Should Cover All Materials, Not Just Plastics

While materials like paper and cardboard are technically recyclable and have high recycling rates, smaller formats can often escape current recycling systems. It's crucial to ensure that even these smaller substrates are captured and recycled. The goal of EPR is to invest in systemic changes to our collection and sorting systems, allowing all materials—regardless of their size—to benefit from improved recycling efforts. By encompassing the entire portfolio of materials, we can enhance the efficiency and effectiveness of recycling processes.

How EPR Works Across Countries

EPR is determined by where products are sold, not where they are produced. The key focus is on waste management treatment in the market where the product is placed. Therefore, a country must invest in recycling systems that account for all products sold within its borders, even if those products were produced in different countries.

This means that the responsibility for recycling includes items from various sources, ensuring that all materials are managed properly in the recycling process.

Integration of EPR Fees into Mars Financial Planning

In 2022, there is no established system for integrating EPR fees into our financial planning, but it's a valuable idea to pursue. The potential shift from \$20 million to \$200 million in EPR fees represents a significant economic impact, especially as we must also consider waste management costs in our overall financial planning.

In the US, Mars lacks a solid baseline for what these costs might be. However, the Recycling Partnership has shared data that models various scenarios, which can help guide our discussions. As for the EPR bills in Maine and Oregon, we estimate that it will take at least two years before we begin contributing to those systems.

This gives us a window of opportunity to collaborate with our segments and determine how best to account for and plan for these fees. While this is a new concept for us in the US, we are initiating those important conversations.

Do EPR Fees Change as Producers Transition to Recyclable Packaging?

There are two key points to consider regarding EPR fees for producers transitioning to recyclable packaging:

1. **Ongoing Fees:** Yes, producers still incur fees even when their products are made from plastic that is not currently recyclable. This is because recycling is often a non-profitable business, where the costs of recycling exceed the revenue generated from selling recyclable materials. Since landfill and incineration are cheaper alternatives, someone must subsidize the costs associated with recycling. While recyclable materials may generate higher revenues, costs remain significant, meaning fees may still apply. However, producers might qualify for lower EPR fees as they improve their packaging.
2. **Investment in Infrastructure:** Historically, some countries, such as France, have focused EPR fees on rigid packaging and bottles, with limited investment in the recycling of flexible packaging. The aim is to change this mindset. When brand owners pay these fees, they should expect improvements in recycling infrastructure for all types of packaging.

In the US, discussions are ongoing among state legislators about how to transition non-recyclable materials to recyclable status over time. Ultimately, while there is potential for reduced fees with effective eco-modulation related to recyclability, brand investment will still be necessary for operational and capital expenses within the recycling system.

Why Don't All Countries Charge EPR?

Implementing Extended Producer Responsibility (EPR) requires certain conditions to be in place. Europe has successfully established EPR systems over many years, largely due to factors such as transparency and the absence of corruption. In regions where these conditions are lacking, there are valid concerns about ensuring that funds collected through EPR are utilized appropriately.

In the US, where EPR has not historically been implemented, we are witnessing a growing trend. We have participated in calls from organizations like the Consumer Goods Forum and the Ellen MacArthur Foundation, advocating for the global adoption of EPR. We believe that EPR is a fair way to distribute costs and an effective means of subsidizing the infrastructure that urgently requires investment.

The landscape is changing compared to 2017. Previously, many trade associations representing brands and material substrates strongly opposed any form of producer responsibility. However, with increasing NGO activity and a broader societal shift, brands are now recognizing the necessity of taking responsibility for their packaging and understanding how to do so effectively.

While discussions about EPR are more constructive now, it's important to note that this is not a simple solution. The conversation has evolved significantly, reflecting a better understanding of the need for investment in recycling infrastructure.