

Understanding EPR and the role of data in its implementation

Western Africa Workshop on Waste Management and the Circular Economy: Bridging data gaps, enhancing technical capacity, and facilitating evidence-based policymaking to accelerate the Sustainable Development Goals

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A circular economy diagram is overlaid on the right side of the slide. It features a central circular flow with arrows indicating a continuous cycle. Labels within the cycle include 'recycle', 'repurpose', 'remanufacture', and 'refurbish'. A dashed arrow labeled 'extraction' points towards the cycle. A solid arrow labeled 'reduce by design' points away from the cycle. A hand is shown writing on a notepad in the foreground, and the word 'processes' is partially visible at the bottom right.

1. Understanding EPR

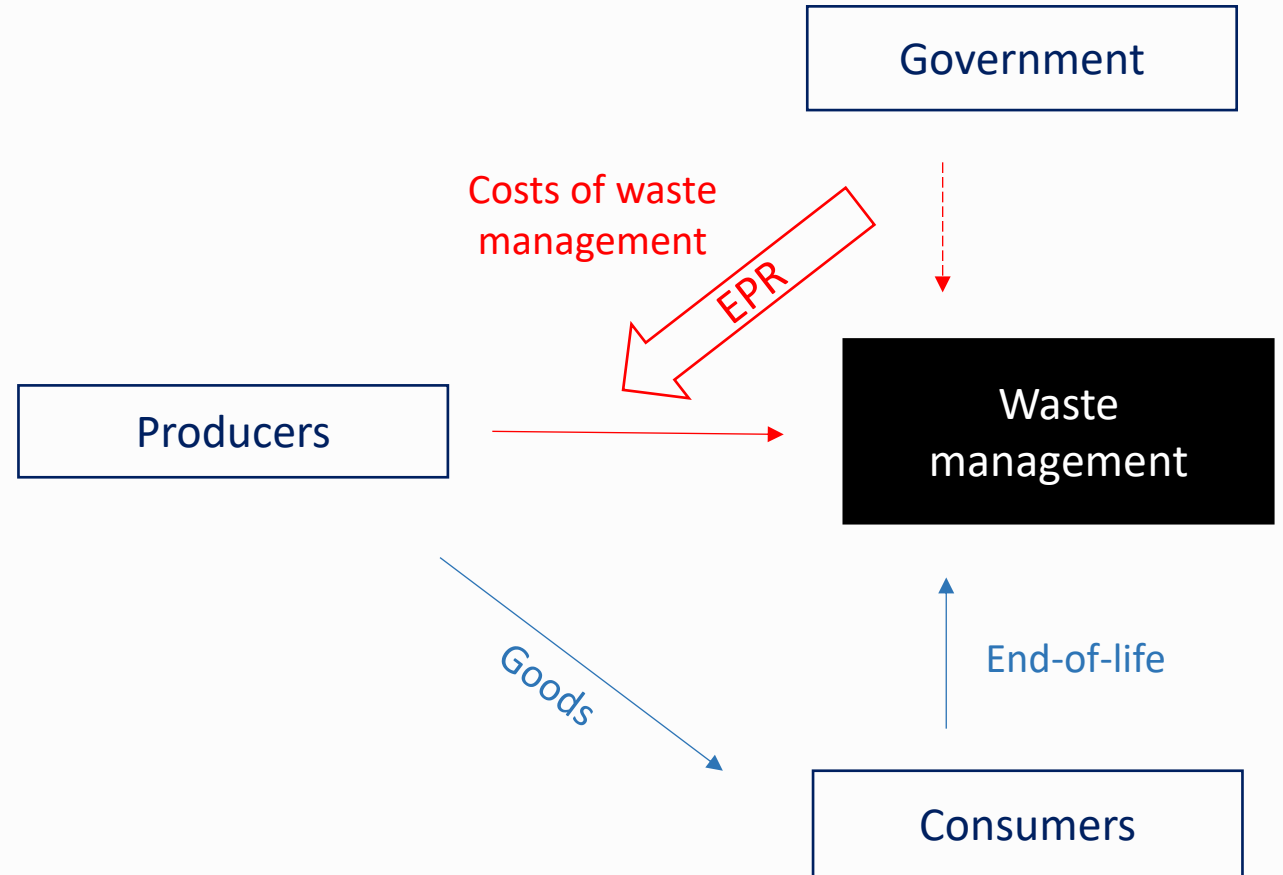
2. Data for better EPR

3. Good cases

1. Understanding EPR

What is it?

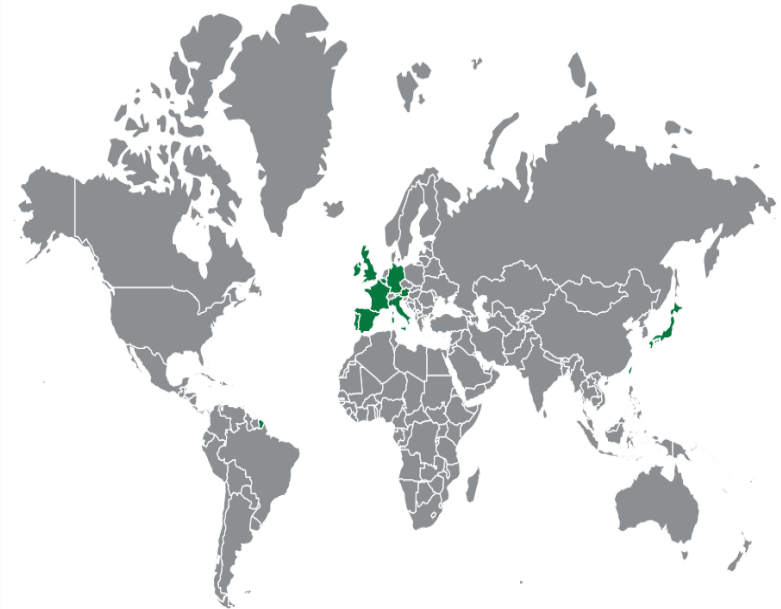
- A concept where **producers** bear a significant degree of **responsibility for the environmental impacts** of their products throughout the **product life-cycle**
- Real world: it puts the burden of waste management on companies by the internalization of costs



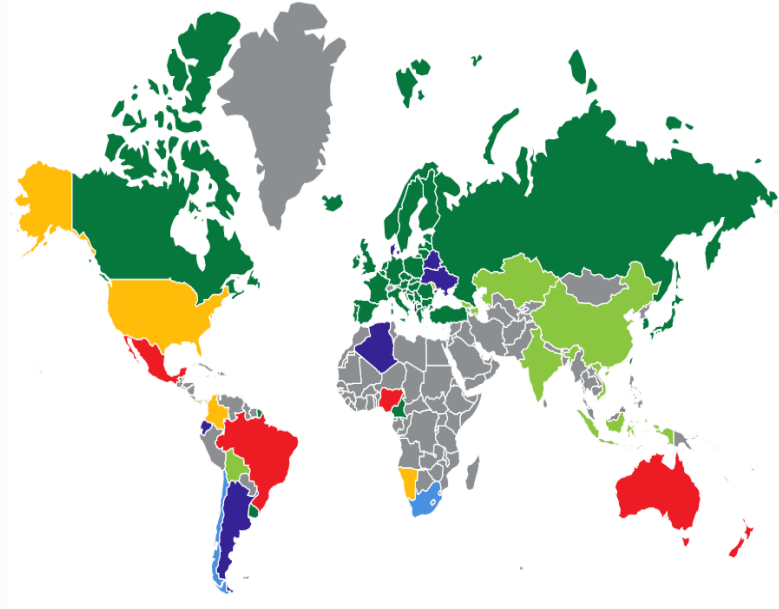
1. Understanding EPR

Global landscape: 400 EPR organisations in 150 countries

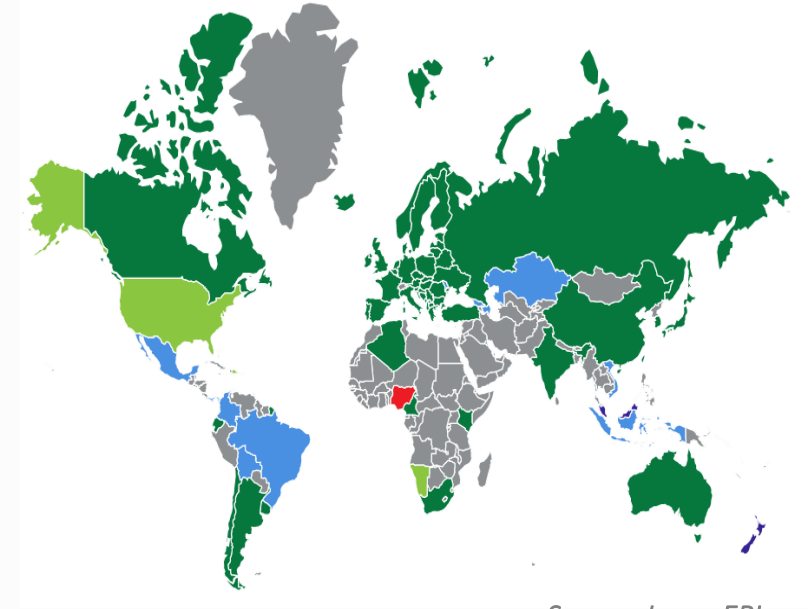
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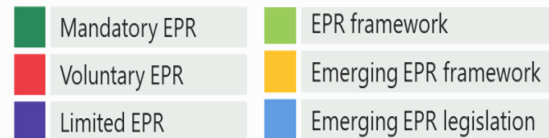
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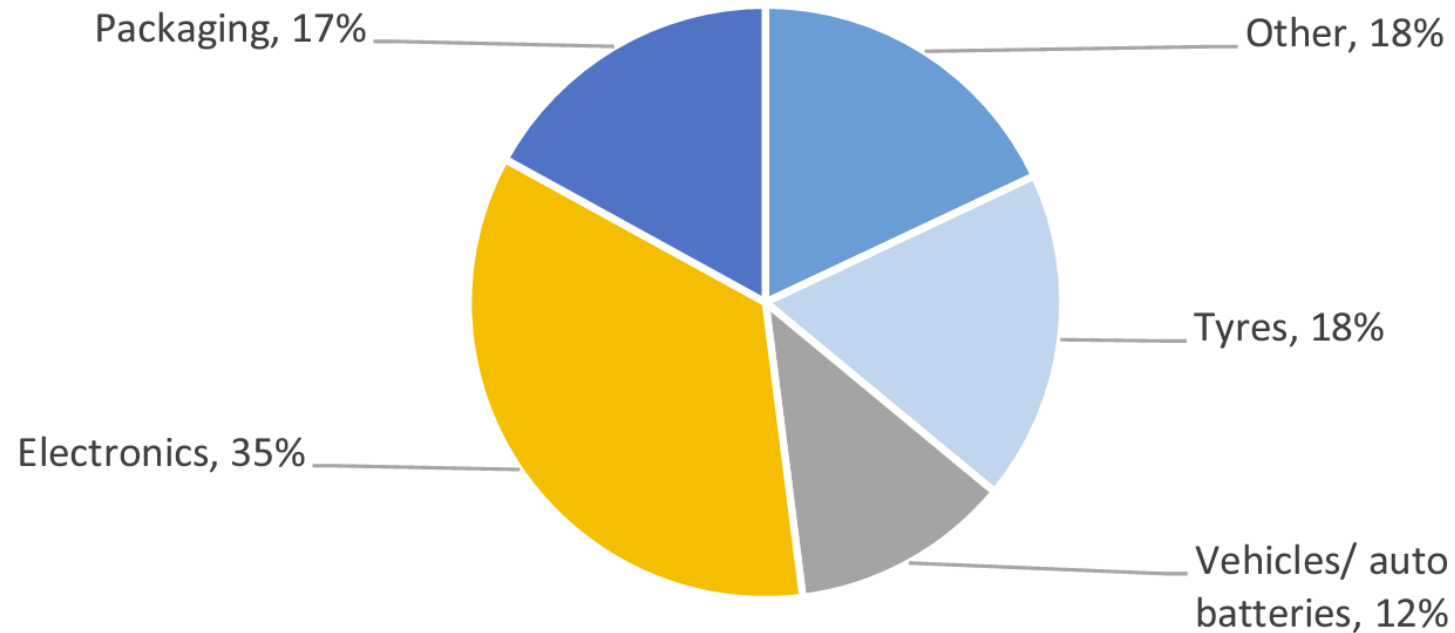
Source: Lorax EPI



1. Understanding EPR

Global landscape, by sectors























































EPR by product type, worldwide (2016)



https://www.oecd.org/en/publications/modulated-fees-for-extended-producer-responsibility-schemes-epr_2a42f54b-en.html

1. Understanding EPR

Policy integration

	Nat/sub-nat. law	Bans, phase out	DRS, tax, levy	Recycl. mandate	Eco-design, label	EPR
Colombia						
Fiji						
India						
Indonesia						
Kenya						
Malaysia						
Maldives						
North Macedonia						
Philippines						
Serbia						
South Africa						
Uruguay						
Vietnam						

Source: UNEP-IETC (2024). Japan-funded project on Sustainable Plastic Waste Management (<https://wedocs.unep.org/handle/20.500.11822/46066>)

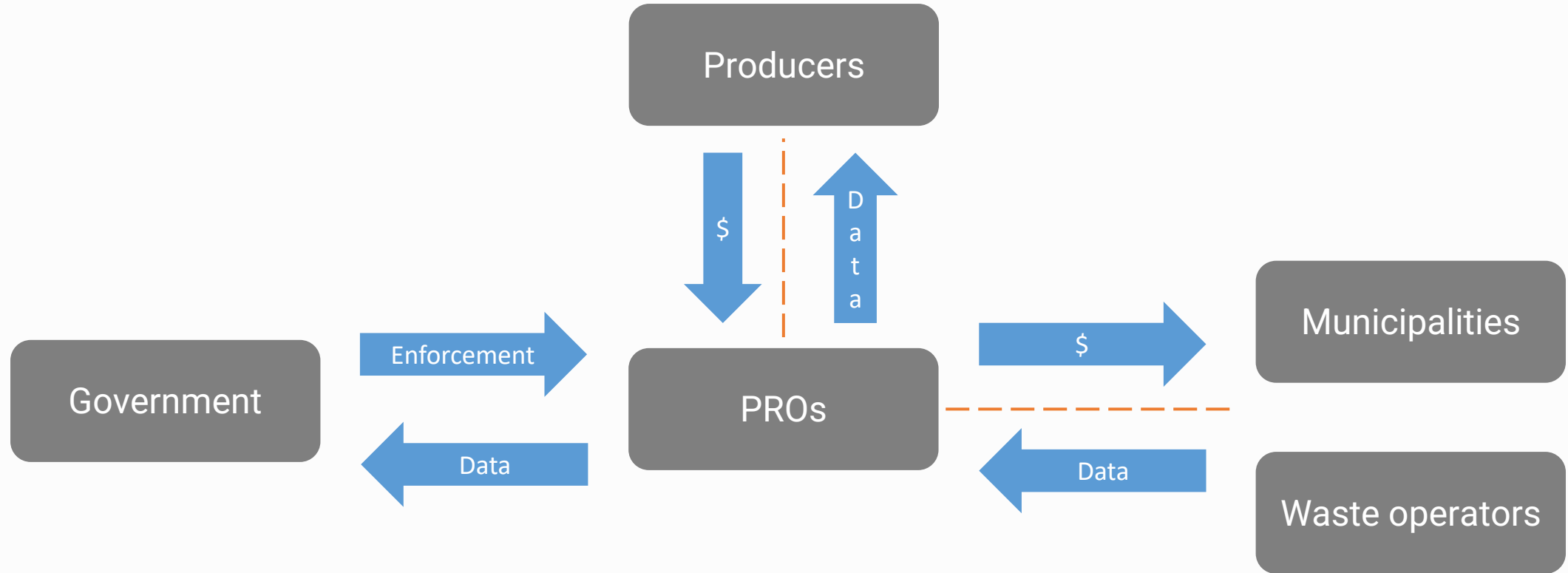
1. Understanding EPR

2. Data for better EPR

3. Good cases

2. Data for better EPR

Stakeholders and commitments



Blue arrows: Financial, information, mandate flows
Orange lines: physical flows

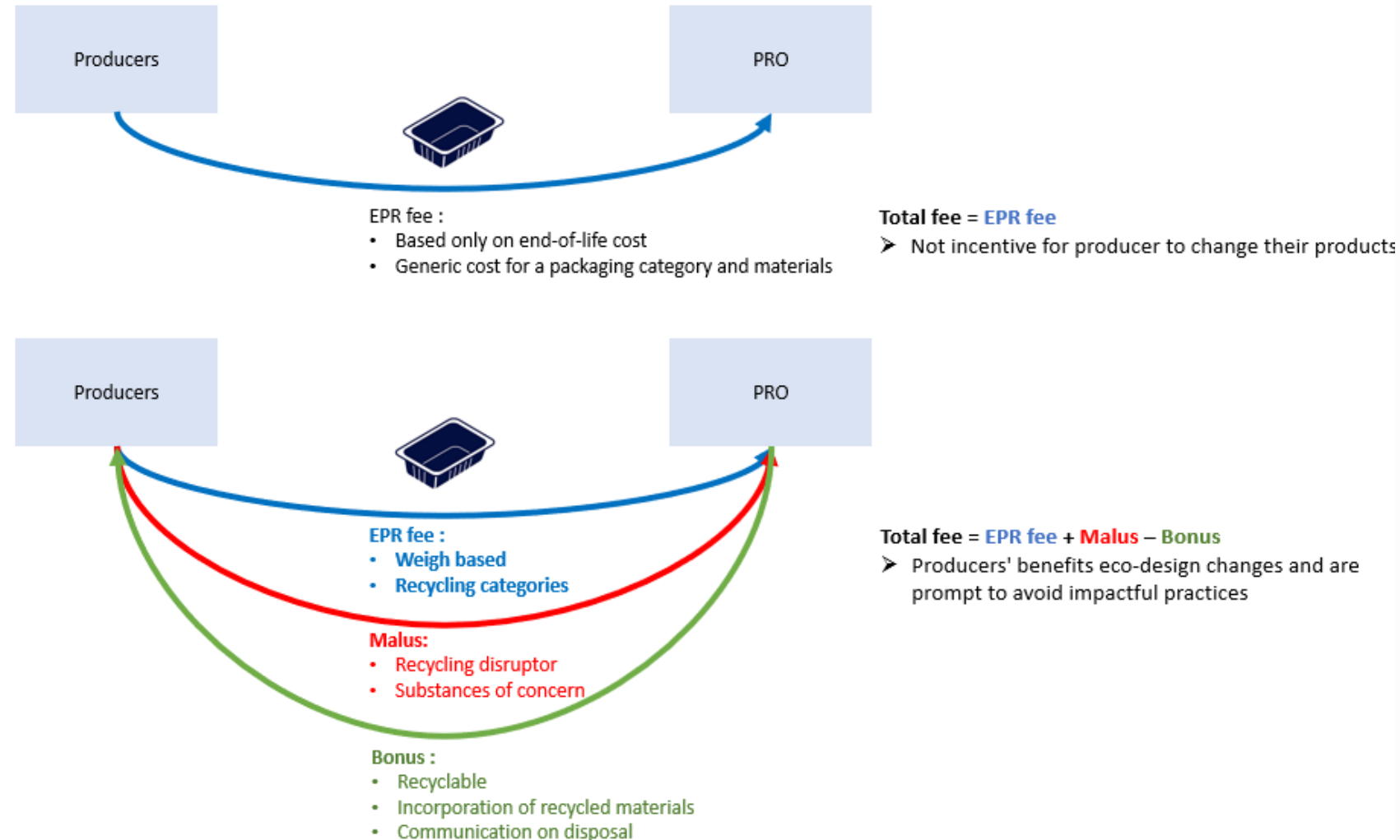
2. Data for better EPR

More data, more effective and efficient schemes: eco-modulation

Pricing as a foundation.

It must consider:

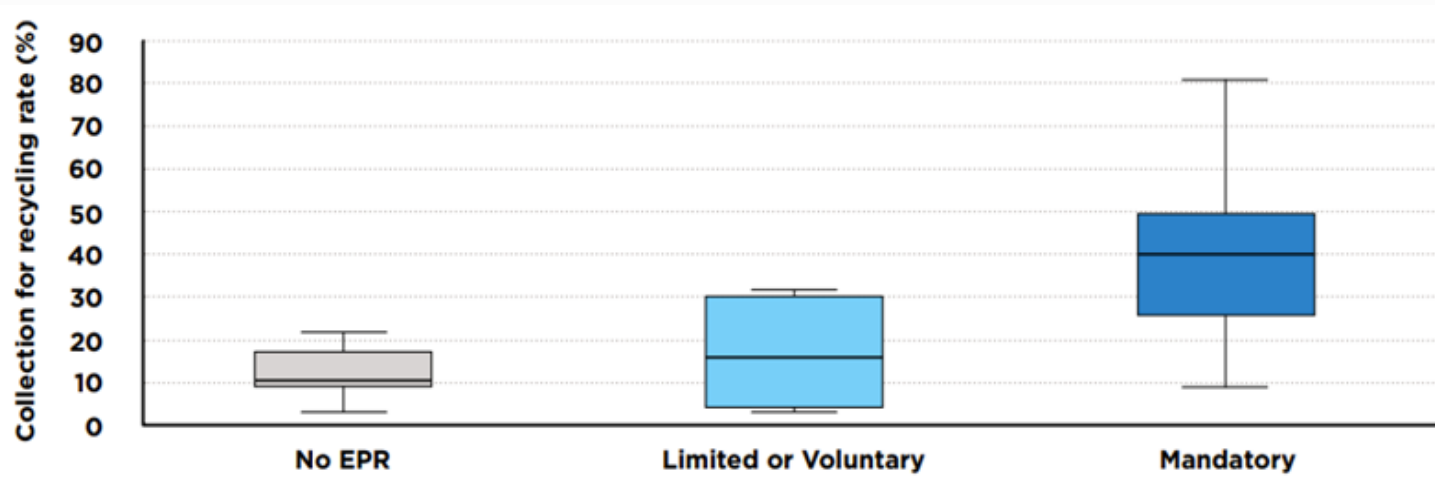
- Environmental impacts
- Recyclability
- Secondary and reuse markets
- Transparency
- Social aspects



2. Data for better EPR

EPRs are prone to be effective, but...

Recycling rates in countries with and without EPR



Ellen MacArthur Foundation (2021) National collection-for-recycling rates for plastic packaging

Transparency and monitoring are critical

Not to become a “mandate to pollute”

Avoid partial cost-coverage

Prevent free riding

Ensure integrity

Enable dedicated funds

1. Understanding EPR

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Countries with advanced waste management

Country/Region	EPR focus areas	Status
Korea	Disposable diapers, PVC pipe toys, kitchenware	ADF (waste charge) applied to hard-to-recycle products
France	Toys, sports/leisure goods, home improvement, gardening	New EPR programs under anti-wastage law (2022+)
EU	Balloons, sanitary wipes	EPR required under Single-Use Plastics Directive
Netherlands	Diapers	EPR planned for 2023 or 2024

Source: ¹Brown, A., Laubinger, F., & Börkey, P. (2023). New Aspects of EPR: Extending producer responsibility to additional product groups and challenges throughout the product lifecycle. *OECD Environment Working Papers*.

3. Good cases

In Global South

Eco-design

Chile: eco-modulation rates, based on collection, recovery and recycled content

Recycling ↑ 20%
Plastic waste ↓ 15%

Social Inclusion

Uruguay: Law focuses on the formal inclusion of informal recycling workers

Brazil: match funding to support waste collectors and recycling cooperatives

National bank: U\$D 4M
Match funding: U\$D +16M

Regulatory Convergence

Rwanda & South Africa: take back schemes for respectively electronics & plastic/glass (bottle to bottle)

Malaysia: committed to banning microbeads and nurdles by 2028

phase out bioplastics

Life cycle approach

South Africa: inserted life cycle metrics into its EPR system

Vietnam: targets on resource use

7–10% reduction
targets

Source: UNEP-IETC (2024). Japan-funded project on Sustainable Plastic Waste Management.
<https://wedocs.unep.org/handle/20.500.11822/46066>

EPR as an opportunity!

The Business Coalition for a Global Plastics Treaty calls for the adoption of harmonised regulations to end plastic pollution at INC 5.2



Dear Heads of Delegations,

As members of the Business Coalition for a Global Plastics Treaty, representing +290 global businesses, financial institutions and NGOs, we remain steadfast in our belief that a robust treaty with strong common obligations is the most effective way to pursue a lasting impact on plastic pollution while delivering economic, environmental and social value.

Business supports harmonised regulations because they (1) drive consistency across borders while supporting national ambitions; and (2) provide the lowest cost option to effectively address plastic pollution. **Voluntary efforts are not enough**, and the current fragmented regulatory landscape results in increased costs and complexity.

With a pivotal opportunity at INC 5.2, we urge you to support a treaty that includes provisions for **harmonised regulations on key elements, including phase-outs, product design and extended producer responsibility (EPR)**.

Enabled by a fair financing mechanism, such measures would help support sustainable levels of production and

A globally harmonised approach for national EPR schemes, with key principles and minimum requirements, would make recycling more efficient and expand the supply of high-quality recycled content. We, as businesses, are already contributing significantly to EPR fees in many countries. However, with common principles applied at a national level, **global cumulative EPR revenues could more than double between 2026 and 2040, to \$576 billion**, compared to \$279 billion under a treaty based on voluntary national measures.

Thank you

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UNEP International Environmental Technology Centre



**UNEP-IETC work on
EPR**



**Japan-funded plastic
project**

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