



EPR TOWARDS A GREATER IMPACT ON PRODUCT DESIGN

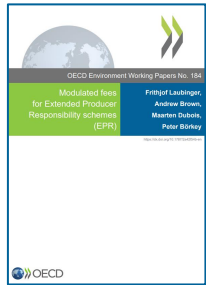
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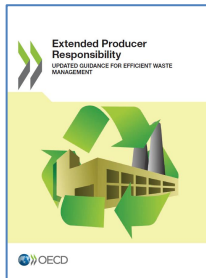
OECD/CSIR Workshop: Ensuring Economic, Social and Environmental Gains of a Circular
Economy Transition
Session II, first day
21 November 2022



Outline



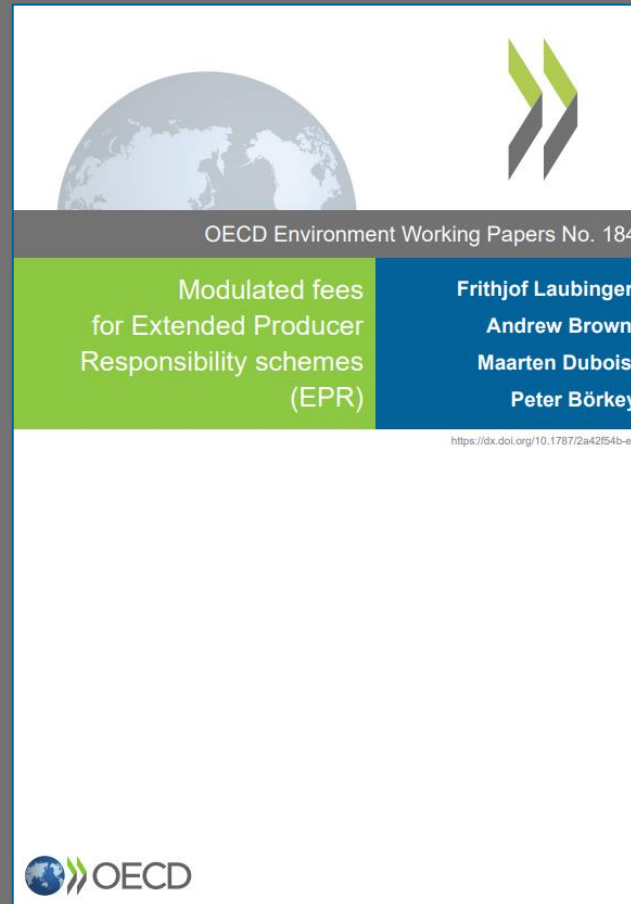
EPR fee modulation towards a greater impact on product design through EPR



Considerations for EPR implementation in the presence of an informal sector



EPR TOWARDS A GREATER IMPACT ON PRODUCT DESIGN





Extended Producer Responsibility

OECD definition:

Extended Producer Responsibility is an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle.

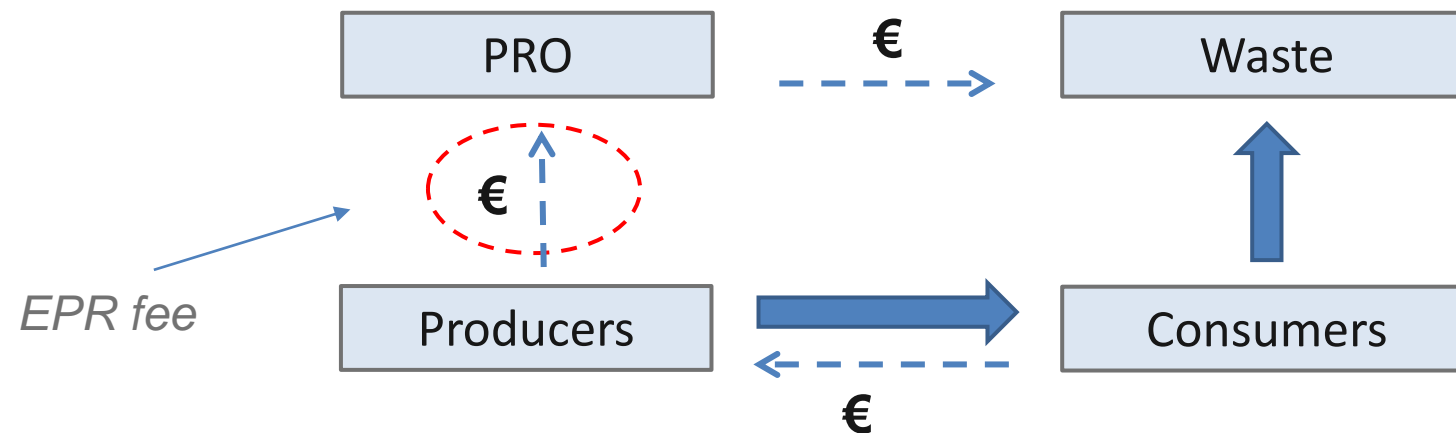
- EPR has three main objectives:
 1. Shift financial burden of waste management from municipalities to producers.
 2. Support waste management and increase recycling rates and material recovery.
 3. Incentivise design for the environment (DfE).
- Whilst EPR has been successful in fulfilling the first two goals, there is less evidence that it has instigated DfE



EPR fee modulation – basic and advanced

In collective implementation, producers collaborate and pay an **EPR fee** to a Producer Responsibility Organisation (PRO):

- **Basic fee modulation:** based on material type and weight/unit
- **Advanced Fee modulation:** based on more detailed measurable product characteristics that better determines a product's impact and instigate DfE





Examples of Advanced Criteria

Advanced Criteria	Description	Applicable Waste Sector
Advanced EoL Fee Modulation		
<i>Recyclability</i>	Specifications for product characteristics that determine recyclability	Packaging, EEE, Batteries, Vehicles
<i>Recycling Rate</i>	Ratio of material that is actually recycled from total waste generated	Packaging, EEE, Batteries, Vehicles
<i>Presence of Hazardous Substances</i>	Presence or absence of substances that inhibit circularity	Packaging, EEE
<i>Consumer Awareness</i>	Actions or labels that improve consumer behaviour	All
Advanced Lifecycle Fee Modulation		
<i>Recycled Content</i>	Ratio of recycled content in the product	Packaging, EEE, Batteries, Vehicles
<i>Product Lifespan</i>	Specifications for durability, reparability, reusability, or waste prevention	Durable goods such as EEE



Key Issues and Considerations

Issue	Description
Cost recovery	PROs need fees to fully cover operation costs.
Magnitude of modulation	A small ratio of fee to product price will provide little incentive for DfE.
Competition	Opportunity for capture to increase barriers to entry.
Harmonisation	Differences in EPR schemes within or across jurisdictions can send mixed signals and insufficient incentives to producers.
Complexity and administration	Costs arise: initially (e.g. to establish the modulation system) and ongoing (e.g. additional reporting and monitoring).
Design Trade-offs	DfE to limit fee liability may result in unintended consequences of product characteristics.
Free-riding and enforcement	Additional complexity could lead to free riding.
Governance	Complexity requires additional decisions to be made in EPR governance.



Policy insights for economies with new EPR schemes

- Advanced EPR fee modulation adds complexity to the system.
 - Mature EPR systems are more likely to have capacity to implement additional complexity.
 - It is advisable to begin with basic fee modulation (weight, quantity) when a new EPR is established to minimise complexity of initial implementation. Advanced fee modulation could then be implemented in a later stage.
- Non-durable products may lend themselves better to advanced fee modulation, due to differences in fee to product price ratios and market structures.
- Advanced fee modulation is only one tool in a larger policy mix to encourage resource efficiency through DfE.



EPR AND THE INFORMAL WASTE SECTOR



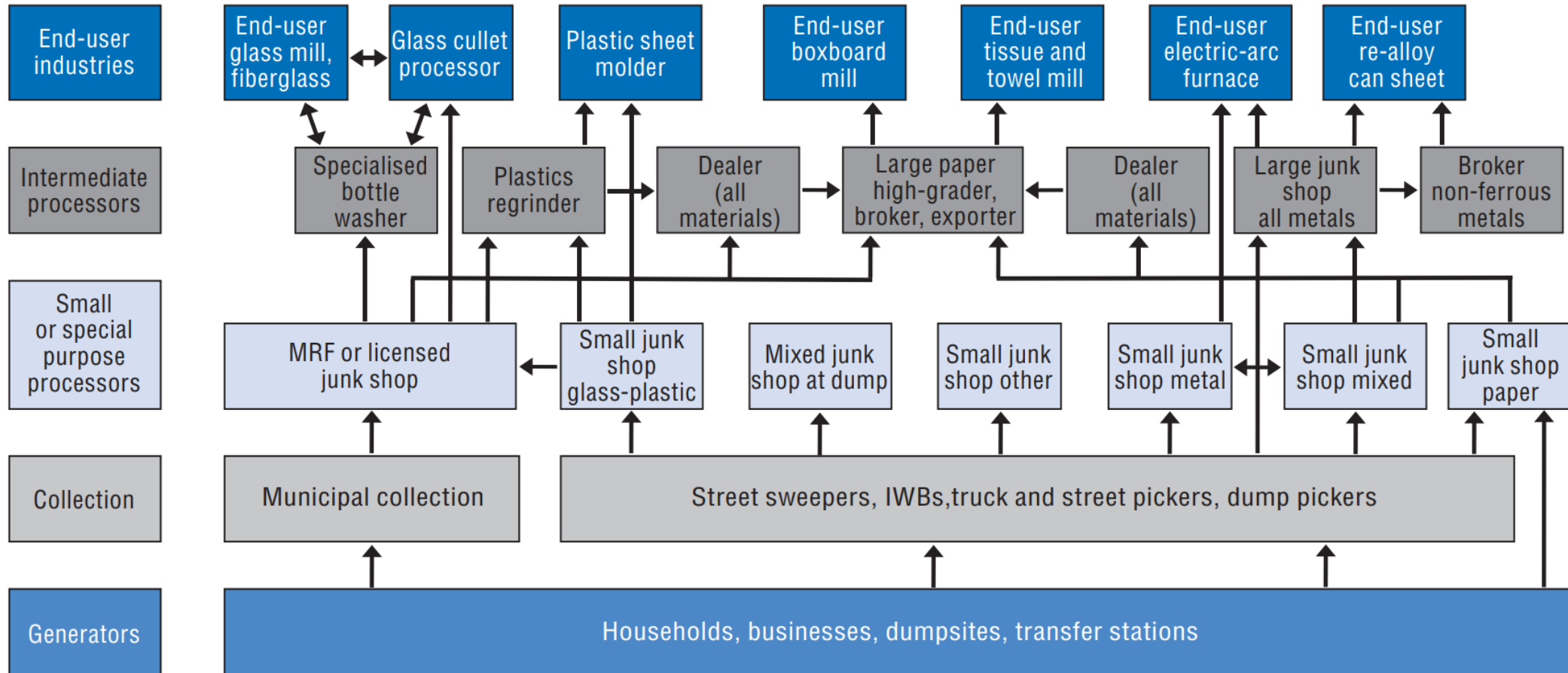


EPR in emerging economies

- EPR in emerging economies relatively new phenomenon
- Different challenges faced by emerging economies
- Important stakeholders (e.g. manufacturers, municipalities and recyclers) may not always have sufficient capacity
- Result: heavier reliance on financial incentives (e.g. price support or diversion credits)



The role of the informal sector in waste management





Informal waste sector provides a useful function but also involves environmental and social challenges

Positive impacts

- Efficient collecting and sorting waste with positive economic value
 - Some evidence that informal systems collect more material than formal
- Provide services that are not provided by the formal sector in countries with limited waste management systems

Negative impacts

- Downstream informal dismantling and recycling pose concerns:
 - Emissions of hazardous substances from poor recycling processes
 - Relatively inefficient materials recovery
 - Residual waste without economic value is dumped or not treated

➤ Challenge: Secure their positive contribution while mitigating environmental impacts from downstream informal waste processing



EPR in emerging economies

- Informal waste sector provides livelihoods for a significant amount of people
 - EPR introduction may interfere with the livelihoods of informal waste pickers, who will compete for valuable materials
 - Failure to include informal sector can undermine EPR system
- Challenge:
- Integrate informal waste pickers to maintain their livelihoods
 - Work towards formalisation and professionalization to improve health standards and efficiencies



Policy recommendations

- Informal sector should be actively engaged in discussion of the development of EPRs
- EPR systems should avoid becoming involved where private value chains are likely to work well
- Instead they should address market failures and environmental externalities
 - environmentally sensitive waste streams (e.g. chemical & hazardous waste)
 - recyclables difficult to dismantle (e.g. EEE)
 - low-value materials (e.g. packaging)
 - waste management in geographically dispersed areas



THANK YOU!

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