

Individual Producer Responsibility – Chances and Limitations

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Definitions of Extended Producer Responsibility (1)

Extended Producer Responsibility is a concept where manufacturers and importers of products should bear a significant degree of responsibility for the environmental impacts of their products throughout the product life-cycle [...]. Producers accept their responsibility when designing their products to minimise life-cycle environmental impacts, and when accepting legal, physical or socio-economic responsibility for environmental impacts that cannot be eliminated by design. (OECD)

EPR is understood as a policy principle to promote total life cycle environmental improvements of product systems by extending the responsibilities of the manufacturer of the product to various parts of the product's life cycle, and especially to the take-back, recovery and final disposal of the product.

The establishment of this feedback loop from the downstream (end-of-life management) to the upstream (design of products) is the core of the EPR principle that distinguishes EPR from a mere take-back system (Lindhqvist, 2000).

Definitions of Extended Producer Responsibility (2)

Extended producer responsibility imposes accountability over the entire life cycle of products and packaging introduced on the market. This means that firms, which manufacture, import and/or sell products and packaging, are required to be financially or physically responsible for such products after their useful life. **They must either take back spent products and manage them through reuse, recycling or in energy production, or delegate this responsibility to a third party, a so-called producer responsibility organization (PRO), which is paid by the producer for spent-product management.** In this way, EPR shifts responsibility for waste from government to private industry, obliging producers, importers and/or sellers to internalise waste management costs in their product prices.

Hanisch, C. (2000). Is Extended Producer Responsibility Effective? *Environ Sci Technol*, 34 (7), pp.170 A-175 A.

Examples of Extended Producer Responsibility

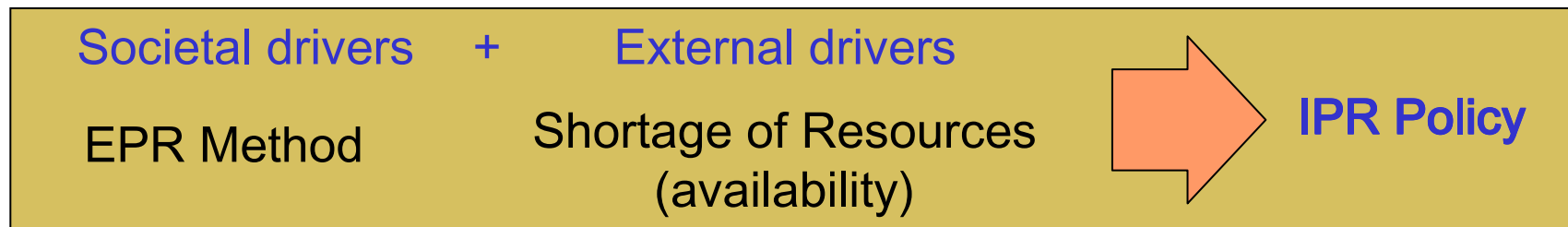
1. Shared responsibility for waste packaging, batteries, cars, or oil in European countries:
 - **Motivation to return waste (end-user)**
 - **Primary collection (producer schemes or municipalities)**
 - **Recycling, recovery and disposal (producer schemes)**
2. 1991 German Packaging Ordinance, and establishment of an industry packaging waste management organisation (DSD)
3. Initiatives outside Europe (excerpt)
 - Canada: return programmes for batteries, pharmaceuticals, pesticides
 - Australia: Container Deposits System, Industry Waste Reduction Plans

Characteristics of Extended Producer Responsibility

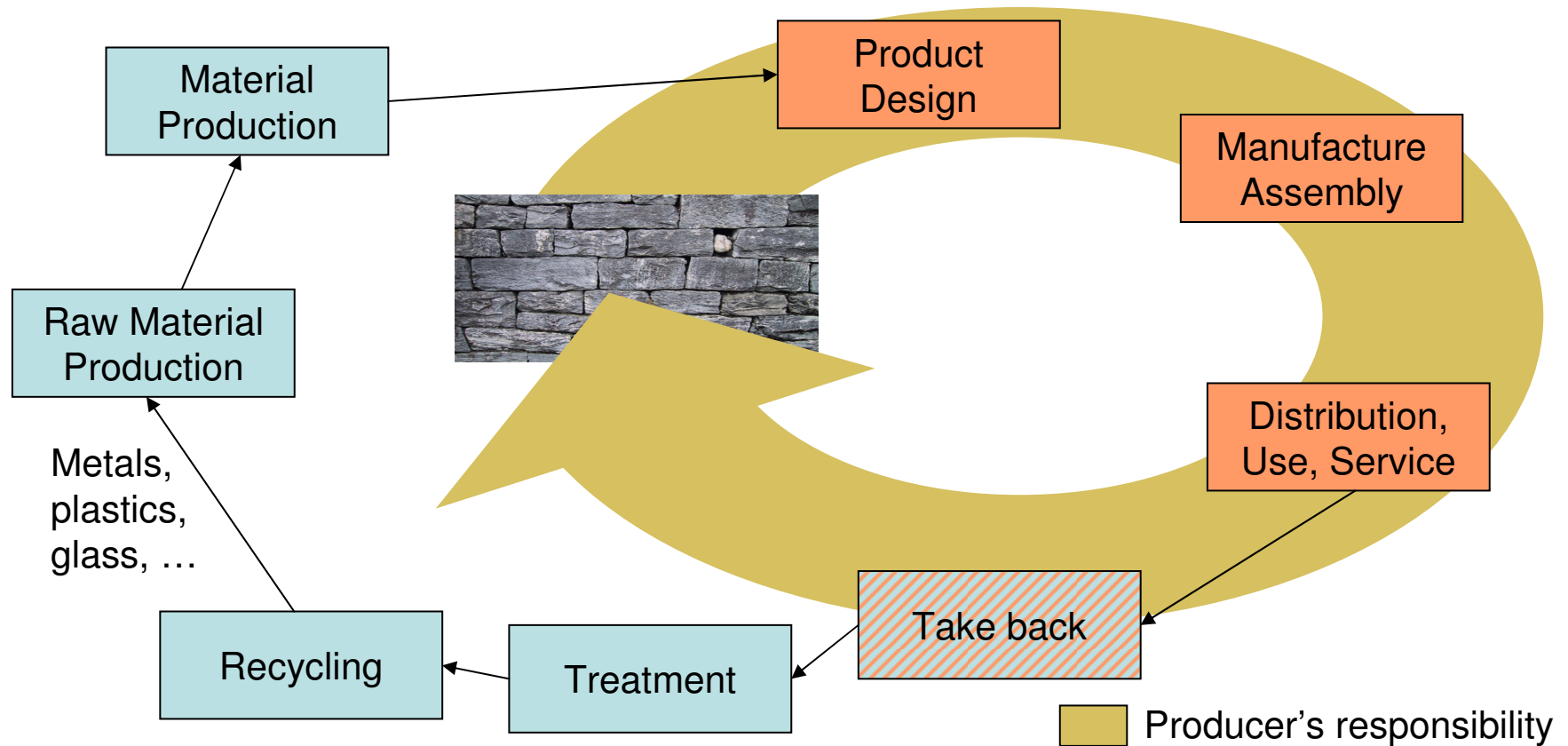
1. Producer set up management and financial structures
2. Producer/ retailer schemes coordinate and finance End-of-Life material flow
3. Widely restrictions on competition within schemes
4. Technical targets for waste treatment
5. Quantifiable targets on recycling and collection
6. Sales-based costs allocation, unit-/ weight based
7. Orphan products covered by producers
8. “Free-rider” tracking
9. Surveillance on documentation and benchmark

From EPR System to IPR Policy

- EPR is a system which shares financial burden of the society and producer community
- Producers set up appropriate systems and documentations
- Secondary materials originate from cross-sector waste streams
- The societal aim of EPR is to keep materials in closed loops
- Producer's aim on closing material loops is his Individual Producer Responsibility → IPR-Policy
- All producer's measures to achieve closed material loops are part of his IPR-Policy



EPR/ IPR-1: Closed material loops

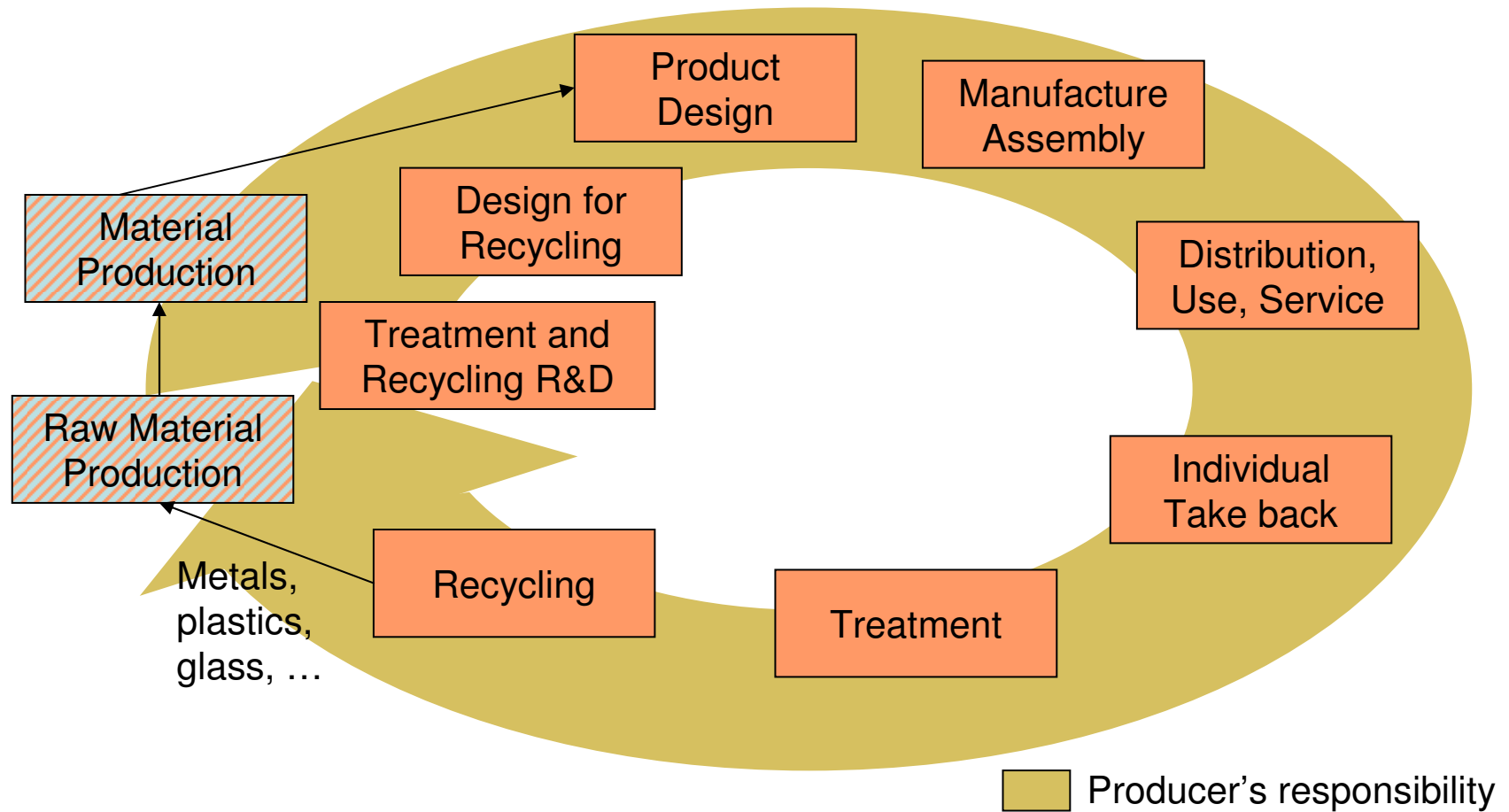


Extended definition of IPR-1 leads to IPR-2

- IPR-2 aims to use the following conditions
 - Producer becomes owner of “his” product again
 - From “collective responsibility” towards property = resource
 - Producer can develop product-specific recycling technologies, in order to reuse secondary material from EoL products
 - Design for Recycling (DfR) can improve reusability, better recyclability as well as the availability of spare parts

Full individual responsibility → IPR-2

IPR-2: Closed loops with material ownership



Requirements for IPR-2

- Stable waste collection w/o cherry picking
- Infrastructure for brand-specific collection of waste products
- Producer's accessibility to waste materials
- Producer's ownership of brand-specific wastes
- Producer's accessibility to treatment and recycling
- Producer must be manufacturer on local level
- Closed loop to producer's own manufacturing processes

Remark:

Best example of IPR-2 is the closed loop system of electronics manufacturers in Japan.

IPR-2 Obstacles in Europe

- Most European producers are importers
- European manufacturers import components globally
- Direct use of “own” secondary materials by vast majority of producers quite limited

Conclusion

- IPR-2 is unrealistic for Europe
- IPR-2 promotion is misleading and does not reflect the European situation
- IPR-1 as a policy should be promoted
- IPR-1 should be improved and forced by producer's individual measures