

EXTENDED PRODUCER RESPONSIBILITY.... A new approach for pollution prevention

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Presentation Outline

- What is Extended Producer Responsibility?
- EPR Examples
- EPR Issues
- Conclusion

What is Extended Producer Responsibility?

- An internationally shared concept initiated by the Organization for Economic Cooperation and Development (OECD) in 1990s.
- A product stewardship.
- A product-centered approach to environmental protection.
- An environmental policy approach in which a producer's responsibility for a product is extended to the post consumer stage of a product life cycle

What is Extended Producer Responsibility?

- Aimed at reducing waste volume in the upstream of waste generation.
- EPR uses financial incentives to encourage manufacturers to design environmentally-friendly products by holding producers liable for the costs of managing their products at end of life.
- EPR promotes that producers (usually brand owners) have the greatest control over product design and marketing and therefore have the greatest ability and responsibility to reduce toxicity and waste



What is Extended Producer Responsibility?

EPR Primary Objectives

- Source reduction (natural resource conservation/materials conservation)
- Waste prevention
- Design of more environmentally compatible products
- Closures of materials use loops to promote sustainable development



What is Extended Producer Responsibility?

EPR Effects

- Provide a pressure point to drive upstream changes in material selection & design aspects of a product



What is Extended Producer Responsibility?

Responsibility

- Shared responsibilities across product chain
- Producers carry significant degree of physical & financial responsibility of products at post-consumer phase



What is Extended Producer Responsibility?

EPR Measures

- Product take-back
- Deposit/refund schemes
- Advance disposal fees
- Material taxes, upstream combination tax/subsidy
- Standards: minimum recycled content requirements
- Leasing/servicizing



What is Extended Producer Responsibility?

EPR Measures

- Product take-back
 - A producer takes back the end-of-life product it originally produced, voluntarily or by law, directly or through an agent or retailer
 - E.g. E-Wastes (PLC boards, white goods, etc)
 - E.g. Automotives



What is Extended Producer Responsibility?

EPR Measures

- Deposit/refund schemes
 - A producer charges the consumer a deposit on top of the selling price of the product, usually for the packaging
 - Upon consumption, the consumer can return the packaging to get a refund of the deposit
 - E.g. glass bottles, crates, pallets, fish boxes, etc



What is Extended Producer Responsibility?

EPR Measures

- Advance disposal fees
 - A producer charges a disposal fee into the selling price of its product upon the sales
 - The fee is then paid to the Municipal Government or the waste collector to dispose or recycle the product properly
 - E.g. white goods, automobiles, plastic packaging, metal packaging, etc.



What is Extended Producer Responsibility?

EPR Measures

- Material taxes, upstream combination tax/subsidy
 - Government imposes a special tax for the use of certain materials which are difficult to dispose off
 - The tax is to fund proper treatment, recycling or disposal of the products containing such materials



What is Extended Producer Responsibility?

EPR Measures

- Standards: minimum recycled content requirements
 - Government or brand owners impose that certain products must use a minimum amount of recycled material in the production of the product
 - E.g. plastic carrier bags used in the UK must contain 70% recycled PE material



What is Extended Producer Responsibility?

EPR Measures

- Leasing/servicizing
 - A producer leases a product to a customer who would eventually return the product to producer after use.
 - The producer provide services to customer to ensure durable use of the product
 - E.g. equipment, machines, forklifts, pallets, crates, boxes, etc.



What is Extended Producer Responsibility?

How EPR works?

- EPR recognizes that product manufacturers must take on new responsibilities to reduce the environmental footprint of their products.
- However, real change cannot always be achieved by producers acting alone: retailers, consumers, and the existing waste management infrastructure need to help to provide the most workable and cost-effective solutions.
- Solutions and roles will vary from one product system to another.



Example 1: E-Wastes

- 1MT of EOL PCs contains more gold than 17MT of gold ores
- E-waste considered toxic:
 - Lead
 - Mercury
 - cadmium
- E-waste recovery alleviate mining of virgin materials
- In Asia, Japan, Korea & Taiwan have developed mandatory e-waste collection laws.
- EU, some US states have also such laws

Example 2:

Ford Motor Company

- Ford Motor Company and its supplier, GE Plastics had promoted on bumper take-back since the pilot programme back in 1993 in the United States.
- The plastic bumpers are converted into clean plastic flake before being regenerated into plastic pellets.
- The recycled resins are moulded into new tail light housing for Ford Wagon models.
- By doing this programme, it does not only reduce the production cost but it also reduces the waste which will ultimately be good for the environment.

Example 3: Japanese Packaging Law

- The Government of Japan began full implementation of its Packaging Recycling Law, with manufacturer's obliged to pay the associated collecting, sorting, transportation and recycling costs for all paper and plastic containers and packaging.
- In the case of imported products, importers will be held responsible for paying recycling costs. If the imported products are private-labelled, the corporation using the private labelling will be held responsible for recycling costs.



EPR Issues

- EPR systems require an integrated approach to product design, reverse logistics, product recovery and remarketing
- Usually higher initial manufacturing cost but reduces cost at end-of-life
- Products normally recycled for their materials
- Quality concerns, technological progress, low return rates hampers product recovery for reuse and remanufacturing



EPR Issues

- Economic efficiency a major concern.
- Can EPR systems pay for itself?
- Will consumer eventually has to bear the cost?
- Will Government offers producers incentives to make it work?
- Are brand owners willing to involve proactively?
- Can Malaysian SMIs compete effectively against MNCs?



EPR Issues

- Advanced economies enjoy competitive edge over developing economies?
- Has EPR been successfully implemented in a developing economy?
- Government needs to conduct thorough and proper study in implementing EPR in Malaysia
- Government needs to engage all stakeholders



Conclusion

- EPR systems enhance the level of recycling in a society
- Aimed at reducing waste volume in the upstream of waste generation.
- EPR systems require an integrated approach to product design, reverse logistics, product recovery and remarketing



Conclusion

- Government needs to conduct thorough and proper study in implementing EPR in Malaysia
- Government needs to engage all stakeholders
- Malaysian industries may be severely and negatively affected if it is not implemented properly