Extended Producer Responsibility

November, 2014
# Table of Contents

1. Introduction and scope ........................................................................................................ 4
2. Background on Extended Producer Responsibility .......................................................... 4
3. Objectives of EPR ............................................................................................................. 5
4. EPR is not a stand-alone policy principle ......................................................................... 5
5. Impact of EPR .................................................................................................................. 5
6. Key considerations for successful implementation of EPR ........................................... 6
7. Conclusions ...................................................................................................................... 8
8. References ....................................................................................................................... 8
9. List of relevant studies on EPR ....................................................................................... 8
1. Introduction and scope

Extended Producer Responsibility (EPR) can be a strong policy principle in waste management. Over the years it has been introduced worldwide for different waste streams. It has lead without any doubt to better recycling results for packaging waste, WEEE, and many other waste streams. By shifting responsibility for certain products once they have become waste from tax payers to consumers and producers, an internalisation of the effects of consumption becomes possible.

EPR has been implemented with changing success. In some countries EPR has been implemented through clear legislation and created well-working cooperation between governments, producers and waste management organisations. In other countries, the implementation of EPR turned out to be a failure:

- Lack of internalisation of environmental costs;
- Insufficient quality of collection service to the public;
- ...

Through its members, ISWA, the world’s leading network for promoting professional and sustainable waste management, has extensive first-hand experience in the operation of all forms of EPR implementation systems. With this paper, ISWA wants to define some key considerations for successful implementation of EPR throughout the world.

This Key Issue Paper on EPR is predominantly based on experiences with EPR in the European Union. This paper has to be read in that context.

2. Background on Extended Producer Responsibility

Issues of environmental protection were first discussed in European Union (EU) policy circles in the 1970s. Since this time, a number of fundamental principles of sustainable development such as the ‘precautionary principle’, the principle of ‘prevention’ and the ‘polluter pays’ principle, have gradually become fundamental to policy development both within the EU and internationally.

The concept of EPR was first introduced by Thomas Lindhqvist, professor at the Lund University in Sweden. In 1990, he wrote a report for the Swedish Ministry of Environment about this policy principle that places a responsibility for a product’s end-of-life impact on the producer and seller of that product. The necessity for the introduction of EPR comes from the growing awareness that other environmental policy measures might not be sufficient to reach the environmental goals of society.

The OECD defines EPR as “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”\(^1\). According to the OECD EPR aims at reaching two goals:

1) Shifting the responsibility away from the municipality and general taxpayer towards the producer;
2) Provide incentives to producers to incorporate environmental considerations in the design of their products.

The responsibility of the producer can be physical, financial and/or informational. According to the OECD, internalisation of external environmental costs is considered a fundamental aspect of environmental policy design and more specifically of EPR and these tenets have now been formally included into the EU Waste Framework Directive\(^2\). Although producers have the primary responsibility under EPR, all actors of the product chain and in society have a responsibility.

---

1 OECD, 2001, Extended Producer Responsibility. A guidance manual for governments, p. 18
2 Art. 8 (1): In order to strengthen the re-use and the prevention, recycling and other recovery of waste, Member States may take legislative or non-legislative measures to ensure that any natural or legal person who professionally develops, manufactures, processes, treats, sells or imports products (producer of the product) has extended producer responsibility
3. Objectives of EPR

ISWA identifies four major objectives of EPR as a policy measure:

1. **Create a sustainable production and consumption policy**
   
   EPR is a key element in implementing a sustainable production and consumption policy, promoting resource efficiency, high-quality recycling, substitution, use of secondary raw materials and the production of sustainable goods. As a result, it should improve the environmental performance of products throughout their life cycle, while meeting industrial and consumer needs.\(^3\)

2. **Incentives for ecodesign**
   
   With the introduction of EPR, producers should be encouraged to incorporate changes in the design of products in order to be more environmentally sound. This should make products easier to dismantle, reuse and recycle. In this way, the total environmental impact of a product decreases and waste prevention is stimulated.

3. **Reduce landfilling and develop recycling and recovery channels**
   
   EPR should reduce landfilling of waste and lead to increased recycling, under environmentally, healthy and socially desirable conditions. In this way, EPR can create meaningful jobs in the recycling and waste management sector.

4. **Full internalisation of environmental costs**
   
   The full internalisation of environmental costs allows financing the sustainable and economically efficient management of waste. The environmental costs, at least, include costs for pollution prevention and the collection, recycling and treatment of waste. These environmental costs should be incorporated into the price of products. As a consequence, the consumer, and not the taxpayer, bears all costs related to the waste he has produced, which is more socially fair.

4. **EPR is not a stand-alone policy principle**

   A single policy measure can rarely achieve the stated policy goals. Policy measures have the best results when they are applied in a mix. The mix of policy measures should fit other measures.

   EPR is recognized to be a strong policy principle in waste management. However, there is no one-size-fits-all approach in different countries and for different waste streams. Moreover, EPR is not a stand-alone policy measure. EPR should always be incorporated in a mix of environmental policy measures.

   The purest form of EPR is without a doubt the take-back of products by the producer. But product take-back should never be an automatic choice, as other instruments might be more effective to reach the goals mentioned above. Alternative approaches may be the introduction of tradable recycling certificate systems, direct financing of collection and recycling, etc...

5. **Impact of EPR**

   In 2006, Van Rossem et al. concluded there is both implicit and explicit evidence of the impact of EPR on product design. Even though it is recognized that determinants of product innovation are coming from a variety of push and pull factors such as legislation, consumer preferences, EPR does provide tangible incentives for environmentally-conscious design. More specifically, EPR legislation had an impact on hazardous materials reduction and improved recyclability and recycling of products. Van Rossem et al. concluded that the drivers of eco-design are strengthened when there is feedback on the total end-of-life...
costs to individual producers. The researchers did not only see an impact on the design of new products, they also saw considerable improvements in the collection of discarded products and treatment of these products.

Also, research by INSEAD concluded that the implementation of the WEEE Directive has led to an increase in the collection and recycling of WEEE. Moreover, diverting hazardous material from landfills had a positive impact on the environment by reducing leakages of toxic substances into the soil and underground water. Next to that, INSEAD concludes that the WEEE Directive also had a positive impact on recycling prices.

When it comes to shifting the financial responsibility from the general taxpayer towards the producer, Van Rossem et al. concluded that municipalities in at least nine countries still had the obligation to finance the collection of WEEE from households in 2006 (Denmark, Germany, Ireland, Luxembourg, the Netherlands, Poland and Slovenia). They also discovered that in practice, municipalities were paying for most of the costs concerning WEEE-collection even in those cases where the producer was legally obliged to do that. This illustrates that a considerable part of the costs of managing WEEE were left to general taxpayers in many countries despite the introduction of producer responsibility. This disables the possibilities of internalisation of environmental costs, as they are not or only partially shifted from taxpayers and local authorities to consumers and producers.

Extensive research by the European Commission on 36 case studies of EPR on different waste streams in the European Union revealed that in most of the benchmark cases, the net operational costs for collection, transportation and treatment of separately collected waste are covered by the EPR system. The extent to which net operational costs are assumed by producers is highly variable and depends notably on the share of organisational and financial responsibilities of the various stakeholders, as well as on the national framework for EPR.

6. **Key considerations for successful implementation of EPR**

Effective policy design on EPR will depend on national circumstances, conditions and priorities. However, ISWA does believe there are some key considerations that should be taken into account when designing EPR policy, that the policy yields the desired effects. ISWA identifies the following key considerations:

1. **Stakeholder involvement in the development of EPR**
   All stakeholders who are affected by the legislative framework of EPR should be involved in the process of development, in which the extent of involvement is related to the type of stakeholder. Stakeholder involvement creates a basis for the EPR policy and improves the acceptability and effectiveness.

2. **Clear allocation of responsibilities among all stakeholders involved**
   While producers have the primary responsibility, all actors involved must bear responsibilities. EPR legislation should therefore clearly allocate responsibilities of national, regional or local governments, of all actors in the product chain (producers, importers, wholesalers, retailers and consumers) and among all waste management actors (waste management collectors, recyclers).

   Clear allocation of responsibilities is necessary to avoid conflicts of interest between the stakeholders involved. This allocation should be made in view of the policy objectives and product characteristics. Furthermore, there should be a clear mechanism whereby all legally obligated parties can be identified.
3. **Individual or collective compliance for producers**

Producers should be able to choose to meet their responsibilities on an individual basis or through a collective compliance mechanism, such as a producer responsibility organisation (PRO). When choosing a collective compliance mechanism, it is important that it is designed in such a way that producers cannot gain an unfair advantage over their competitors or avoid their responsibilities by choosing one or the other of these mechanisms. Moreover, if national legislation allows multiple PRO’s to compete for the same waste stream, it should be ensured that they operate effectively together and without jeopardising the achievement of policy targets.

4. **Transparency of EPR**

As EPR is strongly linked to a public service, transparency is a primary requirement in its implementation. Transparency is necessary to the extent that national governments can control the proper implementation of EPR and both producers and consumers can make informed choices. This should be ensured through reporting and regular audits by the government. It should also be transparent if a producer responsibility organisation (PRO) or an obliged company is using different ways to comply with the legislation.

5. **Governmental support, monitoring, evaluation and control**

An effective and efficient legal framework accompanied by adequate regulatory investigation and enforcement activity is a primary prerequisite for successful implementation of EPR. Governments should enforce this legal framework to close loopholes and trace free riders. Next to that the government must monitor the implementation of EPR. Information needed from producers should be reviewed in terms of the value of the information in relation to the burden to provide such data and information. The legal framework should include control mechanisms for government and sanctions for not reaching objectives and targets.

The implementation of EPR should also be periodically evaluated by governments and, if necessary, be adjusted. Governments also have to implement an accreditation process for PRO’s with minimum requirements.

6. **Ambitious and clever policy targets are a necessity**

A fundamental goal of EPR is to increase the collection and recycling of waste. Therefore, ambitious and clear targets need to be set. Also, clear targets on household waste should avoid cherry picking of easily recyclable materials and products, either at the collection or dismantling phase. Targets could be qualitative and/or quantitative and could be set for a group of products or for individual product categories.

7. **Quality and accessibility of collection service nationwide for municipal waste streams**

Legislation on EPR for municipal waste streams should avoid cherry picking between collection areas and insure the same quality and accessibility of collection service nationwide, with a homogeneous, coherent system in terms of image and communication, organised at the local and/or regional level.

8. **Compensation of reasonable costs for the use of municipal infrastructure**

Any kind of EPR system that uses municipal infrastructure should guarantee a compensation of reasonable costs for the use of this infrastructure. In any case, local and regional authorities should not have any obligation to hand over collected waste falling under EPR if their reasonable costs are not covered by the producers.
7. Conclusions

The principle of EPR has been introduced in multiple countries and for a variety of waste streams. There is also a broad variety in the policy measures to implement EPR, the goals and achievements. As said before, there is no one-size-fits-all approach of EPR and its effectiveness will always depend on national circumstances, conditions, priorities and waste streams.

EPR implementation is a complex topic bringing many potential challenges. With this key issue paper, ISWA has tried to outline some of the major considerations which should be taken into account when implementing EPR. There are additional, and perhaps more ‘practical’ or ‘operational’ aspects to be considered for successful EPR implementation:

- The existence (or lack) of waste management infrastructure;
- The existence (or lack) of other waste policy measures such as landfill bans, pay-as-you-throw systems,…
- …

For further information, ISWA’s network of national subject matter experts, backed by our international expert working groups, would be pleased to respond to any policy enquiry on this or any other specialist waste management topic.

8. References

EMS Consulting (2009), The principle of Extended Producer Responsibility
INSEAD (2014), Extended Producer Responsibility: Stakeholder concerns and future developments
OECD (2001), Extended Producer Responsibility. A guidance manual for governments
Van Rossem, Chris, Naoko Tojo and Thomas Lindqvist (2006), Extended Producer Responsibility. An Examination of its impact on innovation and greening products, Lund University, Sweden.

9. List of relevant studies on EPR

- EXPRA best practices for successful EPR for packaging
- PSI – PAC: Global EPR Best practices
- GMA US – Evaluation of EPR for packaging
This Key Issue Paper was prepared by the

**Working Group on Legal Issues**

The Working Group on Legal Issues (WGLI) serves as a platform for knowledge exchange and as the principal resource to ISWA on legal issues related to waste and resource management. The overall interest for the Working Group is the exchange of information and views on legal aspects concerning hot topics in waste management. Currently there is much focus on EU-waste legislation, environmental responsibility and the legal aspects of different kinds of public private partnership.