**Extended Producer Responsibility (EPR) Policy in East Asia in consideration of International Resource Circulation**

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**Background**

This project examines the potential of EPR-based policy to strengthen the 3R (reduce, reuse and recycle) mechanism in developing Asia. A report will be published in summer 2009.

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<th>Timeline</th>
<th>Progress</th>
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<td>November 2006</td>
<td>A presentation at the Asia 3R Conference by United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and Institute for Global Environmental Strategies (IGES)</td>
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<td>February 2007</td>
<td>“Expert Workshop on EPR and International Material Flow” (Manila, February 14 2007) co-organized by UNESCAP and IGES</td>
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<td>2008 - 2009</td>
<td>Commissioned survey on current situation of EPR policy in Asia from Ministry of the Environment of Japan (MOEJ)</td>
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<td>Summer 2009</td>
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1. **Introduction** (IGES)

2. **Current Situation of Introduction of EPR Policy in Asia**
   ① Analysis of the situation in China (Beijing Univ.), Thailand (TEI), India (IRG Systems South Asia) by national experts.
   ② Comparative analysis of EPR implementation in Japan, Korea, and Taiwan (NIES and IDE-JETRO)

3. **EPR Policy and International Resource Circulation**
   ① Analysis of impact of internationalization of waste and recycling-related issues on domestic recycling system (IGES)
   ② Trade of secondhand goods (IGES)
   ③ International recycling system by industrial sector (International Univ. and Fuji Xerox)

4. **Emerging Trend of EPR Principle**
   ① The emerging need for sharing environmental product information (IGES)
   ② Resource Efficiency, Integrated Product Policy, EPR: EU Experiences (UNEP/Wuppertal CSCP)

5. **Conclusion** (IGES)

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## EPR and International Trade

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<th>Country B(EPR)</th>
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<td><strong>New Products</strong></td>
<td><strong>No effective legislation and weak enforcement</strong></td>
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<td><strong>EPR scheme</strong></td>
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<td><strong>Recycling Capacity</strong></td>
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- **Difficult-to-treat materials**
- **Support for Institutional Building and the Capacity Development**
- **Inadequate Recycling Capacity**
- **New Products**
- **Recycling Capacity**
- **Used goods**
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Institution, infrastructure, and information

For implementation of EPR, the legislation should be supported by physical and organizational structure (including market) for collection, transportation, and recycling of used products. Otherwise, it is difficult to establish formal sector which can be driven by financial and informative incentive from EPR policy.

**FINANCIAL RESPONSIBILITY**

Institution
Legal or procedural regime of rule and enforcement on waste management and recycling

**Physical and organizational structure for collection, transportation, and recycling of used products**

**PHYSICAL RESPONSIBILITY**

**Market**

Incentive

Delivery of data/meaning intended to regulate actor’s behavior

**Actor**

**Informal sector**

**Formal sector**

Institute for Global Environmental Strategies

China, Thailand and India

1. In the OECD context, up-stream environmental management is a pre-condition for EPR. However, in some developing countries, EPR is discussed as a scheme to promote voluntary environmental management (i.e.: CSR from environmental perspective).

2. EPR policy supposes formal collection mechanism for used products. However, the infrastructure of non-OECD is informal. Establishment of competitive formal collection mechanism/collaboration with informal collection mechanism is inevitable.

3. EPR does not contribute to prevention of pollution from recycling. EPR needs many supporting mechanisms based on proper waste management legislation and systems.

4. “Large second hand goods market makes it difficult to identify “producers”.”

China

- Pilot projects on WEEE collection and recycling
- Traditional collection scheme for EEE (partially informal)
- Collector shall pay the price for WEEE
- Strong second-hand market
- Informal resource recovery

Thailand

- Several strategic plans and draft law on WEEE
- Several examples of environmental CSR by major industries
- Several industrial infra. Useful for resource recovery

India

- Authorized Treatment Facilities
- For waste batteries, ELV, and PET, relatively formalized
- No formal collection/transportation scheme for WEEE
- WEEE is emitted mainly from business facilities
- Informal sector is competitive and can put higher price for recyclables
Japan, Taiwan, Korea (NIES and IDE-JETRO)

1. Three countries have constructed their respective recycling structure on the basis of EPR, but the details of each system differ. Japan: To minimize landfill. Korea and Taiwan: To formalize existing deposit refund principle.

2. Each system has its own weak points. It is significant to decide who will play the central role in collection and recycling.

3. In the three countries, EPR systems enable to implement economic responsibility. But the implementation of physical responsibility differs among countries.

4. Even if similar EPR systems are introduced, the effects and results differs based on each country’s legislation background and understanding of issues.

EPR and International Resource Trade

Developing countries
- Increased volume of production and consumption
- Change in lifestyle
- Increase in waste
- Change in quality and type of waste
- Improper recycling
- Lower demand for recyclables
- Outflow of RR
- Damage to domestic recycling industry
- Economic integration
- Further international division of labor
- Internationalization of product life-cycle
- Rising international price of resources
- RR=recyclables and reusables
- International trade of RR (including illegal trade)
- Rising disposal cost
- EPR legislation
- Support for recycling industry
- Accumulation of RR through EPR legislation
- Incentive to recover/minimize cost
- Source: Hotta, Elder et al. (2008)
EPR CONCEPT (IGES)

- The EPR principle identifies that producer’s ownership of their product is consist of various elements of responsibility: financial, physical, and informative responsibility and liability.
- The provision of information is identified as a fundamental element of producer responsibility in the EPR principle, but it has seldom been required or enforced in most countries.
- However, the hazardousness and high resource value of WEEE makes the provision of information highly desirable, especially at the end-of-life (EOL) stages.
- The chapter recommends additional measures to make sure the producer’s informative responsibility needed for safe and efficient EOL treatment of products.

### International Policy Harmonization: Lessons from EU experience

by Greg Tyson

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Conclusion 1

1. For the development of sound management systems for E-waste in developing Asia, application of EPR mechanism in the wider sense is desirable. But, this requires comprehensive capacity development in terms of institution, infrastructure, and information.

2. Some kind of measures, other than EPR-based recycling policy, are necessary to prevent loopholes. Also, some additional measures are necessary to prevent pollution from improper recycling.

Conclusion 2

3. One measure to supplement EPR could be a transfer of recycling fee of exporting countries to contribution to institutional and technical capacity development for proper recycling in developing Asia.

4. In addition to institutional and technical capacity development for proper recycling in developing Asia, countries may consider introducing trade rules for secondhand goods to gain positive benefits of reuse while preventing negative effects of inefficiency posed by near end of life products.
Contact

- The report is planned to be published in August/September 2009 and will be available from IGES website:

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