

# **Extended Producer Responsibility Policy in East Asia**

**- in Consideration of International Resource Circulation -**

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## List of Acronyms

3R	reduce, reuse, recycle
AC	air conditioner
ADB	Asian Development Bank
ADF	advanced disposal fees
ATFs	authorized treatment facilities
AEE	Association of Electronics Environment (Korea)
AEHA	Association for Electric Home Appliances (Japan)
BFRs	brominated flame retardants
CE	Circular Economy
CEPL	Circular Economy Promotion Law (China)
CFCs	chlorofluorocarbons
CPCB	Central Pollution Control Board (India)
CPRA	Containers and Packaging Recycling Association (Japan)
CRT	cathode ray tube
CSR	corporate social responsibility
DfE	Design for Environment
DSD	Duales System Dueatschland
DTAC	Total Access Communication Company
DTU	Danish Technical University
EC	European Commission
ECF	elementally chlorine-free
ECOPROFIT	Ecological Project For Integrated Environmental Technology (Austria)
EEE	electrical and electronic equipment
EIA	environmental impact assessment
EIPRO	Environment Impact of Products
ELVs	end-of-life vehicles
EM	ecological modernization
EMPA	Swiss Federation Laboratories for Materials Testing and Research
EMS	environmental management system
ENVICO	The Korea Environment and Resources Corporation
EPA	Environmental Protection Administration (Taiwan)
EPR	extended producer responsibility
EU	European Union

FLMS	Fundamental Law for Establishing a Sound Material-Cycle Society (Japan)
FRRC	Fee Rate Reviewing Committee (Taiwan)
FTAs	free trade agreements
G8	Group of Eight
GDP	gross domestic product
GTZ	German Technical Cooperation
IDE-JETRO	Institute of Developing Economies, Japan External Trade Organization
HS	Harmonized Commodity Description and Coding System
IPR	individual producer responsibility
IGES	Institute for Global Environmental Strategies
IIIEE	International Institute for Industrial Environmental Economics, Lund University
IMPRO	Environmental Improvement of Products
IPP	integrated product policy
IRRS	International Resource Recycling System
ISO	International Organization for Standardization
JEMA	Japan Electrical Manufacturers' Association
JETRO	Japan External Trade Organization
JOGMEC	Japan Oil, Gas and Metals Corporation
KORECO	Korean Recycling Corporation
LCA	life cycle assessment
LCD	liquid crystal display
LCPR	Law for Container and Packaging Recycling (Japan)
LELR	Law for End-of-Life Vehicle Recycling (Japan)
LPER	Law for Promotion of Effective Utilization of Resources (Japan)
LREC	Law on Resource Circulation of Used Electrical and Electronic Equipment and Used Cars (Korea)
LRHA	Law for the Recycling of Specified Kinds of Home Appliances (Japan)
LRSR	Law for Promotion of Resources Saving and Reutilization (Korea)
METI	Ministry of Economy, Trade and Industry, Japan
MII	Ministry of Industry Information (China)
MoEF	Ministry of Environment and Forests (India)
MOEJ	Ministry of Environment of Japan
MRTs	mandatory recycling targets
MSW	municipal solid waste
NDRC	National Development and Reform Commission (China)
NGOs	non-governmental organizations

NIES	National Institute for Environmental Studies (Japan)
NTBs	non-tariff barriers
OECD	Organization for Economic Co-operation and Development
PCD	Pollution Control Department (Thailand)
PC	personal computers
PDR	Producer Deposit Refund
PET	Polyethylene Terephthalate
PR	producer responsibility
PRO	Producer Responsibility Organization
PVC	polyvinylchloride
REACH	Registration Evaluation and Authorization of Chemicals
RFMC	Recycling Fund Management Committee (Taiwan)
RoHS	Restriction of Hazardous Substances
SCP	sustainable consumption and production
SCG	Siam Cement Group (Thailand)
SECO	Swiss State Secretariat for Economic Affairs
SEPA	State Environmental Protection Administration (China)
SMEs	small and medium enterprises
SO <sub>2</sub>	sulfur dioxide
StEP	Solving the E-waste Problem
TBCSD	Thailand Business Council for Sustainable Development
TEI	Thailand Environment Institute
UN	United Nations
UNEP	United Nations Environment Program
UNDESA	United Nations Department for Economic and Social Affairs
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USA	United States of America
VITO	Flemish Institute for Technological Research
WEEE	Waste Electrical and Electronic Equipments
WTO	World Trade Organization

## **Foreword**

This report summarizes the current situations and challenges that developing Asia faces in introducing Extended Producer Responsibility (EPR). It also discusses various problems experienced by Japan, Korea and Taiwan after the introduction of EPR mechanisms prior to other Asian countries. It then explores issues related to international resource circulation and domestic recycling mechanisms based on the EPR concept. By doing so, the report will present major issues associated with the adoption and dissemination of EPR-related environmental policies in developing countries. It will also examine opportunities to introduce new policy tools that respond to the growing globalization of environmental issues.

The project to develop this report started with a workshop, titled “Workshop on Extended Producer Responsibility (EPR) and International Material Flow”, held in Manila in February 2007. The workshop was co-organized by United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the Institute for Global Environmental Strategies (IGES). Following the workshop, IGES and the presenters updated information on EPR policies up to March 2009, forming the contents of this report. Some additional chapters were included in order to cover topics that were not well discussed in the workshop. Both the initial workshop and the following editorial work were made through financial support from the Ministry of the Environment of Japan. This report is published as an input into the Regional 3R Forum in Asia<sup>1</sup>.

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<sup>1</sup> Regional 3R Forum in Asia: A regional collaborative facility to develop multilayered networks of stakeholders such as governments, academia, scientific and research community, private sector, and NGOs for the strategic implementation of the 3Rs, to be inaugurated in 2009.



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