

Environmentally Sound Management of Electronic and Electrical Waste in Asia Pacific

BACKGROUND

Large quantities of used an end-of-life electronic and electrical wastes (e-waste) are being exported to developing countries for the purpose of re-use, repair, refurbishment, recycling and recovery of non-ferrous and precious metals at facilities that not always operate in an environmentally sound manner. The effective implementation of the Basel Convention requires the environmentally sound management (ESM) of hazardous electronic and electrical wastes.

The sixth meeting of the Conference of the Parties to the Basel Convention (2002) recognized that the issue of the management of electrical and electronic waste required urgent attention, especially in the Asia Pacific region. The Secretariat of the Basel Convention, in consultation with selected countries in this region and the Basel Convention Regional Centres in China, Indonesia and the South Pacific, developed a proposal for a pilot project on the environmentally sound management of e-waste, that was presented at a side-event in conjunction with the Ministerial Conference on the 3R Initiative held in Tokyo in April 2005 and at the fourth session of the Open-ended Working Group of the Basel Convention in July 2005.

PROJECT LAUNCHING

The **Basel Convention Partnership on the Environmentally Sound Management of Electrical and Electronic Wastes for Asia Pacific Region**, which was developed as a project, was officially launched in Tokyo, Japan, in November 2005 on the occasion of the Asia-Pacific Regional Inception Workshop on the Environmentally Sound Management of Electronic and Electrical Wastes, hosted by the Government of Japan in collaboration with the Secretariat of the Basel Convention and Japan's National Institute for Environmental Studies.

Goal

The goal of this programme of action is to enhance the capacity of Parties to manage electrical and electronic wastes in an environmentally sound way through the building up of public-private partnerships, and by preventing illegal traffic.

Strategic objectives

A number of strategic objectives have been identified to achieve the above goal:

- Assessment of the situation through the conduct of national inventories, the establishment of mechanisms for information exchange at the national and regional levels, and monitoring of the impacts on human health and the environment of activities concerning, or related to, the management of electrical and electronic wastes.
- Prevention and minimization of e-waste through the establishment of goals, both intermediate and long-term, to reduce the quantity of electrical and electronic wastes ending up in landfills.
- Introduction of cleaner production approaches to minimize, and where feasible, to eliminate hazardous substances in Electrical and Electronic Equipment (EEE) and consequently their wastes.
- Environmentally Sound Management, to be achieved by promoting best practices and the use of sound recycling technologies adapted to national specificities, including the development of appropriate methods for evaluation, testing, characterizing and classifying e-waste.
- Promotion of information and training through the establishment of a regional information collection and dissemination clearing house accessible to all concerned stakeholders, including the development of training curricula for trainers.

PLANS OF ACTION

Under the plan of action adopted in 2005, the following national and regional plans of action were identified for implementation, based on available resources:

National Plans of Action

1. Carry out awareness raising activities.
2. Carry out detailed inventories.
3. Initiate pilot schemes on the collection and segregation of e-waste, including take-back schemes.
4. Initiate pilot repair, refurbishment and recycling schemes.
5. Training of customs and enforcement officers, as necessary, to control or verify export or import of e-waste and work on the identification of e-waste in the Harmonized System of the World Customs Organization.
6. Evaluation of various projects for their effectiveness and their sustainability.

Regional Plan of Actions

1. Coordination of implementation through the Basel Convention Regional Centres (BCRCs) in the Asia-Pacific Region.
2. Development of a regional focus to address illegal traffic in e-waste.
3. Exchange of information and strengthening of information and enforcement networks in the region.
4. Harmonization of national regulatory procedures to improve the control of those electrical and electronic wastes characterized as hazardous wastes.
5. Development public-private partnerships for the implementation of the project.
6. Harmonization of information-sharing activities at the regional level, to include the following:
 - Establish a directory of recycling companies, including the identification of technologies involved, and the types of materials that are recycled by these companies in the region.
 - Identify markets for recyclable materials.
 - BCRCs to facilitate the identification of appropriate experts for the region, to assist in various e-waste activities at the national level.
 - Establish an information-sharing system on transboundary movements of e-waste.
 - BCRC-China to work in cooperation with other BCRCs in the region, and other institutions, on the development of an information management system on e-waste and awareness raising tools.

7. Development of environmental management systems, standards, guidelines or principles and best practices for the environmentally sound management of used electrical and electronic equipment.
8. Development of environmental management systems, standards, guidelines or principles and best practices for certification schemes and the testing of used electrical and electronic equipment.
9. Initiation of pilot projects on the enhancement of laboratory capacities.
10. Development of generic awareness-raising and communication tools adjusted to the needs of the countries in the region.
11. Carry out feasibility studies on the establishment of a regional environmentally sound recycling scheme.
12. Organization of an international conference on environmentally sound management of e-waste.

PROGRESS TO DATE

The following Asian countries have supported and participated in the project activities: Cambodia, China, India, Indonesia, Malaysia, the Philippines, Singapore, Sri Lanka, Thailand and Vietnam. In addition, BCRC China, BCRC SEA and PRC-SPREP prepared regional proposals for countries covered by their Centres. The governments of Canada, Japan, and the Netherlands have provided financial support for the implementation of the project and further efforts are being made to secure funding from other countries.

Table I shows the progress of project activities as of April 2008. The next phase of this project is the initiation of pilot schemes on the collection and segregation of e-waste, including take-back schemes, the initiation of pilot repair, refurbishment and recycling schemes and the training of customs and enforcement officers to control the import and export of electrical and electronic wastes so as to combat illegal trafficking.

The development of appropriate methods for evaluation, testing, characterization and classification of e-waste, including the development of environmental management systems, extended producer responsibility, standards and guidelines for the environmentally sound management or for certification schemes will be initiated.

The establishment of mechanisms for information exchange at the national and regional level and the monitoring of impacts on human health and the environment of the management of electrical and electronic wastes will be a priority.

Table I:

Project activities undertaken under the Basel Convention partnership on the environmentally sound management of e-waste in the Asia-Pacific region (as of April 2008)

COUNTRY / BCRC	TITLE OF PROJECT	SCOPE	STATUS
BCRC China	Feasibility analysis to develop a centre of excellence of information on the ESM of e-waste in BCRC in Beijing	Regional	Completed.
BCRC China	Research on criteria between new/used EEE and hazardous/non-hazardous criteria in selected Asian countries	Regional	In progress; to be completed in June 2009
PRC-SPREP, Samoa	Pilot inventory of e-waste in five Pacific island countries	Regional	In progress. To be completed in December 2008.
BCRC SEA, Jakarta	Development of guideline documents on methodology on inventory of e-waste and environmentally sound recycling, reuse, repair, refurbishment/disposal of e-waste	Regional	Completed. See http://www.bcrc-sea.org/
BCRC SEA, Jakarta	Training workshop on ESM of e-waste	Regional	Completed on 13-15 March 2007 in Cambodia. See http://www.bcrc-sea.org/
Sri Lanka	Development of national implementation plan for e-waste management	National	Completed.
Development Alternatives, (NGO), India	Facilitating partnerships for ESM of e-waste in India (NGO project): Phase I	National	Completed.
Indonesia	Preliminary inventory of e-waste	National	Completed.
Cambodia, Malaysia, Thailand, Viet Nam	Inventory of e-waste	National	Completed.
Cambodia	Development of awareness raising kits and conducting training courses	National	In progress; to be completed in Aug. 2008



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