

Good Practice for Effective Enforcement of the Basel Convention Experience of Thailand (as of March 2010)

Type of practice	National Policy for enhancing Capacity for ESM of E-waste
Implementation status	Ongoing since 2003 (The national strategic plan was approved by the cabinet in July 2007)
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<Objectives>

- To prevent harmful impacts on human health and the environment caused by environmentally unsound management of E-waste
- To have an integrated ESM of E-waste with the emphasis on collection and recycling and public-private partnership

local administrations, waste collectors and processors are targeted.

<Activities>

The Thai government formulated "*the Strategic Plan on WEEE Management*" in 2003 and it was approved in July 2007. A sub-committee was appointed to steer and keep track on the progress of tasks under the plan. The targets of the plan are as follows:

- 50% collection rate by 2011
- 50% recycling rate by 2011
- Environmentally sound dismantling and recycling facility to be available
- More eco designed EEE is produced by domestic manufacturer
- At least 1 household HW management facility to be established by 2011

<Background Information>

Thailand is a big producer of EEE in South East Asia, and every year a huge amount of EEE and WEEE are imported into the country both legally and illegally. It is estimated that there are about 8,000 junk shops on the streets across the country, and most of them are informal sectors. It is concerned that improper recycling practices in informal recycling facilities will cause great risk on human health and the environment.

The key issues in Thailand identified by the stakeholders are as follows;

- Lack of public awareness
- No specific law/regulation and low enforcement capability
- Lack of infrastructure, especially environmentally sound collection scheme



<Target group>

All the stakeholders relevant to ESM of E-waste, including EEE producers, importers, consumers,

The plan has following five core strategies

1. Technology development and best available practice
2. Capacity building and empowerment
3. Law enforcement and development
4. Financial and investment system
5. Management scheme and organization development

The Thai government has developed a set of measures to realize the above strategies.

<Difficulties and challenges>

The targets of the plan are not easily achievable and it is not clear what types of E-waste to be collected and recycled. The specific terms of recycling and recovery have not been formally defined.

With the economic situation, a new household

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hazardous waste and E-waste management facility is not likely to be established.

<Achievements>

1. Manual for ESM of E-waste

The Thai manual adopts the guideline developed by the Basel Convention Regional Center South-East Asia (BCRC-SEA) on 5Rs of Electrical and Electronics Waste and adds useful information for the Thai context. It covers information of current practice and environmentally friendly practice of 6 types of E-waste dismantling and recycling domestically and internationally.

Target E-waste types include TV, computers, refrigerators, washing machine, air conditioners and mobile phones. This manual was aimed at small and medium sized informal waste buyers to have more knowledge on the danger of improper dismantling and to know how to improve their operations. Copies of the manual were provided to some regional environmental officers to help disseminate. However, the effect was not evaluated.

In addition to the manual for ESM of E-waste, PCD has produced the pamphlets on hazards of E-waste for general public. They are distributed to municipalities around Thailand.



2. Pilot project on mobile phone battery taking back system

PCD has initiated take-back program for end-of-life mobile phones batteries in order to reduce the environmental and human health

risks associated with contamination of soil, water and air from hazardous substances in the batteries. Some of the collected mobile phone batteries are disposed of in a secure landfill, while most of them are exported to be recycled.

The programs are aiming at encouraging customers to take back the end-of-life mobile phones batteries and other rechargeable batteries to the designated collection points provided by PCD, manufacturers or relevant stakeholders, such as service shops, some universities and some government agencies on the voluntary basis. Waste batteries are collected and exported free of charge and complying with Basel Convention. This program is still on-going, but most of the consumers discarded non-rechargeable batteries in the same bin. There is no regular report on the amount of collected waste, to get the data, PCD has to request for them on the case by case basis.



3. Pilot project on fluorescent lamp recycling

The pilot project was implemented from 2006-Dec 2007. The project first targeted public and private office buildings and a few retailers in Bangkok and vicinities. However, after the project period ended, many project partners continue the FL collection and recycling and expanded to other parts of Thailand. More than 300,000 lamps have been recycled since the launch of the program in October 2006. The difficulties include the long distance from collection partners (mostly municipalities) in other parts of Thailand and the recycling cost that incurred after the pilot program ended.

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4. Capacity building for local governments on household hazardous waste management

Since 2006 PCD has developed a segregation, collection and transportation scheme for community-generated hazardous waste for large municipalities. The main target groups of hazardous waste to be collected include dry-cell batteries, fluorescent lamps and chemical containers (e.g. aerosol cans, cleaning agent bottles). Containers for receiving hazardous waste were specially designed and produced to distribute in the participating communities within the selected municipalities. Existing trucks and transfer stations were modified to accommodate hazardous waste collected from household.

Awareness raising campaigns such as TV spot, community radio announcement, pamphlet, poster and road show activities were launched during the project. It was found that residents in the focused communities cooperated in hazardous waste segregation and segregated waste was safely disposed. In addition, straight-type fluorescent lamps which make up about 30% of household hazardous waste by weight can be recycled. After the success of pilot municipalities, the program has been extended to more than 14 municipalities out of total 23 large municipalities around Thailand.

<Ongoing activities>

“Act on Economic Instruments for Environmental management” has been drafted by the Ministry of Finance with the consultation from PCD and other agencies. This new act is to:

- Combine all the economic instruments including pollution tax, emission charge, product fee and insurance bond under one law
- Allows products to be charged a certain fee for the management of end-of-life products

The scheme of WEEE management under the new act is summarized in Figure 3. Details of the types of products to be regulated and the fee rates will be elaborated by PCD and other agencies and be stipulated in a Royal Decree and Ministerial Notification

<References>

- Presentation by DIW and PCD at the Workshop of Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes (2004-2010).
- Presentation by PCD at the 2009 Asian Electrical and Electronic Green Society International Conference
- Information provided by PCD

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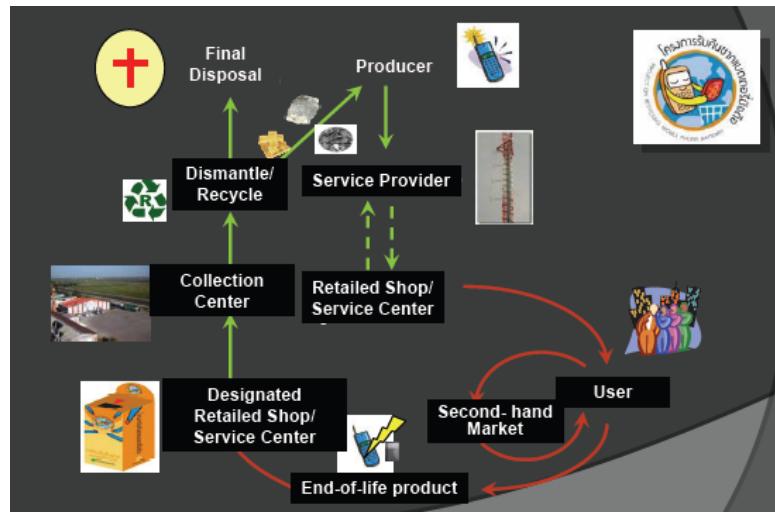


Figure 1. Scheme of Mobile phone battery taking back system

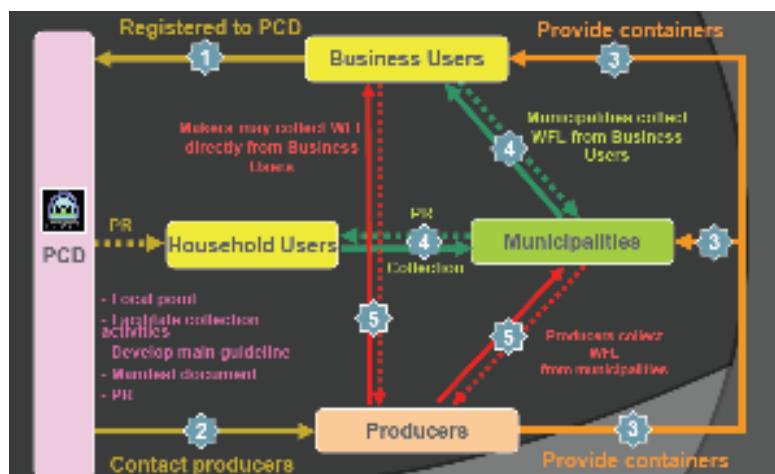


Figure2: Scheme of fluorescent lamp recycling

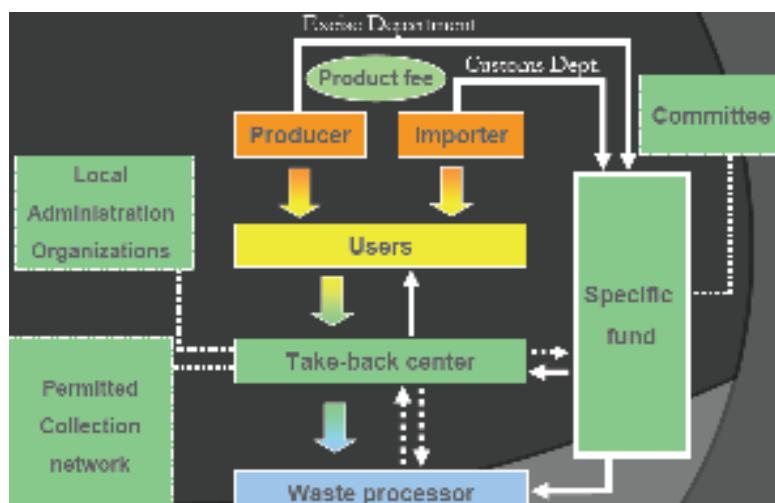


Figure3: Scheme of proposed WEEE management