WEEE Management Policy Update from Thailand

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Pollution Control Department
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Outline

• Introduction
• Overview of E-Waste Situation
• Status of Policy Implementation or Development
• Current Status of WEEE Management
• Lessons Learned and Future Goals
• Questions for Discussion
Introduction
Introduction (I)

Pollution Control Department

- Submit opinions for the formulation of national policy and plans;
- Develop environmental quality management plans and measures;
- Develop appropriate systems/methodologies/technologies for waste management;
- Provide assistance/advice on waste management.

http://www.pcd.go.th/indexEng.cfm
Introduction (II)

Governmental Collaborations

PCD: Pollution Control Department
DIW: Department of industrial Works
LG: Local Governments
Overview
Current Situation (I)

• Sources:
  – Industries (Off-spec products/Scraps from manufacturing)
  – Household/Commercial/Services (Discarded/broken electrical and electronic appliance)
  – Import (Illegal import)
Current Situation (II)

- **Quantities**
  - ~ 342,000 tons or more than 15 million units of e-waste were expected in 2011 (PCD, 2011)
  - ~ 41 formal e-waste recycling/dismantling facilities (PCD, 2011)
  - ~ 9,000 junk shops in Thailand (PCD, 2010)
  - No data available for informal waste collectors

- **E-waste management**
  - Formal
  - Informal
# E-waste inventory

<table>
<thead>
<tr>
<th>Product type</th>
<th>Waste generation 1,000 units in year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
</tr>
<tr>
<td>TV</td>
<td>1,835</td>
</tr>
<tr>
<td>Digital camera</td>
<td>616</td>
</tr>
<tr>
<td>VDO camcorder</td>
<td>120</td>
</tr>
<tr>
<td>Media player</td>
<td>583</td>
</tr>
<tr>
<td>printer</td>
<td>1,365</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>8,405</td>
</tr>
<tr>
<td>PC</td>
<td>1,531</td>
</tr>
</tbody>
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Ref. PCD 2010
Current Situation of WEEE Flow

Formal flow/regulated:
- Production → Sale
- Sale → Use
- Use → Repair
- Repair → Collection
- Collection → Dismantling
- Dismantling → Metal Recovery
- Export

Informal flow/environmental impacts:
- Production → Sale as second-hand
- Sale as second-hand → Repair
- Repair → Collection
- Collection → Dismantling
- Dismantling → Recycling
- Recycling → Disposal
- Disposal → Metal Recovery
General Data

• Recyclers
  – About 30 dismantlers
  – About 50 crusher
  – Limited metal recovery
Pathway of e-waste from household

- Mix dump: 7.8%
- Give/donate: 25.3%
- Sell: 51.3%
- Keep: 15.6%

PCD study 2012
Mishandling of E-waste
Impacts from End-of-Life phase

- Current practice
Impacts from End-of-Life phase

Photo by PCD
What if these are your company’s products?
Impacts from End-of-Life phase

Photo by CU
Impacts from End-of-Life phase

Photo by CU
Collected from around the country
Transport to other province -> other country
Reward for informal waste processor
WEEE Strategy
Objectives:

- To establish e-waste collection system;
- To promote EcoDesign;
- To promote environmentally sound dismantling and recycling facility;
- To raise awareness among the public;
- To protect the country from being a dump site.
Strategy 1: Strengthening of import/export control
Key measure:
- Registration of e-product importer
- Promote import of standard-complied product
- Monitor impacts from FTA /AEC/MEA

Strategy 2: Promotion of eco-friendly e-products with the focus on public procurement
Key measure:
- Promote testing and certification of eco-product
- Propose a policy on e-product rental

Strategy 3: Development of E-waste database
Key measure:
- Develop data collection and reporting system
<table>
<thead>
<tr>
<th>Strategy 4: Development of e-waste segregation, collection, storage and transport for local government</th>
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</thead>
<tbody>
<tr>
<td>Key measure:</td>
</tr>
<tr>
<td>• Capacity building for local government</td>
</tr>
<tr>
<td>• Formulate laws on product fee and/or EPR</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategy 5: Upgrade of dismantling and recycling facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key measure:</td>
</tr>
<tr>
<td>• Support R&amp;D in recycling technology</td>
</tr>
<tr>
<td>• Support investment in environmentally sound recycling</td>
</tr>
</tbody>
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<tr>
<th>Strategy 6: Promotion of public awareness on e-waste</th>
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<tr>
<td>Key measure:</td>
</tr>
<tr>
<td>• Disseminate e-waste knowledge through formal and informal education</td>
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</table>
Proposed WEEE Management System

- EEE Producers
- EEE Importers (new/used)
- Fee Collecting Agencies
- Government Fund
- Material Producers
- Dismantling & Recycling Facilities
- Export of EEE & WEEE
- Distributors & Retail Shops
- Consumers
- EEE Repair Shops
- Waste collectors (Tri-cyclers/Junk Shops)
- Buy-Back Centers
- Final Disposal Facilities

**Buy-back partners**

**Financial flow**

**Product-waste flow**
• Draft Act on *Fiscal Measures for Environmental Management* [Fiscal Policy Office]

• combine all the economic instruments including pollution tax, emission charge, product fee and insurance bond under one law

• Product fee is one of the tools proposed by FPO

• The Draft Act allows products to be charged a certain fee for the management of end-of-life products

• Details of the types of products to be regulated and the fee rates will be elaborated in a Royal Decree and Ministerial Notification (by PCD)
2 possible policy options under considerations

• Formulate a new law (Act) by MNRE (PCD)
  – keeping the idea of product fee
  – Establish a new fund to support buy-back, collection, transportation, recycling and disposal

• Formulate a new law similar to Extended Producers’ Responsibility (EPR)
  – setting collection and recycling target for producers to comply with.
  – No government fund, private sectors manage their own collection and recycling system
Projects/Activities related to E-waste Management
WEEE CAN DO Road show
WEEE CAN DO Road show
Projects/Activities to be done

• National Single Window
• Registration of e-products producer/importer
• Training on Transboundary Movement Control
• Expand the type of products to be included in the public procurement criteria
• Support green product – tax reduction, award, green purchasing awareness
• Product standard/certification
Projects/Activities to be done

• Law on Product Fee or EPR
  – Data reporting
  – Requirement for take back, storage facility
  – Requirement for Environmentally Sound facility

• Capacity building for local governments

• Increase communication channels: product catalogue, instruction manual, pamphlet, social media, old media

• Pilot project with private and public sectors to collect, transport, dismantle, recycle and dispose
Thank you

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