

E-waste Preliminary Inventory Studies and Coming Activities

By Luckmi Purwandari
Ministry of Environment of Republic Indonesia

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Outline

1. **Objective and Activities of E-waste Preliminary Inventory Studies**
2. **Results and Finding of E-waste Preliminary Inventory Studies**
3. **Finding**
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5. **Coming Activities**

1. Objective of Preliminary Inventory on E-Waste:

As an initial step for developing national inventory system of e-waste as a part of national inventory of hazardous waste in Indonesia. Result of this activity is expected to support Indonesia in order to implement environmentally sound management of electrical and electronic waste in Indonesia

Activities of Preliminary Inventory on E-Waste:

- 1) Identification of refurbishment/recondition, recycling/recovery e-waste facilities, and other activities related e-waste in:
 - a. Cities around Jakarta (Bogor, Depok, Tangerang, Bekasi)
 - b. Bonded industrial estate in East Java
 - c. Bonded zone in Batam island

- 2) Identification of **Influx of E-waste** in Batam & Eastern Indonesia

2. Results of Preliminary Inventory on E-Waste:

- 1) a. **Cities around Jakarta** (Bogor, Depok, Tangerang, Bekasi) are mostly **dealing with used-electronic trading**. It is not the significant market for refurbishment/recondition, and recycling/recovery activities.
- b. Used electronic or e-waste in fact being imported (**it stated in the import document as metal scrap or office equipments**) from US into **bonded industrial estate in East Java** for at least reconditioning. The product then exported to China, Taiwan and Hong Kong. The activities were:
 - dismantling (TV, CPU and PC monitor),
 - checking for workability and polishing (CRTs),
 - crushing (TV casing & PC monitor);
 - smelting/packing (metal parts);In bonded industrial estate area in East Java some recycling of e-waste industries have smelting facilities to produce the metal ingot (Copper, Zinc);

Preliminary Inventory on E-Wastecont:

- 1). C. There was importation of used EEE or e-waste in Batam island **(In document import stated the metal scrap or office equipment)**. E-waste entry into Batam island through 65 seaports. Most of valuable E-waste in Batam categorized as hazardous waste.
 - Need extra cost if send it to legal facilities;
 - Mostly given to scrap companies (paid or free of charge)
 - Open dumping of PCBs was found in Sei Lekong Tanjung Uncang

- 2) There are the trading of used goods included used-electronic products in Eastern Indonesia such as Pare-Pare in South Sulawesi and Wakatobi Islands in South-East Sulawesi. Wakatobi is called Central Distributor/Retailer” of used product in Eastern Indonesia.

Activity of Recycle Facilities in East Java

No.	Company Name	Activity	Kind of E-waste Collected
1.	Wajar Logam Jaya Co.	<ul style="list-style-type: none"> ■ importer mix scrap metal, TV and monitor, dismantling CPU and printer; ■ recondition monitor, produce scrap metal or aluminum, brass ingots, grinded casings, export 	e-waste: CPU, printer, TVs, monitor,
2.	Sun Doly Co	<ul style="list-style-type: none"> ■ importer mix scrap metal, TV and monitor, dismantling CPU and printer; ■ recondition monitor, produce scrap metal or aluminum, brass ingots, grinded casing, export 	e-waste: CPU, printer, TVs, monitor
3.	Metalindo Jaya Abadi Co.	Recondition of CPU, fax machine, and printer from domestic originated for local market	e-waste: computer's CPUs, printer
4.	Hanjaya Perkasa Metal Indonesia Co.	Non ferrous smelter using imported mix scrap metal, recondition metal apparatus, imported PCBs powder	e-waste: used PCBs, PCBs sacrap, PCBs powder

Activity of Recycle Facilities in Batam City

No.	Company Name	Activity	Kind of E-waste Collected
1.	Sentral Agung Himalaya Co.	Collecting metal waste from domestic sources, segregation, packing, export or domestic sale, no physical treatment	Rejected small parts of electronic components
2.	Interco Bisnis Langgeng Co	Collecting metal waste from domestic sources, segregation, packing, export or domestic sale, no physical treatment, producer polybag and garbage bag made from used plastic and new plastic	Plastic, e-waste: used PCBs, rejected PCBs, computer monitor, electrical and electronical parts
3.	Indo Batam Ekatama Co.	Collecting metal waste from domestic and imported, segregation, packing, export or domestic sale, no physical treatment	Scrap: Al, Cu, brass, tin solder, plastic. e-waste: Used PCBs

Illegal Import of used telephone boxes



Example of imported e-waste, mainly telephone boxes, founds in one recycling facility
(In document import stated the materials as metal scrap).

Shops selling refurbished or reconditioned goods



Illegal imports of e-waste

In document import stated the materials as metal scrap
(sorting, recovery, open burning, and dumping).



Illegal imports of e-waste

In document import stated the materials as metal scrap (scrapping, sorting, recovery, open burning, and dumping).



3. Finding

- 1) There is no the formal data of importation of e-waste. In fact, the importation of e-waste was identified as metal scrap or office equipment on its document.
- 2) Trading of imported second-hand electronic products and recondition/refurbishment products could be found easily in many places.
- 3) Open burning and open dumping are most alternatif final disposal of non-utilized e-waste (after sorting, smelting, scrapping, and recondition)
- 4) There is a legal company which act as scrapping facility of E-Waste.

4. Need Assessment on Managing National E-Waste

- 1) Regulation Aspect.
Set up definition and specific legislation on e-waste and second-hand EEE.
- 2) Institutional Aspect.
Awareness and capacity of local government officers on managing hazardous waste include e-waste
- 3) Technical Aspect
 - To encourage manufacturers to implement cleaner production and other approaches such as eco-design, extended producers' responsibility and take-back mechanism.
 - To set up comprehensive management of e-waste including data collection and exchange.
- 4) Law Enforcement and Inspection
 - To **strengthen** the Inspection and enforcement on illegal import of e-waste, refurbishment production process and export-import of e-waste, particularly in the area that potential for illegal dumping sites;
 - **Customs** were encouraged to **increase** the effort in **inspection¹⁴ and enforcement of illegal import of e-waste**

Need Assessment on Managing National E-Wastecont.

5) Consumer Protection

- increase awareness of the people on product quality, technical specification and safety of refurbished electronic product, their right to have good quality and safe product;
- to encourage manufacturers to disclose all relevant information regarding their products quality and
- to provide mechanism to protect consumers from sub-standardized products.

6) Economic Aspect

- It was recommended that the **cost of environmental** recovery and **health** impact due to exposure of hazardous waste contained in the e-waste or low safety of refurbished electronic product should be taken into account in **production cost**;
- Refurbishment of electronic product activities conducted by mostly small and unauthorized enterprises or informal sector **should not prohibited** as long as they use **domestic** second-hand electronic or e-waste;
- The government has to **increase their technology capacity** to operate in environmentally sound manner

5. Coming Activities

Plan Feasibility Study of E-Waste Recycling Facility:

- 1) Production Capacity of recycling facility
- 2) Types of recycling facility
- 3) Distribution of recycling facility
- 4) Economic Feasibility

Thank You