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Sabah State Policy on the E-waste Management

Ministry of Tourism, Cultural and Environment, Sabah

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1. INTRODUCTION

Electrical and Electronic Waste (hereafter referred to as E-waste) is one of the fastest growing waste streams in the world. The improper disposal of E-waste can lead to severe human health and environmental hazards due to highly toxic substances within electronic and electrical assemblies such as mercury and lead (lead poisoning, cancerous mercury and pollution from burning may damage human organs and the environment).

In Malaysia, unwanted electrical and electronic assemblies or otherwise commonly known as e-waste is categorized as scheduled wastes under the code SW 110, First Schedule, Environmental Quality (Scheduled Wastes) Regulations 2005. The SW 110 wastes are defined as wastes from the electrical and electronic assemblies containing components such as accumulators, mercury-switches, glass from cathode-ray tubes and other activated glass or polychlorinated biphenyl-capasitors, or contaminated with cadmium, mercury, lead, nickel, chromium, copper, lithium, silver, manganese or polychlorinated byphenyls.

E-wastes are also listed as code A1180 and code A2010 under Annex VIII, List A of the Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and their Disposal 1989.

A1180: Waste electrical and electronic assemblies or scrap[1] containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB- capacitors, or contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III (note the related entry on list B B1110)[2].

A2010: Glass waste from cathode-ray tubes and other activated glasses.

As Malaysia is one of the parties in the Basel Convention, the importation and exportation of such wastes must follow the procedures of the Convention. Importation or exportation of the wastes require prior written approval from the Department of Environment as mandated under Section 34B(1)(b) & (c), of the Environmental Quality Act, 1974. As a general policy, the Department of Environment does not allowed the importation of E-Waste from outside Malaysia.

[1] This entry does not include scrap assemblies from electric power generation
[2] PCBs are at a concentration level of 50 mg/kg or more

2. DEFINITION

In this policy, the following definitions shall apply, unless the context otherwise requires:

"Authorization" means permission for handling, collection, reception, storage, transportation, dismantling, recycling, treatment, and disposal of e-waste granted;

"Bulk Consumers" means bulk users of electrical and electronic equipment such as federal or state or local governments, public sector undertakings, banks, private companies, educational institutions, multinational organizations, and others;

"Manufacturer" means Manufacturing Company that produces Electrical & Electronic items;

"Importer" means A person / company that bring in Electrical & Electronic items from foreign country for use, sale, or re-export;

"Collection Centre" means a centre established, whether individually or jointly, for the purposes of serving as a location or point for receiving e-waste from generators;

"Consumer" means any individual person using electrical and electronic equipment excluding bulk consumers;

"Distributor" means any person who receives electrical and electronic equipment and components thereof from a producer, and sells it on a commercial basis to individuals/parties that will utilize the equipment, including consumers, bulk consumers, other distributors and retailers;

"Dismantler" means any person engaged in the dismantling activities of used electrical and electronic equipment;

"Disposal" means the act of discarding unwanted electrical and electronic equipment, including incineration and deposition in a secured landfill site(s);

"Electrical and Electronic Equipment" or "EEE" means equipment that is dependent on electrical currents or electro-magnetic fields to be fully functional;

"End of Life" means the end of the useful lifespan of any electrical and electronic equipment;

"Extended Producer Responsibility" or "EPR" means the extended responsibility of producers of electrical and electronic equipment for the environmental sound management of their products at the post-consumer stage;

"Facility" means any location wherein the processes of collection, reception, storage, segregation, refurbishing, dismantling, recycling, treatment and disposal or e-waste are carried out;

"Producer" means any person irrespective of selling method used that:

a) Manufactures and sells electrical and electronic equipment under his own brand;
b) Resells under his own brand, the electrical and electronic equipment produced by other manufacturers and suppliers;
c) Imports or exports electrical and electronic equipment;

"Recycler" means any person who is engaged in processing e-waste for recovery of useful materials or components for reuse;

"Refurbishment" means the act of repairing used electrical and electronic equipment to be put back to its original use and for selling in the market;

"Refurbisher" means any person that is engaged in the activity of refurbishing used electrical and electronic equipment.

"Reuse" means any operation by which waste electrical and electronic equipment or components thereof are used for the same purposes as it was originally intended, including the continued use of components from equipment which are returned to collection points, distributors, recyclers or manufacturers;

"Transporter" means any person(s) involved in the off-site transportation of e-waste, including air, rail, road and water transportation methods;

"Treatment" means any activity that occurs after the handover of waste electrical and electronic equipment to a facility for, dismantling, shredding, or preparation for disposal and any other operation carried out for the recovery and/or disposal or E-waste;

"Landfills" means any location wherein the processes of disposal of e-waste are carried out;

"Waste Electrical and Electronic Equipment" or "E-waste" , as defined under the code SW110, First Schedule, Environmental Quality (Scheduled Wastes) Regulations 2005, means any electrical and electronic assemblies, containing components such as accumulators, mercury switcher, glass from cathode-ray and other activated glass or polychlorinated biphenyl-capacitors or contaminated with cadmium, mercury, lead, nickel, chromium, copper, lithium, silver, manganese or polychlorinated biphenyls.

3. CATEGORIES OF E-WASTE

The following categories of e-waste follow the list of electrical and electronic waste covered under the proposed federal DOE "Household E-waste Regulations". The listed electrical and electronic equipment or components that are destined for recycling or recovery or disposal are considered as e-waste. This list however is not exhaustive; however any new additions to the list shall be subject to approval.

- CEW1 - Television (CRT/LCD)
- CEW 2 - Washing Machine
- CEW 3 - Refrigerator
- CEW 4 - Mobile Phone
- CEW 5 - Computer (Desktop/Laptop)
- CEW 6 - Air Conditioner

4. POLICY CONTEXT

While E-Waste presents a challenge and threat if not handled properly, the integrated management of E-Waste can also presents opportunities for resource recovery.

In Sabah, as there are currently no significant electronic and electrical based manufacturing industries, the main focus of E-Waste management is related to household (consumer) E-Waste i.e. refrigerator, TV, PC, air-conditioner, phone and so forth.

A policy on integrated management of E-waste is necessary to stipulate the directions and management safeguard the nation's human resource and environment.

This E-waste policy is formulated with the following considerations:

- Compliance with relevant international treaties which Malaysia has ratified i.e. Basel Convention;
- Consideration of initiatives under regional cooperation such as the Brunei Indonesia Malaysia Philippines East ASEAN Growth Area (BIMP EAGA) Environmental and ICT Clusters;
- Compliance with relevant National Policies, Master Plans and Regulations. Examples are National Policy for Environment (2006), National Solid Waste Management Policy (2009) and Environmental Quality Act and relevant regulations;
- Compliance with relevant National and State Policies and Master Plans. Examples are Sabah Policy for the Environment (2013) and Solid Waste Management Master Plan in Sabah (2009);
- Future national regulation, rules and financing mechanisms relevant to E-Waste.

In addition, this policy supports and shall adopt relevant Federal Department of Environment's policy, regulations and financing mechanism on E-waste:

1. The importation of e-waste from outside Malaysia for the purposes of recovery and disposal shall not be allowed, unless approved by relevant authority;

2. The importation of used electrical and electronic equipment for the purposes of reuse shall be allowed, under the condition that the used equipment is still in working order and are not aged over 3 years from its manufacture date;

3. User responsibility system with aspects of extended producer responsibility applied (system proposed by Federal DOE)

5. POLICY STATEMENT

"E-Waste in Sabah shall be managed systematically through the introduction of an integrated management system based on environmentally sound technologies, promotion of 3R (Reduce, Reuse and Recycle) and safe disposal of any residue. The system shall be based on shared responsibility approach to ensure lowest possible impacts on the environment and public health"

6. PRINCIPLES & OBJECTIVES OF THE POLICY

In developing the e-waste policy, the following principles and objectives are to be met:

Environmental Protection	•Protect the environment and public health and reduce the impacts of improper handling and disposal of e-waste •Enhance resource conservation through the recovery of waste •Prevent recoverable E-Waste to be dismantled informally or disposed into dumping grounds or landfills
Holistic and Integrated Approach	•To systematically introduce a holistic and Integrated Management System for E-Waste in Sabah, inclusive of elements of regulations, infrastructure (collection , transportation, recovery and safe disposal), economic instruments, reporting, enforcement and monitoring
Reduce, Reuse and Recycling (3R)	•To introduce environmentally sound technologies based on 3-R concept •To increase resource recovery through full recovery facilities with full environmental protection
Shared Responsibility	•To ensure the management system is established based on shared responsility principles where all stakeholders will play a role

7. SCOPE OF THE POLICY

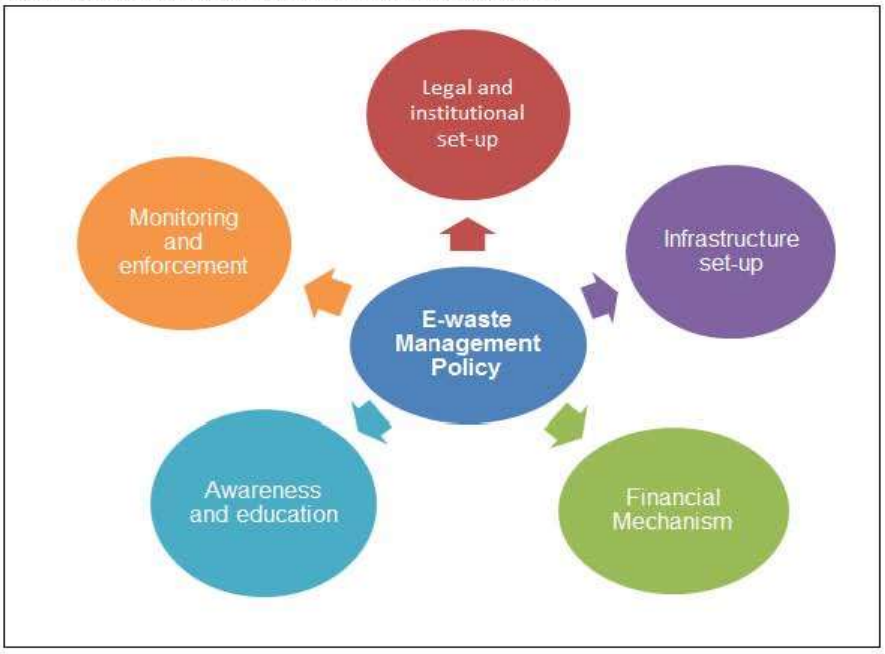
This policy shall encompass all parties concerned in the manufacturing, sales, purchasing and processing of electrical and electronic equipment in the State of Sabah.

The parties are:

- Electrical and electronic producers;
- Electrical and electronic distributers;
- Waste generators;
- Waste transporters;
- Collection centres/ recyclers
- Importers or exporters of wastes; and
- Relevant authorities involved in the management of e-wastes.

8. STRATEGIC THRUSTS OF THE POLICY

The key strategic thrusts of the policy are indicated below:



8.1 Thrust 1: Legal and Institutional set-up

- Enhancement of legal and institutional set up to enable a formal system for holistic management of E-Waste generated from Sabah;
- Adoption of federal regulations and system where relevant with rights of State Government of Sabah observed;
- Ensure roles of stakeholders are clarified and implemented based on shared responsibility approach; and
- Ensure E-Waste handled by approved and licensed players.

8.2 Thrust 2: Infrastructure set-up

- Set up necessary infrastructure to support the holistic management of E-Waste generated;
- Provide adequate collection points, centres and system that are convenient for generators to deliver their E-Waste;
- Select environmentally sound recovery technologies to ensure full recovery and minimal release of residues; and
- Adopt relevant elements of Extended Producer Responsibility as introduced at federal level.

8.3 Thrust 3: Financing Mechanism

- To set up recycling fund as part of the federal government's National E-waste System. Sabah state's recycling system shall link up and request for funding from the federal government under the proposed fund when the national system comes online. Details on the proposed fees to be collected at different stages of the recycling process, as well as the e-waste and reporting flow is shown in below:

- Recycling Fees shall be collected at each stage of the recycling process, beginning from the time that the consumers return/dispose of E-waste to retailers/collectors, till it is handed over to manufacturers or importers, and is sent to a recycling facility. In addition, manufacturers and importers of EEE shall be required to pay an EPR Fee as well as a registration fee.

- The impact and applicability of the instruments will be studied across various aspects including the environmental impact, administrative and implementation costs, social impact, market impact, and political acceptability.

- The State will include programs and activities related to this policy in its strategic plans, and allocate the necessary funds. In addition, the State shall adopt a comprehensive strategy which aims at attracting private investments in the E-waste management business.

8.4 Thrust 4: Awareness and Education

Following the rise in awareness and concerns towards the issues of E-waste in Sabah over recent years, efforts to improve awareness shall be increased at all levels of the public and stakeholder groups. Government institutions and authorities shall demonstrate through good efforts and act as reliable role models. In addition, the State shall:

- Organize events/ campaign to promote E-waste awareness to ensure that the public understand how to safely dispose of E-waste; and
- Knowledge and understanding about the consumers' role in E-waste management shall be improved through education and campaigns.

8.5 Thrust 5: Monitoring and Enforcement

- The State and Local Government shall be responsible for ensuring e-waste flow and enforcement activities. Specific local criteria whereby the e-waste flow in Sabah shall be regulated will be proposed by the State;
- Enforcement shall be done to ensure that stakeholders involved in the collection, transportation or recycling process of E-waste are registered with the State and possess the appropriate approvals and licenses for operation; and
- Set up a database and web portal system for managing the relevant information.