

GUIDELINES FOR TARGET GROUPS (STAKEHOLDERS) IN E-WASTE MANAGEMENT

(**Source:** *Guidelines for E-Waste
Management in Kenya-2010
By NEMA*)

INF 314: E-Waste Management

By

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STAKEHOLDERS IN E-WASTE MANAGEMENT

Almost everyone is/should be a stakeholder



Important to Note that.....

- There is no system to manage the various groups involved in the management of e-waste in Kenya.
- E-waste has to be managed through a carefully **organized system** and existing actors should be part of the management **system Process**.
- **Stakeholders** do have a **collective responsibility** for managing the e-waste at different stages in electronics **life-cycle**.

GUIDELINES FOR PRODUCERS/ MANUFACTURERS

- There are very few (if any) manufacturers of electronic equipment in Kenya/developing world.
- Most companies have their production plants in **Asia**, where they have **specialized equipment** and **methods (Means)** to recover useful raw materials from e-scrap.

Producers need to ?

- Establish **channels** to **collect** the waste at the end of its life-cycle.
- Implement individual **take-back schemes** or get organized into sectorial or sub-sector

Manufacturers....

- Producer **Responsibility** Organizations (PRO) that encompass Extended Producer Responsibility (EPR).
- Clearly **label** products for easy **identification** and to show the **elemental constituents** of electronic product.
- Comply with Kenyan (local) **standards** in the manufacture of electronic goods.
- Build-in the cost of product take back and disposal into the **purchase product price**.

GUIDELINES FOR IMPORTERS / SUPPLIERS

- Importers of electronic and electric equipment are divided into two categories;
 - Importers of **new units** and
 - Importers of **used units**.
- **Importers need to ?**
- Specify standards for products on the **expected remaining lifespan** of the equipment and electrical appliances.
- Notify Authorities for **consent** to transport e-waste through Kenya and other territories subject to stated conditions

Importers Continued.....

- State the **number of years** a computer **has been in use** before “**donation**”. The specifications should be stated according to the regulations on importation of pre-owned electronic equipment.
- Ensure used electrical and electronic goods reach the pre-destined end users. **A record of customers should be kept to facilitate waste collection** e.g. schools, churches.
- Indicate an **envisaged lifespan** of used units when importing used equipment and bear responsibility for this by ensuring that **take back mechanisms** are in place.
- **Desist** from importing **hazardous e-waste**.

GUIDELINES FOR ASSEMBLERS

Assemblers need to ?

- Clearly label products for easy identification of product constituents.
- Clearly indicate Extended Producer Responsibility on electrical and electronic equipment.
- Comply with Kenyan/local standards on the assembly of electronic goods.

GUIDELINES FOR REFURBISHERS

- The refurbisher **extends the functional** life of equipment and feeds it into the **second-hand** market.
- **Refurbishers need to ?**
- Ensure **unusable material** should go to a licensed disposer
- Ensure waste **plucked** out of the equipment will go to authorized recycler
- Provide **incentives** to the consumer to **donate** used devices

GUIDELINES FOR RECYCLERS

- These are organizations and individuals who **dismantle**, **separate fractions** and **recover material** from e-waste after the lifespan of the equipment.

Recyclers need to ?

- Establish recycling **infrastructure** and **environmentally** sound technologies to manage electrical and electronic waste
- Ensure that **dismantling** is done in an **environmentally** safe manner.

Recyclers Continued.....

- Provide **recycling processes** to be approved and licensed by **NEMA** and other responsible authorities
- Ensure that revenue generated through sales of the materials recovered will support the administrative, plant and machinery and other overheads.

GUIDELINES FOR GOVERNMENT ORGANIZATIONS

- These are the organizations involved in the **formulation** and **enforcement of regulations** regarding **generation**, **handling** and **disposal** of e-waste.
- They include **NEMA**, Ministry in charge of **Local Governments**, Ministry of **environment**, **KEBS**, **KRA**, **Port authorities** and **CA**.
- **Government organizations need to ?**
- Prepare a framework with appropriate legislation to support **e-waste management**
- **Monitor** the processes of e-waste handling regularly

Government Continued.....

- Create a management plan with responsibilities for different target groups (**Stakeholders**)
- Provide **incentives** to entrepreneurs to set up e-waste **collection** and **treatment** facilities
- Regulate / control the number of e-waste facilities within a geographical area
- Approve **innovative e-waste management technologies** that are environmentally sound
- Form **multi-stakeholder monitoring committees** to oversee the implementation of the e-waste management guidelines

Government Continued.....

- Create awareness among all the stakeholders through the legislative frame work of e-waste management
- Develop standards to prevent the importation and donations of useless or harmful e-waste
- Determine the impact of and come up with strategies for managing technology changes such as analogue-to-digital television equipment and deciding the procedure for Strategic Environmental Assessments

GUIDELINES FOR CONSUMERS/END-USERS

- Consumer can either be: an **individual** or a **corporate** organization that owns a device which falls into one of the e-waste categories and which is considered to have ceased to be of any value.

Consumers need to ?

- **Separate** e-waste from other wastes to facilitate **collection, treatment and recycling**
- Dispose e-waste generated to the e-waste collection centres

Consumers Continued.....

- Sell or donate e-waste to licensed refurbishers
- Take back equipment to the manufacturer, importer or assembler, if they allow it.
- Dump e-waste at the licensed dumping site specified for the e-waste
- Be responsible for following recommended disposal methods or procedures especially dates of expiry or end of usage period of the product

GUIDELINES FOR LEARNING INSTITUTIONS

- Learning institutions can be those associated with **basic** education or **higher** education.
- They are **recipients** (purchase or donations) of electrical and electronic goods.
- Unfortunately, most of the second hand products are **not inspected** before they are donated. Coupled with **poor handling** and **use**, their **lifespan becomes shorter** resulting in huge amounts of e-waste in most learning institutions.

In order to manage e-waste, learning institutions need to?

- Create awareness and conduct sensitization campaigns on responsible e-waste management
- Develop Memorandum of Understandings (MoUs) with PROs for take-back, recycling and refurbishing of e-waste at life-end
- Develop mechanisms to ensure that inspection certificates clearly specify end-of-life date and who bears responsibility thereafter
- Develop and mainstream e-waste education in curricula.

GUIDELINES FOR TRANSPORTERS

Transporters need to:

- Ensure e-waste on transit is properly stored
- Ensure vehicles transporting e-waste obtain a waste transport license from NEMA.
- Ensure e-waste is disposed in licensed dumping sites
- Provide efficient transport for e-waste

GUIDELINES FOR DISPOSAL AUTHORITIES

Disposal authorities need to:

- Develop **disposal standards** for each type of toxic waste, including procedures for disassembling and recycling
- Develop proper infrastructure for e-waste collection and disposal
- Set manageable fees to sustain e-waste management

GUIDELINES FOR INFORMAL SECTOR E-WASTE COLLECTORS

- Informal sector e-waste collectors will only need to **acquire a license** if they collect e-waste from various sources.
- Follow **regulations standards** and **guidelines** as set by authorities

GUIDELINES FOR PEOPLE LIVING NEAR DUMPSITES

- People living near dumpsites need to be educated on how to detect potential health hazards, through organized workshops by the e-waste management stakeholders and environmental health practitioners

Summary

- There is need to carefully identify all potential E-waste stakeholders for effective management
- Every stakeholder should play their role efficiently as a collective responsibility.
- There is need for governments to develop a legislative framework for control and regulation
- It is the responsibility of everyone including consumers to play their roles in e-waste management

I thank
you!

