WEEE CENTRE

Managing e-Waste for a Safe Environment

Sustainable eWaste Solution

PRESENTED BY:
JOSEPH OLIECH,
WEEE CENTRE

E-Waste Situation

- The high tech boom has brought with it a new type of waste – electronic (e-) waste - a category that barely existed 20 years ago.
- E-Waste represents the biggest and fastest growing manufacturing waste.
- E-waste is usually regarded as a waste problem, which can cause environmental damage if not dealt with in an appropriate way.
- Many generators/disposers are not playing a role in the lifecycle of electronics equipment for resource management and toxic control

Effect of E-Waste on Human Health

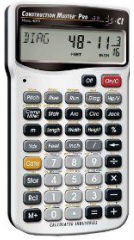
Poor E-waste disposals impact human health in two ways which include:

a) **food chain issues:** contamination by toxic substances from disposal and primitive recycling processes that result in byproducts entering the food chain and thus transferring to humans; and

b) **direct impact on workers** who labor in primitive recycling areas from their occupational exposure to toxic substances.

The danger of e-waste toxicity to human health, both in terms of chronic and acute conditions, has become a serious societal problem and has been well demonstrated by case studies in Ghana, India and China.

Categories of E-Waste



The E-waste Problem in Africa

Dangerous Handling and Retrieval Methods

Improper and Unsafe Method of Disposal – Ngara, Nairobi River

Working Framework:

- WEEE Centre has been working with the Strategic Plan for implementation of the Basel Convention.
- The Strategic Plan takes into account existing regional plans, programmes/strategies, the decisions of the Conference of the Parties and its subsidiary bodies, ongoing project activities and process of international environmental governance and sustainable development.

Requirements for the Strategic Plan of the Basel Convention

- The Strategic Plan requires action at all levels of society: training, information, communication, methodological tools, capacity building with financial support, transfer of know-how, proven cleaner technologies and processes to assist in the concrete implementation of the Basel Declaration.

- Basel Convention Strategic Plan also calls for the effective involvement and coordination by all concerned stakeholders as essential for achieving the aims of the Basel Declaration within the approach of common but differentiated responsibility.

Tools for Addressing E-Waste Problems

Tool 1: Material Flow Analysis (MFA)

- We used MFA tool to study the route of material (e-waste) flowing into Kenya, disposal areas and stocks of materials, in space and time.
- It links sources, pathways, and the intermediate and final destinations of the material. This tool helped us in the consideration of the flow of e-waste and its assessment it in terms of environmental, economic and social values

Tool 2: Extended Producer Responsibility (EPR)

- EPR is an environment policy approach that attributes responsibility to manufacturers in taking care of their products after use, and is based on polluter-pays.
- The EPR approach has helped us to establish links with major original electronic manufacturers operating in Kenya to manage their e-waste.
- We have participated in the development of legislative framework for e-waste management in collaboration with National Environmental Authority.

Outputs

- WEEE Centre is currently collecting and processing 15 – 25 tons of e-waste per month which could have ended up in the dump sites
- Since inception in 2007, WEEE Centre has managed to process over 4,000 tons of e-waste
- 30% of corporate organizations in Kenya have been sensitized on the dangers of e-waste

Achievements

- Major original electronic manufacturers have joined hands to work with WEEE Centre in e-waste management
- WEEE Centre has trained participants from 8 African countries on e-waste management
- WEEE Centre has created employment for 26 permanent staff
- WEEE Centre has established internship/mentorship program for e-waste management

Lessons Learnt

- Rapid change in technology,
- Absence of infrastructure for appropriate national waste management,
- Absence of legislation dealing specifically with e-waste,
- Limited support for local initiatives
- Absence of any framework for end-of-life (EoL) product take-back or implementation of extended producer responsibility (EPR)

Effective E-Waste Management

- Feasibility study
- Human resource
- Funding
- Facilitative policy
- National capacity development – both human and infrastructural
- National and International partnerships

Pictorials

Collection Strategy;
Safaricom Collection Caravan

Cable Stripper

ABS plastic shredder

CRT (Cathode Ray Tube) Cutter

Problematic Fractions

- ABS plastic
- CRT
- Cables
- Mother/Circuit Boards


SAFARICOM AND WEEE CENTRE E-WASTE MANAGEMENT PROGRAMME
"DISPOSE YOUR ELECTRONIC WASTE SAFELY AND RESPONSIBLY"
E CENTRE
Waste for a Safe Environment
E-WASTE
www.weeecentre.com
254 (0) 20 206 0921
In Partnership with
Safaricom
ORACLE
nema

Partners and Collaborators

COMPUTERS FOR SCHOOLS KENYA
Propelling Kenya in the Digital Age

ORACLE

Microsoft

SAMSUNG

Safaricom

WorldLoop
CHANGING THE E-WASTE CYCLE

COMMUNICATIONS AUTHORITY OF KENYA

Computer Aid International