KISII UNIVERSITY

INFORMATION COMMUNICATION AND TECHNOLOGY

E-WASTE POLICY

MAY, 2015

VISION

A world-class University in the advancement of academic excellence, research, Environmental sustainability and social welfare

MISSION

To train human resource that meets the development needs of the country and international labour market, sustain production of quality research and consultancy; disseminate knowledge, skills and competencies for the advancement of humanity

CORE VALUES

Dedication, collaboration, focus on development, environmental sustainability and conservation, transparency, accountability,
Teamwork, compassion, integrity and inclusion.

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PREAMBLE

E-waste is one of the biggest environmental challenges of our time and like other countries around the world, Kenya is grappling with the challenge of reducing levels of unsafe disposal and processing of e-waste. Electronic waste (e-waste) is currently the largest growing waste stream and it is hazardous, complex and expensive to treat in an environmentally sound manner. It is unfortunate that most e-waste is being discarded in the general waste stream hence the need for implementation of an E-waste management policy.

This Policy provides a comprehensive overview and analysis of e-waste management within Kisii University. The policy provides an overview of the main legislative and standards-related developments within Kisii University and its Campuses. The policy further summarizes the current and emerging technologies being used in e-waste recycling. It explores the volumes, sources and flows of e-waste, the risks it poses to e-waste workers and the environment, occupational safety and health issues, labour issues and regulatory frameworks.

The University therefore recognises that in order to meet its vision, mission and statutory mandate towards management of e-waste, all staff, students and other stakeholders need to be aware as they discharge their daily responsibilities. This e-waste policy is developed in the spirit of furthering these objectives. The ultimate responsibility for the implementation of this policy shall lie with the Vice Chancellor, but the concrete work for change shall take place at the departmental levels and other spheres of the university.

Prof. John S. Akama, PhD
Vice Chancellor, Kisii University

LIST OF ACRONYMS AND ABBREVIATIONS

ICT: Information Communication and Technology

KSU: Kisii University

NEMA: National Environmental Management Authority

1.0 INTRODUCTION

Electronic waste, also known as e-waste, are electronic products that have outlived their usefulness and are due for disposal. These products have toxic components such as lead, mercury and cadmium which if not well disposed are not only dangerous to the environment but also to humans. Improper disposal of electronic waste pollutes the soil and water with hazardous toxins, thereby causing widespread health problems and environmental degradation. With increased e-waste generation and the consequent threat of environmental degradation, there is need for a regulatory framework to mitigate this hazard. Most of the Information and Communication Technology equipments (e.g. computers, printers) have an average useful lifespan of four years. After the lapse of their useful lifespan, the equipment is considered obsolete hence the urgency to dispose them in an environmental friendly manner.

Kisii University (KSU) utilizes a wide range of electronic products among them computers, printers, telephone gadgets which results in accumulated e-waste in the university structures. In addition, the University is one of the leading institutions of higher education that the government relies on to devise solutions to emerging challenges such as e-waste. The University as one of the highest consumers of ICT equipment is obliged by law to implement a sustainable environmentally friendly electronic waste disposal policy. After outliving their lifespan, these equipment are considered obsolete but they may still function before they fully outlive their usefulness. Wear and tear of obsolete equipment can be hastened by the conditions unto which these equipment are subjected to like power stability, dust, end user handling and moisture. ICT equipment that is due to outlive its useful life continues to erode the quality of end user output through regular breakdown until it completely degenerates for disposal. Before disposing off any hardware, functional components of some ICT equipment like computers may be salvaged to assemble other functional equipments like personal computer, which may be re-deployed for use, donation or sale of some electrical components in these outlived computers need to be collected and sold to computer repair points.

Environmental contamination from these electronic wastes can be minimized by practicing safer and more responsible methods of disposal these wastes including recycling, reusing of these gadgets considered as waste. Establishment of e-waste management infrastructure, awareness, education and human resource development resource mobilization are some of the key strategies encompassed by this policy document.

2.0　E-WASTE POLICY PRINCIPLES

Any Electronic equipment is regarded as a 'waste' at a time when it is permanently discarded by the owner or authorized person, (i.e. Head of Faculty/Office/Department) and NOT the user. Any electronic equipment, once permanently discarded by the owner is classified as a waste, regardless of it being operational, partially operational or non-operational.

There are four key principles regarding e-waste;

1.　Data protection;
2.　Protection of the environment;
3.　Social responsibility; and
4.　Disposal.

2.1. Data Protection

The University will maintain university partnerships with relevant policy and disposal organizations like the National Environmental Management Authority (NEMA), Electronic waste collectors, refurbishers, ICT importers and assemblers, distributors and retailers. All University user (academic and administrative) units are required to avail obsolete ICT equipment to the central ICT support unit for safe disposal. For any computer equipment capable of storing information, compliance to both the Information Privacy Principles must be adhered to.

2.2. Protection of the Environment

Wherever possible, computer equipment should be re-deployed, either in its current state or where no internal markets exist externally. Sold or donated equipment should be recycled or disposed off in an environmentally and socially-friendly manner. Only designated disposal points will be used for e-waste and **NO** electronic equipment may be placed into either the general bins or skips located in University offices or compound. Please refer to the e-waste procedures for information relating to the safe and legal disposal of electronic items.

2.3. Social Responsibility

KSU shall make all reasonable investigations regarding the final destination of all electronic equipment which it either sells or donates. To help ensure this, KSU will request purchasers and beneficiaries of all electronic equipment to supply documentation specifying the final user, and objective (where known), in addition to guaranteeing the end-of-life procedures and destination.

Where electronic equipment is sent for disposal, KSU will endorse the 'proximity principle' wherever possible and ensure that the equipment is either redeployed or disposed off as close to the point of generation (KSU) as possible.

2.4. Disposal

Any disposal of electronic assets will be in accordance with the procedures specified by KSU Asset Disposal Policy. Authority for the disposal of electronic equipment must be obtained from the Head of Faculty/Office) that owns the equipment. Subject to financial regulations, KSU will endeavor to ensure maximum usage and value for money is obtained from all electronic items in order to dispose e-waste where possible. All equipment prior to release for disposal by the Faculty/Office will ensure that sanitization procedures have been followed. Refer: (e-waste procedures link to Web)

3.0   OBJECTIVES OF THE POLICY

In developing this e-waste policy, KSU seeks to meet the following objectives:
  i.   To minimize e-waste generation.

ii.   To mobilize and sensitize stakeholders on proper management and handling of e-waste on a sustainable basis.

iii.   To develop and implement a critical human resource base knowledgeable in handling e-waste.

iv.   To develop environmental sound e-waste recycling methods.

v.   To provide guidance on the standards of electronic equipment that is important into the University.

4.0   SCOPE OF THE POLICY

This policy covers KSU main campus and its affiliated campuses, colleges, faculties, directorates, departments and sections. It also covers electronic equipment and device: and e-waste management operators on e-waste resultant from staff and students' activities within the University.

5.0   ELEMENTS OF THE POLICY

This policy covers and is informed by the following elements: legal framework, capacity building and environmental sound management of e-waste, awareness and information dissemination and resource mobilization.

5.1   Legal Framework

The e-waste management policy is underpinned by environmental laws including the Environmental Management and Co-Ordination Act. 1999.

5.2   Capacity Building

E-waste management activities shall be strengthened through capacity building and continued efforts on research and development. The existing skills in the area of e-waste are limited, yet these skills are a prerequisite for successful protection against e-waste has arcs for both the environment and human health. With this KSU shall;

i.   Develop e-waste business models which will yield social benefits. These social benefits are jobs and skills transfer from universities to central and county

governments in partnership with the private sector.

ii. Facilitate development of e-waste management training modules to cover technical maintenance, dismantling, and sustainable e-waste management, to provide for environmental and human health benefits.

5.3 Environmentally Sound Management of E-Waste

Environmentally sound recycling refers to recycling without leading to adverse impact on environment and health. The use of environmentally sound technologies need to be encouraged in order to increase efficiency in processes, maximize recovery materials and conserve energy, thus reducing waste generation. The policy shall encase access to such technologies and make the informal stakeholders accountable.

Environmentally sound e-waste management shall be achieved through the following measures:

i. Appropriate technologies for recycling to be sourced (internally or externally).

ii. Ensure use of environmentally sound technologies to maximize recovery and minimize waste generation

iii. E-waste sound recycling in authorized /centralized areas.

iv. Training and skills development to be encouraged for using environmentally safe operations in handling e-waste

5.4 Awareness and Information Dissemination

There is low awareness on hazards of e-waste among the public stakeholders and nationally but extremely limited to the community surrounding the University. Community awareness campaigns on how to safely handle e-waste are non-existent to this end. The University shall:

i. Develop a strategy for education efforts including partnerships with manufacturers/ retainers/recyclers.

ii. Develop an e-waste resource web portal.

iii. Organize annual events to promote e-waste awareness.

Awareness needs to be crated among all stakeholders in the e-waste value chain. Training and awareness programmes need to be organized involving other stakeholders.

5.5 Resource Mobilization

The University shall provide resources for e-waste management as follows;

i. Increase the budgetary allocation to the initiative targeted at reducing e-waste risks

ii. Put in place mechanisms for resource mobilization among development partners;

iii. Provide the Buildings, equipment and devices and other support systems for effective and efficient management of e-waste.

iv. Provide means of transporting these electronic wastes to safe places

6.0   E-WASTE POLICY IMPLEMENTATION PLAN

6.1   Collection Plan

6.1.1 E-Waste Generated From University Operations

The ICT Directorate shall:

i. In liaison with the respective College /Campus /Faculty/ Directorate/ Department / Section, identify e-waste in the University.

ii. Ensure that e-waste is collected every quarter and kept in an appropriate storage pending the recommendations /approval of recommendations of the Disposal Committee.

iii. Profile all e-waste generated at least once every quarter and prepare a report to the Disposal Committee including recommendations for disposal.

iv. Execute the recommendations of the Disposal Committee and prepare a report for the University Management.

6.1.2 E-Waste Generated From Students Operations

The University shall, through the Deputy Vice Chancellor {Academic and Student Affairs). Registrar (Academic Affairs) and the Dean of Students:

i. Organize quarterly awareness forums for sensitization of students on e-waste.

ii. Organize quarterly voluntary surrender of e-waste through the students' Halls Management.

6.2   Advisory Committee

The University shall constitute an e-waste advisory committee that shall:

i.   Advise review/improvement of this policy from time to time.

ii.   Develop procedures and work instructions for collection, sorting, disassembly, packaging, storage and disposal of e-waste.

iii.   Encourage decisions consistent with the national polices and constitution

iv.   Minimize the unintended consequences due to e-waste handling.

v.   Monitor the implementation of this policy and advise university management as appropriate.

vi.   Oversee implementation of this policy.

vii.   Provide flexibility to adopt the changes required from time to time.

viii.   Review inputs from all stakeholders.

6.3   Research and Development Organization

Research and development shall be facilitated to carry out specific research in regard to e-waste and advise on cost effective technologies and effective adaptation of the best available technologies for e- waste management.

6.4   Staff and Skills

The University shall facilitate development of skills requisite for the implementation of e- waste management operations. The staff shall be provided with the requisite instructions and procedures, equipment and devices of e-waste management operations.

7.0   MONITORING, EVALUATION AND REVIEW STRATEGIES

7.1   Monitoring and Evaluation

Realization of the output of this policy shall require consistent monitoring and evaluation of the output indicators. The Government and any other relevant stakeholders will carry out monitoring and evaluation at different levels. A monitoring and evaluation framework shall be developed to ensure midterm review of this policy.

The policy implementation shall be reviewed through the performance contracting execution and reporting structures. A policy implementation plan shall be developed every financial year including actions, actors, time and resource plans.

7.2   Review of Policy

The policy shall be reviewed after every 5 years or earlier as need arises.

8.0   Policy Approval:

VICE CHANCELLOR

DATE: 13th May, 2015