

Regional E-Waste Management Strategy

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Developed By:

Regional E-Waste Management Steering

Committee

Working Group 10 on Environment and E-Waste Management

Foreword

The information and communications technology has been driving the economic growth in East Africa over the last decade, growing on an average of more than 15% for each EAC country. To date, growth has largely come from innovation by large multinational and local enterprises. However, this rapid growth of ICT and economy has contributed to massive generation of electrical and electronic waste commonly known as E-waste. An estimated 50 million tons of E-waste is now generated worldwide every year, with most of this heading to developing countries, including EACO Member States for re-use and disposal. EACO member states have accumulated stockpiles of computers, printers, television sets, refrigerators, washing machines, radios, mobile phones, etc.

The EACO E-waste management strategy spells out the priority strategies along with specific actions to manage e-waste in EACO member states. The regional strategy promotes the principle of Extended Producer Responsibility to finance the proper collection and treatment of e-waste in the region. The regional strategy will ensure harmonization of policies and legal frameworks in EACO member states, the establishment of regional infrastructures and the easy transboundry movements of e-waste in the region.

Working together towards the implementation of this regional strategy will help EACO member states achieve zero negative impact of e-waste by 2030

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EXECUTIVE SUMMARY

This report presents the Regional E-Waste Management Strategy for the EACO and its member states. The strategy spells out the priority e-waste management strategies together with specific actions to help actualize them. The strategy estimates the size of investment required to execute the EACO Regional e-Waste Management strategy, the targeted potential sources of funding as well as capacity building measures needed to warrant sustainable mobilization of resources to finance the strategy. The strategy further highlights the key target outcomes and the indicators, which will assist in measuring success of implementation of the plan. The roles and responsibilities of the various stakeholders in executing the strategy are also highlighted.

The EACO Regional e-Waste Management Strategy is a five-year plan covering the period 2017/18 to 2021/22. However, its vision and aspiration spans a medium to long term period of about 20 years. This strategic direction is pertinent in aligning the short to medium-term interventions into the perspective plan for e-waste management. This strategy is to be used along with other strategic documents guiding priorities of EACO such as the e-waste model Policy for EACO member states and the EACO strategic plan.

Background to the strategy

The EACO regional e-waste management strategy has been developed on the backdrop of the e-waste challenges posed by the rapid diffusion of information and communications technologies (ICTs) in the economies of EACO member states. These challenges range from increasing stock piles of e-waste in the region to potential environmental and health problems associated with e-waste. Another key factor driving the formulation of EACO Regional e-Waste Management strategy is the need to build the capacity of EACO member states in sustainable collection and management of e-waste.

There are a number of initiatives leading to the development of the EACO e-Waste management Strategy. Below is a synthesis of some of the key events and initiatives leading to the formulation of the strategy.

- EACO member states e-waste readiness assessment most EACO members have carried out rapid e-waste status surveys and established the baseline for selected indicators.
- The establishment of the EACO regional e-waste management steering committee and taskforce within the armpit of the EACO working group 10. The regional steering committee is prioritized e-waste management activities and their mainstreaming within EACO
- Establishment of national e-waste management steering committees and/or ewaste management technical working teams

The above and other initiatives paved the way for the development of the EACO e-waste management strategy whose major aim is to consolidate all these efforts into a single policy document – a document that shall provide the strategic direction for e-waste management in EACO member states.

Strategic Direction

The strategy charts the aspirations, goals and building blocks for developing the EACO resource mobilization strategy. These are as follows:

Vision: The Vision of the Strategy is "**Towards** *Zero negative impact of e-Waste in EACO member states by 2030".*

Goal : The goal of the strategy is to *"achieve a sustainable e-waste management system in the EACO member states"*.

Strategies: In order to realize the above goal and steadily move towards attaining the vision; the following strategies have been prioritized:

 Strengthen the policy, legal and regulatory framework for sustainable resourcing of e-waste management activities for effective protection of human health and environment within the region;

- Put in place the requisite e-waste management infrastructure and rationalize its distribution across EACO member states to harness unique value and enhance synergy;
- (iii) Establish mechanisms for comprehensive and sustainable mobilization for ewaste management resources (physical, financial and human resources);
- (iv) Strengthen EACO e-waste coordination structures at regional and national levels
- (v) Promote research and innovation in e-waste management;
- (vi) Put in place a monitoring and evaluation mechanism for e-waste management; and
- (vii) Build capacity and create awareness for effective e-waste management in EACO member states

These strategies resonates well with the resolution made by EACO member states and their partners to address the identified e-waste management constraints, especially in unlocking the binding constraints on inadequate capacity to mobilize adequate resources on sustainable basis to address and fund e-waste management priorities. The strategies and their corresponding actions address the binding constraints identified in each of five strategic areas of intervention/themes, namely:

- i. Policy, Legal and Regulatory framework
- ii. Infrastructure for e-waste management
- iii. Resource mobilization
- iv. Coordination nd institutional alignment
- v. Capacity building, Research, Monitoring and Evaluation

The strategic measures and actions to help actualize the identified resource mobilization strategies for e-waste are as summarized in **Annex 2**.

Implementation Plan

The strategy recognizes that for effective execution, the relationships of key stakeholders need to be well coordinated and managed primarily through strengthening of the e-waste coordination mechanisms at regional and national levels. Other mechanisms include;

- Putting in place a platform for continuous engagement with different stakeholder categories, including potential and existing financing institutions, policy makers, legislators and e-waste producers;
- Supporting the operations and functions of the Regional Steering Committee for effective coordination of the implementation of the Regional e-Waste Strategic plan;
- (iii) Establishing collaborative frameworks with key regulatory bodies and other relevant stakeholders for the proper management of e-waste in EACO member states.
- (iv) Supporting the establishment of a Regional Producer Association as a mechanism for the implementation of the Extended Producer Responsibility (EPR), Advanced Recycling Fee (ARF) in order to enhance producer participation in e-waste management; and
- Building Capacity and Creating Awareness c for e-waste management in EACO member states

Cost implications

The resource requirement for executing the resource mobilization strategies and interventions identified in this plan have been estimated. The need for costing of the strategies was to identify the size of investment needed to bring out target resource mobilization outcomes. That is, the 'seed money' and other resources required to build the capacity of EACO to sustainably mobilize resources to finance her resource mobilization priorities. The total size of required investment in the next five years is estimated at USD 1,680,000, which translates into an average of USD 336,000 per annum. If these resources are made available in a timely manner, effectively allocated, released and utilized; they can

be able to generate an e-waste investment portfolio in the Region estimated at USD 3,000,000

Financing Plan

The major sources of investment in EACO e-waste management have been categorized and identified to include the following:

- 1. Development Partners;
- 2. Innovative measures by e-Waste stakeholders such as the EPR, ARF;
- 3. Contributions from Governments of Member States;
- 4. Corporations and Private sector; and
- Local/community contribution although Local authorities are already constrained in collecting solid wastes and e-waste is not seen as a priority, it can be an importance source of revenues for e-waste management if well implemented.

In order to better manage the resources pooled together to implement e-waste management initiatives at national and regional levels, the following additional measures were recommended in the EACO Regional e-waste management strategy.

- a. Creation of e-waste fund an e-waste fund is anticipated to be a contributory fund for financing priority regional e-waste infrastructure projects. The fund may be replenished by contributions from development partners, private sector, producers and government. A feasibility study will be conducted to advise on the institutional coordination framework as well as financial model for the fund.
- Mainstreaming of e-waste management in various implementing Ministries, Departments and Agencies (MDAs) and other stakeholders' budgets is critical.

Target results/outcomes

The overall impact of the e-waste management strategy is to contribute towards:

- i. Improvement in standard of living reflecting both the number of green jobs created and size of tax income to government contributed by scheme operators;
- ii. Reduction of negative e-waste impacts on public health measured by percentage reduction in diseases related to e-waste; and
- iii. Reduction of negative impacts of e-waste on the environment as reflected in percentage reduction of Green house Gas (GHG) emissions.

The interim results – outcome and output indicators will include but not limited to the following:

- Increase in the Number of Member states adopting regional e-waste standards and Number of member states whose e-waste management policies and laws are harmonized;
- 2. Availability of regional e-waste management policy and guidelines;
- 3. Number of e-waste infrastructure developed at regional level;
- 4. Number of e-waste infrastructure projects established in member states;
- 5. Number of development partners attracted in e-waste management;
- 6. Percentage increase in e-waste management budget;
- Number of Innovative E-waste funding mechanism (such as EPR, ARF and e-Waste Fund established;
- Percentage Functionality of EACO structures responsible for e-waste management (WG 10, Steering Committee etc);
- 9. Percentage Increase in public awareness about e-waste and

10. Percentage Adoption to sound e-waste management practices

Monitoring and Evaluation

Development of a comprehensive Monitoring and Evaluation (M&E) System has been identified as one of the core strategies for successful monitoring of the implementation and evaluation of the impact of the e-waste strategy. Underscoring this M&E system is the need for an intensive surveillance, inspection, monitoring, and reporting on performance of the strategy. The E-waste strategy shall also be subjected to a mid-term review after two and half years and a terminal evaluation after the fifth year of its implementation.

Communication and advocacy

In order to facilitate effective implementation, comprehensive awareness of the EACO members' e-waste management priorities will be done. To this end, the EACO regional e-Waste Management strategy will be widely disseminated to ensure that all key stakeholders are aware of the strategy and have been effectively mobilized to support its implementation. One way to achieve this is the development and execution of a comprehensive communication, advocacy and change management strategy. This will identify which stakeholders to sensitize, the appropriate message, media and frequency of interaction. It will be preceded by thorough mapping of stakeholders based on their interests, powers and authorities in relation to the strategy.

East Africa Communications Organization

(EACO)

Regional E-Waste Management Strategy

July, 2017

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CHAPTER 1: INTRODUCTION

1.1 Preamble

The Regional e-waste management strategy has been developed with the overarching goal of attaining a sustainable e-waste management system in the EACO member states. To achieve the above goal, strategic interventions will be done in the following strategic areas; Policy, Legal and Regulatory framework, E-waste management Infrastructure, Coordination and Institutional Alignment, Resource Mobilization and Research, Capacity building and Innovation.

The strategy will guide strategic interventions in e-waste management for the next five years within EACO region as well as the member states. The strategic plan indicates the priority interventions, actions as well as institutional arrangements for effective coordination of the plan.

1.2 Background

E-waste is considered as one of the fastest growing waste in the world, and yet also toxic and non-biodegradable. E-waste is growing at 3 times (3*) the rate of municipal waste worldwide. This is nearly the same amount as all plastic packaging, although it is much more hazardous. In East Africa, the estimated volume of e-waste is not known, as there is very little statistics.

Holistically, the increased number of e-waste volumes results from the increasing market penetration of electronic use in developing countries, and the increase in replacement market due to technology advancement in the developed countries. The East African region has also suffered from the importation of used or obsolete EEE under the name of donations, as well as the prohibitive prices for acquisition of new EEE. There is therefore a high demand for used products that have a short life span and easily find their way to the waste streams in the short-term.

EEE are composed of various components, i.e. hazardous and non-hazardous materials. The hazardous materials include; Lead, Barium, Mercury, Nickel, Cadmium, Lithium etc. Components such as Lead and Mercury contaminate the soil and water when disposed of in the landfills with other waste. These hazardous components are also listed as human carcinogens as they damage the lungs and liver when eaten or inhaled.

The valuable materials in electronic products include the precious metals- (Gold, Tantalum, Silver etc), while the non-hazardous components are; plastics, Copper etc. Recycling of the precious metals conserves these valuable materials as they are rare earth minerals. Recycling also prevents air and water pollution likely to result from the extraction of new mineral from the earth as well as reduction on greenhouse gas (GHG) emissions. Recovery of these precious metals may pose a positive impact to both the environment as well as socio-economic development issues.

The past decade has seen a tremendous increase of Electrical and Electronic Equipment (EEE) in EACO member states at the government , private sector as well as at individual levels. This increase has been made possible by enabling factors such as; the elimination of trade barriers in importation of ICT equipment, liberalization of the telecommunications sectors that has increased use of mobile phones, fax and telephones; and the development of e-initiatives to improve service delivery.

The EACO Member States comprises of five countries (Burundi, Kenya, Rwanda, Tanzania and Uganda) with an estimated population of 152 million (June 2015). Country specific population is given in the summary below as well as the bar graph in figure 1 below.

COUNTRY	POPULATION REPRESENTATION
KENYA	44234000
TANZANIA	48829000
UGANDA	34856183
RWANDA	12687873
BURUNDI	11167734

"The lowest amount of e-waste per inhabitant was generated in Africa, where only 1.7 kg/inhabitant were generated in 2014 (UNU 2014." This shows correlation between the population and the e-waste generated.



Figure 1: Population of EACO Member states by country (June 2015)

Whilst much mention has been on the increasing investments in the ICTs because of its enormous advantages, it is also important to adequately reflect end of life (EOL) of such equipment, hence mention of electronic waste (e-waste) or waste electrical and electronics equipment (WEEE).

The information and communications technology (ICT) sector has been the major driver of economic growth in East Africa over the last decade, growing on an average of more than 15% for each EAC country. To date, ICT growth has largely come from innovation by large multinational and local enterprises. However, this rapid growth of ICT and economy has contributed to massive generation of electrical and electronic waste commonly known as E-waste where, an estimated 50 million tons of E-waste is now generated worldwide every year, with most of this heading to developing countries including EACO Member States for re-use and disposal. E-waste poses both challenges and opportunities for EACO member

states. Such challenges include: Environmental, safety and public health. On the other hand e-waste presents opportunities for EACO member states and business enterprises such as green job creations, recovery of valuable materials and environmental protection.

It is against this background that EACO is developing a five-year Regional E-Waste Management Strategy for its member states. The strategy will help to sustainably and productively address the E-Waste problem in the Member States.

1.3 Definition of Electrical and Electronic Equipment (EEE)

EEE (Electrical and Electronic Equipment) is equipment that depend on electric currents or electromagnetic fields for its function and also equipment for the generation, transfer and measurement of such currents and fields. Equipment of both household and industrial usage are included in EEE.

Definition of Waste Electrical and Electronic Waste (WEEE) – E-waste: E-waste is a term used to cover all items of electrical and electronic equipment (EEE) and its parts that have been discarded by its owner as waste without the intent of re-use" (Step Initiative 2014). Thus, E-waste is simply 'discarded EEE'

1.4 Rationale (The need for a Regional E-waste Management Strategy)

EACO is developing the e-waste strategy to address some of the challenges that arise from the rapidly growing e-waste stream in member states. The challenges include:

- i) Rapidly increasing e-waste volumes from imports of electrical and electronic equipment and regional generated e-waste
- ii) Low level of awareness amongst key stakeholders that include users and consumers of the electronic and electronic equipment on the recommended standards for EEE, the hazardous nature or toxicity of e-waste and effects of incorrect e-waste disposal/management.

- iii) Lack of appropriate infrastructure and technical capacity to handle, treat and dispose e-waste generated along the entire chain from collection, sorting, transportation, reusing, dismantling, treatment, recycling and final disposal
- iv) Gaps in existing legal framework for e-waste management to address the uniqueness of e-waste
- v) Existing e-waste recycling and disposal practices are largely informal in member states, with inappropriate techniques applied for treatment and disposal
- vi) Lack of incentives for consumers and enterprises to hand out obsolete EEE, or voluntary take back systems for end of life equipment. In many EACO countries the problem is that they do not discard "for free". The access to waste cost is a major stumbling block in financing of the system.
- vii) Lack of accurate estimates of the quantity of e-waste generated and recycled in to inform e-waste management interventions.
- viii) Limited resources in place for e-waste management, and profitable e-waste investments, including financial, human and e waste handling infrastructure and/or treatment facility.

1.5 Guiding Principles

The following will be the guiding principle of this strategy;

- i. Participatory and inclusive drawing participation of all key stakeholders involved in e-waste management value chain both at the national and regional (EACO) levels.
- ii. Alignment with policy, legal and institutional framework for the EAC
- iii. Consistent with national, regional and global development agenda. The strategy should be aligned to global development agenda such as the Sustainable Development Goals (SDGs) and cater for development strategies of the member states
- iv. Equitable distribution of initiatives across the region
- v. Collaborative framework and public private partnership (PPP)

1.6 The Process of developing a strategy

Drafting of the strategic plan was undertaken by a taskforce of five (5) Members drawn from the EACO Regional e-waste management committee. The following processes were followed by the taskforce in developing the Draft Strategy, which was subjected to EACO approval and adoption processes.

- Desk review analysis and assessment this was carried out to provide an understanding of the current internal and external factors influencing e-waste in EACO Member States and the estimated volumes of e-waste generation
- Planning retreat a five (5) day strategic planning retreat was held for members of the taskforce through which a Draft Strategic plan was produced to help generate stakeholder inputs.
- Stakeholder consultation a series of activities were arranged to facilitate stakeholder consultations and engagements. These included regional e-waste steering committee meeting, working group 10 meeting etc and stakeholder validation workshop.
- 4) Endorsements and approvals the draft strategy goes through EACO structures including Assemblies and the Congress.

CHAPTER II: SITUATIONAL ANALYSIS

2.1 Global Outlook on e-waste

E-waste is one of the fastest growing waste streams in the world. In developed countries, it is estimated at 1% of total solid waste on an average [UNU 2014 – The Global e-waste monitor], with United States and Europe being the leading region in generating e-waste.

E-waste is mounting exponentially because of the rapid product innovation and the inclination of people towards technology and electronic gadgets and home appliances like migration from analogue to digital technologies and to flat-screen televisions and monitors. Additionally, economic growth coupled with urbanization and industrialization, and mass production of electronic goods have led to price reduction of these goods, almost doubling the universal demand for such products which eventually turn into e-waste.

The forecast, based on data gathered by United Nations organizations, governments, and nongovernment and science organizations in a partnership known as the "Solving the E-Waste Problem (StEP) Initiative," predicts e-waste generation will swell by a third in the next five years.

Up to 90% of the world's e-waste, worth nearly \$19bn (£12bn), is illegally traded or dumped each year, according to the UN Environment Programme (UNEP). Computers and smart phones are among the ditched items contributing to this 41m tonne e-waste mountain, which could top 50m tonnes by 2017. The developing regions; African and Asia are turning into illegal e-waste hubs, bypassing the legitimate global waste and recycling market that is thought to be worth \$410bn a year. Countries are also losing out on significant amounts of resources, such as rare earth metals, copper and gold, while the conditions in which the products are dumped can be extremely hazardous to health. On the other hand China is the importer of e-waste in the world.

E-waste, is as much an emerging problem as well as a business opportunity of increasing significance, given the volumes of e-waste being generated and the content of both toxic and valuable materials in them. EEE contains gold, silver, palladium, lithium, ruthenium, antimony, indium and tin, among other rare metals [b-UNEP, 2013]. The case is often made that per every ton of ore at a gold mine only 5g of gold can be extracted, whereas 1ton of mobile phones can contain up to 400g of gold [b-SMG, 2009]. As primary materials are increasingly more difficult and expensive to extract, recycling becomes an attractive option. According to a new market research report, Global e-waste Management Market (2011-2016), the revenue generated from the e-waste management market is expected to grow from \$9.15 billion in 2011 to \$20.25 billion in 2016 at a rate of 17.22 percent.

Until now, comprehensive data on global e-waste has been hard to come by, and countries define e-waste very differently. For example, the United States only includes consumer electronics such as TVs and computers, whereas European nations include everything that has a battery or power cord in the e-waste category. A study on e-waste management by EMPA and UNIDO in the East African region also focused on computers only. The East African region does not also have a specific definition of e-waste.

It has been observed that improper management of e-waste can have severe effects on the human health, causing allergies, respiratory diseases and cancer [b-Puckett and Smith, 2002]. Furthermore, leaching, open air burning and heating, as well as the uncontrolled discharge of scrap, acids, cyanides and other by-products from processing operations pollute the soil, groundwater and food [b-Terazono et al., 2006]. Prevention is paramount as 20-50 mn tons of e-waste is generated globally each year [b-UNEP, 2013].

2.2 International Conventions and Protocols on E-Waste

There are a number of international conventions, protocols and laws which provide guidance and standards for e-waste management. These include:

- Basel Convention on Trans boundary Movement of Hazardous Waste, and Disposal, (1992)
- 2. Ban Amendment (2004)
- 3. Bamako Convention on the Ban of the Import into Africa and the Control of Trans boundary Movement and Management of Hazardous Wastes within Africa (1991)
- 4. Framework Convention on Climate Change, 1992
- 5. The Vienna Convention for the Protection of the Ozone Layer.
- 6. Montreal Protocol on Substance that Deplete the Ozone Layer (1987)
- 7. The Stockholm Convention on Persistent Organic Pollutants (2004).
- 8. Kyoto protocol.

1. Basel Convention (5th May 1992)

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, usually known as the Basel Convention, is an international treaty that was designed to reduce the movements of hazardous Wastes between nations, and specifically to prevent transfer of hazardous waste from developed to Less Developed Countries (LDCs). It does not, however, address the movement of radioactive waste.

The Convention was opened for signature on 22 March 1989, and entered into force on 5 May 1992. As of July 2016, 183 states and the European Union are parties to the Convention. Haiti and the United States have signed the Convention but not yet ratified it.

All countries in the region have ratified the convention

2. The Basel Convention Ban Amendment 1994

The "Ban Amendment" provides for the prohibition by each Party included in the proposed new Annex VII (Parties and other States which are members of the OECD, EC,

Liechtenstein) of all transboundary movements to States not included in Annex VII of hazardous wastes covered by the Convention that are intended for final disposal, and of all transboundary movements to States not included in Annex VII of hazardous wastes covered by paragraph 1 (a) of Article 1 of the Convention that are destined for reuse, recycling or recovery operations.

The Ban Amendment was originally adopted as a decision of the second meeting of the Conference of the Parties in March 1994. The Secretariat provides assistance to parties that are facing difficulties in ratifying the Ban Amendment, on request and within available resources.

Only Kenya and Tanzania have ratified the Ban Amendment

3. Bamako Convention;

The Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa is a treaty of the African Nations prohibiting the import of any hazardous wastes including radioactive wastes. The Convention was negotiated by twelve nations of the OAU at Bamako, Mali in January 1991, and came into force in 1998.

The Bamako Convention uses a format and language similar to that of the Basel Convention, but is much stronger in prohibiting all imports of hazardous waste. Additionally, it does not make exceptions on certain hazardous wastes (like those for radioactive materials) made by the Basel Convention.

All countries in the region have ratified the convention

5. Framework Convention on Climate Change.

The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty negotiated at the Earth Summit in Rio de Janeiro from 3 to 14 June 1992, then entered into force on 21 March 1994.

All countries in the region have ratified the convention.

6. Kyoto protocol

The Kyoto Protocol is an international treaty which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC) that commits State Parties to reduce greenhouse gases emissions, based on the premise that (a) global warming exists and (b) man-made CO₂ emissions have caused it.

All EACO Member states have ratified the protocol

2.3 State of e-waste in EACO member states

Like other developing regions, the EACO member states identified ICT as an enabling factor for transforming the region into an information society through initiatives such as egovernment, e-education, e-medicine, e-commerce etc. As such, there has been an enormous increase in ICT usage. The landing of three fibre optic cables in the region heralds an era of exponential growth of access to and use of information and communications technologies (ICTs). With this growth, it is expected that the region will produce more e-waste as the people discard obsolete computers, television sets, mobile phones and other ICT equipment. Further, donations of second-hand equipment, the transition to digital broadcasting and the rapid turnover in technology are likely to compound the problem.

A study funded by Hewlett-Packard, the Global Digital Solidarity Fund (DSF) and the Swiss Federal Laboratories for Materials Testing and Research (Empa) in 2007 indicates that the private sector has the largest computer stocks and generates two thirds of the related waste flow in Africa. The private sector cites lack of infrastructure and policy as some of the obstacles contributing to poor e-waste management.

Manufacturing companies need to assume their responsibilities and obligations in setting up appropriate solutions and mechanisms to recycle their products. Policies for the return of goods at the end of their useful life and plans for safe and clean disposal of equipment and e-waste should be adopted. Some solutions that industry could adopt include, but are not limited to; adapting precautionary principles by employing sustainable product designs, for example through the use of renewable, biodegradable components and material and waste minimization techniques, among others. Industry could also work with governments to implement extended producer responsibility as an appropriate framework that combines major principles of environmental justice. This approach would shift responsibility for safe disposal to manufacturers.

Civil society is also very active in increasing public, scientific and business knowledge on ewaste and continues to play a very important role of awareness creation through research and advocacy activities, such as those undertaken by I-Network Uganda, ICT association of Uganda (ICTAU) and the Kenya ICT Action Network (KICTANet), etc. This seems to have encouraged East African governments to take the issue seriously and to begin to act. Civil society organisations also continue to increase consumers' knowledge of e waste by placing the issue on the public agenda through collaboration with the media.

East African governments should focus on developing policy, legislative and regulatory frameworks at a national and regional level. These policy interventions must begin by clearly defining e-waste for effective regulation and provide an integrated policy with both regulatory and operational components. They must also encourage an effective import and export regulatory regime, and ensure that the provisions of international conventions – Basel and Bamako – are implemented and followed.

2.4 Current initiatives for e-waste management in EACO member states

In the past ten years, the governments of East African member states have been preoccupied with universal affordable access to ICTs without paying equal attention to the environmental impact of access. Studies conducted in the East African region identify the main stakeholders in e-waste generation and management as the government/policy makers, private sector (manufacturers, distributors/importers), and civil society (refurbishment centres,, collectors, recyclers). However, most of East Africa's e-waste is dealt with by the informal sector with little or no regulation and no existing strategy for e waste management and recycling systems. Some countries like Uganda, Rwanda and Kenya have just begun to deal with and develop basic waste management systems, but still lack the capacity, skills, resources and infrastructure to address the challenge effectively.

Most of the countries in the region have no specific policies on e-waste. Uganda recently developed one (October 2012), while Rwanda has a draft and Kenya has a regulation in the making. However, there is recognition of international conventions regulating hazardous waste, among them the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and the Bamako Convention, which aims at introducing preventive measures and guaranteeing appropriate disposal of hazardous waste in Africa.

Although East African member states do not have specific e-waste legislation, there are provisions found in other laws governing the environment, air, water, public health, waste and hazardous substances. For example, in Tanzania, the main environmental governance legislation is the Environmental Management Act (2004), which addresses the management of hazardous waste, among others. It is largely aimed at regulating movement of this waste and placing responsibility for its disposal on those who generate it. Uganda applies the non-specific National Environment Act (1999) to e-waste; however, in 2012 the government released the national e-waste management policy for comments from stakeholders. The policy aims at enforcing several strategies for e-waste management. Kenya, on the other hand, has a draft regulation of e-waste management pending endorsement by Government.

The Rwanda national environment policy sets principles for management of the environment as well as institutional legal reforms and established the Rwanda

Environment Management Authority (REMA). Nevertheless, the application of these legal instruments is typically unspecific to e-waste, and the practical implementation of environmentally progressive waste regulations when it comes to discarded technology is virtually impossible in countries where basic waste management is still a priority. However, the national sanitation policy approved by the Rwanda cabinet and gazetted in December 2016, provides for guiding principles for all aspects of sanitation, including liquid and solid waste, industrial waste, e-waste,etc. The sanitation policy recommends for specific e-waste management policy to give broader policy directions and detailed guidance on e-waste management in Rwanda

The East African member states under EACO have also put in place a number of initiatives as regards e-waste and its management, i.e. developed an East African e-waste management policy model framework to guide member countries in developing their ewaste management policies, workshop on e-waste management in the East African region with an aim to create awareness as well as stakeholder collaboration on achieving sustainable e-waste management in the region.

2.5 E-Waste Challenges and Threats in EACO Region

Although awareness and readiness for improving the management of e-waste in the region are increasing rapidly, major obstacles still exist. These include:

- I. Lack of reliable data which poses a major challenge to the development of e waste management strategies, policy and regulation.
- II. The reliance on the informal sector, without appropriate infrastructure and regulations, where e-waste is commonly burnt in open air or dumped into landfills and water bodies where it releases toxic substances, continues to contribute to environmental degradation and serious health challenges.
- III. Increased dumping of second-hand equipment in the region in the form of donations. The report recommends fast-tracking of the establishment of electronic

and hazardous waste management frameworks, and building capacity for handling electronic and hazardous waste.

- IV. The lack of an e-waste management system and limited processing capacity has led to e-waste being stockpiled in homes, offices and repair shops. However, some companies, such as Hewlett-Packard and Nokia, among others, have launched or expanded recycling programmes in recent years. Some already provide incentives to their customers for product return through a "buy-back" approach
- V. Lack of awareness among consumers and collectors of the potential hazards of ewaste to the environment and their health. Consumers in the region tend to use equipment until the end of its useful life and then store it in their offices or homes, or sell or donate it as second hand equipment that can be repaired and used by others. Consumers need to be informed of their role in e-waste management and encouraged to adopt responsible consumerism. For example, while buying electronic products, they could opt for those made with recycled content and few toxic components, or those that are energy efficient, with minimal packaging and that offer take-back options. Furthermore, donating electronics for reuse could extend the life of valuable products and keep them out of the waste management system for longer.

The current waste management experience in the region demonstrates that informal organizations and the few formal ones cannot deal adequately with the increasing volumes, diversity and complexity of e-waste. It needs to be addressed through a multi-stakeholder partnership approach within a relevant and appropriate framework, at both the national and regional levels. Clear responsibilities must be placed on each stakeholder group to ensure that each is playing its role effectively and efficiently. However, the role of governments in ensuring that the appropriate legislation and new frameworks are drafted is paramount.

2.6 Opportunities and Prospects

There are quite a number of opportunities that present themselves especially in countries that are still grappling to manage e-waste adequately such as in developing countries. There is currently a global push to manage e-waste and international organizations such as ITU and UN have spearheaded this push which has then cascaded downwards to regional and national levels. It is quite noticeable that governments even in the developing regions like East Africa have appreciated the need to adequately manage e-waste. E-waste and it management also presents an economic, social and technological opportunities, i.e. e-waste is a source of valuable resources, its management presents business and employment opportunities etc. Adequate e-waste management reduces negative environmental impact.

SWOT ANALYSIS

These challenges and opportunities are further summarized in the SWOT Analysis presented in the Table below.

STRENGTH	WEAKNESS		
- Model regional e-waste management	- Lack of adequate statistics on e-waste		
policy framework in place	generation in the region		
- Political commitment by leaders in the	- Limited coordination of e-waste		
member states e.g. ratification and	activities at both at national and		
adoption of relevant policies, laws and	regional level		
conventions	- Lack of comprehensive awareness on		
- Existence of E-waste management	e-waste especially among end-users,		
coordination structures at regional	decision makers.		
and national levels (EACO WG 10,	- Limited expertise in e-waste		
National steering committee, Regional	management within the region		
steering committees)	- Inadequate e-waste management		
- Improved appreciation on awareness	infrastructure and facilities.		
of e-waste matters across the board	- Insufficient e-waste policies laws and		
(political, technical and general	regulations and weak enforcement of		

	public)	existing ones and lack of
_	Implementation of e-waste	harmonization of the existing ones
	management initiative of EACO e.g.	- Unpredictable flow of resources on e-
	studies/ statistics	waste management
-	Existing of some basic e-waste	e e e e e e e e e e e e e e e e e e e
	management infrastructure in some	
	countries such as dismantling	
	facilities in Kenya and Rwanda	
-	Existence of enabling environment at	
	national level such as e-waste	
	management policy and strategy in	
	Uganda and draft policy in Rwanda,	
	draft regulations and guidelines in	
	Kenya.	
-	Existence of downstream market for	
	some fractions of e-waste in EACO	
	member states	
OPPO	member states RTUNITIES	TREATS
OPPO Politic	member states RTUNITIES cal	TREATS Political
OPPO Politic	member states RTUNITIES cal Global push on e-waste management	TREATS Political - Political instability in the region
OPPO Politic	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN	TREATS Political - Political instability in the region - Set back on political will
OPPO Politic	member states RTUNITIES cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP,	TREATS Political - Political instability in the region - Set back on political will
OPPO Politic	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP	TREATS Political - Political instability in the region - Set back on political will
OPPO Politic	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC	TREATS Political - Political instability in the region - Set back on political will
OPPO Politic	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC policy harmonization framework	TREATS Political - Political instability in the region - Set back on political will
OPPO Politic	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC policy harmonization framework Global conventions, protocols,	TREATS Political - Political instability in the region - Set back on political will
OPPO Politic	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC policy harmonization framework Global conventions, protocols, declarations.	TREATS Political - Political instability in the region - Set back on political will
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OPPO Politic - - Econo -	member states RTUNITIES al Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC policy harmonization framework Global conventions, protocols, declarations. mic Economic opportunities arising from	TREATS Political - Political instability in the region - Set back on political will - Set back on political will - Feronomic - Affluent societies - Affluent societies
OPPO Politic - - Econo -	member states RTUNITIES cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC policy harmonization framework Global conventions, protocols, declarations. mic Economic opportunities arising from E-waste management	TREATS Political instability in the region - Political instability in the region - Set back on political will - Set back on political will - Feconomic - Affluent societies – High consumption
OPPO Politic - - Econo -	member states RTUNITIES Cal Global push on e-waste management issues and initiatives by ITU, UN activities through UNFCCC, UNEP, Basel and Bamako Convention, StEP Regional integration and the EAC policy harmonization framework Global conventions, protocols, declarations. mic Economic opportunities arising from E-waste management Business and employment	TREATS Political instability in the region - Political instability in the region - Set back on political will - Set back on political will - Feconomic - Affluent societies - High consumption - Counterfeit of substandard goods

Social		Social	
-	Growing activism on environment and	-	Booming informal sector in the region
	Green computing	-	Social practices and culture in
-	Increased Awareness of negative		handling e-waste (holding on items
	impact of e-waste – Public health		due to emotional attachment)
-	Potential positive on special impact		
	groups such as women, youth and		
	PWDs – people with disabilities.		
Techn	ology	Techn	ology
-	Availability of available technologies	-	Changing of technology making the
-	Best practices for Bench mark		ICT equipment's inseparable
		-	Rudimentary technology like
			incineration or burning.
Enviro	onment	Enviro	onment
-	Urban mining	-	Continued Poor disposal methods
-	Reduced Greenhouse gases emissions		hence pollution to the environment
		-	Non segregation of waste
Legal		Legal	

CHAPTER III: EACO REGIONAL APPROACH TO E-WASTE MANAGEMENT

3. STRATEGIC DIRECTION

3.1 Vision, Goal and Strategic Themes

Vision

The Vision of the Strategy is **Towards** *Zero negative impact of e-waste in EACO member states by 2030".*

Goal

The goal of the strategy is to *"achieve a sustainable e-waste management system in the EACO member states"*.

Strategic Themes/Pillars

In order to realize the above goal, EACO member states and collaborators undertake to intervene in the following priority areas.

- 1. Policy, Legal and Regulatory framework
- 2. Infrastructure for e-waste management
- 3. Resource mobilization
- 4. Coordination, institutional alignment
- 5. Capacity building, Research, Monitoring and Evaluation

3.2 Strategies and Strategic Actions

Pillar 1: Policy, Legal and Regulatory frameworks

<u>Strategy (ies)</u>

To ensure protection of human health, environment and enabling conditions for sustainable investment in e-waste management within the region; the priority intervention will be on harmonization of the existing policy, legal and regulatory framework for e-waste management within the EACO member states.

Strategic Actions

- Review existing Policy, laws, standards and guidelines for e-waste management in EACO member states to identify gaps
- 2. Develop Regional e-waste policy, guidelines, laws, regulations and standards to act as model guiding national strategies.
- 3. Disseminate Regional e-waste management policy, guidelines and standards to cater for the uniqueness of e-waste in EACO member states
- 4. Facilitate the adoption and entrenchment of regional e-waste policy, guidelines and standards.
- 5. Advocate for harmonization and alignment of national policies, guidelines and standards to developed regional policies, standards and guidelines

Pillar 2: Infrastructure for E-waste Management

Strategy(ies)

The principle strategy that will help address the identified infrastructure challenges for ewaste management is to ensure rationalization of e-waste management infrastructure in the EACO member states and put in place the requisite infrastructure.

Specific Actions

The priority interventions in the infrastructure for e-waste management over the planning period include the following:

1. Conduct baseline survey on e-waste generation and volumes and develop an updated inventory to inform priority e-waste management infrastructure in the EACO member states

- 1. Conduct an e-waste management infrastructure requirements analysis for the EACO member states
- 2. Develop an e-waste management infrastructure roll out plan
- 3. Put in place appropriate mechanisms for collection, transportation and disposal of ewaste such as the take-back systems , door-to-door collection etc
- 4. Facilitate the development of a regional modern dismantling and recovery facility by integrating the existing infrastructures within the EACO member states

Pillar 3: Resource Mobilization

Strategy (ies)

Successful implementation of the EACO e-waste Management Strategic plan hinges on adequate availability of resources - physical, human and financial resources. Putting in place a comprehensive Resource Mobilization Mechanism for e-waste management has therefore been identified as a critical strategy.

Strategic Actions

The strategic measures, which will help in mobilization of adequate resources for e-waste management and ensure predictability and sustainability in allocation, utilization and accountability, include the following:

1. Develop a Resource Mobilization Strategy for effective implementation of EACO ewaste Management Strategic Plan

- 2. Streamline funding mechanisms for e-waste management within EACO Member States
- 3. Engage EEE producers/retailers in strategic partnerships including financing the ewaste collection, transportation and treatment through the extended producer responsibility (EPR) and advanced recycling fee (ARF).
- 4. Conduct a feasibility study and legal framework analysis for the establishment of EACO e-waste Fund.
- 5. Conduct a study to determine the EPR fees or ARF fees and their collection and disbursement mechanisms
- 6. Set up an EACO e-waste Fund which will collect EPR fees, ARF individual and corporate contributions etc.
- 7. Engage regional and international organizations such as UNIDO, ITU, STEP, UNEP, World Bank, UNU, GIZ, Basel convention, etc for resource mobilization.

Pillar 4: Coordination and Institutional Alignment

Strategy (ies)

Strengthening the EACO e-waste coordination structures at regional and national levels is a core strategy towards ensuring effective implementation of priority e-waste management programmes and projects in the region.

Strategic Actions

The following strategic measures will be executed to enhance coordination and institutional alignment for the strategy:

- 1. Support the operations and functions of the Regional Steering Committee for effective coordination of the implementation of Regional e-waste Strategic plan
- 2. Establish collaborative frameworks with key regulatory bodies and other relevant stakeholders for the proper management of e-waste in EACO member states.

- 3. Mainstream and enforce EPR (Extended Producer responsibility), ARF (Advanced recycling fee) principles in national and regional policyto enhance producer participation in e-waste management
- 4. Establish proper mechanisms for sharing experience and knowledge on E-waste management
- 5. Develop a Communication and Stakeholder Engagement strategy on e-waste management
- 6. Engage with key stakeholders such as Government, Academia, private sector, civil society and development partners to foster mainstreaming of e-waste management within their policies, work plans and budgets

Pillar 5: Capacity Building, Research and M&E

Strategy (ies)

In addressing the critical challenges identified in the situation analysis such as lack of accurate information on volume of e-waste generated and/or imported in the EACO region, limited awareness about e-waste and lack of expertise in use of the appropriate e-waste management practices, three strategies were identified:

- 1. Promote research and innovation in e-waste management
- 2. Put in place a monitoring and evaluation mechanism for e-waste management
- 3. Capacity Building and Awareness creation for e-waste management in EACO member states

Strategic Actions

Strategy 1: Promote research and innovation on e-waste management

Under promotion of research and innovation in e-waste management, the following priority actions will be executed:

- 1. Conduct studies and baseline surveys on e-waste
- 2. Organize annual e-waste management innovation contests/ awards
- 3. Collaborate with research institution to promote research and innovation on e-waste management
- 4. Mainstream e-waste issues in educational curriculum at various levels especially in technical schools

Strategy 2: Put in place a monitoring and evaluation mechanism for e-waste management

The following actions will be executed to enhance the realization of this strategy:

- 1. Collaborate with stakeholders to establish and maintain a database for e-waste generations/ volumes
- 2. Develop and implement a participatory monitoring and evaluation framework
- 3. Conduct midterm review and final evaluation of the regional e-waste management strategy
- 4. Support monitoring and evaluation for national e-waste management initiatives in member states

Strategy 3: Capacity Building and Awareness creation for e-waste management in EACO member states

The identified actions include:

- 1. Raise comprehensive awareness about e-waste and its management
- 2. Build capacity amongst stakeholders and special interest groups such as informal sector, scheme operators etc.
- 3. Formalize the informal sector
- 4. Undertake e-waste awareness campaigns in all member states targeting the general public, technical staff and local leaders
- 5. Networking with partner organizations through stakeholder meetings and dialogues

- 6. Engage producers/retailers of EEE to participate in e-waste awareness campaigns
- 7. Participate in regional and international forums on best practices in e-waste management.
- 8. Develop information, education and communication (IEC) packages for each stakeholder category

These strategies are mapped to each pillar as per Annex 2 below.

CHAPTER IV: IMPLEMENTATION PLAN FOR THE REGIONAL STRATEGY

4.1 Key stakeholders and their roles

Different stakeholders (individuals and institutions) will play roles and responsibilities in the execution of the EACO e-waste Management Strategy.

For this purpose, the stakeholders have been grouped into two categories, namely: regional and national stakeholders. The regional stakeholders include EACO secretariat and all its partners. The partners include the existing as well as potential partners. The national stakeholders include national organizations that constitute EACO member states, national organizations responsible for e-waste management as well as structures and mechanisms created at country level to coordinate e-waste management issues. The key stakeholders and their roles are indicated in the Implementation Matrix in **Annex 3**.

4.2 Co-ordination and Institutional Arrangement

The overall responsibility for implementation, oversight and monitoring and evaluation of the strategy rests to the EACO. The day-to-day implementation of the strategy will be the responsibility of EACO Working Group 10 on Environment and e-waste through the Regional e-waste Management Steering Committee.

The organizational structure for the implementation of EACO e-waste Management Strategic Plan is as illustrated in Figure 1





Figure 2: E-Waste strategic plan Implementation organization structure

4.3 Institutional capacity strengthening

In order to ensure effective coordination of the implementation of the strategy, some capacity enhancement measures have been proposed. These include;

- i. Supporting the operations and functions of the Regional Steering Committee for effective coordination of the implementation of Regional e-waste Strategic plan
- ii. Establishing collaborative frameworks with key regulatory bodies and other relevant stakeholders for the proper management of e-waste in EACO member states.

- iii. Supporting the establishment of a Regional Producer Association as a mechanism for the implementation of EPR (Extended Producer responsibility), ARF (Advanced recycling fee), to enhance producer participation in e-waste management
- iv. Building capacity and creating Awareness for e-waste management in EACO member states

4.4 Action Planning

The actions identified for each of the strategies were spilt further into activities and inputs. The timeframe for implementation of these strategies was also estimated. The resulting action plan is indicated in **Annex 4** below.

This being the first strategic plan, most of the strategic interventions are expected to commence in year one. However, in order to circumvent the risk of not being able to mobilize adequate resources within the first year, other interventions have been scheduled to start in year 2. There are only a few interventions, which will delay beyond year two such as the mid-term review and terminal evaluation of the plan, which are respectively scheduled for 2 ½ and 5th year.

CHAPTER V: RESOURCE MOBILISATION STRATEGY

For successful implementation of the e-waste management strategy, there is need for a sustainable and sufficient funding mechanism. A critical analysis of the required resources, the funding gap and proposed measures to finance the gap are as detailed below.

5.1 Costing of the plan

All strategic interventions in the strategic plan have been costed and total resource requirement for implementation of the plan projected for the entire five-year period. The costing has been based on estimation of costs for the different outputs by looking at the average costs of the inputs, which go into delivery of these outputs. Some inputs include the following:

- 1. Cost of conducting workshops for stakeholders (venue, refreshment and allowances).
- 2. Coordination costs including travel and meetings.
- 3. Writing funding proposals.
- 4. Cost for benchmarking
- 5. Monitoring inspection, and audits
- 7. Consultancy and professional fees
- 8. Printing and publication
- 9. Advertising and publicity

Based on the above framework, the total cost of the strategy for the entire five years is estimated at USD1,680,000 this translates into an average of USD 336,000 per annum.

5.2 Funding gap

The current budget allocation to e-waste by EACO is USD 20,000 per annum. By comparing this with the projected average annual budget of 336,000 leaves a huge funding gap of USD 316,000 per annum and USD 1,580,000 over the entire five-year period.

5.3 Financing the Plan

There has not been any structured funding mechanism for e-waste management in the region. The allocation by EACO is at a meager USD 20,000 per annum. No development partner has yet committed to financing e-waste management in the region.

Development of a comprehensive resource mobilization strategy has been prioritized as one of the key strategic interventions for the plan. EACO targets to mobilize at least USD 1,500,000 over the five year period.

- 1. The possible sources of funding, which are to be further articulated in the resource mobilization strategy include but not limited to; Development Partners,
- 2. Innovative measures of mobilizing resources from producers such as the EPR, ARF
- 3. Contributions from Governments of Member States
- 4. Corporations and Private sector

5.4 Other Proposed Measures to finance the gap include

- 1. Local/community contribution WEEE is an emerging issue; therefore no resources have been allocated for e-waste management. Local authorities are already constrained in collecting solid waste and e-waste is not seen as a priority. Governments and other stakeholders will need to allocate initial funding for e-waste management.
- 2. Mainstreaming of e-waste management in various implementing MDA and other stakeholders' budgets.

These avenues should be explored to ensure e-waste is collected and well disposed, and that the e-waste challenge is handled in a sustainable manner.

For effective collection and management of resources for sustainable e-waste management, **creation of e-waste fund** has been proposed. The e-waste fund is anticipated to be a contributory fund for mobilizing and financing priority regional e-waste management initiatives. Among the measures to replenish, are contributions from development partners, private sector, producers and government. A feasibility study will be conducted to advice on the institutional coordination framework as well as financial model for the fund.

It should be noted that establishing and operationalizing an e-waste fund will be a medium-term measure to ensure sustainable financing of e-waste management.

The specific resource mobilization actions highlighted in this strategic plan includes:

- i. Preparing a detailed resource mobilization plan for implementation of the e-waste strategy.
- ii. Engaging key institutions on the set up and management of the e-waste fund.

- iii. Facilitating the setting up of a Producer Responsible Organization to coordinate the resource financial mobilization.
- iv. Liaising with relevant institutions to review legislation to include an Advance Recycling fee for imported EEE.
- v. Issuing operational licenses to all E-waste collectors and facility operators/owners, and regulate their operations.
- vi. Advocating for inclusion of E-waste management in budgetary allocations at various levels of governance.
- vii. Engaging manufactures of various EEE brands to support e-waste recycling, treatment, and disposal activities, and contribute to the e-waste fund.
- viii. Participating and seeking partnership in the various international, regional and local projects on funding e-waste projects.
- ix. Reviewing and updating existing legislation and regulations to provide for e-waste levy for all e-waste producers.

CHAPTER VI: MONITORING AND EVALUATION STRATEGY

To be able to gauge to what extent the target outcomes have been realized, a monitoring and evaluation framework for the plan has been developed. The framework identifies the anticipated outcomes and results of the strategy – both immediate and long term. For each result (outcomes and outputs) baseline conditions and targets have been identified to show the current status and help in assessing changes in the indicator over time. The detailed M&E Matrix is appended as **Annex 5** below.

The table below presents high-level outcomes and indicators.

Та	rget Outcome	Indicator level		Baseline	Target
Im	pact				
1.	Improvement in standard of living.	(i)	No of green jobs created	29	200
		(ii)	Tax income to government from scheme operators	None	USD 50,000
2.	Reduction of negative impact	(i)		5%	70%
	of e-waste on public health	(ii)	Tons of e-waste		
	and environment.		recycled		
			according to		
			standards		
3.		(i)			
Ou	itcomes				
	1. Align the legal, policy and	(i)	Availability of	None	1
	regulatory framework for		regional e-waste		
	e-waste in EACO member		management		

Table-1 Outcomes and Indicators

states		policy and		
		guidelines		
	(ii)	Number of	0	5
		Member states		
		adopting regional		
		e-waste		
		standards		
	(iii)	No of member	0	5
		states whose		
		policies and laws		
		are harmonized		
		with those of the		
		region		
2. A rationalized and well	(i)	Number of e-	1	5
distributed and		waste		
developed e-waste		infrastructure		
management		developed at		
infrastructure		regional level		
	(ii)	Number of e-	None	1
		waste		
		infrastructure		
		established in		
		member states		
3. Availability of a	i)	Number of	None	20
comprehensive resource		development		
mobilization mechanism		partners		
		attracted in e-		
		waste		
	ii)	% Annual	0	15%

	increase in e-		
	waste		
	management		
	budget		
	····))) (
	iii) Number of	zero	5
	Innovative E-		
	waste funding		
	mechanism such		
	as EPR, ARF and		
	e-waste Fund		
	established		
4. Strengthened capacity	i) % Functionality of	50%	90%
for coordination of e-	EACO structures		
waste at EACO	responsible for e-		
	waste (WG 10,		
	Steering Committee		
	etc)		
	,		
	ii) % of e-waste	0	100%
	management		
	strategic plan		
	implemented		
6. Effective monitoring and	(i) Availability of	None	1
evaluation system for e-	updated		
waste	inventory of e-		
	waste		
	(ii) Number of	None	2
	reports generated		
	from the M&E		
	system		

7. Comprehensive	(i)	% Increase in	15%	50%
awareness about e-waste		public awareness		
in the region		about e-waste		
	(ii)	% Adoption to	15%	50%
		sound e-waste		
		management		
		practices		

Development of a comprehensive Monitoring and Evaluation System has been identified as one of the core strategies for successful monitoring of the implementation and evaluation of the impact of the e-waste strategy. Underscoring this M&E system is the need for an intensive surveillance, inspection, monitoring, audit and reporting on performance of the strategy. The E-waste strategy shall also be subjected to a midterm review after two and half years and a terminal evaluation after the fifth year of its implementation.

Monitoring and Evaluation will be undertaken by the Regional Steering Committee covering the various stakeholders or lead agencies involved in implementation of the e-waste strategy.

CHAP VII: COMMUNICATION AND ADVOCACY STRATEGY

This section examines the following broad focus points;

- 1. Key stakeholders to be engaged
- 2. Stakeholder interests power and influence
- 3. Measures to help engage stakeholders
- 4. Media of reaching out

7.1. KEY STAKEHOLDERS TO BE ENGAGED

In order for a successful implementation of this strategy, communication and advocacy of the key stakeholders is crucial and they must be engaged. The key stakeholders in WEEE include but not limited to, Development Partners such as, UNIDO, UNEP, STEP, BASEL, WORLD BANK, DANIDA, GIZ whose main interest in the strategy is to build lasting partnerships and promote closer engagements to foster democracy, economic development and trade. The investors are also key stakeholders because they will want the strategy to ensure an enabling environment for investment. Both member states and the Agencies therein will want the strategy to deliver a harmonized regional E-waste management Policy, Regulations, Guidelines and Standards in the region while the E-waste schemes will expect the strategy to give them a clear roadmap which will standardize the framework of e-waste management in the region, the strategy should also ensure incentives in e-waste management which will make them re coup their money and create a level playing ground for all. While the public will expect a clean and healthy environment free of negative impact of e-waste.

These stakeholders if properly engaged will influence smooth implementation of the strategy. The stakeholders can be engaged through meetings, retreats, and development of proposals, development of projects, workshops, and trainings.

CATEGORY	STAKEHOLDER INTEREST		MEANS OF ENGAGEMENT
Development	UNIDO, UNEP,	Build lasting partnerships and	Meeting, retreats,
Partners	STEP, BASEL, ITU,	promote closer engagements	development of proposals,
	WORLD BANK, GIZ, to foster democracy, econom		development of projects,
	DANIDA	development and trade.	Workshops

Private		Creating an enabling	Meeting, retreats,
investors		environment for investment	development of proposals,
			development of projects,
			Workshops
Member States	RWANDA,UGANDA,	A harmonized regional E-	
	TANZANIA, KENYA,	waste management Policy,	
	BURUNDI	regulation, guidelines and	
		standards.	
Agencies in	KRA, NITA, NEMA,	Harmonized regional e-waste	Development of the
Member states	NEMC	policy, Regulations, guidelines	regulations
E-waste scheme	EPR, Recycler,	A clear roadmap which will	Workshops, trainings,
	collectors,	standardize the framework of	
		e-waste management in the	
		region,	
		Ensure incentives in e-waste	
		management, which will make	
		them re coup their money and	
		create a level playing ground	
		for all.	
Public	ALL	A clean and healthy	Publications
		environment free of negative	
		impact of e-waste.	
The informal	Recyclers,	To ensure a clean and safe	Guidelines and workshops
sector	collectors. Etc.	environment to the operators	
		in the informal sector.	
Producers,	Producers	Empowered market with the	Guidelines and workshops
Importers and		capability of buying electric	
distrubutors		goods and adequately	
		disposing them after they	
		have obtained their lifespan	
Non-	All related to	Have continues investment of	Stakeholders meetings and
governmental	Environment and	the non-governmental	workshops

organizations	humanitarian	organizations and at the same	
	sectors	time have them protect the	
		environment in their	
		endeavors	
Formal	Recyclers and	Have conducive environment	Guidelines and workshops
collectors and	Collectors	for the operation of the	
recyclers		collectors and recyclers of the	
		e waste	
		Conducive policies for e-waste	
		collection and recycling	
		activities	
International	Corporations	Trans-boundary and product	Treaties and agreements
corporations		compliance	
		Reliable and accurate data	
		/information on e-waste	
		generation	
Universities and	Universities and	Have relevant information on	Research topics and
research	research	the lifespan of electric goods	curriculum
institutions	institutions	and their probable disposal	
		site	
		Reliable and accurate	
		data/information on e-waste	
		generation	
Companies	All	Companies to have proper	Guidelines and systematic
		disposal sites for the electric	collection plans.
		wastes.	

The detailed communication and advocacy strategy will be developed once this strategy is approved.

ANNEX1

SUMMARY DESCRIPTION OF INTERNATIONAL PROTOCALS AND CONVENTIONS RELEVANT TO E-WASTE

1. Basel Convention (5th May 1992)

The **Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal**, usually known as the **Basel Convention**, is an international treaty that was designed to reduce the movements of hazardous Wastes between nations, and specifically to prevent transfer of hazardous waste from developed to Less Developed Countries (LDCs). It does not, however, address the movement of radioactive waste.

The Convention was opened for signature on 22 March 1989, and entered into force on 5 May 1992. As of July 2016, 183 states and the European Union are parties to the Convention. Haiti and the United States have signed the Convention but not yet ratified it. EACO Member states have all signed and ratified the Basel Convention.

2. The Basel Convention Ban Amendment 1994

The "Ban Amendment" provides for the prohibition by each Party included in the proposed new Annex VII (Parties and other States which are members of the OECD, EC, Liechtenstein) of all transboundary movements to States not included in Annex VII of hazardous wastes covered by the Convention that are intended for final disposal, and of all transboundary movements to States not included in Annex VII of hazardous wastes covered by paragraph 1 (a) of Article 1 of the Convention that are destined for reuse, recycling or recovery operations.

The Ban Amendment was originally adopted as a decision of the second meeting of the Conference of the Parties in March 1994. The Secretariat provides assistance to parties that are facing difficulties in ratifying the Ban Amendment, on request and within available resources.

3. Bamako Convention;

The Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa is a treaty of the African Nations nations prohibiting the import of any hazardous wastes including radioactive wastes. The Convention was negotiated by twelve nations of the OAU at Bamako, Mali in January 1991, and came into force in 1998.

The Bamako Convention uses a format and language similar to that of the Basel Convention, but is much stronger in prohibiting all imports of hazardous waste. Additionally, it does not make exceptions on certain hazardous wastes (like those for radioactive materials) made by the Basel Convention.

7. Framework Convention on Climate Change.

The United Nations **Framework Convention on Climate Change** (UNFCCC) is an international environmental treaty negotiated at the Earth Summit in Rio de Janeiro from 3 to 14 June 1992, then entered into force on 21 March 1994.

8. The Vienna Convention for the Protection of the Ozone Layer.

The **Vienna Convention on the Law of Treaties (VCLT)** is a treaty concerning the international law on treaties between states. It was adopted on 22 May and opened for signature on 23 May 1969. The Convention entered into force on 27 January 1980. The VCLT has been ratified by 114 states as of April 2014. Some countries that have not ratified the Convention, such as the United States recognize parts of it as a restatement of customary law and binding upon them as such.

9. Montreal Protocol on Substance that Deplete the Ozone Layer 1987

The **Montreal Convention** (formally, the **Convention for the Unification of Certain Rules for International Carriage by Air**) is a multilateral treaty adopted by a diplomatic meeting of ICAO member states in 1999. It amended important provisions of the Warsaw Convention regime concerning compensation for the victims of air disasters.

10.Kyoto protocol

The **Kyoto Protocol** is an international treaty which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC) that commits State Parties to reduce greenhouse gases emissions, based on the premise that (a) global warming exists and (b) man-made CO_2 emissions have caused it.

ANNEX 2:

MAPPING STRATEGIES TO STRATEGIC ACTIONS BY PILLAR

Pillar	Strategies	Strategic Actions				
1. Policy, Legal	1.1 To harmonize	1.1.1 Review existing Policy, laws, standards and				
and regulatory	policy legal	guidelines for e-waste management in EACO				
frameworks	and	member states to identify gaps				
	regulatory	1.2.1 Develop Regional e-waste policy, guidelines,				
	framework	laws, regulations and standards to act as model				
	for e-waste	guiding national strategies.				
	management	1.1.3 Disseminate regional e-waste management				
	in the EACO	policy, guidelines and standards to cater for the				
	member	uniqueness of e-waste in EACO member states				
	states					
		1.1.4 Facilitate the adoption and entrenchment of				
		regional e-waste policy, guidelines and standards				
		1.1.5 Advocate for alignments of national policies,				
		guidelines and standards to developed regional				
		policies, standards and guidelines				
2. Requisite	2.1 To ensure	2.1.1 Conduct baseline survey on E-waste				
Infrastructure	rationalizatio	generation and volumes and develop an updated				
for E-waste	n of e-waste	inventory to inform priority e-waste management				
Management	management	infrastructure in the EACO member states				
	infrastructure	2.1.2 Conduct an E-waste management				
	in the EACO	infrastructure requirements analysis for the EACO				
	member	member states				
	states	2.1.3. develop an e-waste management				
		infrastructure roll out plan				
		2.1.4 Put in place appropriate mechanisms for				
		collection, transportation and disposal of e-waste				

		such as the take-back systems with incentives for				
		consumers, door-to-door collection etc 2.1.5 Facilitate the development of a regional				
		2.1.5 Facilitate the development of a regional				
		modern dismantling and recovery facility within				
		the EACO member states				
3. Resource	3.1 Put in place a	3.1.1 Develop a Resource Mobilization Strategy for				
mobilization	comprehensiv	effective implementation of EACO e-waste				
	e Resource	Management Strategic Plan				
	Mobilization	3.1.2 Streamline funding mechanisms for e-waste				
	mechanism	management				
	for e-waste	3.1.3 Engage EEE producers/retailers in strategic				
	management	partnerships including financing the e-waste				
		collection, transportation and treatment through				
		the extended producer responsibility and advanced				
		recycling fee				
		3.1.4 Conduct a feasibility study for the				
		establishment of EACO e-waste fund.				
		3.1.5 Set up an EACO e-waste fund which will				
		collect EPR fees, ARF individual and corporate				
		contributions etc				
		3.1.6 Engage regional and international				
		organizations such as UNIDO, ITU, STEP, UNEP,				
		World Bank, UNU, GIZ, Basel convention, etc for				
		resource mobilization.				
4. Institutional	4.1 Strengthen EACO	4.1.1 Support the operations and functions of the				
coordination	e-waste coordination	Regional Steering Committee for effective				
and alignment	structures at regional	coordination of the implementation of Regional e-				
	and national levels	waste Strategic plan				
		4.1.2 Establish collaborative frameworks with key				
		regulatory bodies and other relevant stakeholders				
		for the proper management of e-waste in EACO				
		member states.				

		4.1.3 Support the establishment of a Regional			
		Producer Association as a mechanism for the			
		implementation of EPR (Extended Producer			
		responsibility), ARF (Advanced recycling fee), to			
		enhance producer participation in e-waste			
		management			
		4.1.4 Establish proper mechanisms for sharing			
experience and knowledge on I					
		management			
		4.1.5 Develop a communication and stakeholder			
		engagement strategy on e-waste management			
		4.1.6 Engage with key stakeholders such as			
Government, Academia, private sector, civil society					
		and development partners to foster mainstreaming			
		of e-waste management within their policies, work			
		plans and budgets			
Pillar 5: Research,	4.1 Promote	5.1.1 Conduct studies and baseline surveys on E-			
Monitoring and	research and	waste			
Evaluation and	innovation in	5.1.2 Organize annual e-waste management			
Capacity building	e-waste	innovation contests/ awards			
	management	5.1.3 Collaborate with research institution to			
		promote research and innovation on e-waste			
		5.1.4 Mainstream e-waste issues in educational			
		curriculum at various levels especially in technical			
		school			
	4.2 Put in place a	5.1.1 Collaborate with stakeholders to establish and			
	monitoring	maintain a data base for e-waste generations/			
	and	volumes			
	evaluation	5.1.2 Develop and implement a participatory			
	mechanism	monitoring and evaluation framework			
	for e-waste	5.1.3 Conduct midterm review and final evaluation			
	management	of the regional e-waste management strategy			

	5.1.4 Support monitoring and evaluation for
	national e-waste management initiatives in
	member states
4.3 Capacity	5.1.5 Raise comprehensive awareness about e-
Building and	waste and its management
Awareness	5.1.6 Build capacity amongst stakeholders and
creation for e-	special interest groups such as informal sector,
waste	scheme operators etc.
management	5.1.7 Undertake e-waste awareness campaigns in
in EACO	all member states targeting the general public,
member	technical staff and local leaders
states	5.1.8 Networking with partner organizations
	through stakeholder meetings and dialogues
	5.1.9 Engage producers/retailers of EEE to
	participate in e-waste awareness campaigns
	5.1.10 Participate in regional and international fora
	on best practices in e-waste management
	5.1.11 Develop information, education and
	communication (IEC) packages for each
	stakeholder category

ANNEX 3

ACTION PLAN

			Inputs	Propos	ed Budg	et (USD)			Total	Resp	Time
Pillar	Strategies	Strategic Actions		2017/	2018	2019/2	2020/	2021/	Budget	onsib	fram
				18	/19	0	21	22		le	е
Policy,	1.1To	1.1.1 Review	Workshop	50,000	50,00				100,000	EACO	2019
Legal and	harmonize	existing Policy, laws,	S,		0					- RSC,	
regulatory	policy legal	standards and	Meetings							EACO	
framework	and regulatory	guidelines for e-								WG10	
S	framework	waste management	Desk								
	for e-waste	in EACO member	review								
	management	states to identify									
	in the EACO	gaps									
	member states	1.2.1 Develop	Technical						50,000	EACO	2018
		Regional e-waste	working	50,000						- RSC,	
		policy, guidelines,	group							EACO	
		laws, regulations								WG10	
		and standards to act	Workshop								

as model guiding	S							
national strategies.								
1.1.3 Disseminate		20,00	20,000	20,000		60,000	EACO	2020
regional e-waste	Workshop	0					- RSC,	
management policy,	S						EACO	
guidelines and							WG10	
standards to cater								
for the uniqueness								
of e-waste in EACO								
member states								
1.1.4 Facilitate the	Workshop			50,000	50,000	100,000	EACO	
adoption and	S						- RSC,	
entrenchment of							EACO	
regional e-waste	Meetings						WG10	
policy, guidelines								
and standards.								
1.1.5 Advocate for	Advocacy			20,000	20,000	40,000	EACO	
alignments of	Workshop						- RSC,	
national policies,	S						EACO	
guidelines and								
standards to	Meetings							
developed regional								
policies, standards								
and guidelines								

	2.1To ensure	2.1.1 Conduct	Consultanc	50,000					50,000	EACO	2018
Infrastruct	rationalization	baseline survey on	у							- RSC,	
ure for E-	of e-waste	E-waste generation								EACO	
waste	management	and volumes and	Workshop							WG10	
Manageme	infrastructure	develop an updated	S								
nt	in the EACO	inventory to inform									
	member states	priority e-waste									
		management									
		infrastructure in the									
		EACO member									
		states									
		2.1.2 Conduct an E-	Consultanc	50,000					50,000	EACO	2018
		waste management	у/							- RSC,	
		infrastructure	Workshop							EACO	
		requirements	s/							WG10	
		analysis for the									
		EACO member									
		states									
		2.1.3. develop an e-	Consultanc	50,000					50,000	EACO	2018
		waste management	у							- RSC,	
		infrastructure roll								EACO	
		out plan	Workshop							WG10	
		2.1.4 Put in place	Trainings,	20,000	20,00	20,000	20,000	20,000	100,000	EACO	2022
		appropriate			0					- RSC,	

		mechanisms for	Workshop					EACO	
		collection,	S,					WG10	
		transportation and						,	
		disposal of e-waste	Technical					Natio	
		such as the take-	working					nal	
		back systems with	group					steeri	
		incentives for						ng	
		consumers, door-to-						comm	
		door collection etc						ittee.	
		2.1.5 Facilitate the	Consultanc	100,00			100,000	EACO	2018
		development of a	у/	0				- RSC,	
		regional modern	Technical					EACO	
		dismantling and	working					WG10	
		recovery facility	group						
		within the EACO							
		member states	Workshop						
			S,						
Resource	3.1Put in place	3.1.1 Develop a	Consultanc	20,000			20,000	EACO	2018
mobilizatio	а	Resource	у/					- RSC,	
n	comprehensive	Mobilization	Technical					EACO	
	Resource	Strategy for effective	working					WG10	
	Mobilization	implementation of	groups						
	mechanism	EACO e-waste							
	for e-waste	Management							

management	Strategic Plan									
		-	4000	4000	4000	4000	4000	20.000	EACO.	
	3.1.2 Streamline		1000	1000	1000	1000	1000	20,000	RSC,	
	funding mechanisms								WG	
	for e-waste								10	
	management									
	3.1.3 Engage EEE	Meetings/	5,000	5,000	5,000	5,000	5,000	25,000	EACO	2022
	producers/retailers	workshop							- RSC,	
	in strategic								EACO	
	partnerships								WG10	
	including financing									
	the e-waste									
	collection,									
	transportation and									
	treatment through									
	the extended									
	producer									
	responsibility and									
	advanced recycling									
	fee									
	3.1.4 Conduct a	Consultanc	20,000	20,00				40,000	EACO	2019
	feasibility study for	у		0					- RSC,	
	the establishment of	Workshop							EACO	

		EACO e-waste fund.								WG10	
		3.1.5 Set up an EACO	Operation	10,000	10,00	10,000	10,000	10,000	50,000	EACO	2022
		e-waste fund which	/		0					- RSC,	
		will collect EPR fees,								EACO	
		ARF individual and								WG10	
		corporate									
		contributions etc									
		3.1.6 Engage	Meetings	5,000	5,000	5,000	5,000	5,000	25,000	EACO	2022
		regional and	Workshop							- RSC,	
		international	S,							EACO	
		organizations such								WG10	
		as UNIDO, ITU,	Proposals								
		STEP, UNEP, World									
		Bank, UNU, GIZ,									
		Basel convention,									
		etc for resource									
		mobilization.									
Institution	4.1 Strengthen	4.1.1 Support the	Meetings,	20,000	20,00	20,000	20,000	20,000	100,000	EACO	2022
al	EACO e-waste	operations and			0					- RSC,	
coordinati	coordination	functions of the	Workshop							EACO	
on and	structures at	Regional Steering	S,							WG10	
alignment	regional and	Committee for	Operations								
	national levels	effective	,								
		coordination of the	office								

implementation of									
Regional e-waste									
Strategic plan									
4.1.2 Establish	Meetings,	5,000	5,000	5,000	5,000	5,000	25,000	EACO	2022
collaborative								- RSC,	
frameworks with	Workshop							EACO	
key regulatory								WG10	
bodies and other									
relevant									
stakeholders for the									
proper management									
of e-waste in EACO									
member states.									
4.1.3 Support the	Meetings,	10,000	10,00	10,000	10,000	10,000	50,000	EACO	2022
establishment of a			0					- RSC,	
Regional Producer	Operations							EACO	
Association as a								WG10	
mechanism for the									
implementation of									
EPR (Extended									
Producer									
responsibility), ARF									
(Advanced recycling									
fee), to enhance									

						1	
producer							
participation in e-							
waste management							
4.1.4 Establish	-						
proper mechanisms							
for sharing							
experience and							
knowledge on E-							
waste management							
4.1.5 Develop a	Consultanc	10,000	10,00		20,000	EACO	2019
communication and	у/		0			- RSC,	
stakeholder	Technical					EACO	
engagement strategy	working					WG10	
on e-waste	groups						
management							
4.1.6 Engage with	Meetings	5,000	5,000		10,000	EACO	2019
key stakeholders	Workshop					- RSC,	
such as						EACO	
Government,						WG10	
Academia, private							
sector, civil society							
and development							
partners to foster							
mainstreaming of e-							

		waste management									
		within their policies,									
		work plans and									
		budgets									
Research,	1.1 Prom	5.1.1 Conduct	Consultanc	10,000	10,00				20,000	EACO	2019
Monitoring	ote	studies and baseline	у/		0					- RSC,	
and	resear	surveys on E-waste	Technical							EACO	
Evaluation	ch and		working							WG10	
and	innov		group								
Capacity	ation	5.1.2 Organize	Events,	10,000	10,00	10,000	10,000	10,000	50,000	EACO	2022
building	in e-	annual e-waste	workshop		0					- RSC,	
	waste	management								EACO	
	mana	innovation contests/								WG10	
	geme	awards									
	nt	5.1.3 Collaborate	Workshop			10,000	10,000	10,000	30,000	EACO	
		with research	S,							- RSC,	
		institution to	conference							EACO	
		promote research	S							WG10	
		and innovation on e-									
		waste									
		5.1.4 Mainstream e-	Workshop			5,000	5,000	5,000	15,000	EACO -	202
		waste issues in	S,							RSC,	2
		educational								EACO	
		curriculum at	Meetings							WG10	

especially in technical school in techni	
technical schooliechnical schooliechn	
1.2 Put in5.1.1 Collaborate4000400040004000400020,000EACOplacewith stakeholders toRSCaestablishandCOmonitmaintain a data baseWG10	
place with stakeholders to - RSC a establish and monit maintain a data base - RSC	
a establish and EACO monit maintain a data base Maintain a data base Maintain a data base	
monit maintain a data base WG10	
oring for e-waste	
and generations/	
evalua volumes	
tion 5.1.2 Develop and Wokshops, 10,000 10,000 10,000 50,000 EACO	2022
mecha implement a Visits, 10,000 0 - RSC	
nism participatory EACO	
for e- monitoring and WG10	
waste evaluation	
mana framework	
geme 5.1.3 Conduct Consultanc 20,000 20,000 40,000 EACO	2022
nt midterm review and y, - RSC	
final evaluation of EACO	
the regional e-waste workshop WG10	
management s	
strategy	
5.1.4 Support Workshop 10,000 10,000 10,000 10,000 50,000 EACO	2022
monitoring and s, 0 - RSC	

	evaluation for								EACO	
	national e-waste	Meetings							WG10	
	management									
	initiatives in									
	member states									
1.3 Capaci	5.1.5 Raise	workshop,	10,000	10,00	10,000	10,000	10,000	50,000	EACO	2022
ty	comprehensive	IEC		0					- RSC,	
Buildi	awareness about e-	printed							EACO	
ng	waste and its	materials							WG10	
and	management									
Aware	5.1.6 Build capacity	Trainings,	10,000	10,00	20,000	10,000	10,000	60,000	EACO	2022
ness	amongst	workshop ,		0					- RSC,	
creati	stakeholders and	conference							EACO	
on for	special interest	S							WG10	
e-	groups such as									
waste	informal sector,									
mana	scheme operators									
geme	etc.									
nt in	5.1.7 Undertake e-	Campains	20,000	20,00	20,000	20,000	20,000	100,000	EACO	2022
EACO	waste awareness			0					- RSC,	
memb	campaigns in all	Road							EACO	
er	member states	shows ,							WG10	
states	targeting the general	workshop								
	public, technical									

staff and local									
leaders									
5.1.8 Networking	Meetings	5,000	5,000		5,000		15,000	EACO	2020
with partner								- RSC,	
organizations								EACO	
through stakeholder								WG10	
meetings and									
dialogues									
5.1.9 Engage	Meetings	5,000	5,000				10,000	EACO	2019
producers/retailers								- RSC,	
of EEE to participate								EACO	
in e-waste								WG10	
awareness									
campaigns									
5.1.10 Participate in	Travels,	20,000	20,00	20,000	20,000	20,000	100,000	EACO	2022
regional and	Meetings,		0					- RSC,	
international fora on	conference							EACO	
best practices in e-								WG10	
waste management									
5.1.11 Develop	IEC	5,000	5,000	5,000	5,000	5,000	25,000	EACO	2022
information,	materials							- RSC,	
education and								EACO	
communication								WG10	
(IEC) packages for									

	each stakeholder							
	category							
	Total budget	595,0	295,	235,00	280,0	275,0		
		00	000	0	00	00	1,680,0	
							00	
		Year 1	Year	Year 3	Year 4	Year 5		
			2				Total	

ANNEX 4

THE DETAILED M&E MATRIX

LOGIC FRAMEWORK FOR THE REGIONAL E-WASTE MANAGEMENT STRATEGY

HIERACHY OF	KEY PERFORMANCE	BASELINE	TARGET	Timeline	MEANS OF	CRITICAL
INTERVENTIONS	INDICATORS	January 2017			VERIFICA	ASSUMPTIO
					TION	Ν
<i>Pillar 1</i> : Policy, Legal and Regulatory frameworks for E-waste management in EACO member states						
Outcome 1.:	Harmonized legal,	None	Harmonized policy	2022	EACO	Continued
A harmonized legal,	policy and		Harmonized regulations		reports	Regional
policy and	regulatory		Harmonized standards			Integration
regulatory	framework in place					
frameworks						
Output 1.1 Regional	Number of developed	Draft model	1 regional e-waste		EACO	
e-waste policies,	regional e-waste	framework	management policy	2019	reports	
guidelines and	policy, guidelines and	policy	1 regional e-waste			
standards developed	standards		management guideline			
for EACO member			1 regional standard			
states.						
Output 1.2: Policy,	Number policies,		5 E-waste policies,	2018	EACO	Continued
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laws and standards	laws, regulations	None	5 E-waste regulations		Report	Political
for e-waste	reviewed		5 E-waste standard			Goodwill
management						
reviewed.						
Output 1.3: Regional	Number of	1 workshop	10 workshop (2 in each	2020	EACO	
e-waste management	disseminations		member state)		Reports	
policy, guidelines and	workshop conducted				Workshop	
standards	in each member state				reports	
disseminated to						
EACO member states						
Output 1.4 E-waste	Number of states	None	5 states	2022	EACO	
regional policy,	adopting the regional				Report	
guideline and	e-waste policy,					
standard adopted at	guidelines and					
national level	standards					
Output 1.5 National	Number of policies,	None	5 E-waste policies,		Annual	
policies, guidelines	guidelines and		5 E-waste regulations		report	
and standards aligned	standards aligned to		5 E-waste standard			
to regional policy,	regional policies,					
standard and	standards and					
guideline.	guidelines					

Pillar 2 : Infrastructure for E-waste management in EACO member states

Outcome 2: A	Number of E-waste		1 Regional modern facility	2022		Availability
rationalized and well	infrastructure in the					of viable
distributed E-waste	region					investors
management						
infrastructure in the						
EACO member states						
Output 2.1 : Baseline	Baseline survey	None	Survey Reports	2018		Availability
survey on E-waste	report on e-waste					of funds
generation and	generation and					
volumes to inform	volumes available					
priority e-waste						
management						
infrastructure in the						
EACO member states						
Conducted						
Output 2.2: E-waste	Report on E-waste	None	1 report produced	2018	EACO	Availability
management	management				reports	of funds
infrastructure	infrastructure					
requirements analysis	requirements					
is conducted						
Output 2.3: An e-	Report on e-waste	None	1report produced	2018	EACO	Continued
waste management	management roll out				reports	political
infrastructure roll out	plan					support
plan is developed						

Output 2.4	No of collectors and	None	200 collectors and	2022	Certificate	Commitment
Appropriate	transporters trained.		transporters trained		of	of
mechanisms for					participati	stakeholders
collection,					on	
transportation and	No. collection centers/	None	30 environmentally	2022	EACO	Availability
disposal of e-waste	point established in		friendly collection		reports	of funds
are established	member states		centres/ point			
			established (at least 5 in			
			each country)			
	Tons of e-waste	None	40,000 tons of e-waste	2022	EACO	
	properly collected		collected for proper		report	
			treatment			
Output 2.5	Business plan for the	None	1Business plan	2018	EACO	
Facilitation for the	regional facility					
development of a	available					
regional modern						Availability
dismantling and						offunds
recovery facility						or runus
within the EACO						
member states is						
provided						
Pillar 3 : Resource Mod	oilization for proper e-wa	ste management		·		·
Outcome 3: A	Availability of a	None	Resource mobilization		EACO	Continued

comprehensive	comprehensive		mechanism		Report	commitment
resource mobilization	resource mobilization					and good
mechanism for the e-	mechanism					will from
waste management in						Government
EACO member states	Total amount of funds	0			EACO	
	mobilized				Report	
	Total amount invested	0			EACO	
	in e-waste				Report	
	management by the					
	private sector					
Output 3.1 : Regional	A resource	None	1 mobilization strategy	2018	EACO	Continued
E-waste resource	mobilization strategy				Report	commitment
mobilization strategy	in place and functional					from
developed and						stakeholders
implemented						
Output 3.2	Availability of	None	Feasibility report	2017	EACO	
EACO e-waste fund is	feasibility study report				Report	
established to collect						
EPR fees, ARF						
individual, corporate		None	E-waste fund	2022	EACO	
and donor	E-waste fund in place				Report	
contributions	and functional					

Output 3.3 EEE	Total amoun	None	At least 500,000 USD	2022	EACO	Commitment
producers/retailers	committed to the e	-			report	of producers
engaged in strategic	waste fund					
partnerships						
including financing						
the e-waste						
collection,						
transportation and						
treatment through						
the extended						
producer						
responsibility and						
advanced recycling						
fee						

Pillar 4 : Research, M&E and Capacity building

Outcome 4 : An		TBD			
established research,	Number of reports	None	20 quarterly reports	2022	
M&E system,	generated from the		5 Annual reports		
innovation as well as	M&E system		1 Mid-term report		
developed capacity in			1 final evaluation report		
e-waste management					
Output 4.1 E-waste	Availability of e-waste	None	1 regional curriculum	2018	

management is	mainstreaming		mainstreaming guideline		
mainstreamed in	guideline				
educational	No of curriculum with	None	3 curriculum (primary ,	2022	
curriculum at various	e-waste incorporated		secondary and tertiary) in		
levels especially in			each country		
technical school					
Output 4.2 The e-	Availability of strategy	None	1 midterm report	2019	
waste strategy is	mid-term and final		1 final report	2022	
monitored and	review reports				
evaluated					
Output 4.3: National	Availability of national	None	1 midterm report	2019	
e-waste management	evaluation reports		1 final report	2022	
initiatives in all					
member states are					
monitored and					
evaluated					
		I	L		
Dillar F. Coordination	and in attraction of all and a				

Pillar 5: Coordination and institutional alignment

Outcome 5: EACO E-	Availability of	E-waste	XX+500,000 USD		EACO	Political will
waste coordination	financial support for	Regional and		2022	reports	Continued
structures at regional	the E-waste Regional,	national				
and national levels	national committee	steering				Continued
are strengthened	and WG10	committee in				commitment
		place				of key
		WG 10				institutions
	% of physical	0%		2022	EACO	
	implementation of the		100% (annually 20%)		reports	
	strategy					
Output 5.1: E-waste	Allocated resource to	20,000 USD	500,000 USD	2022	EACO	
regional steering	the operations and				reports	
committee	functions of the					
operations and	steering committee					
functions supported	(National and					
for effective	regional)					
coordination of the	Number of steering					
implementation of the	committee meeting					
regional e-waste	held.					
strategic plan						
Output 5.2: A	Regional Producer	None	1 Regional Producer	2022	EACO	
Regional Producer	association (RPA) is in		association		report	
Association as a	place and functional					

mechanism for the						
implementation of						
EPR (Extended	Number of producers					
Producer	registered to the	None	At least 50 producers			
responsibility), ARF	association			2022		
(Advanced recycling						
fee), is established						
Output 5.3 : A	communication and	None	1 Communication and	2019	EACO	
communication and	stakeholder		stakeholder engagement		reports	
stakeholder	engagement strategy		strategy			
engagement strategy	is in place					
on e-waste						
management is						
	1					

ANNEX 5

COUNTRY STATUS

KENYA

> NATIONAL STEERING COMMITTEE IN PLACE

Uganda

> NATIONAL STEERING COMMITTEE IN PLACE

Rwanda

> NATIONAL STEERING COMMITTEE IN PLACE

Burundi

> NATIONAL STEERING COMMITTEE IN PLACE

Tanzania

▶ NATIONAL STEERING COMMITTEE IN PLACE