



WORKSHOP REPORT

CIRCULAR ECONOMY & EWASTE MANAGEMENT

(Closing the loop)



Introduction:

The *Circular Economy & E-Waste Management Workshop*, held on 11th December 2019 brought together 26 professionals, industry players, change makers and innovators operating in Kenya. The aim was to share their experiences, to learn from one another and discuss good practice partnership models on *what to do after electronics have been declared waste*; all this against the global race to develop and deploy systems and solutions that work.

The workshop was structured to include industry, government, private sector and academia to make it as practical as possible. The workshop was part of a key activity for Sustainable Inclusive Kenya as part of our mandate to empower industry actors through awareness creation and catalyzing partnerships. The opportunity to network and to learn from one another, and the chance to explore ideas, in our experience is the starting point for innovative, tailor-made and impact driven solutions.

This report provides an overview of the workshop, background information and objectives, and suggestions for next steps.



Workshop Objective

Electrical & Electronic pollution is a global challenge that requires global cooperation. Countries, corporations, and other actors must work together to advance a circular economy approach that will reduce the environmental effects of this kind of waste and recover the lost economic value of the material.

The most recent statistics by UNEP, 2010 report that Kenya generates 17,000 tons of E-waste each year; that is 11400 from refrigerators, 2800 from TVs, 2500 from PCs, 500 from printers and 150 from mobile phones. Between 2010 and 2019, these figures have tremendously increased because Kenya's economy has grown leading to more home & office purchases, and the digital accessibility (phone) accessibility is now at a whopping 91%, not mentioning the digital habit to keep consuming the latest most trending phones & computers.

These facts alone define the need and the opportunity to create circular and sustainable solutions to e-waste, notwithstanding the negative effects of e-waste: landfills that adversely contaminate natural systems and human health, life cycle and material waste; and the positive outcomes of circular solutions: safe environment, which results to safe people, increased product life cycle, green employment & new industries.

Recently, there has been an increase of initiatives targeting E-waste in Kenya, which have led to increased attention. For instance:

- In January 2019, the Ministry of Environment and Forestry developed 3 crucial documents to guide waste; among which was the E-Waste Strategy with the vision: *Towards Zero negative impact of e-waste in Kenya*
- Close the Gap is an international social enterprise that aims to bridge the digital divide by offering high-quality, preowned computers donated by European companies to educational, medical and social projects in developing and emerging countries. In Kenya, Close the Gap has partnered with the WEEE Centre in Nairobi to enhance efficient and effective management of Electronic Waste, and are working to set up an innovation hub, learning centre and co-working space in Mombasa to tackle e-waste.



- Slightly over a month ago, KEPSA in partnership with The Ministry of Environment and Forestry and Safaricom in commemoration of the International E-Waste Day organized an E-Waste Recovery Initiative.
- Based their objectives to raise awareness for SIB practice, SIBKenya, during the annual conference in May 2019 had specific focus on E-waste with a workshop and a call-to-action-for WEEE centre which led to 68 engaged companies and is keen on conducting follow up activities

It is critical to use this momentum to create the right awareness, embrace the right solutions and increase corporate, institutional and government ambitions towards tackling E-Waste.



Workshop Discussions: The Focal Points

1. Policy & Implementation

The National E-waste Management Strategy is a five-year plan covering the period 2019/20 to 2023/24 with five thematic areas: Resource mobilization, Raising Awareness, Strengthening Coordination, Monitoring and Evaluation, Research and Innovation and Legal and Regulatory framework for E-waste management in Kenya. Hereunder are related discussions:

- The E-waste policy covers most aspects of E-waste management in Kenya and should be the basic guiding document for industry actors to avoid overregulation and duplication of policies. Instead of starting with policies, harness and strengthen what is already existing, start implementing then sort bottlenecks as they arise.
- Where policy implementation and enforcement is a challenge, businesses should take up the challenge to self-regulate at industry level based on new business values – sustainability and inclusiveness and towards the achievement of the Sustainable Development Goals.
- Where there is need for additional policy/regulation, the industry needs to lobby as one voice to receive proper government attention and action.
- At policy level, enough benchmarking has been done and there is a danger of this becoming a vicious circle, it is imperative for policy makers to start the journey, together and adjust accordingly as progress is realized.
- The introduction of zero rate on import duty on all recycling machines is a stepping stone that will motivate organizations to invest in waste management through recycling. This will create jobs for youth as collectors, researchers etc. at different levels of the value chain



2. Collection & Distribution

Efforts by existing organisations like the WEEE Centre, Close the Gap, Recykla and Solibrium are highly appreciated. However, collection is still at a very low rate and largely informal. There is no general public awareness on E-Waste and no business models for collection systems because it is difficult to attach value on E-waste. The following insights were highlighted:

- There is need to have certainty of volumes for collectors, in order to meet cost margins. Decentralized solutions make volumes low. There lies an opportunity to create business models out of it, for instance, using different organizational strengths to create a collection system and ensure volumes, and sustainable logistics.
- Awareness creation is needed to get the masses to deposit their waste with the right collector. However, there needs to be proper systems and planning to support this. Collectors need to have proper storage and transportation systems and handlers must have the capacity to handle all the e-waste collected as responsibly as they would with lower volumes
- There currently lack a proper, universal coding system for electronics to enable accountability and track and trace procedures. A clear data repository, possibly by KRA, KeBS or NEMA can help measure, track and set goals, priorities on e-waste action.

Measuring e-waste is an important step towards addressing the e-waste challenge. Statistics help to evaluate developments over time, set and assess targets, and identify best practices of policies. Better e-waste data will help to minimize its generation, prevent illegal dumping and emissions, promote recycling, and create jobs in the reuse, refurbishment, and recycling sectors.

(The International Telecommunication Union)



3. Reduce / Reuse / Repair / Refurbish / Recycle

In an ever evolving e-world, charged with greater demand for electronics and the latest for that matter, the first line of defense for the sake of people and planet health is to reduce consumption; only viable when products are designed to last, resilient to be repaired and thereafter to be refurbished and easily dismantled.

Reduce

- Consumer awareness – think twice before buying new electronics; think about repairing before replacing

Reuse

- New markets for re-used electronics can be identified and trusted collection and distribution value chains established for such to ensure volumes and consistency in supplies
- Electric and Electronic Equipment (EEE) donations from developed countries should be closely monitored to avoid the shipping in of goods that are almost obsolete.

Repair / Refurbish

- Consumers need to trust that repaired/refurbished products are still quality products – education is a factor but the industry needs to set standards and procedures to ensure quality and safe repaired / refurbished products
- Facilities must have the technical capacity to repair and refurbish correctly and this requires partnerships for trainings, especially with international distributors.
- The repair/refurbish industry should set standards for producers on the ease of parts replacement, upgradability and ease of dismantling products without destroying them.

Recycle

- Recycling E-waste is very resource intensive. Therefore, E-Waste handlers need more financial and technical incentives and support by the government, academia and other industries to drive impact.



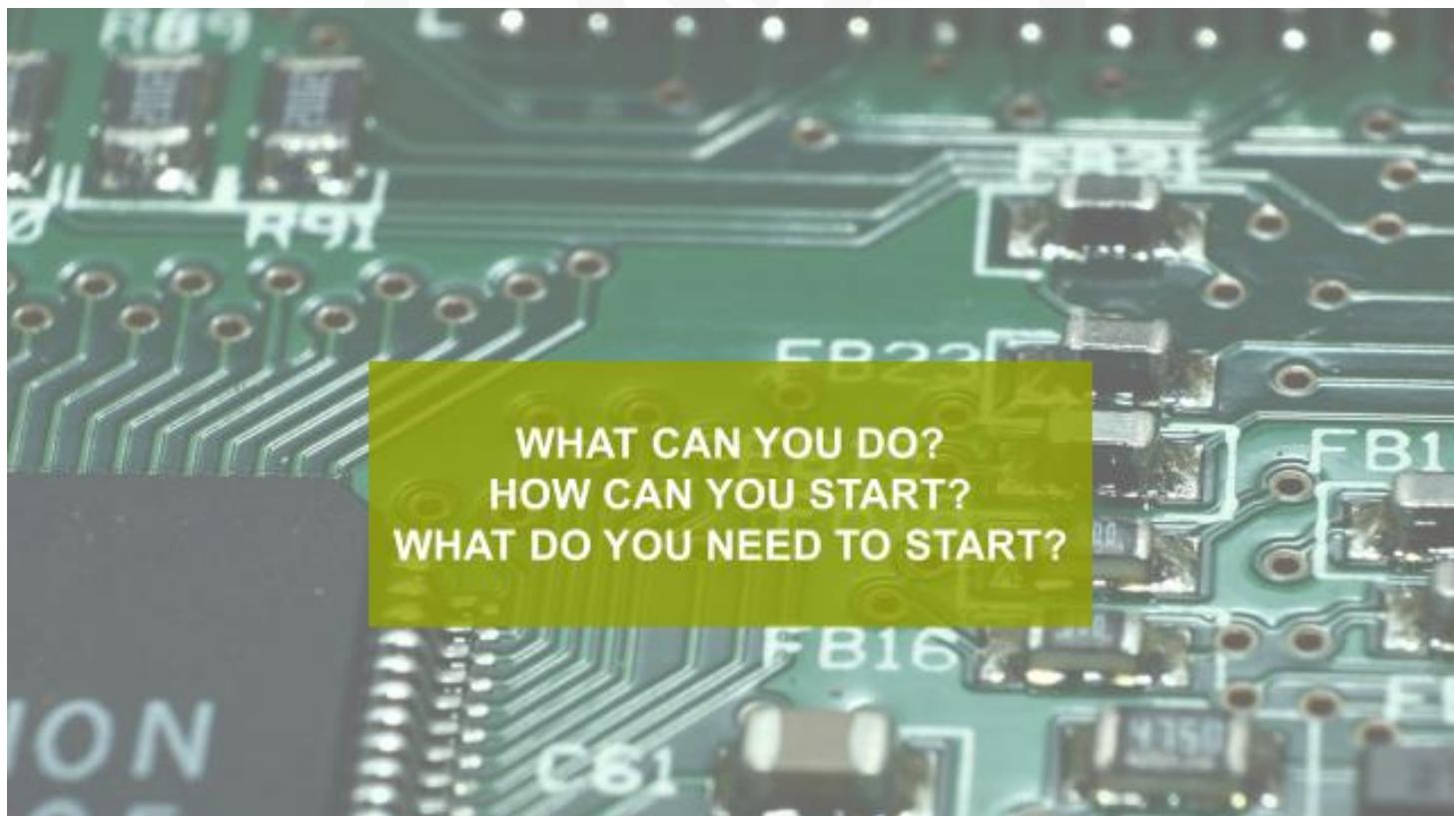
- Proper disposal of personal information in devices and toxic material is crucial and these are standard ad procedures that can only be set by industry experts

4. Extended Producer Responsibility

In the long run, an Extended Producer Responsibility for E-waste can be set up. This is an important step to take and is all about closing the loop and can only be fruitful through partnerships.

An EPR has the possibility to be the earning model for collection and proper handling of E-Waste and the finances can be used for proper research, innovation and capacity enhancement.

Collectively, the industry in Kenya can start by placing a demand for takeback from producers, in order to remove existing e-waste from the environment.



Designing ambition, actions and next steps

Knowledge Sharing: Sustainable Inclusive Business Kenya will continuously share knowledge/updates and facilitate partnerships and dialogue. The website will also have a sector specific platform to interact on the same.

Sector Mapping: It is imperative to map existing efforts in the industry, in order to have a clear baseline that will inform urgent impact areas and future goals.

Industry voice: Creating an action group to be the voice of the sector. This will be done by first having a platform on the SIB-KEPSA website to share updates and insights as they occur; and possibly having E-Waste subsector board under KEPSA Environment Sector Board.

Coding, Labeling & EPR Design: Start on concepts and action plans with one producer on labelling and an EPR outline, with the help of two academic institutions.

Zero rating of solar products: Follow up with the support of KEPSA, meet the national treasury and ministry of Energy and Extractives to advice on requirements and steps.

E-waste day: Use the E-Waste day to create awareness and momentum with academia and county governments. This day can also be used as the E-Waste flea market (repair, resell and collect)

Informal actors: In the action group, find ways to create synergies with the informal sector and other industry associations like residence & investment associations to explore collection and distribution systems.

Collection: Using high traffic areas to create awareness and have drop off stations coupled with education and incentive. Safaricom Limited is already active in this way and supermarkets are a possibility, with the help of the Retailers Association of Kenya. Geomapping tools used by telecommunication companies can be used to track e-waste, working with the coding and labelling systems and using USSD blast messaging to create awareness.



Academia: Colleges and universities to engage students on research and campaign level, creating ambassadorial programs and trainings to bridging the gap between industry and academia.

In the long run:

- Redesigning products in order to extend their lifespan through remanufacturing/refurbishing and repair while recycling those that are beyond their life span is crucial and should be promoted and raised awareness around.
- There is need for research and factual data on E-waste to facilitate sustainable e-waste management, inclusive through an EPR Scheme where the collected funds will be geared towards research. Capacity building from academia level, will be achieved if 3-4% of the National budget is allocated to the Environment and channelled to environmental issues.
- There is a need for dematerializing the electronics industry. The rise of device-as-a-service business models could be one avenue. This is an extension of leasing models, in which consumers are able to access the latest technology without high up-front costs. With new ownership models, the manufacturer incentivize to ensure all resources are used optimally over a device's lifecycle.
- The Circular economy model will improve the quality of products. This sustainable business model does not guarantee profits always, but creates positive impact on people and planet which is also mandatory for future proof businesses. Clear communication about products e.g. the recyclability of your product, should be embraced by all producers.



Private Sector tackling E-waste in Kenya:

- **The WEEE Centre** provides E-waste collection, dismantling and automated processing services in Nairobi and in other major cities in Kenya. The valuable materials are sold to local recycling facilities. Its partnership with international partners enables the shipping of hazardous and non-valuable e-waste fractions to international recyclers and smelters.
- **Safaricom Limited** actively participates in collection of used phones and other e-waste and safe disposal of the same. It has partnered with local institutions such as the WEE Centre to receive the collected waste for dismantling and further processing. Safaricom has invested heavily in raising public awareness and runs collection drives to ensure safe disposal of electronic gadgets.
- **Sintmund Group** is a licensed company operating advanced recycling facility for ewaste such as bulbs, batteries, fridges, freezers, cartridges, computers among others.
- **Sinomet Kenya Limited** is a company specializing in waste transportation, treatment/disposal and trans-boundary movement of waste with special emphasis on Ewaste.
- **E-waste Initiative Kenya (Ewik)** is a Kenyan based NGO dealing with electronic waste management specifically in the informal sector, providing a safe disposal option across the country through their networks.
- **Enviroserve Kenya** provides responsible, environmentally friendly and accredited electronic waste recycling services. Enviroserve Kenya is part of the global Enviroserve Group which is focused on electronic waste (e-waste) recycling.
- **Recyckla International** is an end-of-life electronic waste management company that allows consumers to dispose their electronics in a sustainable way





LET'S CHANGE, WORK TOGETHER



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