Country Report - Kenya

International Workshop Series on E-waste Statistics

Nairobi, Kenya

April 22nd - April 24th, 2025

As part of the European Commission funded project on *Enhancing countries' capacity for measuring progress on the transition towards a circular economy, 2024-2026*

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1. Introduction

Background

The 2030 Agenda for Sustainable Development, adopted by the United Nations (UN) in 2015, has brought with it the need for enhanced monitoring of the environmental dimensions of development. The UN Environment Assembly adopted Resolution 5/11 (2022) on 'Enhancing circular economy as a contribution to achieving sustainable consumption and production' invites UN Member States to integrate circular economy approaches into national and regional strategies and action plans.

The United Nations Environment Programme (UNEP) project *Enhancing countries' capacities for measuring progress on the transition towards a circular economy* (running between 2024 and 2026)[1], takes a multi-level approach to building global capacity around data and statistics on the circular economy, with a focus on:

1. Developing and strengthening statistical methodologies at the global level such as through the preparation of the third edition *of* the global *E-waste Statistics Guidelines*;
2. Supporting regional capacity building and dialogue between data users and producers; and
3. Enhancing, through tailored national activities, the technical capabilities of country-level institutions to regularly publish datasets on the circular economy and waste.

These activities are intended to support improved global monitoring of progress against the Sustainable Development Goals (SDGs) and evidence-based policymaking at the national level. Funds for the project originate from the European Union.

International Workshop Series on E-waste Statistics

Electronic waste (e-waste) is a rapidly growing waste stream across many countries. As part of the UNEP project *Enhancing countries' capacities for measuring progress on the transition towards a circular economy*, the objective of the 2025 *International Workshop Series on E-waste Statistics* is to support relevant authorities across selected countries including Kenya, in developing the technical knowledge and capacities to regularly collect and publish statistics on e-waste.

The target audience for the workshop series is representatives from country National Statistical Offices (NSOs) and ministries involved in the production of statistics on the environment (e.g., Environment, Industry and Economy), particularly those relating to resources and waste. Through the workshop series, participants are intended to be equipped with the knowledge and capabilities to:

- Describe key concepts relating to monitoring e-waste and its relevance as part of tracking progress against the SDGs, particularly SDG 11.6.1, the proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities, SDG 12.4.2a on Hazardous waste generated per capita, SDG 12.4.2b on the proportion of hazardous waste treated, by type of treatment, and SDG 12.5.1 on national recycling rate, tons of material recycled;
- Explain how selected waste indicators are calculated alongside relevant data sources, and be able to use United Nations Institute for Training and Research (UNITAR) tools to produce statistics on e-waste; and

[1] A summary of the project and its activities can be found here.

- Tackle challenges countries may be facing in compiling statistics on e-waste and actions and strategies that can be taken to address them as part of a national statistics implementation plan.

In addition, and in collaboration with a hired national consultant, an output of the workshop held in Kenya is the joint production of a *National E-waste Monitor* for Kenya. This will capture statistical outputs of the training workshops and engagement and help benchmark national performance.

2. General workshop information

The assistance provided to Kenya has multiple components: (a) prerequisite online self-paced courses prior to the in-person workshop, , (b) an in-person three day workshop held in Nairobi, and (c) follow-up engagement to support national statistics producers. The in-person workshop component of the training was held at the Sarova Stanley hotel in Nairobi, Kenya, between 22-24 April 2025. The training was delivered by experts on e-waste from UNITAR, with additional presentations and sessions from UNEP and public and private organisations in Kenya.

The in-person workshop was attended by approximately 15 participants (35% of attendees were female and 65% were male), including representatives from the NSO Kenya National Bureau of Statistics (KNBS), National Treasury – State Department for Economic Planning, National Environment Management Authority (NEMA), ICT Authority of Kenya, Communications Authority of Kenya, and the WEEE Centre.

The sessions making up the workshop included an overview of the e-waste challenge, an introduction to the UNITAR/UNU E-waste Statistics Guidelines and resources to support measurement, discussions on national data needs and challenges in statistics production in Kenya, hands-on computer-based training on producing e-waste statistics, and sessions covering the creation of a national statistics implementation plan. Materials were shared with participants during the training, including Excel tools, presentations and other training-related materials. The training focused on methods for compiling statistics on the following areas:

- Electrical and Electronic Equipment (EEE) placed on the market (POM);
- E-waste generated;
- Environmentally sound management (ESM) of e-waste (formal collection and treatment);
- Other e-waste disposal; and
- Transboundary movement of used EEE and e-waste.

The in-person workshop incorporated presentations that were followed by Q&A sessions, in addition to group exercises. The workshop is currently being followed by 10 days of remote training and engagement as national officers progress in further developing statistics on e-waste, reporting on relevant SDG indicators, and as part of jointly producing a National E-waste Monitor.

3. Key observations and recommendations

As of 2022, Kenya ties with Ethiopia as having the highest level of e-waste generation in the East African region (Baldé *et al.* 2024). The Kenyan government have sought to tackle the

growing e-waste challenge via a number of regulations, including the National E-waste Guidelines (2010), the EPR Regulations Bill (2021), and Sustainable Waste Management (Extended Producer Responsibility) Regulations (2024). A regular and accurate, supply of data covering the electronics life-cycle, and in particular e-waste, has become increasingly sought after in Kenya to support policy-making.

As well as presentations on the challenges associated with e-waste and ways to calculate related indicators, the workshop provided an opportunity to hear from a breadth of government agencies and institutions in Kenya, including KNBS, the Communications Authority, ICT Authority, NEMA, as well as private organisations such as the WEEE Centre, regarding e-waste management and (priorities for) quantification in Kenya, as well as their respective roles in the landscape.

As part of regional activities organised alongside the East African Communications Organization, several representatives from KNBS have previously undertaken UNU/UNITAR training on producing e-waste statistics. Kenya has submitted data on e-waste generation to the United Nations Statistics Division (UNSD) in the past (for 2017) (UNSD, 2024). In its National 2025 Economic Survey, KNBS also presented statistics on e-waste generated nationally up to 2024 which have been calculated using previously shared UNITAR tools (KNBS, 2025).

These areas of progress reflect the impact of previous trainings, though there remain areas of improvement in the completeness of some of the indicators calculated (e.g., Photovoltaic Panels), while additional indicators such as e-waste recycled and the e-waste recycling rate are of growing demand in Kenya and not yet quantified. These offered particular areas of focus for technical support as part of the workshop, and opportunity for further capacity-building in follow-up engagement.

The majority of indicators covered during the workshop were rated as high priority to (continue to) populate by participants, but in particular, the formal collection and treatment of e-waste. There have been ongoing conversation with KNBS and NEMA since the workshop to help identify suitable routes for data collection on e-waste management in Kenya, including data generated under the EPR scheme or alternatively, a survey. Continued support in using the toolkits for the measurement of e-waste indicators has been requested and will be met through post-workshop engagement.

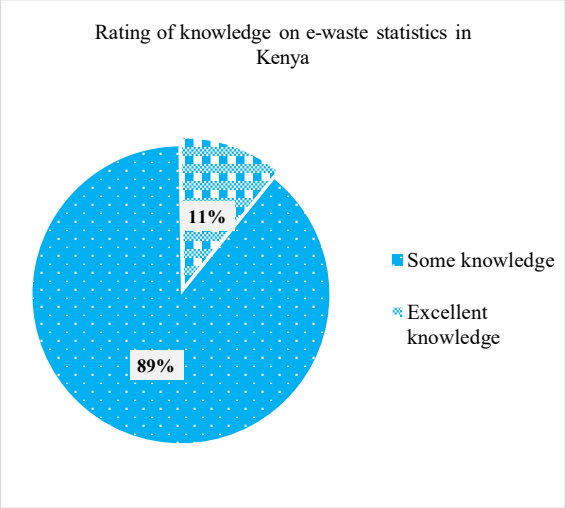
The production of a National E-waste Monitor for Kenya is underway, planned to involve workshop participants brought together to capture the state of the art on e-waste management and quantification in Kenya, and devise paths forward for continued monitoring and reporting in this area going forward.

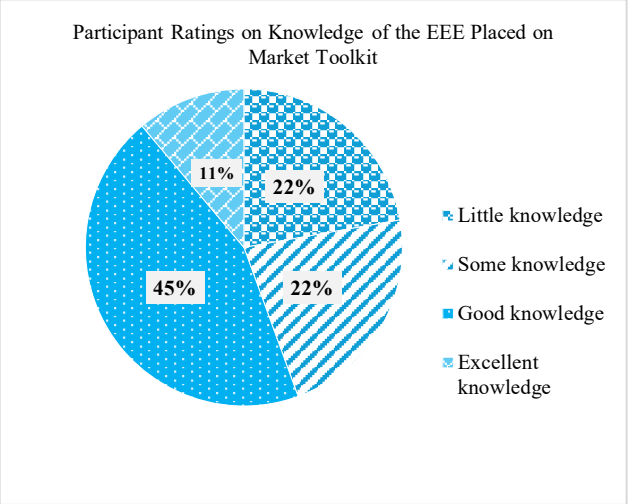
4. Workshop evaluation

The post-workshop survey provided valuable insights into participants' backgrounds, knowledge levels, and overall experiences of the workshop. Out of the 17 workshop participants, 9 (53%) completed the post-workshop survey, of which 33 % were females and 67 % were male. Of the participants who completed the post-workshop survey, 67% were affiliated with government ministry or agency, followed by 22% from KNBS and 11% from an e-waste recycling facility.

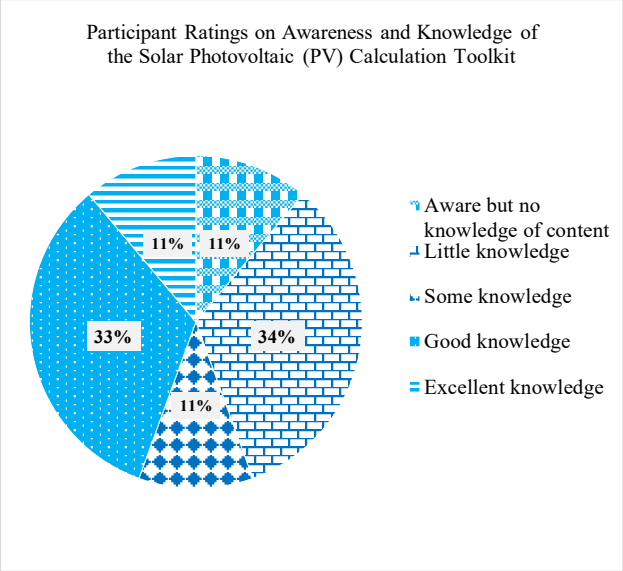
Following the workshop, participants rated their knowledge of e-waste statistics in Kenya, with 89% indicating they had some knowledge, 11% reporting excellent knowledge, and none

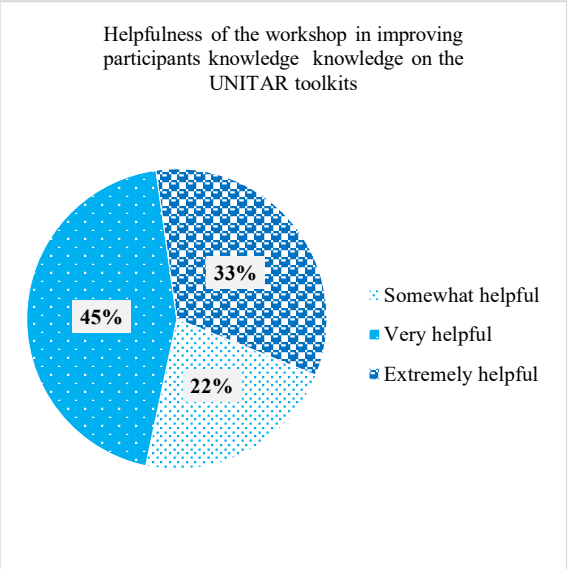
indicating little or no knowledge. Awareness of the toolkit for calculating Electrical and Electronic Equipment (EEE) placed on the market (POM) also improved, with 11% of participants reporting excellent knowledge, 44% indicating good knowledge, 22% indicating some knowledge, and another 22% indicating little knowledge.





For the Solar Photovoltaic (PV) panel toolkit, 11% of the respondents rated they had excellent knowledge on the tool, 33% indicated having good knowledge, 11% indicated having some knowledge, 34% indicated they had little knowledge, and 11% were aware but had no knowledge of the contents covered in the toolkit. Regarding the helpfulness of the workshop in improving participants knowledge of using the toolkits for the calculation of EEE place in the market (POM), Solar photovoltaic (PV) panels POM and e-waste generated, 22% found the workshop somewhat helpful, 33% rated it was extremely helpful, and 45% found it extremely helpful.

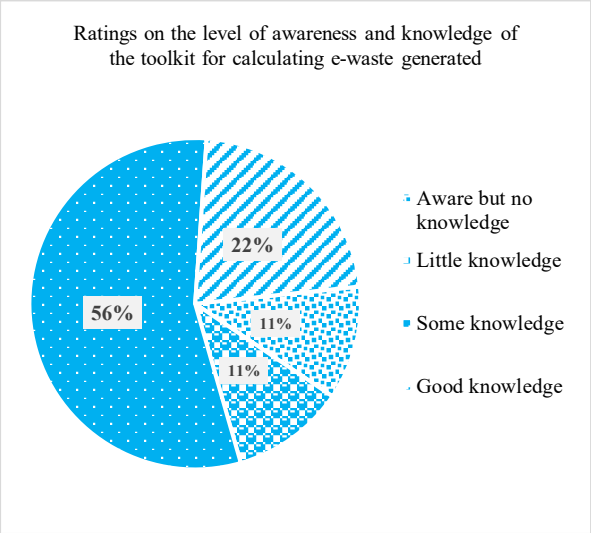


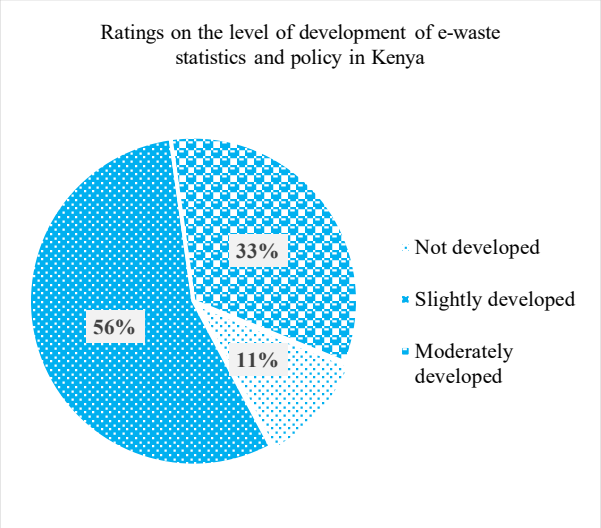


Regarding the toolkit for calculating e-waste generated, 22% of respondents reported having good knowledge, 56% had some knowledge, 11% had little knowledge, and 11% were aware of the toolkit but had no knowledge of how to use it.

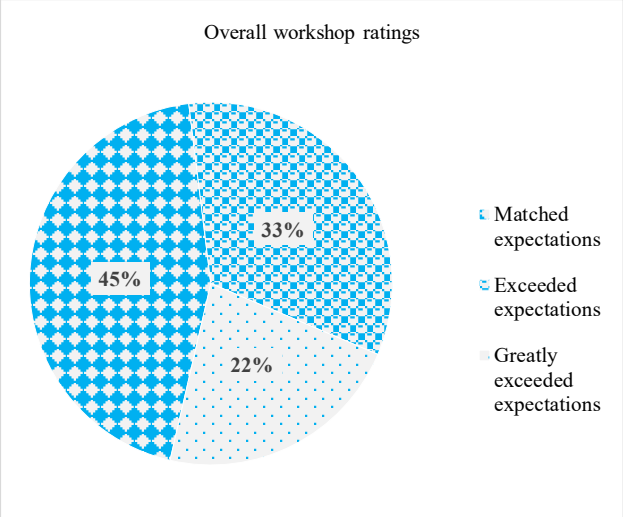
On the level of development of e-waste statistics and policy in Kenya, 33% felt it was moderately developed, 56% indicated slightly developed, and 11% indicated not developed.

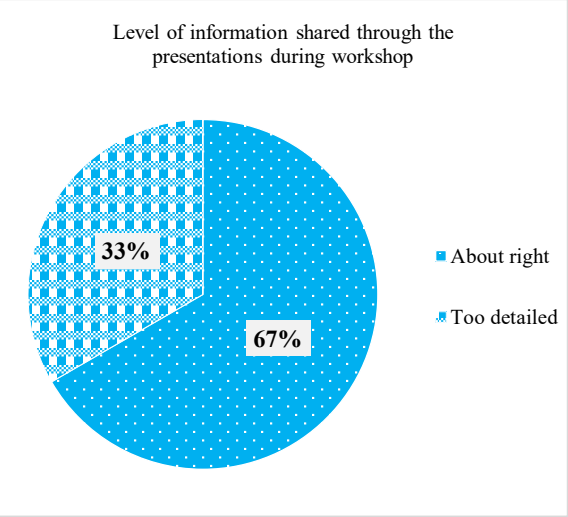
As for the level of demand for official statistics on e-waste in Kenya, 22% indicated very high demand, 67% indicated a high demand and 11% indicated moderate demand.





In terms of overall workshop experience, 44% of participants indicated the workshop met their expectations, 33% indicated the workshop exceeded their expectation, and 22% indicated that the workshop greatly exceeded their expectation. Additionally, 22% found the workshop somewhat helpful in improving their understanding of UNITAR toolkits, 44% found it very helpful, and 33% found it extremely helpful. Lastly, 67% of participants considered that the level of information shared through the presentation in the workshop was about right, while 33% considered it too detailed.





The survey results suggest that future engagements and workshops can build on this foundation by reinforcing the various toolkits developed by UNITAR, particularly in areas where participants showed more limited understanding. This continued focus will support ongoing improvement in e-waste data collection and analysis, and contribute to the development of a National E-waste Monitor for Kenya.

5. Workshop documentation

List of participants

Name	Organization	Email
1. Cornelis Balde	UNITAR	balde@unitar.org
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Agenda

DAY 1: 22nd April 2025		
Time	**Agenda item**	**Speaker(s)/Facilitators**
Session 1.1 – Welcome and opening presentation		
09:00 – 10:00	**Welcome remarks** - Overview of the United Nations Environment Programme (UNEP) project 'Enhancing countries' capacities for measuring progress on the transition towards a circular economy' - Objectives of the 2025 International Workshop Series on E-waste Statistics and outline of the workshop agenda - Introduction to participants o 1 minute introduction per person o Ice breaker: speak to at least two people you have not met before	Therese El Gemayel (UNEP) Kees Baldé (UNITAR)
10:00– 10:45	**Presentation: Introduction to e-waste as a global and national challenge and its relation to the SDGs** – Overview of challenges related to e-waste and global and regional trends – Links to the 2030 Agenda for Sustainable Development goals and indicators	Kees Baldé (UNITAR)
10:45– 11:00	**Refreshment Break**	
Session 1.2 – 1st day country presentations		
11:00 – 12:30	**Country presentations covering:** – The status of national e-waste legislation/regulation	Linah Ngumba (KNBS)

	– National e-waste statistics production – Issues relating to the management and measurement of e-waste in Kenya	Maureen Ratemo (NEMA) Juma Ooro (Communications Authority)
12:30 – 13:30	**Lunch break**	
Session 1.3 – E-waste statistics as an input to policy making		
13:30-14:30	**E-waste statistics as an input to policy making** – Policy and regulation for the circular economy – Data needs associate with policy on e-waste – Pathways to integrate e-waste statistics into national analysis and decision making and data generation opportunities	Oliver Lysaght (UNITAR)
14:30-15:30	**Presentation: The general principles of e-waste statistics** - Overview of the *E-waste Statistics Guidelines* - Classifying EEE goods and e-waste - The e-waste measurement framework and mass-balance principle - Data sources to populate the measurement framework - Indicators to report against - UNITAR datasets and wider resources	Oliver Lysaght (UNITAR)
15:30-16:00	**Day 1 closing remarks & group photo** - Questions: o What would benefit from further explanation? o What are you looking forward to in the content of Day 2/Day 3 – are there any gaps you would like to see filled?	UNITAR, Country representatives
16:00	**End of Day 1 and refreshments**	
Day 2: 23rd April 2025		
Time	**Activity**	**Speaker(s)**
Session 2.1 – Overview of UNITAR tools to support the production of e-waste statistics		
09:00 - 09:30	**Presentation: Overview on how to use the UNITAR statistical toolkits and available core data sets as part of country-level measurement** – Overview of: o Toolkit for the calculation of EEE POM o Toolkit for the calculation of EEE POM of solar photovoltaic (PV) panels o Toolkit for the calculation of e-waste generated	Oliver Lysaght (UNITAR)
Session 2.2 – Applied computer session on calculating electrical and electronic equipment (EEE) placed on the market (POM)		
09:30 – 10:45	**Applied computer session on:** – Calculating EEE POM of PV panels using the UNITAR PV panel toolkit – computer session – Deep dive on different sources of data on EEE POM – the apparent consumption method and national registers	Oliver Lysaght (UNITAR)
10:45 – 11:00	**Refreshment Break**	
Session 2.3 – Applied computer session on calculating e-waste generated and EEE stocks		

11:00-12:30	**Applied computer session:** – Calculating e-waste generated using the UNITAR e-waste generated (WG) toolkit and altering inputs e.g. EEE lifespans to match country data – Extending the framework to account for the material composition of e-waste	Oliver Lysaght (UNITAR)
12:30-13:30	**Lunch break**	
13:30-15:00	**Presentation on potential data sources and calculation steps for:** – Tracking formal e-waste collection and informal collection o Discussion 1 – Focus formal collection o Discussion 2 – Focus on other recycling – Producing a mass-balance of the EEE/e-waste system	UNITAR
15:00-15:30	**Day 2 closing remarks**	UNITAR, Country representatives
15:30	**End of Day 2**	
Day 3: 24th April 2025		
Time	**Activity**	**Speaker(s)**
Session 3.1 – Measuring the transboundary movement of e-waste and UEEE		
09:00-10:15	**Presentation and discussion on possible data sources and stakeholder mapping:** – What we know about the transboundary movement of e-waste and used EEE in Kenya – Routes to collect and share data on transboundary movements on an ongoing basis (Basel Reporting, Trade Statistics) – Group discussion	Kees Baldé, UNITAR
10:15– 10:45	**Refreshment Break**	
Session 3.2 – Developing a national statistics implementation plan		
10:45-12:30	**Developing a national e-waste statistics implementation plan/roadmap** – Mapping stakeholders and data holders, including areas of potential collaboration – Roadmap for compiling e-waste statistics on an ongoing basis	Country representatives, UNITAR
12:30-13:30	**Lunch break**	
Session 3.3 – Planning for post-workshop training and national e-waste monitor		
13:30-15:00	**Discussion on desired areas of focus for follow-up training and planning the production of the Kenya National E-waste Monitor** – Discussion on areas for follow-up after training – Discussion on the status of the National E-waste Monitor and drafting plans	Country representatives, UNITAR
15:00-16:00	**5. Closing session** – Workshop summary – Final remarks	Country representatives, UNITAR
16:00	**End of Day 3 and the workshop**	

Photos