

Speakers



Prof. Michael Okoh
Environmental Specialist
Nigeria Electrification Project,
(REA, - NEP)



Greyson Metili
Head of Africa Operations
Engie Energy Access



Charles Mugabo
Environment and Climate
Change Expert, Rwanda



Chibuikem Agbaegbu
Country Manager, Nigeria
Africa Clean Energy Technical
Assistance Facility

WEBINAR

Government and private sector
collaboration for **effective**
management of solar e-waste

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Moderator
Collin Gumbu

Country Manager, Tanzania and
Rwanda, Africa Clean Energy
Technical Assistance Facility.



**Government and private sector collaboration for
effective management of solar e-waste**



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Content

1. **Background**
2. **Methodology**
3. **The Rwanda E-Waste Management Landscape**
4. **Challenges**
5. **Recommendations**
6. **Best Practices**
7. **Nigeria Experience**



Background



Rwanda's e-waste estimated at 12.4 tonnes in 2020 up from 8.8 tonnes in 2014 fueled by increased demand for electronics.



Sanitation Policy in Dec 2016 (incorporates E-Waste Policy).
Regulation Governing E-waste passed in April 2018.



E-waste dismantling and recycling facility established in Jan 2018 through a private public partnership between the GoR and Enviroserve Rwanda in Bugesera Industrial Park.



Methodology



ACE TAF initiated a study to document Rwanda's experience in implementing e-waste policy and regulations with a focus on SAS.

- *Literature review:* previous study reports relevant to e-waste management, policies and regulations.
- *Consultations:* interviews with government institutions, development partners, financial institutions, private sector (including the industry association), and individual experts.
- *Field visits:* Enviroserve and five collection points in and out of Kigali.
- *Data analysis:* Quantitative and qualitative data collected



Rwanda e-waste management landscape



Public Private Partnership

- MINICOM engaged a private partner to establish, manage and operate e-waste dismantling facility.
- GoR owns the facility through MINICOM. Enviroserve runs the facility on a 10-year renewable lease
- The PPP is based on a revenue sharing model between GoR and Enviroserve.
- The role of Enviroserve includes establishment of collection centres, and expanding the facility by introducing new machinery and equipment

Collection and Recycling

- Dismantling and recycling infrastructure in Bugesera District
- 19 collection points
- Target - 30 centres by the end of 2021 (one in each district and at border posts).



Challenges



- **Limited public awareness** of sustainable management of end-of-life electrical and electronic waste.
- **Financial and human resources constraints:** Few collection points, inadequate transport, high cost of collection, few trained technicians
- **Enforcement of e-waste regulatory framework in the country:** Several government agencies involved in e-waste management, increasing the risk of overlapping activities
- **Suboptimal utilization of the recycling and dismantling plant:** The facility operates at 30% of capacity. No capacity to process lithium-ion batteries.



Recommendations

Government and private sector: Joint efforts to engage and build relationships with local communities to enhance takeback schemes.

Government: Follow up to ensure SAS companies have EMPs in place that cover e-waste.

SAS companies:

- Maintain proper records of their inventory to help them make projections of e-waste generation and associated costs.
- Establish voluntary e-waste drop-off points at their shops to improve e-waste collection.
- Undertake refurbishment and reuse of their e-waste before deciding to recycle.
- Stay up to date with legal developments and comply with them

Recyclers:

- Develop incentives for SAS companies to reduce disposal costs and motivate them to take the e-waste to the recycling plants.
- The recycling and dismantling facilities should have a dedicated line for processing batteries



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Best Practices

Public private partnership has been key to the success seen in Rwanda. The binding commitments of the GoR and Enviroserve has fostered ownership and sustainability.

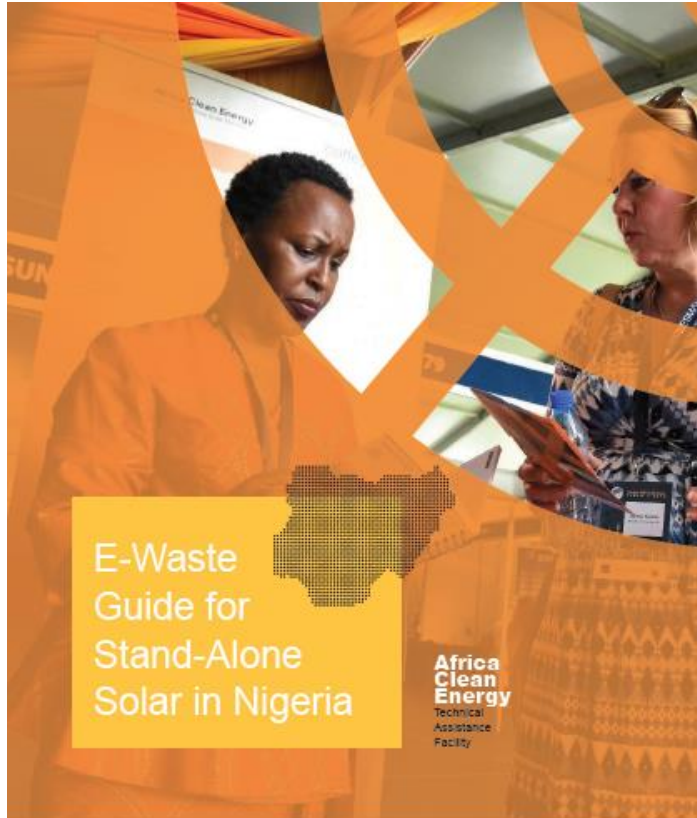
Coordination and inclusion - involve everyone the entire supply chain (regulators, policymakers, producers, retailers, importers, collectors, dismantlers, transporters, consumers and recyclers) to achieve sustainable e-waste management.

Baseline data informs the infrastructure needed for sustainable e-waste management. Rwanda's baseline study revealed the country generates 10,000 -15,000 tonnes of e-waste per year.

Multi-platform messaging and communication, including social media should be adopted to improve the awareness level. RURA, Enviroserve, GIZ Eco-Employ Programme and REMA have been involved in a joint nationwide awareness campaign.



Nigeria E-Waste SAS Support – Background



Rationale

- Need for proactive e-waste practices for the growing OGS sector in Nigeria
- Most OGS companies have little or no knowledge of existing national regulations on e-waste. Management and disposal practices vary - export, partnership with e-waste recyclers, and returning EoL products to OEMs
- Limited understanding of the OGS sector and its e-waste stream by key government environmental institutions

Intervention

- Collaboration with the National Environmental Standards and Regulations Enforcement Agency (NESREA) and support from the Ministry of Environment to develop an **E-Waste Guidance document for the sector**
- Provides guidance to the government and private sector on managing SAS e-waste in line with the national e-waste regulatory framework and serve as a standard e-waste reference document for the sector
- Three focal areas - Legislation/Regulatory Framework, Sector Experience, Guidance & Recommendations

Nigeria E-Waste SAS Support – Key Findings



Legislation

- 4 national legislation on waste management
- 4 national legislation on e-waste
- 2 national legislation on battery waste
- 3 international conventions on hazardous waste

Ongoing Initiatives and Projects

- Global Environment Facility support to NESREA
- Global LEAP Awards – Nigeria beneficiary
- Activities of the Industry Association, (Self-Regulation) and the Producer Responsibility Organisations (PROs)

Sector Practice

- Few licensed e-waste recyclers that can handle OGS e-waste. High number of informal battery recyclers – unsafe and environmentally unfriendly practices
- Government and private sector coordination can be improved

Nigeria E-Waste SAS Support – Recommendations



Multi-stakeholder roundtable on OGS E-Waste
– Min of Env, NESREA, REA, PROs, REAN



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For Solar Companies

- Development of a Standard Operating Procedure for SAS in line with the regulatory requirements. Template provided in E-Waste Guide.
- Create an industry led initiative that pilots improved take-back, collection and treatment, and develops a more efficient and cost-effective framework that can be formalised into a PRO.
- PRO could be achieved through EPRON, the Battery Alliance, the industry association, all three, or an external third party

For Government

- Need for a multi-stakeholder coordination mechanism on e-waste for the sector, primarily led by REA and NESREA
- Policy and regulatory coordination for the sector (recommendations provided to NESREA and adopted)
- Incentives and technical support given its infancy and impact, and attract private sector investment

The REA plays an active role in ensuring effective e-waste management for OGS across its programmes and projects.



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Thank You!



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Panel Discussion



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Question & Answer