



No. 56, Lome Crescent, Wuse Zone 7, Abuja

Request for Proposals

E-WASTE COLLECTION CENTRE CONTRACTOR

Project: MSP 10141: Circular Economy Approaches for the Electronics Sector in Nigeria
Post title: Collection Contractor
Issued on: Tuesday, 11th May, 2021
Duration of Project: June - December 2021
Duty station: Lagos

TERMS OF REFERENCE (ToR)

Background

The Global Environment Facility (GEF)-funded project "Circular Economy Approaches to the Electronics Sector in Nigeria" brings together players along the electronics value chain (from government, the private sector and civil society) to kickstart a financially self-sustaining circular economy approach for electronics in Nigeria, protecting the environment while creating safe employment for thousands of Nigerians. The project is led by the National Environmental Standards and Regulations Enforcement Agency (NESREA) in Nigeria and supported by UNEP.

The project is targeted at transforming the challenge of a growing production of electronics waste into an opportunity. It aims to promote a circular economy for electronics in Nigeria in which the electronics sector recovers and reintroduces usable materials into the value chain and disposes of hazardous waste streams in an environmentally sound manner.

This project has 4 components:

- i. implement the Extended Producers Responsibility legislation for electronics, by jointly defining a roadmap for Nigeria.
- ii. Collect 300 tonnes of e-waste through formalized collection channels that minimize environmental and health impacts.
- iii. develop a cost-effective recycling and disposal systems for various e-waste categories, achieving the target of recycling the collected 300 tonnes of e-waste.
- iv. develop regional and global knowledge exchange on circular economy model for the electronics sector.

Scope of Service

Component 2 and component 3 of the project will pilot test the collection and recycling of 300 tonnes of e-waste. This tender is to establish and upgrade a minimum of 30 collection centres/points for e-waste and ensure that the wastes are sent for treatment at formal recycling facilities.

The group of contracted collection centres are required to collect a minimum of 300 tonnes of e-waste, and improve working conditions for a minimum of 100 informal waste collectors.

300 tonnes of e-waste are expected to be collected and treated by the end of the project, with:

- 10.8 kg of precious metals (Ag, Au, Pd)
- 150 tonnes of common metals (Fe, Al, Cu)
- 90 tonnes of plastics re-entering the value chain

• 30 tonnes of CRT lead glass and 3 tonnes of other hazardous fractions (CFC contained foams, mercury, batteries, frame retardants and POPs containing plastics) are safely stored or treated by Environmentally Sound Management (ESM) facilities



collect 3 tonnes of plastics contaminated with HexaHeptabromodiphenyl ether

Detailed description of services and Technical Specification

1. Establish and/or upgrade physical collection centre infrastructure

- 1.1 Diversify the collection channels by collecting from more than one source, such as collection through municipality, B2B channels, collection points in cities and retailers, and informal sector etc.
- 1.2 Meet the following regulatory requirements as stipulated in the EPR Guidance issued in October 2020 by the Nigerian government1: Register with EPRON if this is not yet done when the contract is signed (as requested in section 1.6 on e-waste collectors of the EPR Guidance)
- 1.3 Meet the following physical requirements as stipulated in the EPR Guidance issued in October 2020 by the Nigerian government (section 2.2 on Physical Requirements for Collection and Recycling Centres):
 - (i) Premises with sufficient space, access control and appropriate anti-theft measures;
 - (ii) Sufficient space dedicated for e-waste storage and having the following features:
 - a) adequate covering to ensure that e-waste is not exposed to rain water percolation, liquids, sunlight or any source of heat.
 - b) controlled temperature (not exceeding the ambient temperature).
 - c) adequate lighting and ventilation.
 - d) shelves properly arranged with gangways for easy movement.
 - e) impermeable floor (tiled, concretized, etc).
 - (iii) Provide fire emergency and safety equipment;
 - (iv) Provide PPE for personnel, and Safe and conducive for workers.
 - (v) Manage e-waste in a way that prevents releases of gases, liquids or solid particles from any e-waste, or component, to the environment.

2. Collect and record e-waste quantities

2.1 Collect the following product categories and set a target amount for each category to be reached under this assignment:

Category	Product types (underlined products are priority products to be collected)	Collection quantity
Category 1: Cooling and freezing equipment	Refrigerators, freezers, air conditioners, central cooling.	Total 60 tonnes
Category 2: Screens and monitors.	Televisions, monitors, laptops, notebooks, and tablets	Total 110 tonnes, at least 50 tonnes of CRT TVs and monitors, and 60 tonnes of CRT TVs and monitors with mercury lamps
Category 3: Lamps	Fluorescent lamps, high intensity discharge lamps, and LED lamps.	Total 20 tonnes, at least 10 tonnes of mercury containing lamps

¹ Document for the Implementation of the Extended Producer Responsibility (EPR) Programme for Electronical/Electronics sector in Line with Circular Economy, gazatted by Federal Government of Nigeria in October 2020.



Category 4: Large equipment	Large printing machines, copying equipment, desktops and telecommunication equipment, central heating, PV panels, large IT (servers, routers, copiers), professional luminaries, tools, medical equipment.	Total 90 tonnes
Category 5: Small equipment	Microwave ovens, electrical and electronic toys, small electrical and electronic tools, irons, kitchen appliances, electric toothbrushes and hair removal devices.	Total 10 tonnes
Category 6: Small IT and telecommunication equipment	Mobile phones, pocket calculators, personal computers, printers, telephones.	Total 10 tonnes

- 2.2 No more than 50% of total weight to be collected from any single product category
- 2.3 Maximise the collection of POPs and mercury containing hazardous fractions
- 2.4 The collection centre shall complete the "E-waste Movement Form" and fix the 'E-waste Movement tag' on the consignment clearly indicating the date, material type and quantity. The tag consists of a sticker that adheres to the electronic material with a duplicate tear off copy
- 2.5 Keep detailed records of the amount collected from per collection source and per product category, describing the collection performance and cost indication, and submit the record every 4 weeks.
- 2.6 The collection centre:
 - (i) shall not dispose any negative value fractions of e-waste
 - (ii) shall NEVER burn either complete or part of any e-waste component (which may be of no value for recycling)
 - (iii) Shall not engage in any treatment activities of e-waste (such as dismantling) under this tender
- 2.7 All staff shall receive appropriate training provided by NESREA, EPRON, LAWMA, LASEPA and other competent institutions.
- 2.8 The following collection and storage requirements should be followed:

The collection centre

- (iv) Shall not mix e-waste with any other non e-waste streams
- (v) Shall store separately
 - a) Category 1: Cooling and freezing equipment
 - b)Category 2: Screens and monitors.
 - c)Category 3: Lamps
 - d)Category 4: Large equipment
 - e) Category 5: Small equipment
 - f) Category 6: Small IT and telecommunication equipment
- (vi) Lamps shall be handled and stored using specific PPE and containers that will avoid breakage of the lamps and release of Hg.
- (vii) Containers storing lamps shall be cleaned before re-use.
- (viii) Lamps shall not be stored in open, warm areas.
- (ix) TV sets, including CRT and FPD must be handled with care and stored in a stable manner to avoid damages of the equipment and injuries to workers. The risk of implosion of CRTs must be considered.
- (x) Large equipment can be stored in bulk, however handling and storage of temperature exchange equipment shall not damage the refrigerating circuit nor compress the cabinet, as both practices may release ozone depleting substances to the environment.
- (xi) Uncontrolled tipping is not allowed when handling and unloading of e-waste, specially for screens, large equipment and lamps.
- (xii)The risk of fires caused by Lithium ion batteries in IT equipment shall be considered in the emergency plan.



3 Recruit and train informal workers and women

Collect at least 30% of the total amount by collaborating with the informal collectors and ensure those informal collectors register with the collection centre. It is encouraged to use digital and innovative tools and approaches to work with the informal collectors.

4 Transport waste to formal recyclers

4.1 Ensure that the e-waste collected under this tender will only be transported to the recyclers designated by NESREA for this tender.

4.2 Jointly with the recyclers, the collector centre should ensure that e-waste is stored and transported safely and in an environmentally sound manner to the designated recycling facilities. (for storage requirements see 2.6). The collection center shall be adequately secured and protected against unauthorized entry and theft until transported to the designated recyclers.

4.3 The collector should keep track of all e-waste transported out of their collection facility and submit the records of e-waste moved out and their destinations every 4 weeks.

4.4 The collection centre should determine when e-waste amount within their control is sufficient enough to be shipped with an agreement made with the recyclers for the delivery modality and dates.

4.5 The collection centre shall attach both portions of the completed " E-waste Movement tag' (sticker and duplicate copy) to the e-waste material prior to delivery to a Recycler or Export

4.6 The collection centre shall notify the Recycler on the same day the e-waste is weighed (should be weighed per product category) and tagged using a 'Notification Form'. The notification to Recycler will include:

- (i) The location of the e-waste for pick-up.
- (ii) The total number of items and approximate weight of each so Recycler can determine the type of equipment/vehicle needed to move the e-waste to storage.

4.7 The collection centre shall also inform the employees that the electronic materials will be picked-up by Recycler within a week of notification

4.8 If export/import of e-waste is officially allowed, it shall be carried out according to the Basel Convention and Bamako Conventions' extant regulations and any other local regulations as shall be applicable after obtaining relevant authorization from NESREA.

5 **Comply with the following code of ethics** (as requested in section 5 on code of ethics of the EPR Guidance):

- 5.7 Ensure gender is mainstreamed;
- 5.8 Child labour shall not be used in your business;
- 5.9 The culture and tradition of the local communities shall be respected and protected in your operation;
- 5.10No action taken is detrimental to the interest, conditions or safety of the public and the environment;
- 5.11Businesses and interactions should be conducted with transparency and due diligence, and without sharp practices;
- 5.12All works undertaken are carried out in accordance with applicable standards and best practices, taking into account advancement in science and technology;
- 5.13There shall be no money laundering, illegal/illicit trans-boundary movement of wastes either by importation or exportation;
- 5.14There shall be no gangster-rism or organized criminal groups.
- 5.15Collection centre shall not act in any way that is likely to prejudice the reputation of NESREA or its functions.



- 5.16Collection centre shall co-operate fully with an enquiry carried out in the event of any alleged breach of ethics.
- 5.17Collection centre shall abide by the laws of Nigeria and adhere to this Code of Ethics.
- 5.18On no account should items collected be separated/removed for 'cherry-picking'. All collected waste products must contain all critical components such as batteries, circuit boards, compressors, screens etc.
- 6 Approve audits and check out visits from the project partners or representatives nominated by them for checking at any time the conditions of the contracted services are met.
- 7 The collection centre should commit to avail waste only to formal recyclers even after the pilot has ended.

Deliverables

- 1. Registration with EPRON if this is not yet done
- 2. The following records submitted to NESREA every 4 weeks. Templates for the monthly records will be provided.
 - a. Detailed records of the amount collected from per collection source and per product category, describing the collection performance and cost indication
 - b. Detailed record of all e-waste transported out of their collection facility to recyclers.
- 3. E-waste collected and transported to recyclers as requested in the contract, with the following requirements met
 - a. No more than 50% of weight from a single product category
 - b. at least 30% of the total amount from informal collectors
 - c. The quantity of collected waste meets the amount in the contract
 - d. The quality of collected waste is good for recycling
 - e. All collection, storage and transportation requirements listed in the Detailed description of services section
- 4. Registration document with informal collectors showing between 10 -15 informal collectors.
- 5. A detailed final report submitted to NESREA which lists the collection approaches, experience, cost and performance. Template of the final report will be provided.

Technical Evaluation

The above duties and specifications will be evaluated by a Technical Evaluation Panel according to the following scheme of mandatory and point scale criteria.

Technical Evaluation Criteria	Evidence to be submitted	Criterion
Mandatory criteria		Pass / Fail
Registered with LASEPA/ LAWMA/NESREA	Registration number and document with LASEPA/ LAWMA/NESREA	
No more than 50% from a single product category	Proposal	
Collect at least 30% of the total amount from informal collectors	Proposal	
Point Scale Criteria		Max points (100 in total)



Technical Evaluation Criteria	Evidence to be submitted	Criterion
Mandatory criteria		Pass / Fail
Quantity of e-waste proposed to be collected, per product category, considering cost-effectiveness and innovative collection solutions	Proposal	max 50 points
Plan on engagement with informal collectors (Collect at least 30% of the total amount from informal collectors)	Proposal	max 20 points
Plan on the collection and storage of hazardous parts of the e-waste (taking into consideration the quantity of mercury and POPs containing parts that can be collected)	Proposal and on-site check if applicable	Max 15 points
Overall quality of the proposal (whether the cost estimation is reasonable; to what extent the plan for collection is comprehensive; the quality of plan on gender mainstreaming and engagement with informal collectors, etc)	Proposal	Max 15 points

How to apply

Please submit the application form in the Annex1 (Application form) to The DG/CEO, National Environmental Standards and Regulations Enforcement Agency (NESREA), No. 56 Lomé Crescent, Wuse Zone 7, Abuja by (25th May, 2021). Please also submit electronic version of the form to this email: ishaku.ibrahim@nesrea.gov.ng and copy <u>mirachree@yahoo.com</u> and halmohammedus2000@yahoo.com







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ANNEX 1: APPLICATION FORM

1. General information

Name of the collection centre	
Address	
Contact person, email and	
telephone number	
CAC Registration no.	
Registration number with	
LAWMA/LASEPA/NESREA	
Operation duration	
Number of personnel	
Brief summary of you existing	
collection activities of e-waste	
Have you been working with	
informal collectors already? If	
so, how many are you working	
with and what percentage does their collection account for in	
your business?	
How many female personnel do	
you have in your business? What	
are their roles?	

2. Current key collection sources and channels in your Organisation (please add rows where necessary)

	Description	Please list key product categories collected from the source, amount collected per product category per year, cost indication, and your partners and network for the collection
Collection source 1		
Collection source 2		



3. Collection proposal for this tender

(NB. If a certain product category is not collected, please indicate N.A in that row)

3a. Please first fill in the cost table on the planning of the collection pilot for the GEF project (Please indicate your cost in Naira)

You may also attach a detailed budget table to further explain all the cost

a.	Staff cost	
b.	Equipment cost (including new equipment purchasing)	
c.	Collection cost (please provide the breakdown in the table below)	
d.	Please list any other costs related to this tender	
Total c	ost	

Breakdown for the collection cost

No.	Product Types (Underlined Products Are Priority Products To Be Collected)	Target Amount To Be Collected Under This Tender (Tonnes)	Collection Cost Per Ton	Total Cost= Target Amount * Cost Per Tonne	Key Collection Sources
Category 1: Cooling and freezing equipment	Refrigerators, freezers, air conditioners, central cooling.	E.g. A Tonnes of refrigerator	E.g. B Naira per tonne per refrigerator	E.g. C Naira (=A*B)	
Category 2: Screens and monitors.	Televisions, monitors, laptops, notebooks, and tablets				
Category 3: Lamps	Fluorescent lamps, high intensity discharge lamps, and LED lamps.				
Category 4: Large equipment	Large printing machines, copying equipment, desktops and telecommunication equipment, central heating, PV panels, large IT (servers, routers, copiers),				



	professional luminaries, tools, medical equipment.		
Category 5: Small equipment	Microwave ovens, electrical and electronic toys, small electrical and electronic tools, irons, kitchen appliances, electric toothbrushes and hair removal devices.		
Category 6: Small IT and telecommunication equipment	Mobile phones, pocket calculators, personal computers, printers, telephones.		

3b. Please explain in details how you are going to successfully collect all the e-waste from stable and reliable sources. Please consider using new and innovative collection approaches that match with the market and socio-economic situation in Nigeria and in Lagos

3c. Your plan on the collection and storage of hazardous parts of the e-waste

- 4. Please provide a brief timeline with milestones of your activities (e.g. how much e-waste per category will be collected in Month 1, Month 2, etc.)
- 5. Your plan on gender mainstreaming and engagement with informal collectors

(Please describe what actions will be taken on these aspects under this tender and in the long term. Word limit: 1500)

Signed:

In the capacity of:

Duly authorised to sign the proposal on behalf of the Applicant.

Date:

