

1- Identification

1.1 Project details

GEF ID	10141	Umoja No:	SB-012761.01
Project Title	Circular Economy approaches for the electronics sector in Nigeria		
Duration months	<i>Planned</i> 30 <i>Extension</i> 31-May-23 (6)	GEF financing amount	USD 2,000,000
Division(s) Implementing the project	Economy Division, GEF Chemicals and Waste, Chemicals and Health Branch	Co-financing amount	USD 13,086,582
Name of co-implementing Agency	-	Date of CEO Endorsement	7-Mar-19
Executing Agency(ies)	National Environmental Standards and Regulations Enforcement Agency of Nigeria (NESREA)	Start of Implementation	20-May-19
Names of Other Project Partners	UNEP Resource and Market Branch	Date of first disbursement	26-Jun-19
Project Type	MSP	Total disbursement as of 30 June	USD 1,451,232
Project Scope	National	Total expenditure as of 30 June	USD 1,054,110
Region <i>(delete as appropriate)</i>	Africa	Expected Mid-Term Date	1-Jan-22
Countries	Nigeria	Completion Date	<i>Planned</i> 31-May-22 <i>Revised</i> 30-Nov-22
Programme of Work	PoW 5: Chemicals, waste and air quality	Expected Terminal Evaluation Date	30-Nov-22
GEF Focal Area(s)	Chemicals and Waste	Expected Financial Closure Date	31-May-23
EA: UNSDCF/UNDAF linkages	Outcome 9, Indicator 2 on hazardous waste management (Nigeria UNSDPF 2018-2022)		
EA: Link to relevant SDG target(s) & indicator(s)	SDG target (1.5.2) & 12 (indicators 12.4.1, 12.4.2, 12.5.1)		

1.2 Project description

Strengthen the sound management of electrical electronic waste through better control, and reduction and/or elimination. The primary objective is that Nigeria adopts a financially self-sustaining circular economy approach for electronics and reducing the release of global pollutants such as POPs etc. Component 1: Implementation of the EPR programme, Component 2: Collection of 300 tonnes of e-waste through formalized collection channels, Component 3: Development of cost effective recycling and disposal systems, Component 4: Regional and Global knowledge exchange on circular economy model.

1.3 History of project revisions (TM)

Version	Date	Main changes introduced in this revision
Rev0 (CEO ED)	7-Mar-19	
Rev1 (Agreement PCA)	20-May-19	Project Cooperation Agreement with NESREA
Rev2 (Amendment 1 - PCA)	23-May-22	PCA extension with NESREA and budget increase (budget comes from UNEP Resources and Markets Branch budget and midterm review budget from the implementing agency) to allow increased national communications and monitoring. The contract technical completion date is now November 2022, extended from May 2022, to accommodate some delays faced with procurement of the collection and recycling contracts (which are now in place).
Rev3 (Agreement IA)	24-May-19	Internal Agreement with UNEP Consumption and Production Unit/Resources and Markets Branch (C&P-Unit)
Rev4 (Amendment 1 IA)	23-Mar-22	Internal Agreement Extension; revised budget allocation and workplan

2- OVERVIEW OF PROJECT STATUS

2.1 UNEP PoW

UNEP Subprogramme(s)

Subprogramme 5: Chemicals and Pollution Action

Specify the relevant Expected Accomplishment(s) & Indicator(s)

**PoW Outcomes: 3A, 3B and 3C
PoW Outcome Indicators: ii, iii, iv, v and vi
Direct outcomes to which project contributes: 3.1, 3.5, 3.6, 3.8 and 3.13**

TM: Progress towards delivering the stated PoW

Indicator ii): The project aims to support 1 government in developing or implementing policies, strategies and mechanisms to prevent or reduce waste and ensure environmentally sound waste treatment or disposal. In Nigeria the customs import criteria now includes mandatory registration with the E-waste Producer Responsibility Organisation Nigeria (EPRON) and a mandatory requirement is also added to the EEE Regulation to supplement the technical guidance produced last year. Over 350 collectors have been trained on Nigeria's EPR legislation and have collected 40 tonnes towards the project target of 300 tonnes. Collection & Recycling Standards are being developed and a draft training manual on best practices for the informal e-waste sector has been drafted. Two recycling centres have been upgraded (incl. providing machineries, extension of building, improvement of the pick-up vehicles).

Indicator iii): The project aims to develop 1 roadmap and 1 database on producers. A national database portal that manages e-waste producer data has been established and will be handed over to EPRON. The roadmap for EPR implementation and enforcement was developed.

Indicator iv): The project aims to collect 300 tonnes of POPs and mercury containing wastes. To date, 44 tonnes of e-waste was collected.

Indicator v): The project will be working with: 150 ewaste producers registering in EPR; 5 global companies financially supporting establishment of Extended Producer Responsibility Organizations in Africa

Indicator vi): The project support progress under SDG 12.4.

2.2. GEF Core Indicators

GEF Core Indicators

Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)

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Indicative expected Results

300 metric tonnes of POPs and mercury containing wastes

TM: GEF core indicators targeted by the

Indicators	Expected value at	
	Mid-term	End-of-project
9.1 Solid and liquid POPs removed or disposed		3 tonnes PBDE
9.2: Quantity of mercury reduced		29 tonnes of CRT lead glass
9.4: Number of countries with legislation and policy implemented to control chemicals and waste		1
9.6: Quantity of POPs/Mercury containing materials and products directly avoided		300 tonnes
11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment		100 informal collectors (30% Female)

Implementation Status 2022

PIR 3

Risk

	PIR #	Rating towards outcomes (section 3.1)	Rating towards outputs (section 3.2)	Risk rating (section 3.3)
FY 2022	3rd	S	S	L
FY 2021	2nd	S	S	M
FY 2020	1st	S	MS	M

2.3 Implementation status &

EA: Summary of status
(will be uploaded to GEF Portal)

Progress: 30 collection centers are fully functional i.e have been set up to minimum standards required for waste storage, have scales to measure quantities of waste collected, laptops for proper record keeping as well as proper partitioning to ensure segregation of different waste streams. Over 200 collectors have registered with the project, well over the target of 100 and 44 tonnes of the 300 tonnes target are achieved. Two recycling centers have been upgraded. A cooperative was established to formalize the informal collectors by the Lagos State Ministry of Commerce and Cooperative. Review of EEE sector regulation to include regulation of not only used but new EEE as well and an amendment made to establish mandatory registration with EPRON. The Ministry of Justice, Nigeria Customs Service, WEEE forum, Steering committee members. On the regional component, UNEP published "Towards a Circular Economy for the Electronics Sector in Africa: Overview, Actions and Recommendations" in June 2022; and continues to deliver regional online workshops, during World Resource Forum in October 2021.

Challenges: Price being paid to collectors by the project is very low compared to what is obtainable in the market. This has the potential to hinder collection targets set for the project. Registrations with EPRON are lagging by producers and threaten the viability of the PRO. A delay in finalizing the recycling contracts has affected the project timelines but is on track to be completed by the new end date.

2.4 Co-finance

EA:Planned Co-finance

USD 13,086,582

EA: Actual to date:

USD 13,085,098.17

EA: Justify progress in terms of materialization of expected co-finance. State any relevant challenges.

The Federal Government of Nigeria including the Lagos State Government provided in kind, support for the project throughout the lifecycle and has already materialized the full expected amount with 6 months of project implementation to go. This support will extend beyond the project lifecycle. A major challenge came with the advent of covid 19, other source of funding that the government was to add to the project was instead channeled to other humanitarian activities. Other cofinancing partners including Hinckley and EPRON continue to strongly support the project.

2.5. Stakeholder

EA: Stakeholder engagement
(will be uploaded to GEF Portal)

Two Steering Committee meetings held in February and December 2022 to update steering committee members comprising the Nigeria Customs Service, MTN, EPRON, Lagos State Ministry of Environment on the progress made and challenges encountered and planned next steps for the success of the project. Site suitability inspection in 2021. Provision of PPEs to over 350 informal collectors under the project. Synergy especially as regards continuous monitoring of informal collectors, collection centers and recyclers. Also LAWMA and LASEPA are interfacing with the Nigeria Police Force to ensure all registered informal collectors enjoy a measure of recognition and protection. Formalization of over 450 informal collectors as well as collection flag off on the 23rd of September, 2021. Training of informal collectors and PPE collection on the 5th of November, 2021.

The project engages with international stakeholders including the Alliance of international producers, WEEE Forum, ITU, GIZ, etc. ILO has developed a draft of training manual for informal workers and will pilot it via the network established by the GEF project.

2.6. Gender

EA: Gender mainstreaming
(will be uploaded to GEF Portal)

Over 75 women involved in the E-waste collection. However collection centres operators are encourage to involve more female. They are also required to ensure similar opportunities accrue to female staffers as accrue to male staff. Every meeting and training held in which the recyclers, informal collectors and collection centers have participated in has had proper female representation. The Gender Consultant carried a survey to mainstream and conduct a robust consultative review of gender issues as its relates to the project. Formal and informal training carried out about 30 women were in attendance.

2.7. ESSM

EA: Environmental and social safeguards management
(will be uploaded to GEF Portal)

The Gender consultant has ensured the social and labour safeguards during the trainings conducted for collectors. Also, collection has commenced in earnest and has being rolled out in line with the risk management plan. Training and retraining of the Collectors is ongoing while planning to develop a small booklet for the informal Collectors to serve as guide in their operations. A new standard on e-waste collection and recycling has been drafted by stakeholders and has been submitted to the Standards Organization of Nigeria for approval.

2.8. KM

EA: Knowledge activities and products
(will be uploaded to GEF Portal)

As one of the outputs of component 4 of the project, the report "Towards a Circular Economy for the Electronics Sector in Africa: Overview, Actions and Recommendations" was released in June 2022 and the publication webpage has more than 500 visits as of July 2022. The report will also be uploaded onto the SAICM knowledge platform and the UNEP circularity platform for further dissemination. A bilateral exchange of experience has been organized with South Africa on the results of the levy consultant work, including the calculator and guidance to set an appropriate fee for producers with EPRON.

2.9. Stories

EA: Stories to be shared
(section to be shared with communication division/ GEF communication)

Planning has started for a video based on interviews with direct beneficiaries and footage from the field to show the key progress and learnings from the project. 2 web stories will also be developed based on interviews with the international and local stakeholders. These communication materials will be posted onto the SAICM knowledge platform and the UNEP circularity platform for further dissemination.



To Step 2

3. RATING PROJECT PERFORMANCE

3.1 Rating of progress towards achieving the project outcomes

Project objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	EA: Summary by the EA of attainment of the indicator & target as of 30 June	TM: Progress rating
Objective						
Nigeria adopts a financially self-sustaining circular economy approach for electronics	Tonnes of recyclable material which are recovered and re-entering the value chain locally and internationally.	0 tonnes	None	10.8kg of precious metals, 150 tonnes common metals, 90 tonnes plastics re-enter value chain from 300 tonnes of e-waste	On track to achieving this target. 44 tonnes of e-waste collected. Recyclers have commenced pickup of e-waste from collection centers. Breakdown of tonnes recovered will be provided later	MS
	Tonnes of hazardous fractions from e-waste which are safely disposed of, treated or channelled to appropriate treatment facilities	200 tonnes recycled in 2017 by 2 registered recyclers	None	30 tonnes CRT lead glass and 3 tonnes of other hazardous fractions	On track to achieving this target. Currently 4 tonnes of CRT has been processed by the recyclers. Break down will be provided later	S
Outcome 1						
The electronics sector recovers and reintroduces usable materials into the value chain and disposes of hazardous waste streams in an environmentally sound manner.	Number of e-waste producers registered in PRO	8 registered producers	20	150	58 registered producers	MU
	Amount of levy collected by PRO	None	level of levy calculated	100,000 USD of levy is committed	All producers including importers pay an annual registration fee of USD 122.	MU
	Number of collection channels and points created within the EPR	No known official number	30 to be created	30	30 collection channels created and fully functional.	HS
	Number of collectors gaining employment in the formal sector or with improved conditions in the informal (male/ female)	No known official number	30 formal, 300 informal	100	Currently there are 253 informal (75 female) collectors that gained employment or have improved conditions. Some dropped off due to the pricing which they felt was too low and not conducive for them.	S
	Amount of e-waste safely collected at ESM facilities	54 tonnes	54 tonnes	300 tonnes	44 tonnes of e-waste received by recyclers. Breakdown will be provided later.	S
	Number of recycling centres established for ESM treatment enforcing EHS standards	2	2	2	2 recycling centres have been upgraded (incl. providing machineries, extension of building, improvement of the pick-up vehicles).	S
	Number of formal recycling workers gaining employment (male/ female)	NIL	NIL	50	Currently combined staff strength from identified recyclers is 41, with 18 being women.	MS
	Tonnes of e-waste collected and hazardous components safely stored pending disposal	5 tonnes	5 tonnes	33 tonnes	Some has been stored by recyclers already but no detailed figures yet for this, these numbers will be available after recycling activities.	MS

Number of global companies financially supporting establishment of PROs in Africa	4	4	4	The Alliance of international producers has been reaching out to global companies for their potential registration with EPRON. Panasonic, Sony, LG, Samsung, IBM, Ericsson, and Bosch have been reached out.	MS
Number of users accessing success cases via the KM platform	NIL	NIL	5	1 report/ case study published "Towards a Circular Economy for the Electronics Sector in Africa: Overview, Actions and Recommendations", more than 500 visits as of July 2022. Further case studies planned in the last year of the project delivery.	MS

For joint projects and where applicable ratings should also be discussed with the Task Manager of co-implementing agency.

3.2 Rating of progress implementation towards delivery of outputs

Output	Expected completion date	Implementation status as of 30 June 2021 (%)	Implementation status as of 30 June 2022 (%)	EA: Progress rating justification, description of challenges faced and explanations for any delay	TM: Progress rating
Under Comp 1					
1: The Government of Nigeria and Producers jointly implement the Extended Producer Responsibility (EPR) legislation for the electronics sector	Q3 2022	93%	98%	The Federal Ministry of Justice has sent the final version of the regulation to the Federal Ministry of Environment for onward transmission to the Executing Agency. The legislation has been adopted in the country, enforcement such as mandatory registration with EPRON has commenced and is being enforced.	S
2: 300 tonnes of e-waste are collected through formalized collection channels that minimize environmental and health impacts	Q3 2023	40%	70%	Procurement and distribution of PPE to 350 informal collectors in November, 2021. . Formalization of 350 informal collectors. Training of over 350 informal collectors by LAWMA, LASEPA, NESREA 30 collection sites were selected and the contracts have been awarded. First tranche of monies to 30 collection centers for upgrade disbursed. 20 collection centers have been paid their second tranche of monies for upgrade. Financial Incentives for collected e-waste which has been certified and handed over to recyclers has also been disbursed. Partnership with ILO to provide training manual as additional cofinance for the project. Its has produced draft Training manual which will be used to train both formal and informal collectors before the end of the project.	S
3: Establish cost-effective recycling and disposal systems for various e-waste categories	Q4 2022	20%	80%	Levy consultant has completed the tasks of determining the technical costs of Nigeria EPR system, Levy for each EEE category, guidance on EPR fund management as well as training material on fund management of EPR system development. Market disposal consultant has identified ESM options for waste disposal. The second phase which comprises development of handbook based on identified options for treatment, storage and disposal of hazardous fractions is ongoing.	MS

<p>4: Regional and global knowledge exchange on Circular economy models for the electronics sector</p>	<p>Q4 2023</p>	<p>30%</p>	<p>80%</p>	<p>1. The report on circular economy for electronics in Africa was peer reviewed and released in June 2022 and widely disseminated through UNEP's network. https://www.unep.org/resources/report/towards-circular-economy-electronics-sector-africa-overview-actions-and.</p> <p>2. An online workshop "Enhancing circularity in electronics value chain in Africa" was organized during World Resource Forum 2021 on October 12 2021. This workshop brought together stakeholders from electronics sector, including NESREA, EPRON, UNEP, Philips, ITU and Closing the Loop. It shared with international stakeholders the latest progress of the project, presented the key findings from the report on circular economy for electronics in Africa and collected insights and share best practices/examples on circular economy for electronics.</p> <p>3. Regular coordination with international partners has been conducted, including with the alliance of international producers, to facilitate the registration of international producers with EPRON and the implementation of the EPR scheme.</p> <p>4. A project brief to highlight the key impacts of the project was developed. The project communication team has been conducting interviews with key local and international stakeholders and will produce a video and web stories to demonstrate the achievements and learnings from the project.</p>	<p>MS</p>
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The Task Manager will decide on the relevant level of disaggregation (i.e. either at the output or activity level).

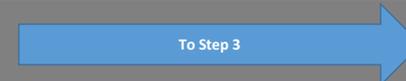


Table A. Risk-log

Implementation Status: PIR 3

Risk	Risk affecting:	Risk Rating				Variation respect to last rating	
	Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	Δ	Justification
Producers do not invest to establish the PRO	Output 1	H	M	M	M	↓	With greater awareness created, more producers have signed into the EPR programme. The EA has made registration to the programme a prerequisite for importation of electrical electronics into the country and the EEE Regulation has been updated. Enforcement will be required in the long term to ensure compliance.
No-one contributes financially to the PRO in early stages (levy being collected to subsidize the system)	Output 1	H	M	L	M	↑	A flat administrative fee is charged across board for all Producers. This has been sustained.
Levy and other revenues are not ringfenced for disposal of hazardous waste fractions separated and stored for final disposal	Output 1	H	L	L	L	=	Establishment of independent PRO through the EPR legislation will ensure ring-fenced funds.
Market fluctuation causing the rising cost of collection and recycling	Output 2 and 3	M	S	H	H	=	Inflationary trends in the country is still tending upwards, and has a direct effect on collection and recycling costs. Also the high cost of fuel affects collection.
Informal sector workers livelihoods are threatened by formalization of the recycling system (included in ESERN)	Output 2 and 3	M	L	M	M	=	ILO partnership has developed a draft training manual but training was delayed to 2022. Monitoring and validation of informal sector impacts and benefits will be included in the independent review of the project.
Not sufficient interests exist to develop and implement circular economy in Africa	Output 4	M	L	L	L	=	African Circular Economy Alliance regional network and governments and private sector are expressing interest.
The circular economy takes much longer time to shape and develop (beyond the project timeline)	Output 4	M	M	M	M	=	Covid has affected the development and exploration of emerging initiatives on the circular economy during project lifetime.
The hazardous materials and components collected in the project are not properly stored or disposed of (included in ESERN)	Output 3	M	M	M	M	=	Recyclers have been prequalified based on requirement for formal licence including storage facilities for hazardous fractions pending export for disposal. Standard for e-waste will cover these aspects.
Collection and recycling in formal sector are not competitive compared to market prices	Output 2 and 3	-	-	-	H	↑	From the current collection pilot, the biggest threat noticed so far has been the comparatively low price offered by the project vis a vis the open market. This risk needs careful monitoring to ensure that the levy calculation can offset this difference.
Software to register producers' product data of the project is not fully secure; and/or not handed over to EPRON for long-term management	Output 1	-	-	-	M	↑	The 'blackbox' database was successfully developed but during validation consultations the issue of security of commercial data; and the long term hosting of the system were raised.
Consolidated project risk		-		M	M	=	The major risks have been caused by the inflationary trends in the country as well as low pricing. Once the project becomes self sustaining, the cost issue will be mitigated.

Table B. Outstanding medium & high risks

List here only risks from Table A above that have a risk rating of **M or worse** in the current PIR

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	Additional mitigation measures for the next periods		
			What	When	By whom
Market fluctuation causing the rising cost of collection and recycling	Removal of product categories that are expensive to collect, yet with minimal hazardous fractions (eg LED), based on financial proposals by collectors during procurement bids.	Expensive fractions with minimal hazardous materials were taken out of the collection pilot in collaboration with the collectors	Continue with the established course of action	Nov. 22	EA
Informal sector workers livelihoods are threatened by formalization of the recycling system (included in ESERN)	Engage ILO and WHO country offices to learn from best practices	Draft ILO training developed and shared with the agency.	Carry out training for informal sector using developed ILO manual. Include monitoring and validation of informal sector impacts and benefits in the independent review of the project.	July. 22	EA, ILO, independent reviewer
The circular economy takes much longer time to shape and develop (beyond the project timeline)	NESREA will work at National level, while UNEP will work at international level to generate the necessary interest to drive engagement.	At national level, NESREA has championed the circular economy approaches to e-waste disposal. The agency pushed an aggressive campaign on the programme.	Keep working with international stakeholders and seeking opportunities for international events to generate interests, share best practices and get international buy-in.	Nov. 22	NESREA and UNEP
The hazardous materials and components collected in the project are not properly stored or disposed of (included in ESERN)	none	none	Regular monitoring exercises to collection centers. In order to ensure that e-waste collected is stored in an ESM.	Aug.22	NESREA, LAWMA, LASEPA.
			Ensure the adoption by SON of the new e-waste standard for environmental and health controls, and ensure it is applied by recyclers. To be monitored by the independent reviewer.	Sep-22	Independent MTR reviewer
Software to register producers' product data of the project is not fully secure; and/or not handed over to EPRON for long-term management	none	Budget allocation for the 'black box' was increased in the amendments to allow data security certification	The project team to closely monitor the developer to ensure handover of the source code, and possible further minor budget reallocation to ensure hosting can continue	Aug-22	EA; EPRON
Collection and recycling in formal sector are not competitive compared to market prices	None	The pilot collection activities have been formalized and regular communication with collectors has enabled this risk to be identified.	Ensure the market disposal consultant obtains accurate estimates of actual collection costs and adapt levy to include these	Oct-22	EA, Market disposal consultant

High Risk (H): There is a probability of greater than 75% that **assumptions** may fail to hold or materialize, and/or the project may face high risks.

Significant Risk (S): There is a probability of between 51% and 75% that **assumptions** may fail to hold and/or the project may face substantial risks.

Medium Risk (M): There is a probability of between 26% and 50% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.

Low Risk (L): There is a probability of up to 25% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.

To Step 4





Project Minor Amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the Project and Program Cycle Policy Guidelines.

Minor amendments	Changes
Results framework	No
Components and cost	Yes
Institutional and implementation arrangements	No
Financial management	No
Implementation schedule	Yes
Executing Entity	No
Executing Entity Category	No
Minor project objective change	No
Safeguards	No
Risk analysis	Yes
Increase of GEF project financing up to 5%	No
Co-financing	No
Location of project activity	No
Other	No

Minor amendments
Contract amendments completed with NESREA and UNEP Resources and Markets Branch to accommodate increased national communications in the last year of the project, and independent monitoring locally. Funds were essentially repurposed from UNEP travel and large face to face meetings which are not foreseen anymore due to COVID. The amendment also included a 6 months extension to May 2023, with operational completion by Nov 2022. This reflects a long delay at the beginning of the project for NESREA to receive the funds in their account (was only confirmed in Oct 2019), and longer than anticipated negotiations with the recyclers for the contracts. The revised workplan and timeline were approved by the Project Steering Committees held in Dec 2021.

GEO Location Information:

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and

Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID Required field if the location is not an exact site	Location Description Optional text field	Activity Description Optional text field
JDP Global Ventures	6.589417	3.2455			Collection center
E-Terra Technology	6.462806	3.257583			Recycling center
Recyclepoints Limited	6.461972	3.272556			Collection center
Harvest Recycling Limited	6.582917	3.398111			Collection center
Ojota scrap yard	6.58058	3.37592			Collection center
Ijora scrap yard	6.47092	3.36444			Collection center
Alaba Market	6.46307	3.18816			Collection center
LASEPA Ikorodu	6.67741	3.51991			Collection center

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate. *

[See attached file](#)

[Annex any linked geospatial file]

