GEF-8 REQUEST FOR CEO CHILD ENDORSEMENT/APPROVAL

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General Child Project Information

Child Project Title	
Strengthening the value chain for WEEE management in Colombia.	
Region Latin America and the Caribbean	GEF Project ID 11558
Country(ies) Colombia	Type of Project FSP
GEF Agency(ies) UNDP	GEF Agency Project ID 9944
Project Executing Entity(s) Ministry of Envionrment and Sustainable Development (Ministerio de Ambiente y Desarrollo Sostenible, MADS)	Project Executing Type Government
GEF Focal Area (s) Chemicals and Waste	Submission Date 6/17/2025
Type of Trust Fund GET	Project Duration (Months) 60
GEF Project Grant: (a) 5,500,000.00	Agency Fee(s) Grant: (b) 495,000.00
PPG Amount: (c) 150,000.00	PPG Agency Fee(s): (d) 13,500.00
Total GEF Financing: (a+b+c+d) 6158500	Total Co-financing 34,377,065.00
Project Sector (CCM Only)	
Rio Markers	

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	No Contribution 0	No Contribution 0	No Contribution 0

Project Summary

Provide a brief summary description of the project, to offer a snapshot of what is being proposed. The summary should include: (i) what is the problem and issues to be addressed? ii) as a child project under a program, explain how the description fits in the broader context of the specific program; (iii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. (max. 250 words, approximately 1/2 page)

Colombia has made significant progress in enhancing the circularity of electrical and electronic equipment (EEE) through the National Policy for the Integrated Management of Waste Electrical and Electronic Equipment (WEEE). This policy establishes a coordinated approach involving public institutions, the private sector, and society to promote responsible production, consumption, and post-consumer management of EEE. The country has also established a robust regulatory framework. These advancements have positioned Colombia as a regional leader in WEEE management, fostering employment, innovation, and material recovery. However, several challenges remain in fully transitioning to a circular electronics sector.

As part of the Global Electronics Management (GEM) Program, the project "Strengthening the value chain for WEEE management in Colombia" aims to strengthen the national capacity of the different stakeholders involved in the production and trade chain of EEE and in the management of WEEE. This will be achieved by aligning with national and international guidelines on chemicals and hazardous waste, through strategies that promote EEE circularity, reuse of recyclable materials, and safe management of WEEE, including hazardous components. In a complementary and cross-sectional manner, a gender analysis was carried out integrating aspects related to gender equality and key environmental elements linked to the project components, translated into an integrated gender action plan.

The Project foresees the following Outcomes:

- National or city level plans and strategies for circular electronics value chain developed.
- Policies and incentive mechanisms in place to support circular electronics value chain.
- Innovative and resource/energy efficient electronic components (parts) and products designed, manufactured or placed on the market.
- Markets for innovative products and behavior change away from unnecessary consumption and toward increased longevity.
- Mechanisms to maximize reuse, repair and material recycling put in place.
- Hazardous waste streams in the electronics sector removed from the value chain.
- Contributions to the Global GEM knowledge management platform ensured to support sharing and learning, capacity building, awareness raising among various stakeholder to achieve sectoral transformation.
- Coordination and linkages amongst the relevant global and national stakeholders and Global GEM Knowledge Management platform established.

The Project in Colombia is structured and will be carried out as part of the broader Global GEM Program framework. While focusing on key national challenges, Colombia will leverage the Program's systemic approach to tackle the underlying causes of e-waste and sustainability gaps in the electronics sector, aiming to transition toward a circular economy. At the same time, Colombia's interventions will not only benefit from but also contribute to the Global Program by enhancing access to information, promoting education, building capacity, generating knowledge, and fostering the adoption of best practices among stakeholders involved in advancing electronics circularity.

The project will be led by the Ministry of Environment and Sustainable Development with the participation of multiple stakeholders from the public and private sector, academia and organized civil society.

Through its different interventions the Project will directly benefit 3,000 people (1,800 men; 1,200 women) and will evidence result in the following Global Environmental Benefits: 21.2 tonnes of POPs and 4 kgs of mercury removed or disposed; 15,396 tonnes of POPs/Hg containing materials and products directly avoided; 2 gTEQ avoided and 26,067 tonnes of CO_2eq mitigated

Child Project Description Overview

Project Objective

Strengthen the national capacity of the different stakeholders involved in the production and trade chain of EEE in the management of WEEE.

Project Components

Component 1. Enabling Policies on Circular Electronics.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,495,000.00	9,281,808.00

Outcome:

Outcome 1.1. National or city level plans and strategies for circular electronics value chain developed.

Outcome 1.2. Policies and incentive mechanisms in place to support circular electronics value chain.

Output:

Output 1.1.1. Strategies for “Right to repair”, “anti-planned obsolescence” and 'circular design' strategies drafted, enacted, and disseminated.

Output 1.2.1. Green and sustainable procurement, green financing, polluters pay, incentive mechanisms, CSR and EPR policies designed and adopted based on country needs.

Output 1.2.2. New business models (lease and take back, services in place of goods) promoted and set up.

Component 2. Cleaner Production and Sustainable Consumption and use.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
718,096.00	4,125,248.00

Outcome:

Outcome 2.1. Innovative and resource/energy efficient electronic components (parts) and products designed, manufactured or placed on the market.

Outcome 2.2. Markets for innovative products and behavior change away from unnecessary consumption and toward increased longevity.

Output:

Output 2.1.1. Circular design on electronic components (parts) and products (aimed at increasing standardization and compatibility; ease of maintenance and repair, including disassembly and reassembly; avoidance of hazardous material) promoted and supported.

Output 2.2.1. Eco-labeling of green and innovative electronic products promoted.

Output 2.2.2. Information and awareness raising on green products, alternatives and services in the electronics sector undertaken.

Component 3. Resource-efficient value chain across the electronics sector.

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
2,300,000.00	14,782,138.00

Outcome:

Outcome 3.1. Mechanisms to maximize reuse, repair and material recycling put in place.

Outcome 3.2. Hazardous waste streams in the electronics sector removed from the value chain.

Output:

Output 3.1.1. E-waste collection schemes (one to one, zero to one, dedicated services for offices and institutions) and reverse logistics established.

Output 3.1.2. Infrastructures and business models for refurbishment, repair or remanufacturing established/enhanced.

Output 3.1.3. increased uptake of recycled materials along the value chain.

Output 3.2.1. Material streams contaminated by POPs, mercury and chemicals of concern managed in an environmentally sound manner and knowledge of stakeholders to access material supply chains enhanced.

Component 4. Knowledge Management, Communication, Program-level coordination.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
560,000.00	3,093,936.00

Outcome:

Outcome 4.1. Contributions to the Global GEM knowledge management platform ensured to support sharing and learning, capacity building, awareness raising among various stakeholder to achieve sectoral transformation.

Outcome 4.2. Coordination and linkages amongst the relevant global and national stakeholders and Global GEM Knowledge Management platform established.

Output:

Output 4.1.1 Communication plans and capacity development strategies developed.

Output 4.1.2 Knowledge management infrastructure designed and set up, aligned to the Global GEM Knowledge Management Strategy and Platform.

Output 4.2.1 The global program and child projects introduced and linked to existing relevant platforms including the Global GEM Knowledge Management Platform. Coordination mechanism between the global program and the child projects designed and implemented.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
165,000.00	1,375,083.00

Outcome:

Outcome 5.1. M&E and adaptive management applied to assess activity performance and GEB impact.

Output:

Output 5.1.1. Inception Workshop organized; Monitoring of indicators in project results framework; Independent Mid-term Review (MTR); GEF Tracking Tool; and Terminal Evaluation (TE) carried out.

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1. Enabling Policies on Circular Electronics.	1,495,000.00	9,281,808.00
Component 2. Cleaner Production and Sustainable Consumption and use.	718,096.00	4,125,248.00
Component 3. Resource-efficient value chain across the electronics sector.	2,300,000.00	14,782,138.00
Component 4. Knowledge Management, Communication, Program-level coordination.	560,000.00	3,093,936.00

M&E	165,000.00	1,375,083.00
Subtotal	**5,238,096.00**	**32,658,213.00**
Project Management Cost	261,904.00	1,718,852.00
Total Project Cost ($)	**5,500,000.00**	**34,377,065.00**

Please provide Justification

N/A

CHILD PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Since this is a child project under a program, please include an explanation of how the context fits within the specific program agenda. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

THE BASELINE SCENARIO

INSTITUTIONAL AND LEGAL FRAMEWORK

Faced with the complex problem represented by the accelerated generation of waste electrical and electronic equipment (WEEE) in Colombia and its environmentally inadequate and unsafe management, the Ministry of Environment and Sustainable Development formulated with broad participation of the private sector and society in general, the National Policy for the integrated management of waste electrical and electronic equipment - WEEE[1][1], which was launched in June 2017 and defines the roadmap until 2032 to be followed, in a systemic and coordinated action, by the State, headed by the different entities of the national, regional and local levels; the various productive and business sectors of the country -involved in the management of this type of waste- and the Colombian society in general to face the global and local problem represented by WEEE.

This policy is developed in the application of the universally accepted principle of extended producer responsibility (EPR), which supports all policies regarding the post-consumer management of products, and which motivates and obliges producers, whether manufacturers or importers, to maintain a degree of responsibility for all the environmental impacts of their products throughout their life cycle, from the extraction of raw materials, through manufacturing and placing on the market, to the final disposal of the product as waste in the post-consumer stage.

In its action plan, the policy seeks to meet the objectives of preventing and minimizing the generation of WEEE by promoting a change in Colombian society towards the responsible production and consumption of electrical and electronic equipment; encouraging the use of WEEE in an environmentally safe manner, as an alternative for the generation of employment and as an economically viable sector; to promote the integrated management of WEEE, in order to minimize the risks to health and the environment, and to promote the full integration and participation of producers, traders and users or consumers of electrical and electronic equipment, in the development of strategies, plans and projects for an integrated management of WEEE.

According to the evaluation of the first five-year period of the WEEE Policy carried out in 2023, it records a 61% progress in its implementation in the period 2017 - 2023, represented in the fulfillment of 20 goals of lines of action out of a total of 33. In the remaining 13 lines of action, partial progress is recorded. Among the main conclusions of the aforementioned evaluation, the following stand out:

- The actions completed to date with the highest relevance valuation by the actors of the WEEE value chain are: The regulation of Law 1672 of 2013[2][2] (Decree 1076), the implementation of the Registry of producers and marketers of electrical and electronic equipment (RPCAEE) [3][3], the issuance of the terms of reference for environmental impact studies of facilities, the updated diagnosis of the situation of the informal sector in the management of WEEE and the development of technical regulations and the Colombian Technical Standards (NTC) on the requirements for logistics and treatment of WEEE.

- The lack of institutional coordination of the responsible actors assigned to the actions, the lack of resources of the actors responsible for the actions and oversized goals to meet them in the short term were the reasons perceived as the greatest difficulties in meeting the goals in the evaluation period.

- Among the recommendations for the implementation of the WEEE Policy in the next five years, the following stand out: greater coordination among the actors involved at the national, regional and local levels, both public and private, according to their roles and competencies; promote a more active and heterogeneous participation of all the actors of the WEEE value chain in the National WEEE Committee; include the informal sector and support its formalization; promote the optimization of the collection of WEEE and other post-consumer waste with the creation of temporary collection centers in the country's municipalities; and provide investment resources to ensure the implementation of the Policy.

In regulatory matters, it should be noted that the Congress of the Republic issued Law 1672 of July 19, 2013 establishing the "Guidelines for the adoption of a public policy for the comprehensive management of Waste Electrical and Electronic Equipment (WEEE), and other provisions". This Law established, among other matters: that WEEE are of differentiated management and that their final disposal in sanitary landfills is prohibited; that Extended Producer Responsibility (EPR) is the guiding principle for the environmentally sound management of WEEE and that therefore, the producers of EEE (Electrical and Electronic Equipment), i.e. manufacturers, importers, assemblers or remanufacturers, must establish directly or through third parties, individually or collectively, the systems for the collection and environmentally safe management of the waste (SR&G of WEEE) of the products placed by them in the market; and that the WEEE collected will be managed prioritizing the use and recovery of the same and through management companies that have an environmental license to do so. In addition, the law establishes obligations to the other actors of the logistic chain of distribution and consumption and to the State entities involved in the flow of information, surveillance and control of the management and promotion of WEEE management. The following illustration shows how the regulatory and public policy development has been progressing in the integral management of WEEE.

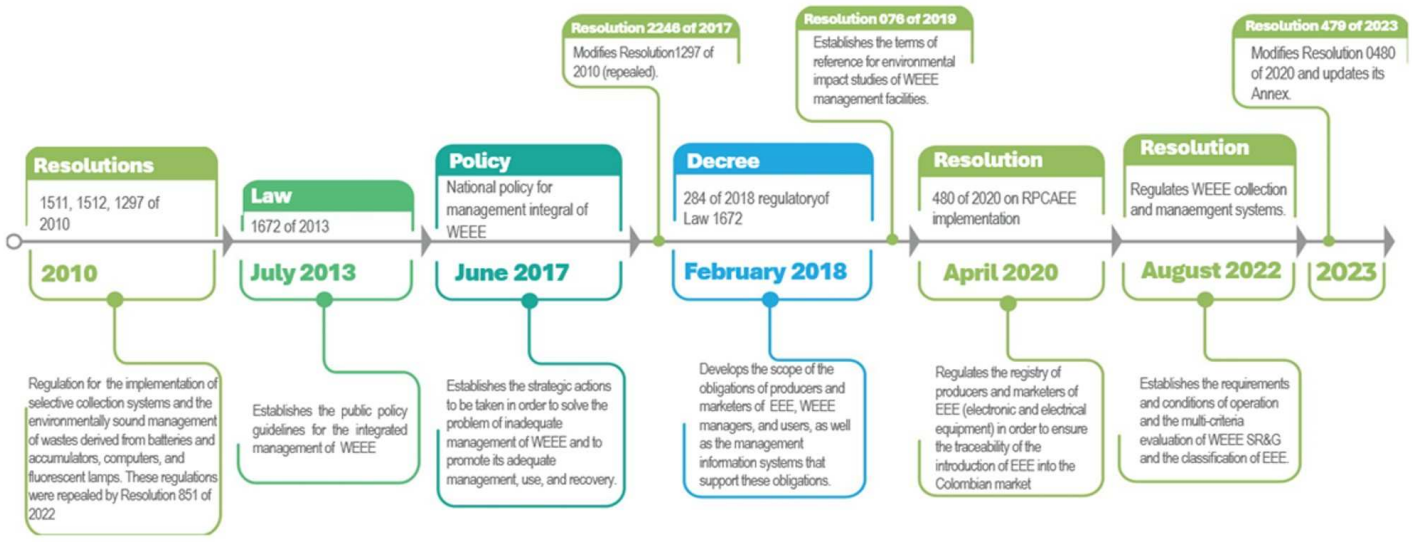


Figure 1. Regulatory and public policy development for the integrated management of WEEE.

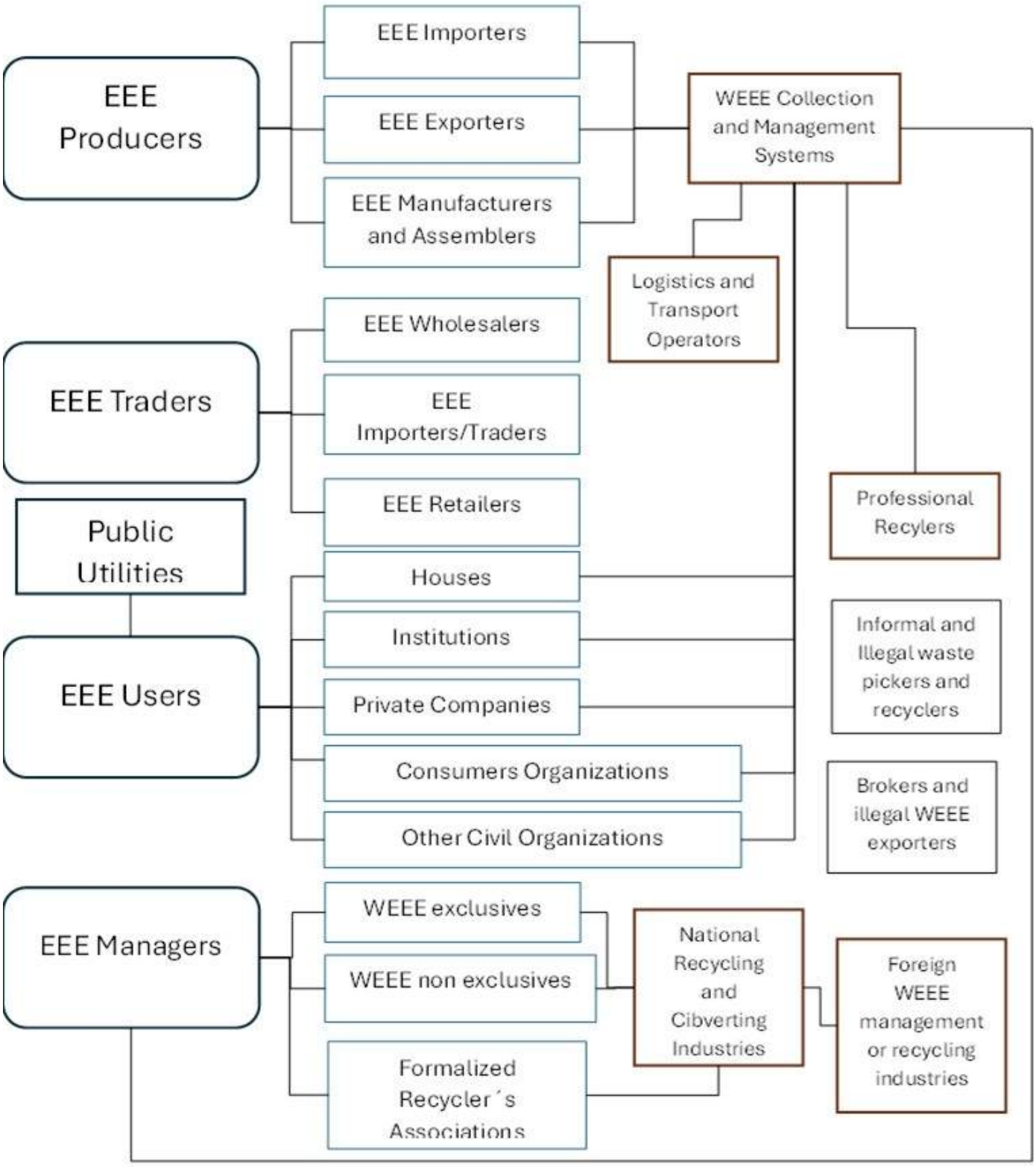
It is noteworthy that thanks to the development of public and regulatory policy carried out by the Ministry of Environment and Sustainable Development since 2010 with the first WEEE post-consumer management standards and from the enactment of the Framework Law 1672 of 2013, Colombia has positioned itself as a leader and reference country in the Latin American region in the regulation of integrated and differentiated management of WEEE, achieving acceptance and consensus by the regulated productive

sector, The latter recognizes that the progress made in the implementation of extended producer responsibility for electrical and electronic equipment has contributed decisively, both to reduce the problem of its improper management, and to create a techno-management system that has been a catalyst for the circular economy in the country based on WEEE and that generates many jobs, business opportunities, foreign exchange from the recovery of materials recovered abroad and multiple developments in applied research and innovation in the use of this type of waste.

EEE/WEEE VALUE CHAIN IN COLOMBIA.

The following is a map of actors in the EEE/EEER chain, distinguishing between actors in the value chain (EEE life cycle) and institutional actors (public and private entities and NGOs).

Stakeholders of the value chain of EEE/WEEE



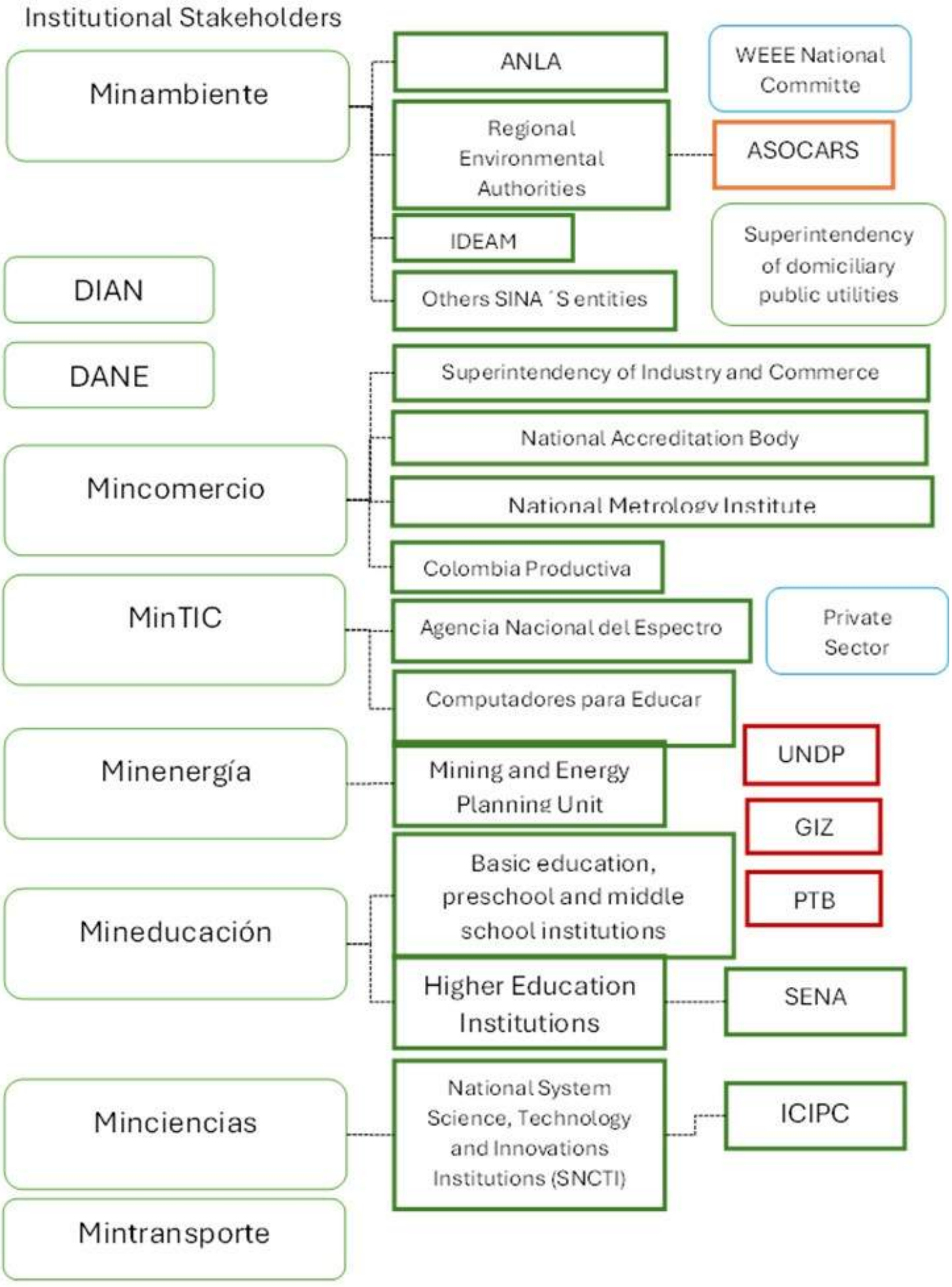

Institutional Stakeholders
Minambiente
ANLA
WEEE National Committe
Regional Environmental Authorities
ASOCARS
IDEAM
Superintendency of domiciliary public utilities
Others SINA´S entities
DIAN
DANE
Superintendency of Industry and Commerce
National Accreditation Body
Mincomercio
National Metrology Institute
Colombia Productiva
MinTIC
Agencia Nacional del Espectro
Private Sector
Computadores para Educar
Minenergía
Mining and Energy Planning Unit
UNDP
GIZ
Basic education, preschool and middle school institutions
PTB
Mineducación
Higher Education Institutions
SENA
Minciencias
National System Science, Technology and Innovations Institutions (SNCTI)
ICIPC
Mintransporte

Figure 2. EEE/WEEE value chain stakeholders.

EEE MARKET IN COLOMBIA.

In order to establish the placing on the market of EEE in the country, information was obtained for the years 2020, 2021, 2022 and 2023 for the import, export and national manufacturing operations of the 17 subcategories of EEE containing mass consumption appliances, which are those subject to the WEEE collection and management systems implemented by the producers (importers and national manufacturers) of EEE.

Table 1. Total Electrical and Electronic Equipment (EEE) in the Colombian market.

	2020		2021		2022		2023	
EEE mass consumption	**Quantity**	**Gross weight (ton)**	**Quantity**	**Gross weight (ton)**	**Quantity**	**Gross weight (ton)**	**Quantity**	**Gross weight (ton)**
Total Imports	553,116,682	247,292	604,411,773	281,038	53,141,1340	254,566	467,822,220	243.264
Total Exports	7,792,405	73,336	9,177,687	93,121	822,4146	94,239	9,765,548	95.783
Domestic Manufacturing	32,360,349	58,479	28,346,099	74,356	1,783,153	17,129	N/A	N/D
Total EEE placed in the market	**577,684,626**	**232,435**	**623,580,185**	**262,273**	**524,970,347**	**177,456**	**458,056,672**	**147,481**
ICT share in the EEE market	**313,421,417**	**54,336**	**333,243,107**	**44,209**	**378,436,084**	**50,478**	**223,951,450**	**32,299**

POST-CONSUMER SYSTEMS FOR WEEE COLLECTION AND MANAGEMENT (SR&G).

Colombia currently has the following post-consumer systems (REP) related to WEEE: i) Computers and peripherals (Resolution 1512 of 2010); ii) Fluorescent bulbs (Resolution 1511 of 2010); iii) Batteries and/or accumulators (Resolution 1297 of 2010, partially modified by Resolution 2246 of 2017); iv) Used lead acid batteries (Resolution 0372 of 2009, partially modified by Resolution 0361 of 2011).

As a result, by 2022, EEE producers had installed a total of 12837 collection points and 87 collection centers throughout the country. In turn, there are 91 WEEE management facilities duly licensed by the competent environmental authorities and located in 19 of the country's departments. The geographic coverage can be seen in the following illustration:

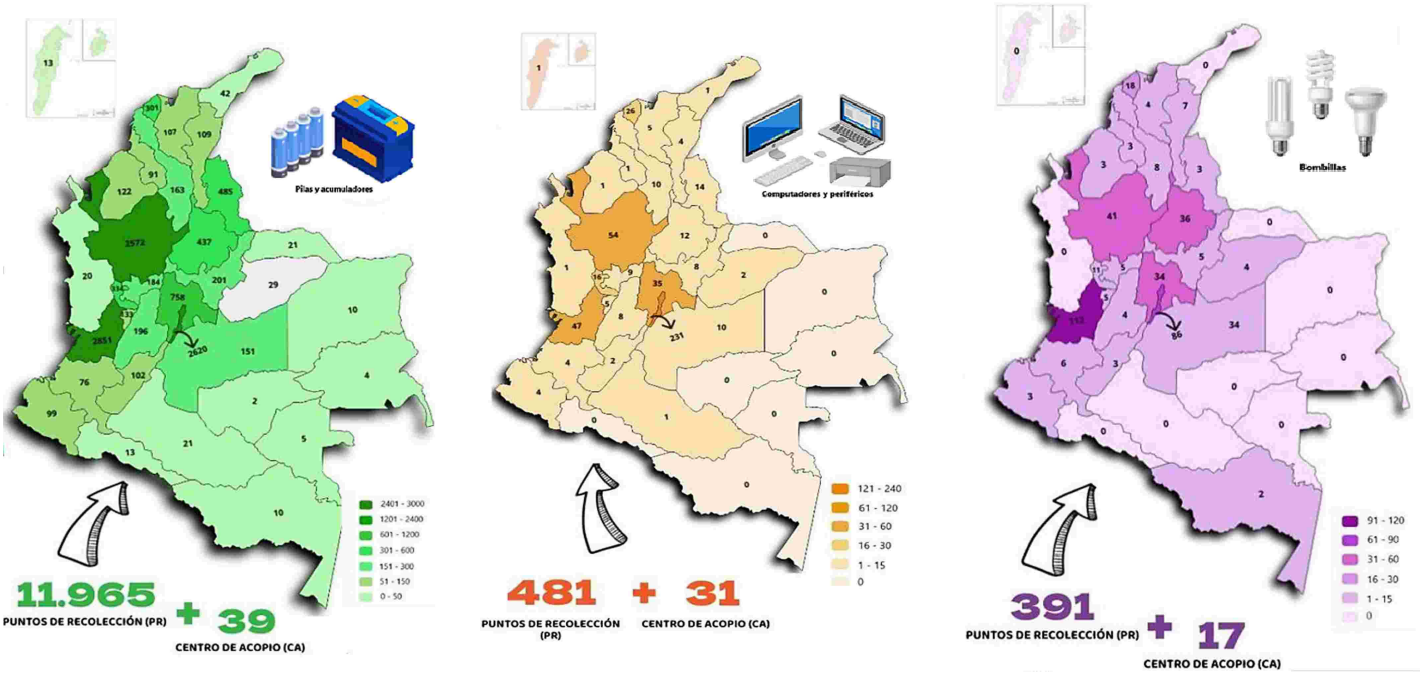
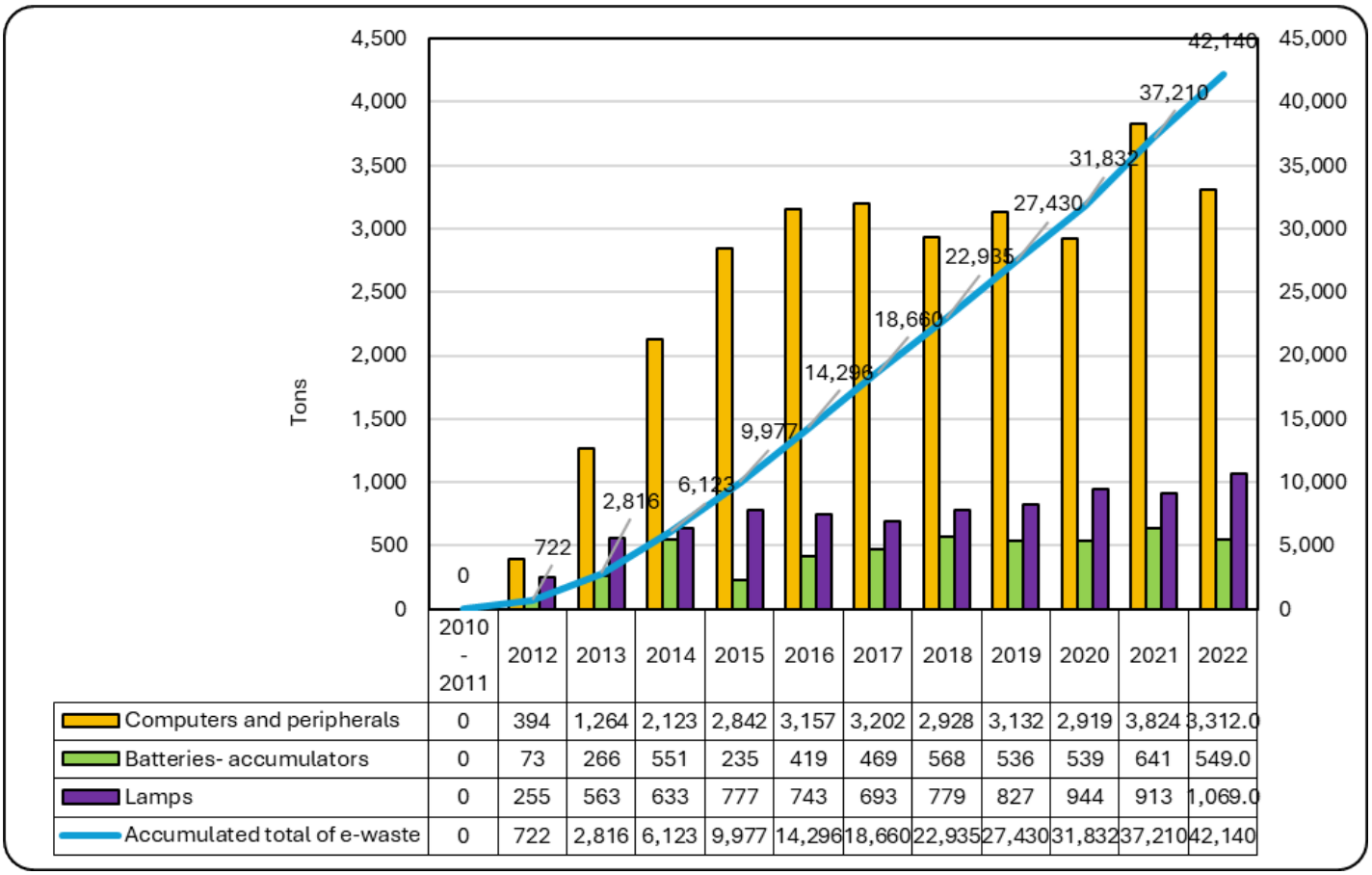


Figure 3. Geographical coverage of WEE collection and management systems in Colombia.

Consequently, and by way of balance, it should be noted that a total of 42,410 tons has been collected and managed in the country from 2012 to 2022, which represents a growth of 6.8 times from 2012 to 2022. The illustration shows the evolution of each type of WEEE regulated in this period and the accumulated total.



	2010 - 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Computers and peripherals	0	394	1,264	2,123	2,842	3,157	3,202	2,928	3,132	2,919	3,824	3,312.0
Batteries- accumulators	0	73	266	551	235	419	469	568	536	539	641	549.0
Lamps	0	255	563	633	777	743	693	779	827	944	913	1,069.0
Accumulated total of e-waste	0	722	2,816	6,123	9,977	14,296	18,660	22,935	27,430	31,832	37,210	42,140

Figure 4. Integrated management of WEEE results - Regulation 2012 - 2022WEEE GENERATION IN COLOMBIA.

The generation of WEEE in Colombia corresponds to the total weight of discarded electrical and electronic equipment (waste) as a result of its use or consumption within the Colombian territory, once its original owner decides to stop using it, and therefore discard it, considering that it has no value, and prior to any post-consumer management activity before any post-consumer management activity (collection, preparation for reuse, treatment, recovery (including recycling) or export).

In this way, the generation of WEEE is estimated for equipment categorized as mass consumption, applying the probabilistic distribution of Weibull discard, according to the parameters indicated by the UNU for countries other than the EU, and calculating the placing on the market with all the variables in mass, that is, net weight imported or exported, and weight manufactured domestically from the units produced and converted into weight.

The following Table shows estimated volumes of WEEE generated in Colombia for 3 different scenarios:

Table 2. Estimated WEEE from mass or domestic consumption EEE.

	2022	2023	2024	2025
Scenarios	Tons	Tons	Tons	Tons
Maximum: Imports + Domestic manufacturing	247,076	248,865	249,859	250,199
Medium: Imports net weight.	204,111	208,898	212,921	216,307
Minimum: Imports - Exports in net weight.	178,901	182,388	185,177	187,405

As it can be concluded, out of the total estimated WEE a range of 17% - 23.5% is currently being formally collected and managed through the post-consumer systems.

ICT sector

Although information has been presented for all mass consumption EEE that includes the subcategories of Computers and data processing equipment and Telecommunications equipment (Colombia has a classified list of all EEE used in the country made up of 3 categories and 33 subcategories based on the HS codes (the United Nations University has a classification of 54 UNU-keys); there is specific information by type of device: laptop computers, desktop computers, cellular cell phones, cathode ray tube (CRT) monitors and flat panel monitors (LCD, LED) for computers. The following table presents the market supply for the years 2022-2024, calculated as: imports - exports + domestic manufacture. It should be noted that Colombia is not a manufacturer of ICT EEEs; it only assembles or integrates desktop and laptop computers in low proportions. Thus, in 2023, 16% of the total number of laptops and tablets were assembled in the country, and 4% of desktops and servers.

Laptop and desktop computers:

Tariff Subheading	Description	2022	2023	2024	Annual Average
8471300000	Portable computers (notebook (classic laptop), ultrabook or hybrid) and tablets	2,546,731	2,054,300	2,188,538	2,263,190
8471410000	Desktop computers	158,724	125,379	151,329	145,144
8471490000	Other computers as network servers	345,513	260,886	276,576	294,325
Total		**3,050,968**	**2,440,565**	**2,616,443**	**2,702,659**

Mobile Cell Phones:

Tariff Subheading	Description	2022	2023	2024	Annual Average
8517130000	Smart cell phones	13,748,931	10,380,275	11,808,480	11,979,229
8517140000	Other mobile (cellular) telephones and those of other wireless networks	1,499,823	330,656	469,035	766,505
Total		**15,248,754**	**10,710,931**	**12,277,515**	**12,745,733**

Cathode ray tube type computer monitors:

Tariff Subheading	Description	2022	2023	2024	Annual Average
8528420000	Monitors with cathode ray tube suitable for direct connection and designed for use with an automatic data-processing machine of heading 84.71	689	1,670	1,036	1,132

Flat screen computer monitors (LCD, LED):

Tariff Subheading	Description	2022	2023	2024	Annual Average
8528520000	Other monitors suitable for direct connection and designed for use with an automatic data processing machine of heading 84.71	435,772	402,614	449,586	429,324

Regarding the ICT repair sector, there are no studies or official information on how many laptops, desktops, cellular cell phones, cathode ray tube (CRT) monitors and flat panel monitors (LCD, LED) are repaired in the country. As mentioned, Colombia has strength in the management of WEEE by having implemented the extended responsibility of the producer of EEE through law 1672 of 2013 and its regulation; however, upstream, towards the extension of the useful life of EEE, although it is established that it is a strategy of the national policy for the integral management of WEEE, there is no knowledge about the sector.

Based on the commercial registry of the country's chambers of commerce by International Standard Industrial Classification (ISIC) code related to the repair of EEE, there are 1,057 companies in the country with the main economic activity of maintenance and repair of computers and peripheral equipment, 251 with the main economic activity of maintenance and repair of communication

equipment, 144 with the main economic activity of maintenance and repair of consumer electronics and 256 with the main economic activity of maintenance and repair of household and gardening equipment.

It should be noted that there are no official statistics on the number of EEE repaired by these technical service companies and, precisely for this reason, a diagnosis of the sector is required, within the design and implementation of a national strategy for the maintenance and repair of electrical and electronic equipment (EEE).

THE DEVELOPMENT CHALLENGE

Colombia has made significant progress in enhancing the circularity of electrical and electronic equipment (EEE) through the National Policy for the Integrated Management of Waste Electrical and Electronic Equipment (WEEE), launched in 2017 as a roadmap until 2032. This policy, based on extended producer responsibility (EPR), establishes a coordinated approach involving public institutions, the private sector, and society to promote responsible production, consumption, and post-consumer management of EEE. The country has developed a strong regulatory framework, particularly with Law 1672 of 2013, and has implemented an extensive collection and management system, including over 12,800 collection points and 91 licensed WEEE treatment facilities across 19 departments. These advancements have positioned Colombia as a regional leader in WEEE management, fostering employment, innovation, and material recovery. However, challenges persist, including limited institutional coordination among national, regional, and local actors, insufficient financial resources, and limited collection and recycling rates, with only 17%–23.5% of WEEE being formally managed. Furthermore, the informal sector plays a major role in WEEE processing, requiring formalization to ensure environmentally sound practices. Additionally, consumer awareness and participation need strengthening to encourage responsible EEE consumption and disposal.

The development challenge is to overcome the institutional, technical, social and environmental barriers that hinder the effective and efficient management of WEEE and circularity along the value chain. The analysis of the development challenge during the project design phase has resulted in the following problem analysis:

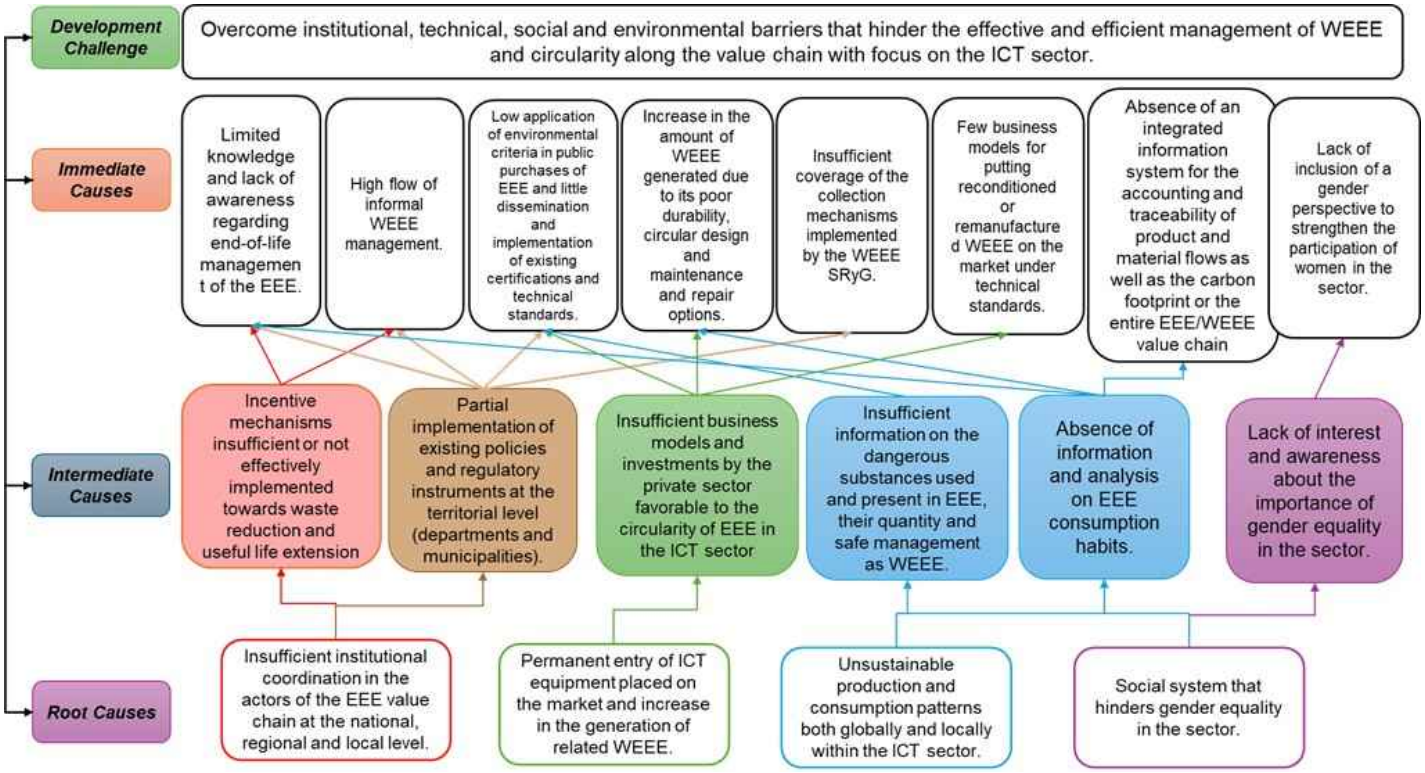


Figure 5. Theory of Change: Problem Analysis Diagram

[1] Política Nacional Para La Gestión Integral de RAEE

[2] Ley 1672 de 2013: “Lineamientos para la gestión integral de los Residuos de Aparatos Eléctricos y Electrónicos (RAEE) en Colombia”.

[3] RPCAEE

[4] Enabling Elements for Good Project Design: A synthesis of STAP guidance for GEF project investment: https://stapgef.org/resources/advisory-documents/enabling-elements-good-project-design-synthesis-stap-guidance-gef

B. CHILD PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole, including how it addresses priorities related to the specific program, and how it will benefit from the coordination platform. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF’s policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

STRATEGY

As described in the previous section, Colombia has shown progress and efforts to address the complex problem of the accelerated generation of electronic waste and its inadequate and unsafe management, adopting a management model that involves producers, importers, traders, waste managers, consumers, national and regional authorities. However, it is important to point out that there are still several challenges that must be addressed to achieve an environmentally sound management of WEEE and strengthen the value chain. On this basis, the main challenges to be addressed by this project, which are directly related to the main root causes/obstacles identified in the Problem Analysis Diagram, are the following:

a) Insufficient institutional coordination in the actors of the EEE value chain at the national, regional and local level. The management of waste electrical and electronic equipment (WEEE), which includes the ICT sector, involves multiple actors, from producers and distributors to government entities and waste managers. However, the lack of articulation between these levels creates barriers to the efficient implementation of policies and strategies. Among the most relevant problems are the absence of homogeneous regulations at all levels of government, the limited technical and operational capacity of some entities, and the lack of effective communication mechanisms between the different actors. This lack of coordination prevents the development of integrated strategies for the reduction, reuse, recycling, collection, treatment and/or final disposal of WEEE within the ICT sector, making it difficult to achieve the goals of the National Policy. Furthermore, there are no official information on how ICT equipment are being repaired in the country. As mentioned, Colombia has strength in the management of WEEE by having implemented the EPR systems; however, there is insufficient knowledge regarding upstream interventions/services, towards the extension of the useful life of EEE in general, and in particular in the ICT sector.

b) Permanent entry of ICT equipment placed on the market and increase in the generation of WEEE. The growth of the ICT´s EEE market in Colombia is due to several factors, such as globalization, rapid technological evolution and the growing demand for electronic devices. However, this constant flow of new products implies an accelerated generation of WEEE, aggravated by the lack of incentives for the reuse and repair of equipment. In addition, the high presence of low-quality products or products with short life cycles increases the volume of waste, while the collection and proper disposal of this waste remains insufficient. This generates significant environmental and health impacts due to the presence of hazardous substances in related WEEE and its improper disposal.

c) Unsustainable production and consumption patterns both globally and locally. The current logic of consumption promotes the constant acquisition of new ICT products to the detriment of reuse and recycling practices. At the industrial level, many companies design products with programmed obsolescence, limiting their useful life and encouraging the frequent replacement of devices. At the consumer level, there is a low culture of repair and reuse, together with a general lack of knowledge about the responsible management of electronic waste. At the regulatory level, the lack of economic incentives and strict regulations to promote sustainable product design and efficient WEEE management of ICT´s equipment contribute to the perpetuation of this problem.

d) Social system that hinders gender equality in the sector. WEEE management in Colombia (as in many other countries), including those resulting from ICT equipment, faces challenges related to gender equity. The recycling and waste management industry is often dominated by men, with little representation of women in technical and leadership roles. Barriers to formal employment, lack of gender-sensitive technical training and cultural biases limit women's inclusion in the sector. In addition, in many communities, informal work in the collection and treatment of electronic waste is performed under precarious conditions, disproportionately affecting women who do not have access to more secure and well-paid job opportunities.

THEORY OF CHANGE

The Project´s vision is to proceed with direct interventions on the immediate, intermediate and root causes previously identified; strengthening national capacity for the rational management of WEEE within the framework of national and international guidelines on the management of chemical substances and hazardous waste, through the establishment of strategies that allow the circularity of WEEE, the reincorporation of recycled and recyclable parts and materials into production cycles, and the adequate management of WEEE including hazardous electronic waste.

The Child Project in Colombia has been designed and will be implemented within the framework of the Global GEM Program. Colombia while addressing these main challenges identified at national level will benefit from the Global Program systemic approach and efforts to address the root causes of e-waste and sustainability failures in the electronics sector, to shift the electronics industry toward circularity. In addition, Colombia will benefit but also will contribute through its different interventions to the Global GEM Program to increase the access of information, enhance education, generation of knowledge, capacity building and adoption of best practices among relevant actors towards electronics circularity.

The Project in Colombia will focus its interventions mainly targeting the ICT sector in alignment to the Global GEM Program. In a complementary way, and as commited within the Child Project Concept, the project will provide limited support to start building national capacity on the following EEE: electric batteries, photovoltaics panels and refrigerator, highlighting that these interventions will be mainly supported through cofinancing.

This Project is aligned with CPD 2025-2027. Outcome 3.1 By 2027, Colombia will have made progress in adapting to and mitigating the effects of the triple planetary crisis – climate change, the loss and degradation of biodiversity, and the reduction of pollution.

In addition, the project is aligned to the following National and Sectorial Policies:

- National Policy for the comprehensive management of waste electrical and electronic equipment – WEEE: the scope and alignment has been described in the previous section.

- Environmental policy for the comprehensive management of hazardous waste and Action Plan 2022-2030: The general objective of this policy is to continue strengthening the comprehensive management of hazardous waste (RESPEL), recognizing the needs of the different interest groups, as well as the environmental problems associated with its generation and management, in order to protect the environment and human health, thus contributing to the sustainable development of the country. Its 2022-2030 Action Plan highlights strategy 8. Optimization of administrative instruments and strengthening of national environmental control and monitoring, which contemplates the improvement of: the internal evaluation and monitoring processes of post-consumer waste return plans and the study, approval and monitoring processes of authorizations for cross-border movements of RESPEL within the framework of the Basel Convention and OECD Decisions; and the development of terms of reference for the preparation of Environmental Impact Assessments (EIA) for the licensing of projects associated with the different stages of RESPEL management.

- National Sustainable Production and Consumption Policy – towards a culture of sustainable consumption and productive transformation, in terms of its objectives to generate a change towards sustainable production and consumption patterns, through strategies such as eco-design, sustainable public purchases, promotion of business competitiveness, etc.

- National Climate Change Policy of 2017: The objective of the policy is to incorporate climate change management into public and private decisions to advance a path of climate-resilient and low-carbon development, which reduces the risks of climate change and allows taking advantage of the opportunities it generates. Within its strategic lines, it contemplates low-carbon and climate-resilient urban development and within the actions of said line, incentives for electric and low-emission vehicles.

- Green growth policy (CONPES 3934 of 2018): This policy aims to boost the country's productivity and economic competitiveness by 2030, while ensuring the sustainable use of natural capital and social inclusion, in a climate-compatible manner. It has an Action Plan that includes electric mobility (Action Line 27) and the circular economy (Action Lines 28, 29 and 30) within the action lines.

- Policy for the improvement of air quality (CONPES 3934 of 2018): This policy proposes actions to reduce the concentrations of pollutants in the air through the renewal and modernization of the vehicle fleet, the reduction of sulfur content in fuels, the implementation of best techniques and practices in the industry, the optimization of information management, the development of research, territorial planning and risk management due to air pollution. Its lines of action contemplate the renewal and modernization of the vehicle fleet, promoting the incorporation of zero and low emission technologies, especially electric vehicles, dedicated to natural gas and hybrids.

- National Electric Mobility Strategy – ENME of 2019: This strategy recognizes the global trend in electric mobility and seeks to accelerate its penetration in Colombia so that it allows, proactively, to reduce emissions in the transportation sector and use energy

in an efficient and rational way, for the benefit of a better quality of life for Colombians. The strategy has a 2018-2022 Action Plan, which highlights the actions proposed in literal C. of the technical and technological instruments of the Plan, which corresponds to the disposal of electric vehicles or their components (1. Definition of second/third use of batteries, 2. Definition of the guidelines for the final disposal of the electric vehicle and its components).

- Energy transition policy (CONPES 4075 of 2022): This energy transition policy proposes guidelines and strategies to increase energy security; encourage knowledge and innovation in energy transition; generate greater competitiveness and economic development from the energy sector and develop an energy system with low GHG emissions within the framework of the Colombian reality. Among the lines of action is Line of Action 21. Establish policy guidelines for good practices for circular economy projects in the mining, energy and transportation sectors and promote their implementation.

- National green business plan 2022-2030: The Plan defines, within the categories of green businesses, industrial eco-products, within which is the use of electrical, electronic, construction and demolition waste, plastics, rubber, textiles, packaging and containers from sources other than biomass to produce raw materials and products.

- National Circular Economy Strategy (ENEC): The National Circular Economy Strategy aims to promote a new economic development model that includes the continuous recovery of resources, the closing of material, water, and energy cycles, the creation of new business models, the promotion of industrial symbiosis, and the consolidation of sustainable cities. The main objectives include optimizing efficiency in the production and consumption of materials and reducing both the water and carbon footprint. This strategy set specific goals related to industrial material flows and mass consumption products, as well as sub flows of materials from Waste Electrical and Electronic Equipment (WEEE) and hazardous waste (RESPEL). Among these goals, it established a 90% recovery rate of scrap metal for steel production by 2021, as well as the collection and management of waste from computers and peripherals, fluorescent lamps, batteries and accumulators, used lead-acid batteries, pesticide containers, and expired medications—under the principle of extended producer responsibility. Additionally, it aimed to recover and recycle materials from 100,000 replaced refrigerators, manage refrigerants controlled under the Montreal Protocol for reuse, and establish a percentage of used lubricating oils collected and treated for energy recovery. Although the ENEC was a presidential government strategy that ended in 2022, the Ministry of Environment is currently in the process of reformulating a new strategy (a draft version has not yet been released). In this context, the DAASU groups have been asked to set new goals within the same material flows, including WEEE, making coordination with these planned targets necessary.

The following project´s theory of change has been developed which takes into account and include previously identified barriers and challenges to deliver proper interventions and effective actions to address them, encourage expected transformation and achieve project´s objective.

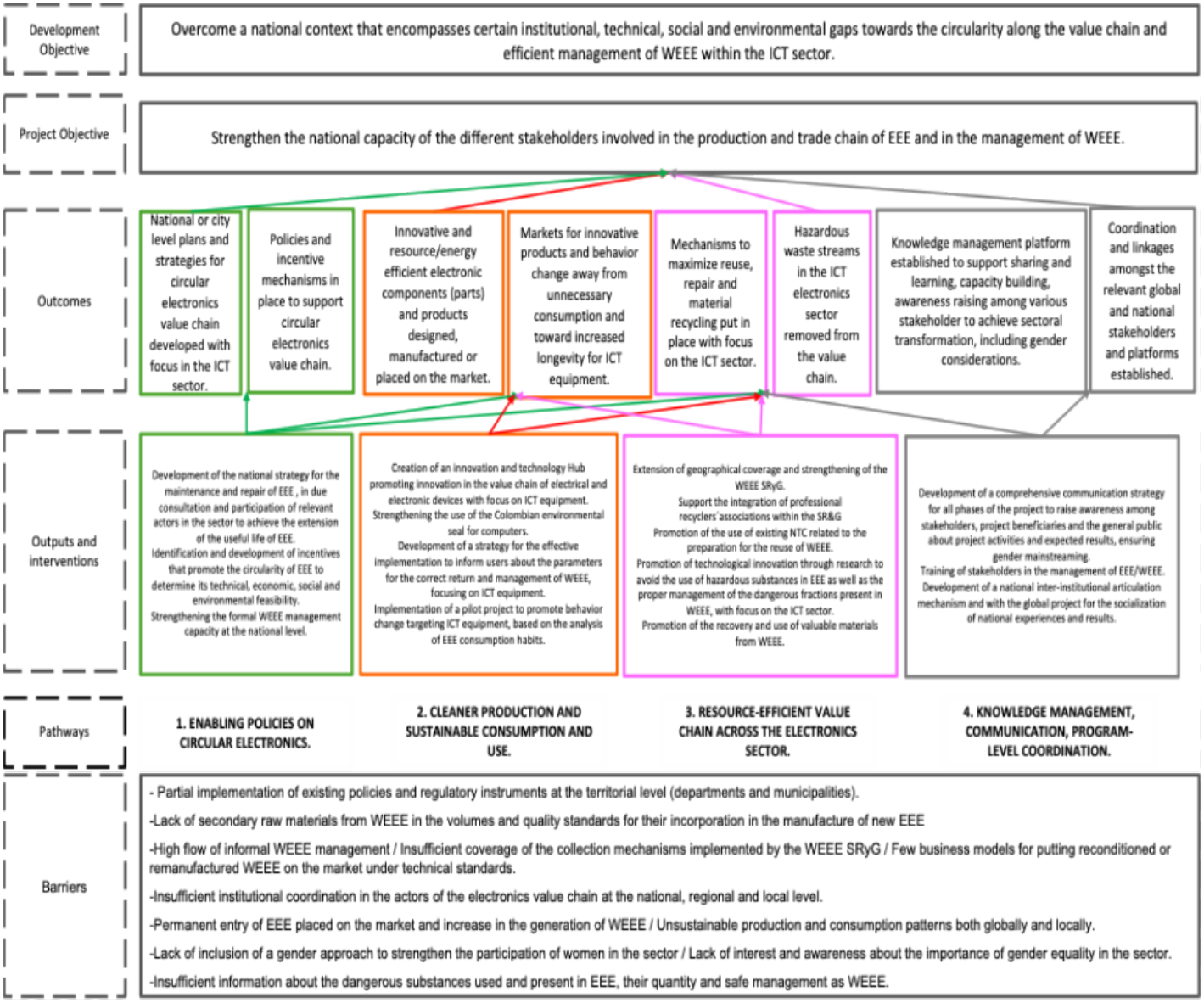


Figure 6. Theory of Change Diagram

In summary, the strategy selected to address the overall development challenge is the following:

Through Component 1, the project will support the country in strengthening its national policies and strategies, in line with the National Policy for the comprehensive management of waste electrical and electronic equipment, promoting the maintenance and repair of EEE, particularly ICT equipment, in due consultation and participation of relevant actors in the sector (manufacturers, importers, WEEE managers, technical services, government authorities and the academic sector). In a complementary manner, support the implementation of incentives and/or stimuli that favor the circularity of EEE throughout the value chain and the promotion of new business models, as well as the technical strengthening of WEEE managers so that they are able to recover electrical and electronic components efficiently for reuse in the repair, reconditioning or remanufacturing of EEE with focus on the ICT sector.

Component 2 will have a focus aimed at promoting sustainable consumption and production patterns throughout the EEE value chain, targeting the ICT sector. The project will support innovation in the productive sector by facilitating interaction and knowledge exchange between different actors, especially the private sector and the academic sector. In turn, it will work on consumer habits related to ICT equipment by strengthening the Colombian Environmental Seal and the design and implementation of a behavior change strategy aligned with the principles of circular economy and based on behavioral sciences.

Component 3 will support the strengthening of current WEEE collection and management systems, contributing to the scaling up of their geographic coverage as well as their technical capacity for the repair, reconditioning or remanufacturing of EEE resulting from the ICT sector. Likewise, this component will create national capacity for the adequate identification and management of Persistent Organic Pollutants (POPs) present in EEE from the ICT sector, complementing the results obtained by the GEF/UNDP project

"Strengthening national capacity to manage industrial POPs within the framework of national and international guidelines on the management of chemical substances and hazardous waste."

Finally, Component 4 will strengthen knowledge management, communication, and coordination to align Colombia's efforts with the Global GEM Program. It supports sectoral transformation by developing communication strategies, gender-inclusive educational materials, and outreach to different interest groups involved in the EEE value chain of the ICT sector. It builds knowledge infrastructure through training, virtual courses, and regional platforms to enhance WEEE management. Additionally, the component ensures Colombia's active participation in global coordination, communication, and reporting mechanisms, contributing lessons learned, technical inputs, and visibility to the GEM Knowledge Platform. This linkage fosters global collaboration, supports shared learning, and ensures Colombia's efforts contribute meaningfully to sustainable, circular electronics value chains.

Key assumptions

The project strategy is based on a few assumptions that will be of great importance for achieving expected changes and results. These assumptions can be found in the "Project Results Framework" section, and the main ones can be summarized as follows:

- The world's leading electronics companies can generate demand for greener materials processes; Developing countries can influence certain segments of the supply chain, establish market/trade standards for electronic products and change consumer behaviors.
- There is a need to promote business models and facilities for the maintenance and repair of EEE in use and the preparation for the reuse of discarded EEE (WEEE) and its components, in order to extend the useful life of EEE and reincorporate WEEE into the economic cycle; as well as manage dangerous components in the value chain. A more effective and sustainable result can be achieved through a national strategy for articulating actors.
- Information on ICT´s electronics and e-waste management need strategic dissemination for use by manufacturers, consumers, decision makers and international discourse.
- National and local Governments commits to encourage coordination among competent authorities for strengthening the WEEE value chain management in the ICT sector in Colombia through the integrated management of chemicals and waste.
- Governments and producers are willing to legislate, implement, regulate, and deliver based on the e-waste hierarchy, starting with waste prevention.
- Key Stakeholders related to the ICT sector, mainly the private sector and financial institutions, are willing to participate and receive training and capacity built in the promotion and adoption of circular solutions for e-waste and are willing to participate in their reduction and in their environmental sound management.
- The industry maintains a strong ambition to phase out chemicals of concerns within their processes and increase circularity of ICT´s products.
- Participation and investment by the private sector related to the ICT sector, as decisions taken by product designers and manufacturers ultimately and directly influence waste generation and circularity of materials/components.
- Local communities, including vulnerable groups, are willing to participate in the implementation of activities and are motivated for behaviour change around e-waste reduction and e-waste segregation resulting from ICT equipment.
    - A collaborative approach to policy making that is sustained and continuously improved, integrating gender related issues across the implementation of the proposed activities.
    - Collecting the lessons learnt would foster continuous improvement during the implementation phase and assisting in the development of innovative demonstration approaches and testing for other similar implementations elsewhere after the project´s completion.
    - Most e-waste regulations are anchored on broader municipal or hazardous waste laws. Growing significance of other sector requires updated/targeted regulations on circular electronics and e-waste.
    - Global electronics lead firms in the ICT sector can generate demand for greener materials processes; developing countries can influence certain segments of the supply chain, set market/trade standards for electronic products, and alter consumer behaviors.

- There is expressed need for upgraded business models and facilities to accommodate after-sales repair services, turn e-waste into resource, and remove hazardous components from the value chain of the ICT sector. Higher capacities and inclusive/interlinked systems make it efficient and sustainable.

EXPECTED RESULTS

COMPONENT 1: ENABLING POLICIES ON CIRCULAR ELECTRONICS.

OUTCOME 1.1. NATIONAL OR CITY LEVEL PLANS AND STRATEGIES FOR CIRCULAR ELECTRONICS VALUE CHAIN DEVELOPED.

Output 1.1.1. Strategies for “Right to repair”, “anti-planned obsolescence” and 'circular design' strategies drafted, enacted, and disseminated.

To promote the sustainable management of Electrical and Electronic Equipment (EEE) and extend its useful life, with main focus on the ICT sector, a series of incremental activities will be implemented under Output 1.1.1. These activities focus on designing a National Strategy for EEE maintenance and repair, strengthening technical services, quantifying the carbon footprint, implementing amendments to the Basel Convention, and updating the national reporting framework. Through collaboration with key stakeholders, these efforts aim to improve repairability, enhance circularity, and ensure environmental compliance. The initiative will contribute to reducing e-waste, fostering sustainable practices, and supporting Colombia’s energy transition and digital transformation objectives.

As identified in Risk 4, 5, 6 and 7 prior to the implementation of demonstration activities, different verification and assessments will be conducted to identify potential risk factors and prevent their occurrence, the following will be considered: physical conditions of the facilities will be conducted to verify their vulnerability to events of origin, compliance with standards and guidelines for the safe management of EEE, WEEE, hazardous substances and hazardous waste, considering the environmental and safety aspects, standards related to safety and health at work, compliance with international standards such as those of the ILO.

The following incremental activities will be carried out to achieve Output 1.1.1:

a) Design and implementation of a National Strategy for the maintenance and repair of electrical and electronic equipment (EEE): In line with the National Policy for the Integrated Management of Waste Electrical and Electronic Equipment (WEEE), this activity will design and implement a National Strategy that promotes the maintenance and repair of EEE in due consultation and participation of relevant actors in the sector (EEE manufacturers, importers and marketers, WEEE managers, technical services, independent repairers, government authorities, public programs for the provision of technologies for education, such as “Computadores para Educar”, and academia) with the participation of women in a broad, effective and substantive manner. Likewise, an evaluation of the degree of reparability of EEE will be carried out through the measurement of a reparability index. The main objective of the strategy is to achieve the extension of the useful life of mass consumption EEE, including ICT equipment. The following sub-activities will be considered in the design and implementation of the strategy:

i) Diagnosis and evaluation of the national context of maintenance and repair of EEE. The current market of EEE used in the country will be established, as well as the identification of the existing capacity (repair infrastructure: technical services authorized by the brands, multi-brand technical services, independent repairers, WEEE collection and management systems - WEEE SRyG, etc.) and the barriers to overcome that currently impede the maintenance and repair of EEE in use, particularly those related to the ICT sector . Likewise, the evaluation of existing regulatory frameworks and policies will be carried out in order to identify gaps, inconsistencies and opportunities for improvement and to promote policy coherence for the extension of the useful life of EEE, including the differentiated perspective of men and women.

ii) Definition of objectives, methodology, actors to be involved, indicators and goals, linking interests and differentiated strategies for men and women.

iii) Carrying out the diagnosis and analysis of results.

iv) Consolidation of a database of maintenance and repair technical services and independent repairers of the country's EEE.

v) Identification of the barriers or challenges, as well as the needs that arise in relation to the repair and maintenance of EEE (e.g. technical knowledge, access to maintenance and repair manuals, supply of original spare parts, etc.) and the definition of possible actions to overcome the barriers and meet the needs in conjunction with public policy actions and the existing regulatory framework. Also, the definition of incentives for the involvement of service centers and independent repairers to participate in the strategy.

vi) Design of an EEE repairability index and the methodology for its application and evaluation.

vii) Definition of the strategy's governance, monitoring and evaluation.

b) Strengthening the technical services for maintenance and repair of EEE currently operating in Colombia in the subcategories of computers and data processing equipment, telecommunications equipment, and domestic and commercial refrigeration, promoting the participation of women. These actors include the network of services authorized by the EEE brands (imported and domestically manufactured), non-authorized technical services and independent repairers. This last service link is essential to support the national strategy. In this way, it is proposed to use the model to strengthen the SDG value chains[1][4] for the articulation of EEE producer companies, the WEEE SRyG, the WEEE management companies, the technical services and the independent repair people, in such a way that, on the one hand, the corporate image perceived by the users of these devices is improved regarding the quality and ease of repair of the EEE and, on the other hand, the technical services and the independent repair people have high quality standards that allows them to be endorsed and recognized by producers, and made visible by users to increase their market, introducing gender guidelines that encourage the visibility and broad, effective and substantive participation of women. Likewise, the circularity of the functional components recovered from WEEE will be strengthened so that they can be used as spare parts in maintenance and repair operations of EEE, and at the end of the materials cycle with environmentally appropriate management as WEEE of the unusable parts and components that are replaced in said operations. Regarding “Computadores para Educar”, a technical training strategy will be implemented for the educational community around the beneficiary public educational institutions to promote preventive maintenance or on-site repair of the terminals delivered, as well as the supply of spare parts from terminals that are discarded by the institutions and managed by the entity's National Center for the Use of Electronic Waste - CENARE.

The following sub-activities will be considered in the implementation of this activity:

i) Diagnosis and initial modeling of at least three (3) SDG Value Chains (subcategories: computers and data processing, telecommunications equipment, and domestic and commercial refrigeration), considering a differentiated analysis between men and women. Based on the diagnosis of the infrastructure of technical maintenance and repair services and independent repairers of EEE and the barriers identified for a better provision of the associated services, the possible productive linkages that strengthen this sector will be identified. In this way, improvements to the business models that could be implemented for the productive units involved will be identified and proposed.

ii) Design, implementation and follow-up of the 3 improvement plans according to the modeling of the previous sub-activity. In addition, documentation of the experience and results obtained for replication, considering relevant aspects differentiated by men and women.

iii) Implementation of a demonstration activity for each of the value chains (subcategories of computers and data processing equipment, telecommunications equipment, and domestic and commercial refrigeration) to demonstrate the application of the reparability index and, based on the results, provide feedback on the definition and methodology to be defined within the National Strategy. For this purpose, collaboration with national appliance manufacturers will be sought, among which the following are proposed: Haceb, Challenger, or Mabe, and with at least one EEE importer from the ICT sector. In particular, for the guidelines for life extension and management of EEE resulting from alternative energy projects, the strategy will feed back on the results of the demonstration project to be implemented in activity b) of Output 3.1.3.

iv) Creation of an information management tool for technical services and independent repairers to obtain information on repair and maintenance operations, capturing differentiated data from men and women participating in these dynamics. At the same time, its articulation with the related WEEE SR&Gs will be ensured in order to guarantee that the WEEE generated in their operations are adequately managed through the systems. The tool will allow the analysis and monitoring of the actual repairability index based on the information of the actors involved, taking into consideration, as far as possible, the costs associated with the repair versus the cost of the equipment for the feasibility analysis. It will start as a voluntary tool and will be hosted by a government partner (National Learning Service - SENA, Bogota Chamber of Commerce) or other private sector entity (COLNODO or ECOCOMPUTO) to be defined during project implementation. In addition, institutionalization mechanisms will be analyzed, as well as sustainability beyond the life of the project. The project will support the dissemination and training in the use of the tool in the authorized technical services or independent repairers of at least three (3) EEE producers, focusing on ICT equipment.

c) Quantification of the environmental benefits in terms of carbon footprint attributed to the implementation of the national strategy for the maintenance and repair of EEE and the integrated management of WEEE regulated in the country. For the development of this activity the following sub-activities will be carried out:

i) Definition of the methodology to be used for the estimation of the intervened EEE and managed WEEE, with focus on ICT EEE and for the estimation of greenhouse gas (GHG) emissions avoided through the extension of the useful life of the intervened EEE and managed WEEE; selection of the parameters for calculating avoided GHG emissions, taking into account internationally recognized

methods and parameters, as well as the methodologies and calculation tools (GEB Tool) developed by the Global Global Electronics Management (GEM) Program.

ii) Consolidation of calculations and generation and publication of the respective reports.

iii) Training of the actors involved in the national strategy for the maintenance and repair of EEE and the integrated management of regulated WEEE in the country, under the auspices of the Retorna Group Association (which brings together several post-consumer programs and WEEE collection and management systems that in turn represent the most important manufacturers and importers of EEE in the country), and the Colombian Association of Industrial Managers of Waste Electrical and Electronic Equipment (ACORAEE), which brings together the largest WEEE managers in the country. The project will support training on the use of the tool for the correct measurement of the carbon footprint in operations. In addition, this tool will allow the different actors to quantify their current emissions and establish reduction plans accordingly. The project will support the training of at least 30 companies (producers and repairers) and 10 WEEE managers.

d) Implementation of the amendments to the Basel Convention: this activity will support the Ministry of Environment and Sustainable Development (MinAmbiente), the National Environmental Licensing Authority (ANLA), and the National Tax and Customs Directorate (DIAN) in the generation of technical capacity of personnel assigned to the entities in the national territory for the development of technical procedures and other corresponding instruments for the correct and effective implementation of the amendment to the Basel Convention adopted by COP-15 in 2022 on WEEE transboundary movement.

e) Updating of the Single Environmental Registry (RUA) to enable the reporting of information for decision-making on the integrated management of WEEE. In this sense, technical guidelines will be provided to determine the installed capacity of WEEE management companies according to the processes and categories of licensed WEEE, which will allow ANLA to authorize or not the transboundary movement of WEEE. The project will disseminate produced guidelines to WEEE managers for their correct reporting. In addition, a technical guide will be designed for the regional environmental authorities to verify and monitor such capacities in the environmental follow-up of the environmental licenses of WEEE management facilities.

OUTCOME 1.2. POLICIES AND INCENTIVE MECHANISMS IN PLACE TO SUPPORT CIRCULAR ELECTRONICS VALUE CHAIN.

Output 1.2.1 Green and sustainable procurement, green financing, polluters pay, incentive mechanisms, CSR and EPR policies designed and adopted based on country needs

To enhance the circularity of electronics in Colombia, several key activities will be implemented under Output 1.2.1. These include identifying and developing feasible incentives to promote WEEE management with focus in the ICT sector, based on prior studies, and supporting their implementation with stakeholder involvement. Additionally, the project will strengthen the application of environmental criteria in public procurement of EEE, particularly ICT equipment, through training sessions for national and territorial entities. These efforts aim to drive sustainable practices, encourage circular economy principles, and foster gender-inclusive participation in Colombia's transition to responsible e-waste management.

The following incremental activities will be carried out to achieve Output 1.2.1:

a) Analysis of the incentives that could promote the integrated management of WEEE in Colombia with responsive gender guidelines. The incentives identified by the study "Incentives to promote the use and integrated management of WEEE in Colombia", developed in 2024 by the Ministry of Environment and Sustainable Development with the support of the German Society for International Cooperation (GIZ) will be analyzed to determine their technical, economic, social and environmental feasibility and to propose a roadmap to address the implementation of the incentive with the highest degree of feasibility by the actors involved and promoting the involvement of women. The project will evaluate the development of a demonstration activity for the implementation of the selected incentive incentive prioritizing the ICT sector. A gender analysis will be included in order to establish measures and criteria to promote the inclusion of women in equal conditions and opportunities to financing services. A gender analysis will be included in order to establish measures and criteria to promote the inclusion of women in equal conditions and opportunities to financing services.

b) Strengthening the application of guidelines for the procurement of EEE. Within the framework of the National Strategy for Sustainable Public Procurement, the project will support the training and sensitization of public entities on the application of existing guidelines that include environmental criteria for the procurement or rental of EEE[2][5], with a focus on ICT equipment. The work

will be developed in conjunction with “Colombia Compra Eficiente” (Colombia Efficient Procurement) of the Public Procurement Agency and 100 national and territorial entities will be trained.

Output 1.2.2 New business models (lease and take back, services in place of goods) promoted and set up

To advance circular economy practices in Colombia, Output 1.2.2 focuses on promoting new business models such as leasing and take-back systems for Electrical and Electronic Equipment (EEE) of the ICT sector. Key activities include strengthening WEEE managers to enhance component recovery and reuse, supporting maintenance and repair services, and fostering connections with secondhand markets. Additionally, the project will assess the feasibility of leasing reconditioned EEE and implement a pilot initiative in partnership with a WEEE manager. These efforts aim to extend product lifecycles, reduce e-waste, and create sustainable economic opportunities within the ICT sector.

As identified in Risk 4, 5, 6 and 7 prior to the implementation of demonstration activities, different verification and assessments will be conducted to identify potential risk factors and prevent their occurrence, the following will be considered: physical conditions of the facilities will be conducted to verify their vulnerability to events of origin, compliance with standards and guidelines for the safe management of EEE, WEEE, hazardous substances and hazardous waste, considering the environmental and safety aspects, standards related to safety and health at work, compliance with international standards such as those of the ILO.

The following incremental activities will be carried out to achieve Output 1.2.2:

a) Strengthening of five (5) WEEE management companies to increase the capacity for recovery and reuse of components from WEEE, prioritizing the ICT sector, including gender responsive guidelines in the business dynamics. This activity will support the National Strategy for the maintenance and repair of electrical and electronic equipment, particularly in the strengthening of technical maintenance and repair services to be developed in Output 1.1.1. In this way, it is intended to improve the circularity of WEEE with the recovery of electrical and electronic components and other parts (e.g. mechanical or plastic parts) in a cost-effective manner for reuse in the repair of EEE in use or in the reconditioning of WEEE or in the remanufacture of other EEE. For the development of this activity the project will provide the necessary technical training, procedures for the identification, recovery and functionality testing for the reuse of components from WEEE, as well as the connection with the market of service centers and independent repairers of EEE and secondhand markets of EEE.

b) Promotion of new business models to stimulate the reuse of WEEE. This activity will support the development of a technical, economic and marketing feasibility study for the implementation of a leasing model for reconditioned EEE that incorporates gender-sensitive guidelines. Based on the results, support will be provided for the implementation of a pilot project in partnership with a WEEE management company that has implemented an EEE reconditioning process in the ICT sector and is interested and has the conditions to implement EEE leasing to enhance its scaling up.

COMPONENT 2: CLEANER PRODUCTION AND SUSTAINABLE CONSUMPTION AND USE.

OUTCOME 2.1 INNOVATIVE AND RESOURCE/ENERGY EFFICIENT ELECTRONIC COMPONENTS (PARTS) AND PRODUCTS DESIGNED, MANUFACTURED OR PLACED ON THE MARKET.

Output 2.1.1: Circular design on electronic components (parts) and products (aimed at increasing standardization and compatibility; ease of maintenance and repair, including disassembly and reassembly; avoidance of hazardous material) promoted and supported

This Output focuses on promoting circular design in electronic components and products to enhance standardization, compatibility, and ease of repair while minimizing hazardous materials. A key initiative is the creation of an innovation and technology hub for the EEE value chain, fostering collaboration among industry stakeholders, research institutions, and policymakers. This hub will facilitate knowledge exchange, support eco-design initiatives, and drive advancements in EEE circularity within the ICT sector. By promoting durable, repairable, and recyclable products, the initiative aims to extend product lifecycles, improve waste management, and accelerate Colombia’s transition toward a more sustainable and circular electronics sector.

The following incremental activities will be carried out to achieve Output 2.1.1:

a) Creation of the innovation and technology hub of the EEE value chain: the activity will support the development of an innovation and technology hub facilitating the interaction and exchange of knowledge of different actors and promoting the full, effective and substantive participation of women, in order to promote innovation in the EEE value chain and its waste with focus on the ICT sector. Consequently, the activity will be developed jointly with the Ministry of Science, Technology and Innovation and will involve the different actors of the National System of Science, Technology and Innovation - SNCTI, companies of the EEE value chain, startups, investors, among others. It will be materialized in a space or instance attached to the WEEE National Committee, which will articulate the actors linked to the hub and will manage the information on the research lines, projects and results carried out by the research groups of the universities and technological centers, incorporating knowledge differentiated by gender, as well as other innovative initiatives carried out by the actors of the EEE value chain and related to the eco-design of EEE, the integrated management of WEEE, the circularity of EEE/WEEE and other related topics, in such a way that they are systematized and disseminated in catalogs and socialized in special events with the interested parties to promote their implementation and replication. Likewise, a catalog of

challenges or research projects foreseen by the producers of EEE, SRyG and WEEE management companies will be created, so that universities and research centers support their resolution.

Among the initiatives to be taken into account by the hub, the following can be mainly listed with focus in the ICT sector: extension of the useful life of EEE by improving its durability, adaptability, reparability, ease of maintenance and repair; design of EEE with materials and components that facilitate its recovery and recycling and that do not contain dangerous chemical substances; design of EEE to facilitate preparation for reuse (reconditioning, remanufacturing) once it becomes WEEE; design of electronic devices or interfaces, communication protocols, software that allows the reuse of WEEE in second applications; procedures for the recovery of WEEE components for readaptation, reconditioning or remanufacturing; processes for the recovery and use of valuable or critical materials contained in WEEE; processes for the recovery, treatment or use of dangerous fractions contained in WEEE; and other initiatives that promote the circularity of EEE/WEEE.

OUTCOME 2.2 MARKETS FOR INNOVATIVE PRODUCTS AND BEHAVIOR CHANGE AWAY FROM UNNECESSARY CONSUMPTION AND TOWARD INCREASED LONGEVITY.

Output 2.2.1 Eco-labeling of green and innovative electronic products promoted

This Output aims to enhance consumer awareness and promote sustainable practices in the Electrical and Electronic Equipment (EEE) sector. Key activities include supporting producers in informing consumers about hazardous substances and proper WEEE disposal, as well as strengthening the use of the Colombian Environmental Seal (SAC) for EEE products. The project will facilitate the development of clear labeling guidelines and conduct a demonstration initiative to certify environmentally responsible EEE.

The following incremental activities will be carried out to achieve Output 2.2.1:

a) Development of mechanisms to inform EEE consumers about hazardous substances contained in EEE and their correct return at the end of their useful life. Through this activity, support will be given to EEE producers for the preparation of a report with the analysis of alternatives that allows them to comply with the obligation to inform the users of their products, with focus on the ICT equipment, the parameters for a correct return and management of WEEE, for which said information may be presented in a complete, express and clear manner to the consumer on their labels, packaging or annexes (literal f of numeral 2 of Article 6 of Law 1672 of 2013). The report will be disseminated among producers as a decision tool.

b) Strengthening the use of the Colombian environmental label for EEE producers. At present, Colombia has the NTC 6192 standard "Type I Environmental Labels. Colombian Environmental Seal. Environmental criteria for computers"[3][6]. This activity will help two (2) companies that produce EEE to obtain certification under this standard. The Colombian Environmental Seal (SAC) is a voluntary seal that can be awarded to goods and services that meet certain environmental requirements. To obtain the seal, manufacturers, importers, service providers, and product marketers may apply to a certification body accredited by the National Accreditation Body (ONAC) and authorized by the National Environmental Licensing Authority (ANLA). The project will support the implementation of a demonstration activity in coordination with 2 companies to apply the standard and obtain the corresponding certification. In addition, in line with Output 1.2.1, the project will promote consideration of the "Colombian Environmental Seal" as an environmental criterion for selecting supplier companies in the framework of sustainable public procurement.

Output 2.2.2 Information and awareness raising on green products, alternatives and services in the electronics sector undertaken

This Output focuses on raising awareness and promoting sustainable consumption in the electronics sector with focus on ICT equipment. Activities include analyzing consumer habits to understand purchase, maintenance, and disposal behaviors, providing key insights for policy adjustments. Additionally, a behavior change strategy targeting ICT equipment will be piloted to encourage proper return of EEE to WEEE management systems. The initiative will engage stakeholders, implement targeted interventions, and develop marketing campaigns to foster circular economy practices. Based on the pilot's success, the approach will be refined and scaled nationally, ensuring long-term impact on sustainable EEE consumption and waste management practices in Colombia.

The following incremental activities will be carried out to achieve Output 2.2.2:

a) Analysis of information on EEE consumption habits, considering gender-sensitive dimensions: through this activity, the analysis of statistical information provided both through the National Administrative Department of Statistics (DANE), as well as through other tools to be considered by the project, will be supported, in order to detect the use and consumption habits, behavioral patterns and preferences of the population, gender differentiated, related to EEE. The analysis will identify key findings, such as: the factors or criteria that influence the purchase of new devices, the willingness to maintain or repair them, the most common reasons for discarding EEE, the correlations between demographic factors and consumer behaviors, among others, which will serve as input for the development of a strategy that promotes changes in habits towards extending the useful life of EEE.

In a complementary manner, the dissemination of the results with the relevant actors will be supported, mainly with the Ministry of Environment and Sustainable Development, as input for feedback and adjustment of the regulations on the matter.

b) Implementation of the behavior change strategy: this activity will support the implementation of a pilot project to promote the return of EEE by users to the corresponding WEEE collection and management systems. To implement this activity, the following stages will be carried out:

i) Pilot project design:

- Scope: Design and implement a behavior change strategy potentially aimed at the territories where Outputs 1.2.2 and 3.1.1, considering gender mainstreaming, will be implemented, which allows measuring the effectiveness of behavioral changes in the consumer differentiated by gender. This activity complements each pilot, to influence the consumer's decision on the return mechanisms in the collection systems. The project focuses on the development of a behavior change strategy to influence people's attitudes and habits in relation to the consumption of EEE, with the aim of promoting more sustainable behaviors aligned with the principles of the circular economy. This strategy will draw on the principles of psychology and behavioral science to understand how people make decisions and how they can be motivated to change their actions.

- Objective: Guide the user's conscious choice towards active participation in WEEE SR&G, its return mechanisms and the adoption of circular economy criteria in product selection, considering gender-sensitive aspects.

- EEE/WEEE: Focus on ICT EEE/WEEE.

- Interested parties: Involve interested parties at various levels, producers and marketers of EEE, the SR&G of WEEE, managers of WEEE, users of EEE, women's groups linked to the value chain, environmental authorities and territorial entities and other relevant government institutions.

- Requirements/needs: Coordinated management between the execution of pilot projects and the adoption of solutions through changing the behavior of users or consumers.

- Identify and address the needs for eventual end-of-life management of EEE, incentives for users or consumers and compliance with regulations.

ii) Implementation of the pilot project:

- Select appropriate collection points and regions for the pilot project.

- Collaborate with the main agents of post-consumer systems, managers and government agencies to achieve a unified approach.

- Launch marketing and promotional campaigns focused on life extension and circularity, management and collection systems, considering strategies that include gender-sensitive aspects, as well as other related activities, to encourage consumer participation.

- Develop communication materials that highlight the benefits of useful life extension, circular products, management and collection systems and behavioral changes.

iii) Operational steps:

- Identification of target behaviors: Identify specific behaviors related to the consumption of EEE, considering gender-differentiated aspects, and the use of management and collection systems that are sought to change to promote the extension of the useful life of EEE and the proper management of WEEE.

- Understanding the influencing factors: Analyze the factors that influence these behaviors, such as beliefs, values, incentives and perceived barriers either by women or men.

- Design of specific interventions: Develop interventions adapted to the target behaviors and identified influencing factors, using proven techniques in behavioral psychology and behavior change, considering the factors that have a differential influence on men and women.

- Effective execution: Implement the interventions effectively, ensuring reaching the target audience in a relevant and persuasive way.

- Improvement iterations: Measure the progress and impact of interventions, according to the differentiated results between men and women, adjusting the strategy as necessary to improve results.

- Replication: based on the results obtained and within Output 4.1.1, design a national strategy for its replication.

COMPONENT 3: RESOURCE-EFFICIENT VALUE CHAIN ACROSS THE ELECTRONICS SECTOR.

OUTCOME 3.1. MECHANISMS TO MAXIMIZE REUSE, REPAIR AND MATERIAL RECYCLING PUT IN PLACE.

Output 3.1.1. E-waste collection schemes (one to one, zero to one, dedicated services for offices and institutions) and reverse logistics established.

Effective e-waste management is essential for environmental sustainability and social development. Output 3.1.1 aims to establish efficient e-waste collection schemes and optimize reverse logistics, aligning with behavior change strategies. This initiative focuses on expanding the geographical reach of WEEE SR&G, with focus on ICT equipment, integrating professional recyclers, and enhancing collection, transportation, and storage systems. By fostering synergies among stakeholders and prioritizing socially vulnerable areas, the project seeks to improve cost-effective waste management solutions. Additionally, formalizing recycler associations will ensure sustainable operations, aligning with international

As identified in Risk 4, 5, 6 and 7 prior to the implementation of demonstration activities, different verification and assessments will be conducted to identify potential risk factors and prevent their occurrence, the following will be considered: physical conditions of the facilities will be conducted to verify their vulnerability to events of origin, compliance with standards and guidelines for the safe management of EEE, WEEE, hazardous substances and hazardous waste, considering the environmental and safety aspects, standards related to safety and health at work, compliance with international standards such as those of the ILO.

In line with the behavioral change strategy of Output 2.2.2, the following incremental activities will be carried out to achieve Output 3.1.1.

a) Strengthening the WEEE SRyGs in improving the geographic coverage of WEEE collection and management in a cost-effective manner, which considers in a differentiated manner the environmental agency of men and women and seeking reverse logistics synergies between the systems currently operating in the country. This activity will be developed through the following sub-activities:

i) Analysis of optimization and increase of geographic coverage of the WEEE SRyG: based on the current geographic coverage indicator, the project will support the ANLA to improve the capture and processing of information, to subsequently conduct a study that supports the optimization of the collection and management of WEEE in a cost-effective manner, with focus on ICT equipment, identifying the environmental contributions differentiated between men and women, and the geographic leverage of the systems, with a primary focus on socially vulnerable areas. In this way, reverse logistics, collaborative and articulation strategies will be analyzed among the different WEEE SRyG to share infrastructure and resources in the stages of collection, transportation and collection of WEEE that allow synergies to be achieved for a more effective geographical coverage. Feasibility analyses of other WEEE collection and return mechanisms by users (e.g., municipal clean points, postal services, door-to-door collection, etc.) will also be carried out. A document will be produced with the results of the analyses and the guidelines and recommendations for the optimization of the geographic coverage of the WEEE SRyG.

ii) Design and execution of a demonstration activity with the WEEE SR&G with focus on ICT equipment, to test the optimization strategy conceived in the previous point, focusing on an area of the country where the greatest benefit could be obtained.

b) Integration of professional recyclers' associations for the collection of WEEE, especially those resulting from the ICT sector, in accordance with international guidelines and the recommendations of the study on informality in the management of WEEE carried out by the Ministry of Environment and Sustainable Development in 2023[4][7], promoting the inclusion and full, effective and substantive participation of women recyclers. It is proposed to use the SDG value chain strengthening model, including gender guidelines, for the articulation between the WEEE SRyG and the associations of people dedicated to recycling (called recyclers by trade), taking advantage of the capillary collection capacity and, thus, increasing the collection flow through them, so that the collection, transportation and collection processes are carried out with the best environmental practices and best available techniques, recognizing the fair value of the services provided and promoting the social development of this sector. At least three (3) associations of recyclers will be chosen for this development, considering the leadership of women. These must meet certain criteria of formalization, organization, capacity and others that guarantee the proper management of WEEE, and priority will be given to associations that are located and operate in intermediate cities such as: Cúcuta, Pasto, Villavicencio, Popayán, Neiva, Tunja, Sogamoso, etc.

c) Support for the formalization of a legally constituted association of professional recyclers through the licensing of WEEE management processes in a facility owned by the association and the fulfillment of other conditions. This association will be selected through an open call and priority will be given to those associations that include women within the organization and operate in the intermediate cities mentioned in b).

Output 3.1.2. Infrastructures and business models for refurbishment, repair or remanufacturing established/enhanced.

To promote a circular economy and sustainable e-waste management, Output 3.1.2 focuses on strengthening infrastructures and business models for refurbishment, repair, and remanufacturing. Key activities include supporting compliance with national

technical standards, fostering reuse of electric batteries in energy storage systems, and advancing research to eliminate hazardous substances in EEE. By engaging manufacturers, recyclers, and energy providers, this initiative enhances environmental responsibility, resource efficiency, and economic opportunities. Additionally, technical capacity-building efforts will ensure proper identification and management of hazardous materials.

The following incremental activities will be carried out to achieve Output 3.1.2:

a) Promotion of the use of existing Colombian technical standards (NTC 6684:203, 6685:2023, 6686:2023 and 6687:2023) related to the preparation for reuse of WEEE, the incorporation of recycled materials for new products and others, so that EEE producers and WEEE managers implement the conditions to achieve compliance and subsequent certification in the standard. In this sense, the necessary technical support will be provided for the achievement of such compliance and the preparation of the certification process of at least two (2) national manufacturers or assemblers (for example: Haceb, Mabe, PCSmart, Compumax) and two (2) WEEE managers (for example: Pcshek, Ecoindustrias) promoting the participation of men and women linked to the companies in equal opportunities. Likewise, the possibility of training ten (10) auditors for the conformity assessment of the standard will be evaluated, enabling the spaces and facilitating the call for the training of women auditors.

b) Promotion of the reuse and commercialization of reconditioned electric batteries from electric mobility in stationary applications such as photovoltaic systems or battery energy storage systems (BESS). For the development of this activity, it will seek cooperation and coordination between the producers of lithium ion batteries used in public and private electric transport, the operating companies or concessionaires of the public electric bus service, the SRyG of used batteries, the management companies that are reconditioning and marketing electric vehicle batteries (for example: RECOBATT, BATX), companies providing electric energy services through photovoltaic installations or BESS systems (for example: ENEL, ECOPETROL) and, in particular, with the University of Antioquia, which is currently developing research projects on batteries and is launching a Battery Diagnostic Center with the capacity to carry out battery health diagnosis, assembly of prototypes, electronics development and projection of remaining life, among other activities.

In this sense, an alliance will be made with the University of Antioquia for the implementation of at least one demonstration project for the reuse of batteries from electric mobility in specific energy generation and storage needs to boost its market, business models and social acceptance. Likewise, support will be provided to the processes and activities of training and technical training on the topic of electric mobility, use, manipulation, reuse and recycling of batteries for the different actors in the electric mobility value chain, with the involvement of women who participate in the development of such projects.

c) Promotion of technological innovation through research to eliminate the use of dangerous fractions present in EEE. In a complementary manner to the work carried out in the GEF/UNDP project “Strengthening national capacity to manage industrial persistent organic pollutants (POPs) within the framework of national guidelines and international regulations on the management of hazardous chemicals and waste” regarding PFOS/PFOA, SCCPs and Brominated POPs, this activity will support the MinAmbiente to carry out a personalized inventory of UV-328, Dechlorane Plus and Medium Chain Chlorinated Paraffins (PCCM) in the value chain of the EEE sector with focus on ICT equipment.

i) Compilation of information and evaluation of stocks of UV-328, Dechlorane Plus and PCCM in the equipment where they have allegedly been used.

ii) Design and implementation of a monitoring plan for UV-328, Dechlorane Plus and PCCM in the EEE sector with focus on ICT equipment. This monitoring plan will make it possible to specify the estimates made for the POPs achieved, including representative sampling of products of interest.

iii) Preparation of a report and dissemination of adapted inventory results on UV-328, Dechlorano Plus and PCCM in the sector, considering equal access of men and women to the information generated.

iv) Strengthening technical capacity, including the training of personnel from two (2) laboratories to support the identification and characterization of POPs and other substances of interest present in EEE with focus in ICT equipmnet, promoting the full, effective and substantive participation of women.

Output 3.1.3 increased uptake of recycled materials along the value chain

This Output aims to enhance the adoption of recycled materials along the value chain, fostering circular economy practices in the electrical and electronic equipment (EEE) sector. Key initiatives include promoting 3D printing of spare parts using thermoplastics from e-waste and supporting educational robotics programs. Additionally, the project will assess the feasibility of reusing discarded photovoltaic panels, contributing to sustainable energy solutions. By integrating recycled materials into production and education, this initiative strengthens resource efficiency, waste reduction, and innovation, aligning with national strategies for maintenance, repair, and responsible e-waste management.

As identified in Risk 4, 5, 6 and 7 prior to the implementation of demonstration activities, different verification and assessments will be conducted to identify potential risk factors and prevent their occurrence, the following will be considered: physical conditions of

the facilities will be conducted to verify their vulnerability to events of origin, compliance with standards and guidelines for the safe management of EEE, WEEE, hazardous substances and hazardous waste, considering the environmental and safety aspects, standards related to safety and health at work, compliance with international standards such as those of the ILO.

The following incremental activities will be carried out to achieve Output 3.1.3:

a) Promotion of the development of 3D printing of spare parts for EEE using thermoplastics recovered from WEEE to promote the National Strategy for the maintenance and repair of WEEE, as well as for the development of educational robotics platforms that use components recovered from WEEE, promoting an inclusive environment that promotes the participation of children and adolescents in equal opportunities.

This activity will be developed in conjunction with 'Computers to Educate', a National Government program that promotes educational innovation, through the access, use and appropriation of technology in the country's educational centers. The project will support the strengthening of two (2) lines of work:

i) Design or update of the educational robotics kit based on components recovered from WEEE, considering gender-sensitive aspects that encourage the interest of girls and young women and men.

ii) Improvement of the kit with the design of parts to be made by 3D printing from own thermoplastics or from third parties (WEEE managers).

iii) Support in the pedagogical design of the teaching guides for the use of the robotics kit in the public institutions that benefit from the Program, considering gender biases around science.

b) In line with the National Strategy for the maintenance and repair of electrical and electronic equipment (EEE) of Product 1.1.1., the development of a technical and economic feasibility study for the reuse of photovoltaic panels discarded and received by WEEE management companies such as LITO, OCADE, and others will be supported, as well as the characterization of the constituent materials of the photovoltaic panels treated by these management companies, which may include characterization as waste. dangerous. In this way, support will be provided to the design and implementation of one (1) demonstration project for the reuse of photovoltaic panels from solar energy parks in other applications, such as individual photovoltaic solutions.

OUTCOME 3.2. HAZARDOUS WASTE STREAMS IN THE ELECTRONICS SECTOR REMOVED FROM THE VALUE CHAIN.

Output 3.2.1. Material streams contaminated by POPs, mercury and chemicals of concern managed in an environmentally sound manner and knowledge of stakeholders to access material supply chains enhanced.

This Output focuses on the environmentally sound management of hazardous waste in e-waste, ensuring compliance with best environmental practices (BEP) and best available techniques (BAT). This initiative builds on prior efforts to identify and characterize persistent organic pollutants (POPs) in electrical and electronic equipment (EEE) and aligns with international guidelines on hazardous substances. Key actions include strengthening WEEE management companies, ensuring safe disposal of toxic materials, and implementing a demonstration project for responsible cable waste management.

As identified in Risk 4, 5, 6 and 7 prior to the implementation of demonstration activities, different verification and assessments will be conducted to identify potential risk factors and prevent their occurrence, the following will be considered: physical conditions of the facilities will be conducted to verify their vulnerability to events of origin, compliance with standards and guidelines for the safe management of EEE, WEEE, hazardous substances and hazardous waste, considering the environmental and safety aspects, standards related to safety and health at work, compliance with international standards such as those of the ILO.

The following incremental activities will be carried out to achieve Output 3.2.1:

a) Environmentally sound management of waste containing brominated POPs, PCCM, UV-328, dechlorane plus and mercury through WEEE management companies in line with best environmental practices (BEP) and best available techniques (BAT), avoiding the generation of unintentional persistent organic pollutants (COPNI).

This activity will be implemented based on the results of the GEF/UNDP Project “Strengthening national capacity to manage industrial POPs within the framework of national and international guidelines on the management of hazardous chemicals and wastes”, the capacity created for the identification and characterization of POPs used in EEE (Output 3.1.2), and the international guidelines on mercury content in EEE. The following sub activities will be carried out:

i) Strengthening the capacity of three (3) WEEE management companies for the environmentally sound management of waste that may contain UV-328, Dechlorane Plus and PCCM (Product 3.1.2).

ii) Avoidance and disposal of WEEE containing brominated POPs, UV-328, Dechlorane Plus, PCCM and mercury in line with the BAP/BAT available worldwide for the treatment and disposal of WEEE containing POPs.

iii) Implementation of a demonstration project for the environmentally sound management of cable waste from WEEE and electrical installations.

COMPONENT 4: KNOWLEDGE MANAGEMENT, COMMUNICATION, PROGRAM-LEVEL COORDINATION.

OUTCOME 4.1 CONTRIBUTIONS TO THE GLOBAL GEM KNOWLEDGE MANAGEMENT PLATFORM ENSURED TO SUPPORT SHARING AND LEARNING, CAPACITY BUILDING, AWARENESS RAISING AMONG VARIOUS STAKEHOLDER TO ACHIEVE SECTORAL TRANSFORMATION.

Output 4.1.1 Communication plans and capacity development strategies developed.

This Output aims to enhance communication and capacity-building efforts throughout the project, ensuring alignment with the Global GEM Program, broad outreach and active participation. Key activities include developing a communication strategy to inform stakeholders and the general public about the project's progress and results, reaching at least 3,000 people. Additionally, the project will implement a gender action plan to promote equality in the electronics sector and introduce educational content on the comprehensive management of WEEE in schools. By fostering awareness and engagement, this initiative contributes to sustainable practices and inclusive development within the electronics value chain.

The following incremental activities will be carried out to achieve Output 4.1.1:

a) Development of a communication strategy making visible the contributions and differentiated participation of men and women for all phases of the project in order to broadly inform the interested parties, the beneficiaries of the project and the general public about the activities to be developed and developed and the results expected and achieved with a coverage of at least 3,000 people (1,200 women and 1,800 men) representing the actors involved.

b) Implementation of the gender plan: during the project design phase, a proper gender analysis was carried out in the EEE sector and throughout its entire value chain (Annex 10). As a result, an action plan was designed to be implemented throughout the life of the project in order to guarantee equality in the sector. This activity will demonstrate support for the implementation of the Gender Plan prepared.

c) Introduction of educational content on the comprehensive management of WEEE: In coordination with the Ministry of Environment and Sustainable Development and the Ministry of National Education, the project will support the development of a document of guidelines and content to incorporate the comprehensive management of WEEE, which includes sustainable consumption habits and participation in S&G with a gender perspective, in the environmental education of the country's educational institutions through the School Environmental Projects (PRAES).

Output 4.1.2 Knowledge management infrastructure designed and set up, aligned to the Global GEM Knowledge Management Strategy and Platform.

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This Output focuses on establishing a robust knowledge management infrastructure, aligned to the Global GEM Knowledge Management Strategy and Platform, to enhance capacity in the electronics sector. Key activities include training stakeholders along the electronics value chain, such as environmental authorities, producers, and citizens, on sustainable practices and regulations. Additionally, the initiative will support the updating and operation of virtual courses on the comprehensive management of WEEE, hazardous waste, and related topics. By strengthening platforms like the Minambiente Environmental Training School and the REP+ platform, this project ensures the dissemination of critical knowledge and promotes informed participation in the consumption of EEE and e-waste management in Colombia.

The following incremental activities will be carried out to achieve Output 4.1.2:

a) Training of stakeholders in the AEE value chain: This activity will support the training and education corresponding to the different products of the previous Components of the project, promoting the full, effective and substantive participation of women. As a result, 50 people from environmental authorities will be trained, 100 people linked to the EEE value chain (EEE producers and marketers, SR&G and WEEE managers) and 500 people from interested parties (public institutions, NGOs, citizens, etc.).

b) Strengthening, promotion and thematic and technical support for the updating and operation of virtual courses on the comprehensive management of WEEE, RESPEL and related topics (POPs, thermoplastics, etc.) including gender-sensitive aspects, which are provided to citizens and actors in the EEE/WEEE chain at the Minambiente Environmental Training School[5][8]. Likewise, technical support will be provided to the REP+[6][9] platform that the ANLA implements for the dissemination to the public of updated

information related to the operation of the WEEE SRyG and the RESPEL post-consumer programs, as well as the instruction to EEE producers obliged to the WEEE SRyG for the presentation of the annual environmental monitoring reports of their systems.

On the other hand, computer technical support will be provided to the Ministry of Commerce, Industry and Tourism (MinComercio) for the Registry of EEE Producers and Marketers (RPCAEE in accordance with the thematic guidelines defined by MinComercio together with MinAmbiente).

c) Creation of five (5) regional working groups between environmental authorities and the private sector of EEE and WEEE management, to promote the strategies and lines of action of the national policy for the comprehensive management of WEEE, as well as topics developed by this project. This activity is proposed in compliance with line of action 4.2.1 of the National Policy for the comprehensive management of WEEE.

OUTCOME 4.2 COORDINATION AND LINKAGES AMONGST THE RELEVANT GLOBAL AND NATIONAL STAKEHOLDERS AND GLOBAL GEM KNOWLEDGE MANAGEMENT PLATFORMS ESTABLISHED.

Output 4.2.1 The global program and child projects introduced and linked to existing relevant platforms , including the Global GEM Knowledge Management Platform. Coordination mechanism between the global program and the child projects designed and implemented.

Through this Output the Project in Colombia will ensure the needed communications, coordination and knowledge management activities to contribute to the Global GEM Program and Global GEM Knowledge Management Platform.

The following incremental activities will be carried out to achieve Output 4.2.1:

a. Annual participation in:

- Global Program Annual Conference: Review progress and workplans of child projects, ensure coordination across projects.
- GEM Global Steering Committee Meeting: Evaluate and assess project progress, address risks, and make recommendations.
- GEM Lessons Learned Meeting: Provide inputs for annual planning, share lessons learned from child projects.

Communications

b. Alignment with GEM Global Communications Objectives: Liaising with Global Communications Specialist to ensure alignment of Global Communications Strategy to National Communications Plan. Following guidelines on Communications Assets (Branding, Photography, content creation)

c. Participation in Global Communications Coordination Group: Update on national communications plans and harmonization with Global Communications campaigns

d. Communication campaigns contributions to GEM Community Platform:

- Translation of GEM knowledge and communications products: Translation of GEM content for local distribution through established channels.
- Ensure visibility of GEM Child Project through database creation of photography/videography: Independently build national image database to support global imagery, budget and plan for professional photography/videography services.
- Generation of GEM Human interest stories: Identification of beneficiaries and coordination of interviews, support for production of min. 1 human interest story/year.
- Cross-promotion with GEM partners in events and media: National project event updates in the media (monthly basis) and content creation support for related events (min. 1 news story/quarter)
- Thematic content creation: Technical inputs for evergreen content for distribution through established channels

Coordination

e. Participation in Coordination Meetings:

- Thematic Working Group: Provide technical inputs on topics of national relevance (circular and sustainable public procurement of ICTs, right to repair, EPR, sustainable financing models in national policy, guidance on ICT device repair and refurbishing business sector, gender mainstreaming), with a focus on cross-cutting areas: Knowledge Management, Communication, Stakeholder Engagement, and Gender

- Advisory Group Meeting: Provide lessons learned and best practices from National/Regional Child Projects on topics of concern

- Thematic focus groups and trainings: Provide lessons learned and best practices from National/Regional Child Projects on topics of concern.

- Optional - Self-organized regional meetings, events, workshops, and working groups (South-South initiatives, etc.)

f. Coordination efforts with:

- Technical experts on child project design, implementation, risk management: Seek guidance from experts on thematic and implementation support during inception phase.

- Sister projects and other GEF Integrated Programs: Provide lessons learned and best practices from National/Regional Child Projects on thematic concerns and cross-cutting issues.

- GEM Partners and global industry players, via de Global Child Project: Share knowledge, results, and lessons from child projects; identify next steps for scaling impact.

Knowledge management

g. Reporting requirements – allocation of time and content for quarterly and Annual reporting needs to Global Program: Time and knowledge products to contribute to required reporting of the Global Program (e.g. annual report).

h. Monitoring and reporting of Global Environmental benefits (GEBs) and programmatic indicators: Child projects follow guidance on GEB quantification and programmatic indicators regular monitoring and reporting.

i. Monitoring and Evaluation needs, including Mid-term and Terminal Evaluations: Follow established GEF and IA guidance on monitoring and evaluation procedures.

f. Training needs for environmental and social monitoring safeguards indicators and guidelines and gender mainstreaming in project implementation: Attendance in virtual training events and follow guidance on monitoring and reporting on environmental and social monitoring safeguards and gender inclusive activities

g. Knowledge products:

- Content contribution to GEM Community Platform

- Content contribution to GEM Technical, Advisory, Thematical meetings and workshops, Forum discussions: Contribution to forum discussions on lesson learned and best practices of the National/Regional Child projects. Child project specific contribution to the development of Toolkits, Guidance and E-learning products

- Needs assessment of knowledge products from stakeholders / global industry players: Assess and coordinate with Global Child Project on the needs for knowledge products from Global industry players in the electronics value chain (technical guidelines, manuals, toolkits for ICT device repair and refurbishing, standards, EPR, policy on repair)

The project aims to build a Community Platform which can adapt to emerging technologies, new knowledge and business trends to be as efficient and effective as possible in the establishment of circularity in the electronics value chain. To this end, even the

ordinary project monitoring and evaluation, including the mid-term project review, are key factors to ensure the achievement of the targeted GEBs.

MONITORING AND EVALUATION (M&E).

OUTCOME 5.1. M&E and adaptive management applied to assess activity performance and GEB impact.

Output 5.1.1. Inception Workshop organized; Monitoring of indicators in project results framework; Independent Mid-term Review (MTR); GEF Tracking Tool; and Terminal Evaluation (TE) carried out.

The project results as outlined in the Project Results Framework, will be monitored periodically during implementation to ensure that the project effectively achieves its results. The results of the monitoring will be reported in an intermediate and final evaluation and the lessons learned captured will be integrated in the project through adaptive feedback management. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy.

As a standard practice for every UNDP project, continuous monitoring of FSP results and achievements will be ensured, while the application of adaptive management of the project after conclusion of the Mid-Term Review (MTR) will be warranted. The Project Management Unit (PMU) will design the project´s M&E system and be responsible for implementing the project´s M&E Plan (see Section VI below), including the Project´s Inception Workshop, annual planning workshops and Project Implementation Reports (PIRs). During the implementation the review and reporting of the Gender Action Plan and relevant gender dimensions of the project will be included in the PIRs, MTR and TE.

The following activities will be implemented to achieve Output 5.1.1:

a) Development of Project's Inception Workshop.

b) Monitoring:

i) Project Results Framework (outcome indicators, GEF Core Indicators, baseline and annual target indicators).

ii) Project Risk Matrix, Environmental and Social Framework/Social Environmental Screening Procedures (ESMF/SESP), SESA, the Gender Analysis and Action Plan, and the Stakeholder Engagement Plan.

c) Holding Project Steering Meetings.

d) Carrying out “Mid-Term Review” (MTR): The MTR will be carried out after the second submission of the PIR; it will assess the progress of each project activity and attainment of the project’s indicators presented in the Project Results Framework (Section V of the ProDoc) and Multiyear Work Plan (Annex 4). This review will also consider one Gender Assessment of project impact completed as part of MTR and the disbursement of financial resources and co-financing provided by project partners, and it will monitor and assess administrative aspects for the execution of the project. The MTR will also inform the adaptive management of the project and improve its implementation as a remainder of the project’s duration.

e) Carrying out Terminal Evaluation (TE): The TE aims to evaluate whether all planned project activities have been developed, resources granted by the GEF have been disbursed and spent in line with GEF and UNDP policies and rules, following activities as set out in this Project Document. The TE will also extract and identify lessons learned, how to disseminate them most efficiently and make recommendations to ensure that project results are sustainable.

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Agreement on intellectual property rights and use of the logo on the project’s deliverables and disclosure of information**:** To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed per relevant policies, notably the UNDP Disclosure Policy[7][10] and the GEF policy on public involvement[8][11].

Partnerships:

This FSP needs to engage a variety of stakeholders not only from the public sector but also from the private sector in order to achieve the planed outputs and outcomes. The following table summarizes the actors that the project will need to involve and describes their responsibilities in project´s implementation as well as their contributions to addressing the development challenge:

Table 3. Partnerships of the Project.

Type	Group	Stakeholder	Role
Public Entities	National Government	Ministry of Environment and Sustainable Development (MinAmbiente)	MinAmbiente is the leading public partner responsible for the development, detailed design, and implementation of this full-scale project and, as such, a member of the Project Steering Committee. It is also responsible for liaising with other ministries (Ministry of Science, Ministry of Trade, and Ministry of Education), other environmental authorities (ANLA, Territorial and Urban Environmental Authorities), affiliated institutes (IDEAM), and the National Tax and Customs Directorate (DIAN). MinAmbiente will be the partner in the implementation of this project. It is responsible and accountable for the management of this project, including the monitoring and evaluation of project interventions, the achievement of project outputs and outcomes, and the effective use of resources. The Project Management Unit (PMU) will be located at its premises.
		Ministry of Trade, Industry and Tourism (Mincomercio)	Mincomercio is a key player in the implementation of the Strategy for the maintenance and repair of Electrical and Electronic Equipment (EEE) (Output 1.1.1); in the activity of strengthening the technical services for the maintenance and repair of EEE; in the implementation of the Amendment to the Basel Convention on WEEE; in the analysis of the stimuli that could promote the integral management of WEEE in Colombia; in the promotion of new business models to encourage the reuse of WEEE; in the development of mechanisms to inform consumers of EEE about the hazardous substances contained in EEE and the correct return of appliances at the end of their useful life. And it will be a key player in the creation of the EEE value chain innovation and technology hub. Mincomercio will be part of the Project Steering Committee.
		Ministry of Science, Technology and Innovation (Minciencias)	Minciencias is a key player in the creation of an innovation and technology hub, facilitating interaction and the exchange of knowledge between different actors in order to promote innovation in the value chain of EEE and its waste.
		Ministry of Education (Mineducación)	Mineducación is an important player in the development of guidelines for incorporating the integral management of WEEE into the environmental education of the country's educational institutions through the School Environmental Projects (SEP). It is also envisaged that this ministry may participate in the Innovation and Technology Hub.
		Ministry of Transport (Mintransporte)	The Ministry of Transport will work with the National Authority of Environmental Licenses (ANLA) and the National Tax and Customs Directorate (DIAN) to implement the Amendment to the Basel Convention on WEEE and to analyze alternatives for optimizing and increasing the geographical coverage of WEEE C&MS. It is also expected that this ministry may participate in the Innovation and Technology Hub

		National Authority of Environmental Licenses (ANLA)	The ANLA is a key player in the development of the project, as it will benefit from strengthening activities for the implementation of the Amendment to the Basel Convention on Waste Electrical and Electronic Equipment, the updating of the Single Environmental Registry (SER) to determine the installed capacity of WEEE managers in the country, the analysis for the optimization and increase of geographical coverage of the WEEE C&MS, and the strengthening of the EPR+ strategy that this entity has been implementing for the dissemination to the public of updated information related to the operation of the WEEE C&MS. It is planned that it will accompany the execution of other activities such as strengthening the use of the Colombian environmental label for EEE producers and the integration of associations of professional recyclers for the collection of WEEE. ANLA will be part of the Project Steering Committee and is also expected to participate in the Innovation and Technology Hub.
		Institute of Hydrology, Meteorology and Environmental Studies (IDEAM)	IDEAM will be responsible for the process of updating the Single Environmental Registry (SER) to determine the installed capacity of WEEE managers in the country and is also expected to participate in the Innovation and Technology Hub.
		National Tax and Customs Directorate (DIAN)	DIAN will benefit from strengthening activities for the implementation of the Amendment to the Basel Convention on WEEE and is also expected to participate in the Innovation and Technology Hub.
		National Administrative Department of Statistics (DANE)	The DANE will support the project by providing statistical information on the consumption habits of the Colombian population in relation to EEE and the management of WEEE, and it is also expected to participate in the Innovation and Technology Hub.
		Superintendence of Public Utilities (SSPD)	The SSPD will oversee the implementation of the integration of associations of professional recyclers for the collection of WEEE.
		Colombia Productiva	Colombia Productiva will support the provision of information for the diagnosis and initial modeling of the three (3) SDG value chains (refrigeration, computers, and telecommunications equipment), in order to analyze and identify possible production chains that strengthen this sector; it will support the identification and feasibility analysis of incentives that could promote the integral management of WEEE in Colombia, and it is also expected to participate in the Innovation and Technology Hub.
		Computers for educating (Computadores para Educar)	Computers for Education is a national government program that will be responsible for the implementation of Output 3. 1.3 which aims to increase the use of recycled materials throughout the value chain, which will be achieved through the design, updating and improvement of the educational robotics kit based on COMPONENTs recovered from WEEE and the pedagogical development of teaching guides for the use of the robotics kit in public institutions and will also be responsible for Output 3. 2.1 by strengthening the capacity of 3 management companies for the environmentally sound management and disposal of waste that may contain UV-328, Dechlorane Plus and MCCPS and the implementation of a demonstration project for the environmentally sound management of cable waste from WEEE and electrical installations. It will accompany the execution of activity 4.1.1 c) through which guidelines will be developed to incorporate the integral management of WEEE in the environmental education of the country's educational institutions through the School Environmental Projects (SER). It is also expected to participate in the Innovation and Technology Hub.

	Local Government	Environmental Authorities	This group of entities is made up of the Urban Environmental Authorities (AAU) and the Regional Autonomous and Sustainable Development Corporations (CAR), who will benefit from the strengthening of WEEE management in their jurisdictions, will be able to participate in communication and training activities on the activities carried out in the project and its results, and will support the monitoring of possible effects on the environment caused by the project through Inspection, Surveillance and Control (ISC) activities at the facilities if necessary. These entities will be able to participate and link up with the Innovation and Technology Hub.
International Organizations	Cooperation Agencies	United Nations Development Programme (UNDP)	UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services, and for the Project Assurance role of the Project Board/Steering Committee. UNDP and its Colombia Country Office have extensive experience working with the private sector, governmental institutions, and civil society. It is part of the Project Board.
Non-governmental organizations	Coordination bodies in the EEE sector and innovation.	National Science, Technology and Innovation System (SNCTI)	All project activities related to innovation, research, and the dissemination of scientific information will be supported across the board through the SNCTI, which will also support the creation of the Innovation and Technology Hub.
		Colombian Chamber of Information Technology and Telecommunications (CCIT)	The Colombian Chamber of Information Technology and Telecommunications will assist in the design and implementation of a national strategy for the maintenance and repair of electrical and electronic equipment (EEE), in terms of information gathering, support in the construction of a database of independent technical and repair services in the country, the identification of barriers or challenges, as well as the needs that arise in relation to the repair and maintenance of EEEs and the monitoring and design of an EEEs repairability index. The CCIT may participate in and be linked to the Innovation and Technology Hub.
		National Committee for Waste Electrical and Electronic Equipment (WEEE)	The WEEE Committee is a consultative body of the Ministry of Environment and Sustainable Development, created through Law 1672 of 2013, whose main objective is to promote and strengthen the policy for the management of Waste Electrical and Electronic Equipment (WEEE) and its support, advice, accompaniment, and monitoring of the activities developed in the project has been contemplated. The possibility of the Innovation and Technology Hub becoming a subcommittee within this committee has been analyzed, taking advantage of the synergies already created between its participants and the convening power to bring other actors on board.
		Regional sectoral table for electrical and electronic equipment	These bodies carry out activities to strengthen the EEE chain and the coordination of the different actors involved in this chain, such as manufacturers, associations of EEE Producers, technical and technological institutions and laboratories, who could provide valuable information, support and accompany the development of the National Strategy for the maintenance and repair of electrical and electronic equipment (EEE); they could contribute in a special way to the Innovation and Technology Hub and benefit from training and strengthening activities to be developed in the project.
		ANDI Chamber of Domestic Appliances	

Private sector	Producers, marketers, technical services, independent repairers, WEEE-C&MS, WEEE managers	Producers (Manufacturers and importers) and marketers. CHALLENGER HACEB Industries MABE Colombia SAS PCSMART COMPUMAX	The Producers will be responsible for the development of the Strategy for the maintenance and repair of Electrical and Electronic Equipment (EEE) (Output 1.1.1), through the provision of information, they will participate in the development of the repairability index and the strengthening of the capacity of the technical services for the maintenance and repair of EEE, through the provision of information for diagnosis; the initial modeling of 3 SDG value chains (subcategories of domestic and commercial refrigeration, computers and data processing equipment, and telecommunications equipment) and the implementation of a demonstration project in the previously identified value chains, which will demonstrate the application of the repairability index. They will be beneficiaries in the activity of promoting the use and certification of existing Colombian technical standards (NTC 6684:2023, 6685:2023, 6686:2023 and 6687:2023) and will be invited to participate and join the Innovation and Technology Hub.
		Technical services and EEE independent repairers.	Independent technical and repair services for EEE will participate in activities related to the development of the Strategy for the maintenance and repair of Electrical and Electronic Equipment (EEE) through the provision of information for the consolidation of the database of technical maintenance and repair services and independent repairers of EEE in the country; in the identification of barriers or challenges, as well as the needs that arise in relation to the repair and maintenance of EEE. They will participate in the development of the repairability index and will benefit from the strengthening of their capacity for the maintenance and repair of EEE. They will participate, through the provision of information, in the diagnosis and initial modeling of 3 SDG value chains (subcategories of domestic and commercial refrigeration, computers and data processing equipment, and telecommunications equipment) and in the implementation of a demonstration project in the previously identified value chains, which will make it possible to demonstrate the application of the repairability index. They will provide information and will benefit from the creation of an information management tool, intended for them, which will allow them to obtain information on the repair and maintenance operations carried out. They would also benefit from obtaining recovered materials (parts, components) which will be supplied by the WEEE managers, and which can be reintroduced into the production cycles and used in the repair of EEE.

		WEEE Collection and Management Systems (WEEE SRyG) - Grupo Retorna - Ecocómputo	These WEEE SRyG will participate in activities related to the development of the Strategy for the maintenance and repair of Electrical and Electronic Equipment (EEE) through the provision of information. They will be responsible for the development and, if possible, will host an information management tool for independent technical services and repairers that will provide information on repair and maintenance operations in the country. Through the development of a demonstration project, they will integrate associations of professional recyclers for the collection of WEEE in accordance with international guidelines and the recommendations of the GIZ study on informality in the management of WEEE. They will be responsible for promoting the reuse and commercialization of reconditioned electric batteries from electric mobility in stationary applications such as photovoltaic systems or battery energy storage systems (BESS). They will be responsible for supporting the strengthening of the capacity of three (3) management companies for the environmentally sound management and disposal of WEEE that may contain UV-328, Dechlorane Plus, and MCCPS and the implementation of a demonstration project for the environmentally sound management of cable waste from WEEE and electrical installations.
		WEEE and CAIWEEE Managers LITO Orinoco PCShek Ecoindustria OCADE INNOVA/ECOTEC	WEEE managers will benefit from capacity-building activities to increase their capacity to recover and reuse WEEE components through the necessary technical training, the implementation of procedures for the identification, recovery, and functionality testing for the reuse of WEEE components, as well as the connection with the market of service centers and independent EEE repairers and second-hand EEE markets. They will benefit from the promotion of the use and certification of existing Colombian technical standards related to the preparation for the reuse of WEEE, the incorporation of recycled materials for new outputs, and other related standards. They will be responsible, through the provision of information, for carrying out the inventory, the evaluation of stocks, and the monitoring plan for UV-328, Dechlorane Plus, and MCCPS, in the equipment where they are presumed to have been used, and will subsequently benefit from the development of capacities that will enable them to carry out the management and elimination of this waste. They will develop a study of the technical and economic viability for the reuse of discarded photovoltaic panels, as well as the characterization of the constituent materials of these panels. CAIWEEE as an association will also be invited to participate in the development of the Strategy for the maintenance and repair of Electrical and Electronic Equipment (EEE) by providing information and support in the execution of the activity. WEEE managers will also be invited to participate and link up with the Innovation and Technology Hub through CAIWEEE or individually.

		ECOPETROL ENEL RECOBATT BATX	These companies will be responsible for the development of Output 3.1.2 b), which will promote the reuse and commercialization of reconditioned electric batteries from electric mobility in stationary applications such as photovoltaic systems or battery energy storage systems (BESS). This activity will be developed through the articulation of producers of lithium-ion batteries used in public transport, the operators or concessionaires of the electric bus service, the C&MS of used batteries, the management companies that recondition and commercialize the batteries (RECOBATT, BATX) and companies that provide electrical energy services through photovoltaic installations or BESS systems (ENEL, ECOPETROL). Additionally, within the framework of Output 3.1.4 b), it is expected that ENEL and ECOPETROL will be responsible for developing a strategy for the reuse of discarded photovoltaic panels received by WEEE management companies such as LITO and OCADE.
Organizations, Associations and other relevant actors.	Organizations	ICONTEC (Colombian Institute of Technical Standards and Certification)	ICONTEC will monitor the development of Product 2.2.1 b) Strengthening the use of the Colombian environmental label for EEE producers, in accordance with standard NTC 6192 “Environmental Labels type I. Colombian Environmental Seal,” so that 2 EEE producers obtain certification in this standard and will monitor product 3.1. 2 a) through which it is intended to promote the use of Colombian technical standards (NTC 6684:2023, 6685:2023, 6686:2023 and 6687:2023) related to the preparation for the reuse of WEEE and the incorporation of recycled materials for new products, so that two or more companies can be certified. ICONTEC will be invited to participate and become involved in the Innovation and Technology Hub.
	Industrial Unions	Colombian Association of Micro, Small and Medium Enterprises (ACOPI) National Federation of Traders (FENALCO) BOGOTA CHAMBER OF COMMERCE Confederation of Chambers of Commerce (COMFECÁMARAS) Colombian Association of Industrial Managers of Waste Electrical and Electronic Equipment (ACORAEE) Professional Recyclers' Associations Colombian Consumers' Confederation	Work will be done with these associations to seek greater participation from members or related companies in the sectors they represent. As associations, they will be encouraged to participate in the shaping of the innovation and technology hub in such a way as to achieve greater representation of the sector and its companies. In addition, it is expected that these associations will benefit directly or through their affiliates from the capacity-building activities that will be developed during the project and from the activities of communication and dissemination of information on the progress and results of the project.
	Other entities related to the use of information and communication technologies	COLNODO/SENA/ECO-COMPUTO	As part of Output 1.1.1, which establishes the creation of an information management tool for independent technical and repair services that allows for the collection of information on repair and maintenance operations, it has been considered that COLNODO, SENA or ECOCÓMPUTO can develop and host the information tool on their platforms.

	Associations of recyclers by occupation	Associations of professional recyclers	The associations of professional recyclers will participate in the development of Output 3.1.1, where it is proposed to integrate them into the collection of WEEE in accordance with international guidelines and the recommendations of the study of informality in the management of WEEE (Prousar-GIZ), using the SDG value chain strengthening model for the articulation of WEEE-C&MS and associations of professional recyclers, taking advantage of the capillary collection capacity of these associations, which will allow for an increase in the flow of WEEE collection. Additionally, one of the legally constituted associations of professional recyclers will benefit. taking advantage of the extensive collection capacity of these associations, which will increase the WEEE collection flow. In addition, one of the legally constituted associations of professional recyclers will benefit from the support and strengthening provided by the project towards the environmental licensing process for WEEE management. The associations of recyclers will also be invited to participate and join the Innovation and Technology Hub.
	Academy	University of Antioquia	The University of Antioquia is participating in the development of Output 3.1.2 by supporting the development of the demonstrative project, which includes diagnosing the health of the batteries, assembling prototypes, developing electronics, and projecting remaining life, among other activities.
	Civil Society	For the purposes of the project, the beneficiaries are the citizens of Colombia.	The project will benefit the country's citizens through the design and implementation of a Strategy for the maintenance and repair of Electrical and Electronic Equipment (EEE), which will enable them to extend the useful life of their appliances, to know the repairability index of the Outputs they consume as a purchasing criterion, to use reconditioned or remanufactured appliances that meet higher quality standards and come from certified companies; they will be able to have more mechanisms for the management of the Waste Electrical and Electronic Equipment (WEEE) they generate, through increased coverage and optimization of WEEE- SCEMS and finally they will benefit from a cleaner environment, which is achieved through the environmentally sound management of WEEE by managers who have strengthened their capacities.

Knowledge:

Knowledge and lessons learned are mainstreamed among the different Component and activities within the project. The project will ensure the proper documentation of lessons learned and knowledge products, including gender dimension, resulting from each of the project activities and making accessible for each group of stakeholders. All the information and knowledge generated by the project will be made available through the website of the Ministry of Environment and Sustainable Development (MinAmbiente) https://quimicos.minambiente.gov.co.

Particularly, Component 4 will contribute to knowledge management at national and at global level. Colombia will support the development of knowledge products to strengthen national capacity of the different stakeholders involved in the production and trade chain of the EEE and in the management of WEEE through the following:

- Educational Content development to strengthen the environmental education of the country´s educational institutions through the School Environmental Projects (PRAES);
- Strengthening, promotion and thematic and technical support for the updating and operation of the virtual courses on the integrated management of WEEE, WEEE and related topics (POPs, thermoplastics, etc.) that are offered through MinAmbiente's Environmental Training School.

Also, the Global Electronics Management (GEM) Program will ensure the amplification of individual child projects through the proper coordination of knowledge management exchange, best practices sharing and communication, safeguarding knowledge products

and tools developed by country teams and project partners, are designed as gender responsive. Colombia will support Knowledge Management of the Global Program through the following as described in Output 4.2.1:

- Content contribution to GEM Community Platform:
- Content contribution to GEM Technical, Advisory, Thematical meetings and workshops, Forum discussions.
- Needs assessment of knowledge products from stakeholders / global industry players.

Innovativeness, Sustainability and Potential for Scaling Up:

Innovation

The proposed project in Colombia introduces several innovative approaches across its components to enhance circularity in electrical and electronic equipment (EEE).

Under Component 1, the project pioneers a National Strategy for the maintenance and repair of Electrical and Electronic Equipment, fostering EEE life extension through policy integration, a repairability index, and economic incentives. It also introduces the systemic approach of the SDG Value Chain model to connect producers, repair services, and recyclers, ensuring high-quality repair standards and component reuse. Additionally, the initiative includes a carbon footprint quantification tool to measure the environmental benefits of repair and WEEE management, allowing the different actors to quantify their current emissions and establish reduction plans accordingly. Lastly, it supports the introduction of new business models such as leasing of reconditioned EEE by developing a technical, economic and marketing feasibility study and implementing a pilot project engaging with WEEE managers.

The innovative nature of Component 2 lies mainly in the creation of the “innovation and technology hub of the EEE value chain”, facilitating and enhancing the interaction and exchange of knowledge between different actors, including academia, industry, and policymakers, in order to promote innovation towards circularity in the value chain of EEE and its waste. Additionally, focus will be given to raise awareness among consumers to enhance sustainable consumption patterns and make informed decisions. This will be mainly achieved through the implementation of the Colombian Environmental Seal (SAC) for computers and piloting a behavior change strategy to enhance consumers participation in existing WEEE collection and management systems

Under Component 3, the project will expand the geographical coverage of WEEE SR&G, integrating professional recyclers, and enhancing collection, transportation, and storage systems. By fostering synergies among stakeholders and prioritizing socially vulnerable areas, the project seeks to improve cost-effective waste management solutions.

Additionally, the project will facilitate and encourage:

- The promotion of 3D printing of spare parts using thermoplastics from e-waste and supporting educational robotics programs.
- The promotion of reconditioned electric batteries from electric mobility in stationary applications such as photovoltaic systems or battery energy storage systems (BESS), an incipient problem in Colombia that it is relevant to begin to strengthen.

Building on the results of the GEF/UNDP project “Strengthening national capacity to manage industrial persistent organic pollutants (POPs) within the framework of national guidelines and international regulations on the management of hazardous chemicals and waste” regarding PFOS/PFOA, SCCPs and Brominated POPs, the project will further support the MinAmbiente to carry out a personalized inventory of UV-328, Dechlorane Plus and Medium Chain Chlorinated Paraffins (PCCM) in the value chain of the EEE sector, and build national capacity.

Sustainability

The project ensures sustainability beyond its lifetime by embedding long-term policy mechanisms, capacity-building initiatives, and institutional integration across all components.

Under Component 1, sustainability is achieved by integrating the National Strategy for the maintenance and repair of Electrical and Electronic Equipment into national policies, ensuring their enforcement beyond the project. The establishment of a repairability index and economic incentives will provide continuous support for EEE maintenance.

Strengthening institutional frameworks through the application of existing guidelines that include environmental criteria for the procurement or rental of EEE, with a focus on ICT equipment, the support given to the adoption of the Basel Convention amendments and the updating the Single Environmental Registry (RUA) will also ensure long-term regulatory effectiveness.

Additionally, support given to the analysis of the different potential incentives to determine their technical, economic, social and environmental feasibility and to propose a roadmap for the implementation by the actors will contribute to the enabling environment for the circularity of EEE after project lifetime.

Training and capacity building mainstreamed along the different activities of Component 1 will directly contribute to the sustainability of the obtained results.

Component 2 secures sustainability by establishing a technology and innovation hub which creates a permanent interaction workspace fostering circular economy solutions in the EEE sector. The Colombian Environmental Seal (SAC) will continue to incentivize sustainable product design, while consumer awareness initiatives—including eco-labeling and behavior change campaigns—will create lasting shifts in consumption patterns.

Under Component 3, the project promotes the formalization of professional recyclers and their integration into e-waste collection systems, ensuring long-term operational capacity. The support for leasing and reconditioning business models will stimulate self-sustaining market mechanisms, making circular business practices economically viable. Infrastructure investments in 3D printing for spare parts and photovoltaic panel reuse will foster continued material recovery and innovation.

Finally, Component 4 ensures sustainability through capacity-building programs, including virtual courses, training platforms, and the strengthening of regulatory tools like the REP+ platform. These initiatives will embed circular economy principles in Colombia's education, governance, and industry, creating a lasting impact on EEE management. By integrating these elements into institutional, economic, and societal structures, the project lays the foundation for a self-sustaining circular electronics sector in Colombia.

Scale Up

The project has been designed to integrate and promote up-scale and amplification of successful experiences. The replicable models, capacity building, fostering institutional integration, and leveraging strategic partnerships mainstreamed in all components is to ensure knowledge and experiences stay and replicate in country within relevant institutions.

Under Component 1, the project introduces policy frameworks for circular electronics, including the National Strategy for EEE Maintenance and Repair and a repairability index. These mechanisms will be progressively expanded nationwide, with stakeholder engagement and regulatory integration ensuring broader adoption.

When the project comes to an end the increased capacity of national entities, local authorities and other key stakeholders, as well as the improved institutional mechanisms, policy and regulatory enabling environment for the reuse and repair of EEE will continue to serve the electronics sector value chain towards the adoption of circular solutions.

Component 2 focuses on scalable eco-design practices by creating a technology and innovation hub, which will continuously generate research, policy guidance, and industrial innovation for widespread adoption. The Colombian Environmental Seal (SAC) will be expanded as a national standard for green electronics, while eco-labeling and awareness campaigns will be refined and deployed at regional and national levels. The behavior change pilot will serve as a model for future consumer awareness programs, supporting broader policy reforms.

Under Component 3 the project promotes reverse logistics and WEEE collection expansion, testing cost-effective collection models in selected regions that later will result in scaling solutions nationwide. The integration of professional recyclers will follow a structured formalization process, facilitating nationwide adoption in different urban and rural settings. Additionally, leasing and reconditioning models will be piloted, with results informing industry-wide expansion. Investments in 3D printing and photovoltaic panel reuse will provide scalable models for material recovery.

Finally, Component 4 ensures scale-up through virtual courses, training programs, communication strategy and the REP+ platform, supporting continuous learning and adaptation at the national level. By institutionalizing capacity-building and policy alignment, the project creates a foundation for large-scale adoption of circular economy principles across Colombia.

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[5] SDG Value Chains

[6] The "Guide for the elaboration of chemical substances of concern in the process of sustainable public procurement of electrical and electronic equipment" is available within the framework of the project "Global best practices on emerging chemical policy issues of concern under the Strategic Approach to International Chemicals Management (SAICM)" developed by ICONTEC, with the support of the Ministry of Environment and Sustainable Development. Guide to chemicals of concern

[7] NTC 6192 standard "Type I Environmental Labels. Colombian Environmental Seal. Environmental criteria for computers"

[8] Study of informality in the management of WEEE in Bogota

[9] MinAmbiente Environmental Training School

[10] REP+ Strategy (Extended Producer Responsibility)

[11] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[12] See https://www.thegef.org/gef/policies_guidelines

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this child project, including framework and mechanisms for coordination, governance, financial management and procurement. This should include consideration for linking with other relevant initiatives at country-level (if a country child project) or regional/global level (for coordination platform child project). If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

Implementing Partner: The Implementing Partner for this project is Ministry of Environment and Sustainable Development (MinAmbiente).

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

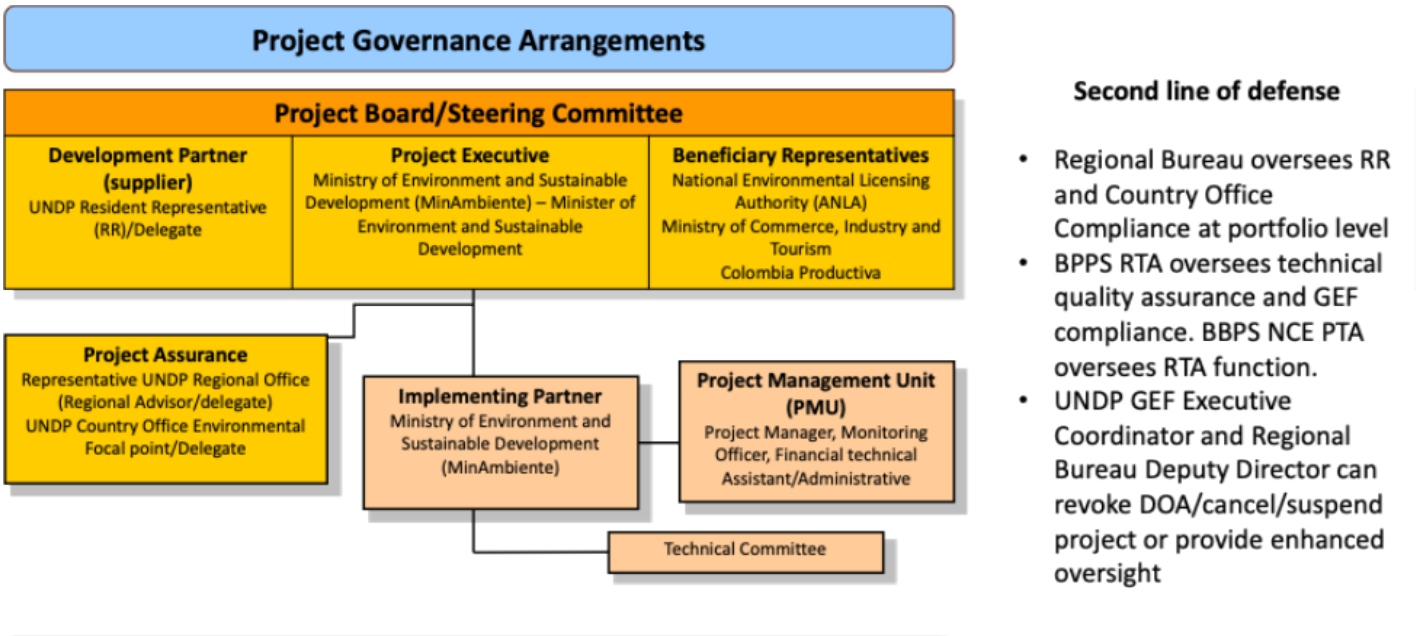
- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties: no Responsible Parties are identified for this Project.

Project stakeholders and target groups: The stakeholders of the project correspond to a diversity of entities at Global, National and City´s level, as detailed in Table 3 "Partnerships of the FSP". Among the different stakeholder groups the following can me mentioned: Governments (national and local level), industrial associations from different electronics sector, universities, research centers, NGOs, minority groups (e.g: informal workers, women associations), etc. These stakeholders can engage having similar approach and goals aligned to the project objective to strengthen the national capacity for the sound management of WEEE within the framework of national and international guidelines on the management of chemical substances and hazardous waste, through the establishment of strategies that allow circularity of EEE, reincorporation of recycled and recyclable parts and materials to production cycles, and proper management of WEEE including hazardous e-waste.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

Section 2: Project governance structure



The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the project board:

As noted in the Minimum Fiduciary Standards for GEF Partner Agencies, in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and

execution functions.

In this case, UNDP is only performing an implementation oversight role in the project vis-à-vis our role in the project board and in the project assurance function and therefore a full separation of project implementation oversight and execution duties has been assured.

Section 4: Roles and Responsibilities of the Project Organization Structure:

a) Project Board: All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

The two main (mandatory) roles of the project board are as follows:

1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the "Provide Oversight" section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.

2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

Requirements to serve on the Project Board:

- ✓ Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ✓ Meet annually; at least once.
- ✓ Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ✓ Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ✓ Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

Responsibilities of the Project Board:

- ✓ Consensus decision making:
    - The project board provides overall overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.

- Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;
- The project board is responsible for making management decisions by consensus.
- In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.
- In case consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

✓ Oversee project execution:

- Agree on project manager's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
- Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
- Address any high-level project issues as raised by the project manager and project assurance;
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
- Track and monitor co-financed activities and realisation of co-financing amounts of this project.
- Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.

✓ Risk Management:

- Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
- Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
- Address project-level grievances.

✓ Coordination:

- Ensure coordination between various donor and government-funded projects and programmes.
- Ensure coordination with various government agencies and their participation in project activities.

Composition of the Project Board: The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Project Executive is: Minister of Environment and Sustainable Development – Ministry of Environment and Sustainable Development (MinAmbiente).
2. **Beneficiary Representative(s):** Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representative (s) is/are: National Environmental Licensing Authority (ANLA), Ministry of Commerce, Industry and Tourism, and Colombia Productiva.
3. **Development Partner(s):** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner(s) is/are: UNDP Colombia Resident Representative.

b) **Project Assurance:** Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution.

A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is/are: UNDP Colombia Environmental Focal Point and the Regional Advisor of UNDP Regional Office.

c) **Project Management – Execution of the Project:** The Project Manager (PM) (also called project coordinator) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project manager typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

-

A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

The primary PMU representative attending board meetings is: Project Manager/Coordinator

Additionally, a Technical Commitee will support the PMU and MinAmbiente providing advice on relevant technical aspects to be considered in the implementation of activities towards the circularity in the electronics sector. The technical committee wil not perform any execution or oversight function.

Will the GEF Agency play an execution role on this child project? No

If so, please describe that role here and the justification.

N/A

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

Also related to the previous mentioned partnerships, there is a group of GEF-financed projects and other initiatives in Colombia currently under implementation related to the development challenge that this project is also addressing, which could provide some additional support to strengthening this institutional partnership approach. Thanks to the involvement of the institutional partners in some of them, it seems of mutual benefit the achievement of the outcomes of this project. Specifically, this FSP will ensure coordination and count on the capacity built and knowledge gathered from the concurrent projects that are already in progress, as shown in Table below:

Table 4. Other on-going projects related to this Project.

Project	Agency	Main relevance for this FSP
Strengthening national capacity to manage industrial POPs within the framework of national and international guidelines on chemical substances and hazardous waste management	GEF – UNDP GEF ID 10202	This project aimed to reduce releases of industrial POPs and other hazardous chemicals such as PCBs, SCCPs, PFOS and brominated POPs in an integrated approach to promote compliance with the Stockholm Conventions; to identify, label and classify PCB-contaminated electrical transformers and set up financial and technical support programmes for disposal; to develop national capacity to identify industrial POPs (in products) and suitable alternatives to support the phase-out of industrial POPs; and finally to raise awareness among project stakeholders on the management of industrial (POPs) chemicals, related wastes and safer alternatives.
Development of National Capacity for the Environmentally Sound Management and Disposal of PCBs.	GEF – UNDP GEF ID: 4417	The objectives of the project were to protect human health and the environment from the impacts of the improper management of PCBs in Colombia by strengthening the legal, administrative and regulatory framework for the sound management of PCBs; developing national capacity for the environmentally sound management and disposal of PCBs; and managing and disposing of PCBs in an environmentally sound manner through demonstration projects, monitoring, learning, adaptive feedback, outreach and evaluation.
Review and update of the national implementation plan for the Stockholm Convention on Persistent Organic Pollutants (POPs).	GEF – UNDP GEF ID: 6975	The objective of this project was to update the inventory of the first POPs of the Stockholm Convention and to develop inventories of the new POPs and corresponding action plans. In this way, the country was able to update the National Implementation Plan required under Article 7 of the Convention and identify the responsibilities of the stakeholders; conduct POP inventories and assess the national infrastructure and capacity; develop action plans for new POPs and update the action plans for the first POPs; and finally update the National Implementation Plan to include new POPs.
Reducing UPOPs and mercury releases from healthcare waste management, e-waste treatment, scrap processing and biomass burning	GEF-UNDP GEF ID: 6928.	The main objective of this project was to introduce Best Environmental Practices (BEP) and Best Available Technologies (BAT) to reduce the release of unintentionally generated Persistent Organic Pollutants (UPOPs) and mercury from the treatment of healthcare waste (HCW), the processing of Waste Electrical and Electronic Equipment (WEEE), processing of iron and steel, and biomass burning in the sugarcane sector.The project meet this objective by updating available information on UPOPs and mercury releases, through undertaking UPOPs inventories and national assessments in the four mentioned sectors. In addition, the project supported the implementation of 12 demonstration projects that introduced various BAT and BEP solutions for the different sectors supported by the project.
Sustainable Recycling Industries Phase II	Swiss Agency for Development and Cooperation SDC	The overall development objective of the programme was to create an enabling environment for the development of a sustainable recycling industry for e-waste and related waste streams in SECO's partner countries. The programme focused on:- governance and technology aspects that allow for optimal recovery of secondary raw materials and safe management of hazardous substances- leveraging the concept of circular economy and contributing to climate change mitigation actions through the reintegration of secondary raw materials into industrial processes- maximising and measuring the positive impact of the programme, developing and applying metrics for sustainability and environmental benefits of implemented changes.
ProUSAR: Sustainable use and efficient use of resources in Colombia	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	The ProUSAR project focuses its work on 3 value chains: - Textiles - Packaging - Electrical and electronic equipment. ProUSAR enhances the opportunities that exist around innovation from the approach of waste prevention, optimisation and circularity practices from the design of products, their inputs, the production process and uses. In this way, through the counterparts and particularly the private sector, we seek to make the value chains of textiles, packaging and electrical and electronic equipment more dynamic in these links of the chain, and to reflect social, economic and environmental benefits for Colombia based on this approach.

Table On Core Indicators

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	7355	26067	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	7,355	26,067		
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting	2026	2026		
Duration of accounting	5	5		

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

11.90	25.20	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
Tetrabromodiphenyl ether and pentabromodiphenyl ether	0.38	1.40		
Chlorinated paraffins	11.52	19.80		

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	4.00		

Indicator 9.3 Hydrochloroflurocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
1			

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
15,398.00	15,396.00		

Indicator 9.7 Highly Hazardous Pesticides eliminated

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 10 Persistent organic pollutants to air reduced

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)
0.90	2.00		

Indicator 10.1 Number of countries with legislation and policy implemented to control emissions of POPs to air (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 10.2 Number of emission control technologies/practices implemented (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	1,500	1,200		
Male	1,500	1,800		
Total	**3,000**	**3,000**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

The Core Indicators for the Child Project in Colombia were calculated using the Global GEM GEB Tool.

The only indicator that has been reduced in comparison with the Child Project Concept is Core Indicator 9.2: Quantity of Mercury reduced. The reduction is due to the fact that the methodology developed by the Global Program in the concept design stage had a measurement unit error, which gave the result in tons when in fact it corresponded to kilograms.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	The main climate risk identified for the project is damage to the infrastructure of facilities where Electrical and Electronic Equipment (EEE) is repaired or refurbished, or where Waste Electrical and Electronic Equipment (WEEE) is managed. This risk can be caused by natural events exacerbated by climate change, such as heavy rains, landslides, or floods. Colombia, due to its geographical position, is vulnerable to these hydrometeorological phenomena. If this risk materializes, it could lead to disruptions or paralysis of operations, delays in project activities, damage or total loss of EEE and WEEE, and economic losses for those responsible for the facilities. These natural events could also trigger secondary technological disasters (NATECH) like fires or explosions. While the likelihood is considered low, the impact would be intermediate, classifying this risk as moderate. This risk specifically triggers Standard 2: Climate Change and Disaster Risks. To mitigate this risk, the project will implement several key measures. Before starting activities, facilities will be assessed to verify their seismic resistance, vulnerability to climatic events, and the existence of emergency procedures. A preliminary verification of physical conditions will be conducted to identify vulnerabilities to natural (landslides, floods) or technological (fires, mechanical, chemical) events, and an updated contingency plan will be required. This plan must include risk identification, preventive actions, reduction and mitigation measures, and communication activities for workers and the community on how to act during such events. It is crucial that WEEE managers participating in the project are licensed managers who comply with Colombian environmental regulations, such as Title 7A of Decree 1076 of 2015, which mandates an environmental license and a prior Environmental Impact Study. They must also have an updated contingency plan and trained personnel. Demonstration activities will be conducted exclusively in facilities that already possess an environmental license and have submitted an Environmental Impact Assessment (EIA), thus eliminating the need for an additional EIA for the project. Additionally, specific management plans, such as the Environmental and Social Management Framework, will be required. Please see the project's SESP for details.
Environmental and Social	Moderate	The project's overall risk categorization is moderate. Several potential risks have been identified, primarily categorized as moderate. These include the

		possible lack of capacity or competence among involved governmental entities, which could delay implementation. Another moderate risk is potential discrimination hindering women's full participation in project activities, as well as situations of sexual exploitation and abuse in the workplace. Other moderate risks encompass infrastructure damage from climatic events like heavy rains or landslides, unsafe working conditions due to exposure to hazardous substances or electrical/mechanical risks for workers, and potential environmental contamination from hazardous substance emissions during WEEE repair or management activities. In addition, a moderate risk was identified related to some of the project's activities could be developed in areas where the indigenous population could have influence. To manage these risks, the project has developed a Stakeholder Engagement Plan and a Gender Action Plan. Furthermore, capacity assessments and verification of compliance with environmental and occupational health and safety regulations will be conducted in the facilities where activities take place. Demonstration activities will exclusively be carried out in facilities that possess an environmental license and have already submitted an Environmental Impact Assessment, thereby eliminating the need for an additional Environmental Impact Assessment (EIA). Specific management plans will be required, such as the Gender Action Plan and an Environmental and Social Management Framework Please see the project's SESP for details.
Political and Governance	Low	The PMU and the Project Steering Committee will provide continuous feedback and monitor the project results on a regular basis. Consultations will be held with decision makers from other government organizations to communicate the relevance of their participation in the project.
INNOVATION		
Institutional and Policy	Low	The project strategy, objectives and activities are fully aligned with the national and local policies and strategies and are also fully aligned with the International Chemicals and Waste Conventions. There is a commitment from the national government to promote the alignment of policies and institutional performance in order to fully comply with national obligations under the Stockholm and Basel Conventions. Consequently, risks related to strategies and policies are considered low.
Technological	Low	The project will foster to introduce innovative solutions to local contexts reducing e-waste generation with the adoption of circularity principles along the electronics value chain. Meaning this the adoption of successful experiences and learnings worldwide adapted to local contexts. The project as part of the Global GEM Program ensures engagement and technical advisory exchanges with key strategic partners at global and at national level.
Financial and Business Model		Stakeholders identified at the beginning of the project consider not participating in the development of the activities. For that purpose, Initial diagnosis of stakeholders to identify their activities, technical support needs, define the interventions to be carried out with the project, barriers to participation in the activities and expectations regarding the project's

		contributions. Sensitization and training of stakeholders on the activities to be developed and the social, economic and environmental benefits of the project. Provide permanent accompaniment by the project team, allowing for fluid communication channels with stakeholders. Design and implement technical incentives, such as the provision of tools, participation in fairs or training courses specific to their activities.
EXECUTION		
Capacity	Low	During the implementation of the FSP, awareness-raising, training and technical training programs will be developed and implemented, as well as capacity building in national authorities, public officials and other interested parties who are working on issues related the circularity of electronics to ensure the knowledge and experience needed to carry out their tasks properly.
Fiduciary	Low	The PMU analyzes the fluctuations of the Representative Market Rate and implements the proposed actions within the framework of a conservative rate, in order to guarantee sufficient resources for its execution. In the event of unexpected fluctuations, the PMU, within the framework of periodic monitoring and budgetary reviews of the project, makes the early adjustments needed
Stakeholder	Moderate	There is also a moderate risk that micro, small, and medium-sized enterprises (MSMEs) may not be adequately involved, affecting their ability to influence and benefit. A plan will be implemented to actively involve all relevant actors, especially MSMEs and WEEE managers (a stakeholders engagement plan was developed during the PPG), Awareness-Raising Sessions will be conducted to directly gather their perceptions, complaints, and suggestions, ensuring their voice in the project. Please see the project's SESP for details.
Other		
Overall Risk Rating	Moderate	The overall risk rating was identified by applying the highest risk level of all the individual risks.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies, including the specific integrated program priorities, and country and regional priorities, Describe how these country strategies and plans relate to the multilateral environmental agreements, such as through NDCs, NBSAPs, etc.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

(max. 500 words, approximately 1 page)

The Global Electronic Management project, through the underpinning child projects and the overarching

Global Coordination Project, are compliant with the following objectives of the GEF 8 Chemical and Waste

and Climate Change focal areas:

GEF – 8 Climate Change Focal Area. The objectives and interventions of the project are in line with the Pillar I of the Climate Change focal area, to "Promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts" with specific reference to objective 1.1. Accelerate the efficient use of energy and materials, as the intervention related to:

• Extending the lifetime of ICT devices (with or without repair)

• Reusing electric or electronic components which although discarded are still perfectly functional.

• Recovery of metals with or without BAT/BEP

• Recycling through local pre-treatment and shipment to BAT plants abroad (Mt)

Will have a significant impact on the reduction of GHG through the avoidance of GHG achieved in the manufacturing stage of ICT, or through the energy saving associated with the recovery of metals and other materials from e-waste. The direct reduction of GHG through the above initiatives is estimated in 109,000 Mt of CO2e. The change which will be achieved through project implementation is structural (the system will not go back to the baseline situation after project ends).

GEF – 8 Chemical and Waste Focal Area. The objectives and interventions of the project are in line with objective 1 of the Chemical and Waste focal area, aimed at "Creation, strengthening and supporting the enabling environment to transform the manufacture, use and sound management of chemicals and to eliminate waste and chemical pollution". More specifically, the following activities which can include policy, legislation and capacity and institutional strengthening of the public sector, private sector, CSOs and others as required by the focal area objective are envisaged by the project:

• Investments to eliminate hazardous chemicals, products containing these chemicals and waste,

• Access to, and transparency of chemical information in products and materials

• Reverse logistics and supply chains to enable recovery of materials and products for reuse, thereby preventing them from building up in the environment, through initiatives on ICT.

• Regenerative design of products and materials, which will facilitate removal of hazardous chemicals from supply chains of materials and products and facilitate more closed loop and circular supply chains.

• Green and sustainable approaches, practices, and safer alternatives to hazardous chemicals.

• Green approaches to managing waste that contains hazardous chemicals, or can emit hazardous chemicals if improperly managed, include supporting enterprises to do this responsibly.

• Green procurement to facilitate elimination of products and materials that contain or can contribute to the emission of hazardous chemicals and a build-up of material that contains hazardous chemicals,

• Participation and incentivization of women in businesses that work in management of chemicals and waste.

• Support of financial mechanisms and instruments for innovation in clean and regenerative design of products and materials, particularly those that are developed using indigenous peoples/local communities' knowledge.

• Support to develop and implement financial instruments and mechanisms at national level to allow for access to finance for business to sustain and scale project and program results.

• Policy, legislation, and technical capacity to manage products, materials and chemicals containing hazardous chemicals throughout their lifecycle, including trade.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the child Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the child project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the child project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Child Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement**.**

Yes

Select what role civil society will play in the Project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier; Yes

Member of project steering committee or equivalent decision-making body ;

Executor or co-executor;

Other (Please explain)

Private Sector

Will there be private sector engagement in the Child project?

Yes

And if so, has its role been described and justified in section B “Child project description”?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed child project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided. This includes budget for linking with and participation in knowledge exchange activities organized through the coordination platform.

Yes

Socio-economic Benefits

We confirm that the child project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

In addition to the Global Environmental Benefits (GEBs) the project is expected to deliver on the following socio-economic benefits:

- Reduce air pollution / reduce waste and wastewater pollution by reducing contaminants and increasing circularity in electronics. The project will remove or dispose 21.2 metric tonnes of POPs and 4 of Hg, avoid 15,396 metric tonnes of POPs/Hg containing materials, avoid 26,067 metric tons of CO2e and reduce 2 gTEQ of UPOPs during its implementation.

- Enhance participation, equality, and inclusion (including for women, youths, and Indigenous Peoples and local communities) by ensuring proper engagement and equal access to identified vulnerable groups. The project will enhance the integration of at least three (3) trade recyclers associations as well as the formalization of at least one (1) recycler association.

- Improve education, skills, capacity and technology for sustainable development, through several interventions targeting different stakeholders’ groups to reduce identified contaminants through chemicals and waste integrated management towards a circular economy in the electronics value chain. Based on the different activities/interventions to be implemented through the project

capacity building and training will target 100 public entities, 30 EEE companies (producers and repairers) and 15 WEEE managers, 4 recyclers associations, 50 people (20 women and 30 men) from environmental authorities; 100 people (40 women and 60 men) from value chain companies; 500 people (200 women and 300 men).

- Create job opportunities and enhance the quality of jobs through the deployment of activities related to the SDG value chains and business models to circularity of targeted sectors, including the technical assistance to recyclers associations. It is estimated that at least 200 jobs opportunities will be created and at least 100 jobs will be enhanced in quality during project implementation.

- Increase access to finance, through the development of a soft credit, to support business initiatives of companies related to the electronics value chain which include the adoption of circularity principles.

These co-benefits will be monitored and reported on during project implementation (at MTR and TE).

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNDP	GET	Colombia	Chemicals and Waste	POPs	Grant	4,400,000.00	396,000.00	4,796,000.00
UNDP	GET	Colombia	Chemicals and Waste	Mercury	Grant	1,100,000.00	99,000.00	1,199,000.00
Total GEF Resources ($)						**5,500,000.00**	**495,000.00**	**5,995,000.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested? true

PPG Amount ($) 150000

PPG Agency Fee ($) 13500

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)
UNDP	GET	Colombia	Chemicals and Waste	POPs	120,000.00	10,800.00	130,800.00
UNDP	GET	Colombia	Chemicals and Waste	Mercury	30,000.00	2,700.00	32,700.00

Total PPG Amount ($)	**150,000.00**	**13,500.00**	**163,500.00**

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CW-1	GET	5,500,000.00	34377065
Total Project Cost		**5,500,000.00**	**34,377,065.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Environment and Sustainable Development	In-kind	Recurrent expenditures	2731710
Private Sector	ECO INDUSTRIA S.A.S. E.S.P.	In-kind	Recurrent expenditures	3581025
Private Sector	ECO INDUSTRIA S.A.S. E.S.P.	Grant	Investment mobilized	406225
Private Sector	Lito SAS	In-kind	Recurrent expenditures	1592710
Private Sector	Lito SAS	Grant	Investment mobilized	743050
Private Sector	ORINOCO E-SCRAP SAS	In-kind	Recurrent expenditures	4496450
Private Sector	ORINOCO E-SCRAP SAS	Grant	Investment mobilized	13200895

Private Sector	CORPORACIÓN ECOCÓMPUTO	In-kind	Recurrent expenditures	1788745
Private Sector	CORPORACIÓN ECOCÓMPUTO	Grant	Investment mobilized	1731095
Recipient Country Government	COMPUTADORES PARA EDUCAR	Grant	Investment mobilized	736855
Recipient Country Government	UNIVERSIDAD DE ANTIOQUIA	In-kind	Recurrent expenditures	160615
Recipient Country Government	UNIVERSIDAD DE ANTIOQUIA	Grant	Investment mobilized	89065
Private Sector	PCSHEK TECNOLOGIA Y SERVICIOS SAS	In-kind	Recurrent expenditures	1431955
Private Sector	PCSHEK TECNOLOGIA Y SERVICIOS SAS	Grant	Investment mobilized	1105285
Private Sector	CORPORACIÓN PARA EL MANEJO POSCONSUMO DE ELECTRODOMÉSTICOS RED VERDE	In-kind	Recurrent expenditures	388810
Private Sector	CORPORACIÓN PARA EL MANEJO POSCONSUMO DE ELECTRODOMÉSTICOS RED VERDE	Grant	Investment mobilized	192575
Total Co-financing				**34,377,065.00**

Please describe the investment mobilized portion of the co-financing

The investment mobilized portion of the co-financing include the following:

- Investments for treatment or recovery for the environmentally appropriate management of the WEEE received by COMPANY, including hazardous fractions containing brominated persistent organic pollutants (POPs), PCCM, UV-328, dechlorane plus, mercury, and other hazardous substances.
- Investments in expanding the physical plant or increasing the capacity for treatment, recovery, or preparation for reuse of WEEE covered by the environmental license of company.
- Investments in collection, reconditioning, and final disposal of technological terminals.
- Investments in design of educational kits with recycled WEEE components
- Investments in implementation of EEE maintenance and repair strategies to extend their useful life
- Investments in applied research activities in material reuse.
- Investments in monitoring, traceability, and control of e-waste management by the National Electronic Waste Center (CENARE).

ANNEX B: ENDORSEMENT

GEF Agency(ies) Certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
GEF Agency Coordinator	6/19/2025	Nancy Bennet	19177746577	nancy.bennet@undp.orgg
Project Coordinator	6/19/2025	Xiaofang Zhou	12129065782	xiaofang.zhou@undp.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
MARÍA TERESA BECERRA RAMÍREZ	Head of International Affairs Office	Ministry of Environment and Sustainable Development	3/19/2024

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document. For the Integrated Programs' global/regional coordination child project, please include the program-wide results framework, inclusive of results specific to the coordination child project. For any country child project, please ensure that relevant program level indicators are included.

Project result framework can be found in page 58 of the ProDoc. M&E framework can be found in page 71 of the ProDoc.

Project Results Framework

Contribution to the Sustainable Development Goal (s): SDG 1 No poverty; SDG 3 Health and well-being; SDG 5 Gender equality; SDG 8 Decent work and economic growth; SDG 11 Sustainable cities and communities; SDG 12 Responsible consumption and production; SDG 13 Climate Action; SDG 17 Partnerships for the goals.						
Intended Outcome as stated in the UNSDCF/Country Programme Results and Resource Framework: CPD 2025-2027. Outcome 3.1 By 2027, Colombia will have made progress in adapting to and mitigating the effects of the triple planetary crisis – climate change, the loss and degradation of biodiversity, and the reduction of pollution.						
Applicable Output(s) from the UNDP Strategic Plan: Output 4.1 Natural resources protected and managed to enhance sustainable productivity and livelihoods".						
Project title and Quantum Project Number: Strengthening the value chain for WEEE management in Colombia.						
Objective and Outcome Indicators **(no more than a total of 20 indicators)**	**Data Source**	**Baseline**	**Mid-term Target**	**End of Project Target**	**Data Collection Methods**	**Risks/Assumptions**
Project Objective:	Strengthen the national capacity of the different stakeholders involved in the production and trade chain of EEE and in the management of WEEE.					
Mandatory Indicator 1:	Annual report on the number of people	-	1,000 people (400 women and 600 men)	3,000 people (1,200 women and 1,800 men)	Annual report on the number of people trained and in attendance at	Risks: Gender discrimination reproduced

	GEF Core Indicator 11: # direct project beneficiaries disaggregated by gender (individual people)	trained and in attendance at awareness workshops, collected by and reported on by the PMU. This information would be disaggregated by gender and recorded in a project beneficiary's database.				awareness workshops, collected by and reported on by the PMU. This information would be disaggregated by gender and recorded in a project beneficiary's database.	through limiting women to benefit from the project. (Related to risk 2) Assumptions: The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
	Mandatory Indicator 2: GEF Core Indicator 6: Greenhouse gas emission mitigated (metric tons of CO2e): 6.2 Greenhouse gas emission mitigated outside AFOLU sector	Official records of MinAmbiente.	-	7,820 metric tons of CO2e mitigated outside AFOLU sector.	26,067 metric tons of CO2e mitigated outside AFOLU sector.	Global GEM GEBs calculation methodology. Official records of MinAmbiente.	Risks: Limited capacity and/or lack of political will of national stakeholders for enhancing circularity of electronics and the environmental sound management of hazardous chemicals. (Related to Risk 17 and 18) Assumptions: The industry maintains a strong ambition to phase out chemicals of concerns within their processes and increase circularity of products. Governments and producers are willing to legislate, implement, regulate, and deliver based on the e-waste hierarchy, starting with waste prevention.
	Mandatory Indicator 3:	Official records of MinAmbiente.	To date (Dec 2024), UNDP project COL 112906 has	6.4 metric tons of	21.2 metric tons of	Global GEM GEBs calculation methodology.	Risks: Limited capacity and/or lack of political will of

	GEF Core Indicator 9: Chemicals of global concern and their waste reduced (metric ton of toxic chemicals reduced): <u>9.1: Persistent Organic Pollutants (POPs) removed or disposed (POPs type) (in metric tons)</u> <u>9.2 Quantity of mercury reduced.</u> <u>9.6: POPs/Mercury containing materials and products directly avoided (in metric tons)</u>		eliminated 75 kilograms of PBDEs from 22 tons of plastics contaminated with these substances.	POPs removed/reduced. (0.1 metric tons of PBDE, 6.3 metric tons of MCCP) 1.2 kg of mercury reduced. 4,618 metric tons of POPs/Mercury containing materials and products directly avoided.	POPs removed/reduced. (1.4 metric tons of PBDE, 19.8 metric tons of MCCP) 4 kg of mercury reduced. 15,396 metric tons of POPs/Mercury containing materials and products directly avoided.	Official records of MinAmbiente.	national stakeholders for enhancing circularity of electronics and the environmental sound management of hazardous chemicals. (Related to Risk 17 and 18) <u>Assumptions:</u> The industry maintains a strong ambition to phase out chemicals of concerns within their processes and increase circularity of products. Governments and producers are willing to legislate, implement, regulate, and deliver based on the e-waste hierarchy, starting with waste prevention.
	<u>Mandatory</u> <u>Indicator 4:</u> GEF Core Indicator 10: Persistent organic pollutants to air reduced (gTEQ)	Official records of MinAmbiente.		0.6 gTEQ reduced.	2 gTEQ reduced.	Global GEM GEBs calculation methodology. Official records of MinAmbiente.	<u>Risks:</u> Limited capacity and/or lack of political will of national stakeholders for enhancing circularity of electronics and the environmental sound management of hazardous chemicals. (Related to Risk 17 and 18) <u>Assumptions:</u> The industry maintains a strong ambition to phase out chemicals of concerns within their processes and increase circularity of products. Governments and producers are

							willing to legislate, implement, regulate, and deliver based on the e-waste hierarchy, starting with waste prevention.
Project component 1	**Enabling Policies on Circular Electronics**						
Project Outcome 1.1	Indicator 5: a. National Strategy for the maintenance and repair of electrical and electronic equipment (EEE) designed, including gender considerations. Strengthening of the technical services of maintenance and repair of AEE through: b. Number of SDG Value Chains Modeling and improvement plans developed and implemented. c. Number of demonstration projects applying the reparability index implemented. d. Information management tool,	Official records of MinAmbiente.	a. National Policy for the Integrated Management of Waste Electrical and Electronic Equipment (WEEE) published 2017. b. No previous experiences. c. No previous experiences. d. No official registers/records for technical services and repairers.	b. Three (3) SDG Value Chains Modeling developed. d. One (1) Information management tool, gender sensitive, for technical services and repairers created.	a. National Strategy for the maintenance and repair of electrical and electronic equipment (EEE) designed, including gender considerations. b. Three (3) improvement plans for the modeled SDG Value Chains implemented. c. One (1) demonstration project applying the reparability index implemented.	Official draft document of the National Strategy for the maintenance and repair of electrical and electronic equipment (EEE). Document SDG Value Chains modeling, lessons learned and scale up strategy. Document reparability index application models, lessons learned and scale up strategy. Keep records of the performance of the information management tool.	<u>Risks:</u> Public authorities for the environment, TIC, energy, education, science, health and commerce do not actively participate in the development and implementation of project activities. (Related to Risk 16) Stakeholders identified at the beginning of the project consider not participating in the development of the activities or do not align with the standards for the development of these activities. (Related to Risk 13) Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) <u>Assumptions:</u> National and local Governments commits to encourage coordination among competent authorities for strengthening the WEEE value chain management in Colombia through the integrated management of chemicals and waste. A collaborative approach to policy making that is sustained and continuously improved, integrating gender

	gender sensitive, for technical services and repairers created.						related issues across the implementation of the proposed activities. The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
	Indicator 6: e. Carbon footprint quantification methodology validated and number of companies and WEEE managers trained. f. Technical procedures for the implementation of the amendments to the Basel Convention developed. g. Single Environmental Registry (RUA) updated.	Official records of MinAmbiente.	e. No carbon footprint quantification standards are defined. f. Amendants of COP-15 in 2022 are not yet implemented in Colombia. g. Single Environmental Registry (RUA) created in 2011.	e. Carbon footprint quantification methodology validated. f. Technical procedures for the implementation of the amendments to the Basel Convention developed. g. Single Environmental Registry (RUA) updated.	e. 30 EEE companies (producers and repairers) and 10 WEEE managers trained, with at least 30% of women participation.	Keep records of companies trained on the carbon footprint methodology. Official draft document of amendments technical procedures. Keep records of the performance Single Environmental Registry (RUA).	Risks: Public authorities for the environment, TIC, energy, education, science, health and commerce do not actively participate in the development and implementation of project activities. (Related to Risk 16) Stakeholders identified at the beginning of the project consider not participating in the development of the activities or do not align with the standards for the development of these activities. (Related to Risk 13) Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Assumptions: National and local Governments commits to encourage coordination among competent authorities for strengthening the WEEE value chain management in Colombia through the integrated management of

							chemicals and waste. A collaborative approach to policy making that is sustained and continuously improved, integrating gender related issues across the implementation of the proposed activities. The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
Outputs to achieve Outcome 1.1	Output 1.1.1. Strategies for “Right to repair”, “anti-planned obsolescence” and 'circular design' strategies drafted, enacted, and disseminated.						
Outcome 1.2	Indicator 7: h. Number of demonstration activities for the application of incentives implemented. i. Number of public entities trained in guidelines that include environmental criteria for the acquisition or rental of EEE.	Official records of MinAmbiente.	h. Study published in 2024 “Incentives to promote the use and integrated management of WEEE in Colombia”, developed by the MinAmbiente with the support of the German Society for International Cooperation (GIZ). i. “Guide for the elaboration of chemical substances of concern in the process of sustainable public procurement of electrical and electronic equipment”	h. Feasibility study of identified incentives, including gender considerations, and roadmap for implementation developed. i. Forty (40) public entities trained on existing guidelines that include environmental criteria for the acquisition or lease of EEE.	h. One (1) demonstration activity for the application of the selected incentive. i. Hundred (100) public entities trained, with at least 30% of women participation, on existing guidelinesthat include environmental criteria for the acquisition or lease of EEE.	Officially document the feasibility study report. Document demonstration of the incentive application, lessons learned and scale up strategy. Keep records of public entities trained on the guidelines that include environmental criteria for the acquisition or rental of EEE.	Risks: Stakeholders identified at the beginning of the project consider not participating in the development of the activities or do not align with the standards for the development of these activities. (Related to Risk 13) Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Assumptions: Key Stakeholders, mainly the private sector and financial institutions, are willing to participate and receive training and capacity built in the promotion and adoption of circular solutions

			developed in 2023 by ICONTEC, with the support of MinAmbiente.				for e-waste and are willing to participate in their reduction and in their environmental sound management The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
	Indicator 8: j. Number of WEEE management companies with capacity built for recovery and reuse of components from WEEE. k. Number of pilot projects implemented for reconditioned EEE leasing model.	Official records of MinAmbiente.	j. No previous experiences. k. No previous experiences.	j. Five (5) selected management companies with feasibility analysis of capacity building in the recovery and reuse of WEEE components.	j. Five (5) WEEE management companies with capacity built for recovery and reuse of components from WEEE, with at least 30% of women. k. One (1) pilot project implemented for reconditioned EEE leasing model.	Keep records of capacity building activities with WEEE management companies. Document EEE leasing business model, lessons learned and scale up strategy.	Risks: Stakeholders identified at the beginning of the project consider not participating in the development of the activities or do not align with the standards for the development of these activities. (Related to Risk 13) Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Assumptions: Key Stakeholders, mainly the private sector and financial institutions, are willing to participate and receive training and capacity built in the promotion and adoption of circular solutions for e-waste and are willing to participate in their reduction and in their environmental sound management. There is expressed need for upgraded business models and facilities to accommodate after-sales repair

							services, turn e-waste into resource, and remove hazardous components from the value chain. The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
Outputs to achieve Outcome 1.2	Output 1.2.1. Green and sustainable procurement, green financing, polluters pay, incentive mechanisms, CSR and EPR policies designed and adopted based on country needs. Output 1.2.2. New business models (lease and take back, services in place of goods) promoted and set up.						
Project component 2	**Cleaner production and sustainable consumption and use.**						
Outcome 2.1	Indicator 9: l. Innovation and technology hub of the EEE value chain created. m. Report on the information management activities carried out by the hub.	Official records of MinAmbiente.	l. No previous experiences.	l. Innovation and technology hub of the EEE value chain created.	m. One (1) report that presents the state of the art and the results of research, innovation, and applied development carried out by stakeholders linked to the innovation and technology hub of the EEE/WEEE value chain.	Keep records of the performance of the Innovation and technology Hub.	Risks: Deficiencies in communication and relationship with stakeholders (Related to Risk 12) Assumptions: As part of the implementation of the stakeholder engagement plan, briefings with stakeholders were organized during the PPG phase and will continue during the implementation of the Project. In the previous sessions of the PPG phase, the main concerns and interests of the stakeholders interested in the project allowing the formulation of actions that allow eliminating these barriers and emphasizing on the benefits of being part of the project
Outputs to achieve	Output 2.1.1. Circular design on electronic components (parts) and products (aimed at increasing standardization and compatibility; ease of maintenance and repair, including disassembly and reassembly; avoidance of hazardous material) promoted and supported.						

Outcome 2.1							
Outcome 2.2	Indicator 10: n. Report with the analysis of alternatives for compliance with the obligation to inform EEE consumers on hazardous substances content developed. o. Number of demonstrative activities implemented for the application and certification of the NTC 6192 standard "Type I Environmental Labels. Colombian Environmental Seal. Environmental Criteria for computers".	Official records of MinAmbiente.	n. National obligation: literal f of numeral 2 of Article 6 of Law 1672 of 2013). o. NTC 6192:2016 standard "Type I Environmental Labels. Colombian Environmental Seal. Environmental Criteria for computers.	n. One (1) report with the analysis of alternatives for compliance with the obligation to inform EEE consumers on hazardous substances content developed.	o. Two (2) demonstrative activities implemented for the application and certification of the NTC 6192 standard "Type I Environmental Labels. Colombian Environmental Seal. Environmental Criteria for computers".	Officially document the analysis of alternatives report. Document the application and certification activities, lessons learned and scale up strategy.	Risks: Private companies fear that participation in the project may affect their image or brand. (Related to Risk 19) Assumptions: As part of the implementation of the stakeholder engagement plan, briefings with stakeholders were organized during the PPG phase and will continue during the implementation of the Project. In the previous sessions of the PPG phase, the main concerns and interests of the stakeholders interested in the project allowing the formulation of actions that allow eliminating these barriers and emphasizing on the benefits of being part of the project.
	Indicator 11: p. Number of pilot projects implemented to promote behavioral change, including gender considerations, among users of EEE.	Official records of MinAmbiente.	o. No previous experiences.	p. One (1) Report on the analysis of EEE consumption habits, gender differentiated, in Colombia developed.	p. One (1) pilot project implemented to promote behavioral change among users of EEE, gender sensitive.	Officially document the analysis of EEE consumption habits report. Document the activities of the behavioral change strategy, lessons learned and scale up strategy.	Risks: Private companies fear that participation in the project may affect their image or brand. (Related to Risk 19) Assumptions: As part of the implementation of the stakeholder engagement plan, briefings with stakeholders were organized during the PPG phase and will continue during the implementation of the Project. In the previous sessions

							of the PPG phase, the main concerns and interests of the stakeholders interested in the project allowing the formulation of actions that allow eliminating these barriers and emphasizing on the benefits of being part of the project.
Outputs to achieve Outcome 2.2	Output 2.2.1. Eco-labeling of green and innovative electronic products promoted. Output 2.2.2. Information and awareness raising on green products, alternatives and services in the electronics sector undertaken.						
Project component 3	**Resource-efficient value chain across the electronics sector.**						
Outcome 3.1	Indicator 12: q. Number of demonstration activities testing optimization guidelines in geographic coverage. r. Number of trade recyclers associations integrated through the strengthening of the SDG value chain, considering the leadership of women. s. Number of informal recyclers' associations formalized. t. Number of manufacturers, national assemblers, or WEEE managers	Official records of MinAmbiente.	q. No previous experiences. r. No previous experiences. s. No previous experiences. t. Existing technical standards: NTC 6684:2023, 6685:2023, 6686:2023 and 6687:2023	q. One (1) document of guidelines and recommendations for the optimization of the geographic coverage of the WEEE SR&G developed. t. Auditor training guidelines developed.	q. One (1) demonstration activity testing optimization guidelines in geographic coverage. r. Three (3) trade recyclers associations integrated through the strengthening of the SDG value chain, considering the leadership of women. s. One (1) informal recyclers' association formalized. t. Four (4) manufacturers, national assemblers, or WEEE managers technically advised for the certification of Colombian technical standards that promote the reuse and recycling of WEEE. Ten (10) auditors, at least 30% women, trained in the	Officially document the guidelines and recommendations of geographic coverage optimization. Document the demonstration activity on geographic optimization, lessons learned and scale up strategy. Keep records of recyclers associations strengthened through the SDG value chain and informal recyclers formalization. Keep records of manufacturers, national assemblers, or WEEE managers technically assisted and of auditors training.	Risks: Technical services for maintenance and repair of EEE, WEEE managers or associations of recyclers, in particular from micro, small and medium-sized enterprises (MSMEs), might not be involved in the project. (Related to Risk 3) Limited capacity and/or lack of political will of national stakeholders for enhancing circularity of electronics and the environmental sound management of hazardous chemicals. (Related to Risk 17 and 18) Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Assumptions: The project has considered proactive actors from the public and private sectors and from NGOs. Additionally, there is a commitment

	technically advised for the certification of Colombian technical standards that promote the reuse and recycling of WEEE. Number of auditors trained in the standards.				Colombian technical standards.		from the national government to promote the alignment of policies and institutional performance in order to fully. Awareness-raising, training and technical training programs will be developed and implemented, as well as capacity building in national authorities, public officials and other interested parties who are working on issues related the circularity of electronics to ensure the knowledge and experience needed to carry out their tasks properly. The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
	Indicator 13: u. Number of demonstration projects for the reuse of batteries from electric mobility in stationary applications implemented v. Number of inventories of POPs in the EEE value chain developed. w. Number of robotics kits designed with	Official records of MinAmbiente.	u. No previous experiences. v. Inventories of PFOS/PFOA, SCCPs and Brominated POPs developed by the GEF/UNDP project "Strengthening national capacity to manage industrial persistent organic pollutants (POPs) within the framework of national	v. One (1) document including the progress up to the collection and compilation of the data for the inventory of POPs (UV-328, Dechlorane Plus and Medium Chain Chlorinated Paraffins (PCCM)). w. Robotics kits design with components recovered from WEEE and 3D printed plastic parts developed.	u. One (1) demonstration project implemented for the reuse of batteries from electric mobility in stationary applications. v. One (1) inventory of POPs (UV-328, Dechlorane Plus and Medium Chain Chlorinated Paraffins (PCCM)) in the EEE value chain developed. w. One (1) robotics kit designed with	Document the reuse of batteries and photovoltaics panels models, lessons learned and scale up strategy. Officially document the POPs inventory report. Document robotic kits design, lessons learned and scale up strategy.	<u>Risks:</u> Stakeholders identified at the beginning of the project consider not participating in the development of the activities or do not align with the standards for the development of these activities. (Related to Risk 13) Limited capacity and/or lack of political will of national stakeholders for enhancing circularity of electronics and the environmental sound management of hazardous chemicals. (Related to Risk 17 and 18)

	components recovered from WEEE and 3D printed plastic parts. x. Number of demonstration projects for the reuse of photovoltaic panels implemented.		guidelines and international regulations on the management of hazardous chemicals and waste". w. No previous experiences. x. No previous experiences.		components recovered from WEEE and 3D printed plastic parts. x. One (1) demonstration project for the reuse of photovoltaic panels implemented.		Difficulties in obtaining the information required to develop the Inventory of POPs in the EEE. (Related to Risk 11) <u>Assumptions:</u> The project has ensured through the stakeholder participation plan, an adequate awareness creation on the importance of this Inventory. Furthermore, the signing of collaboration agreements with the sectors / companies that will participate in the demonstration projects is foreseen, which will incorporate measures to protect confidential information. Awareness-raising, training and technical training programs will be developed and implemented, as well as capacity building in national authorities, public officials and other interested parties who are working on issues related the circularity of electronics to ensure the knowledge and experience needed to carry out their tasks properly.
Outputs to achieve Outcome 3.1	Output 3.1.1. E-waste collection schemes (one to one, zero to one, dedicated services for offices and institutions) and reverse logistics established. Output 3.1.2. Infrastructures and business models for refurbishment, repair or remanufacturing established/enhanced. Output 3.1.3. increased uptake of recycled materials along the value chain.						
Outcome 3.2	Indicator 14: y. Number of WEEE management companies	Official records of MinAmbiente.	y. No previous experiences.	y. Three (3) WEEE management companies selected with feasibility analysis of capacity building in the	y. One (1) demonstration project for the environmentally sound management of cable waste from WEEE and electrical	Document the cable waste sound management model, lessons learned and scale up strategy.	<u>Risks:</u> Limited capacity and/or lack of political will of national stakeholders for enhancing circularity of electronics and the

	strengthened in the environmentally sound management of UV-328, Decorane Plus and PCCM.			in the environmentally sound management of UV-328, Decorane Plus and PCCM.	installations. Three (3) WEEE management companies with capacity built in the environmentally sound management of UV-328, Decorane Plus and PCCM.	Keep records of capacity building activities with WEEE management companies.	environmental sound management of hazardous chemicals. (Related to Risk 17 and 18) Stakeholders identified at the beginning of the project consider not participating in the development of the activities or do not align with the standards for the development of these activities. (Related to Risk 13) <u>Assumptions:</u> The project has ensured through the stakeholder participation plan, an adequate awareness creation on the importance of this Inventory. Furthermore, the signing of collaboration agreements with the sectors / companies that will participate in the demonstration projects is foreseen, which will incorporate measures to protect confidential information. Awareness-raising, training and technical training programs will be developed and implemented, as well as capacity building in national authorities, public officials and other interested parties who are working on issues related the circularity of electronics to ensure the knowledge and experience needed to carry out their tasks properly.
Outputs to achieve Outcome 3.2	Output 3.2.1. Material streams contaminated by POPs, mercury and chemicals of concern managed in an environmentally sound manner and knowledge of stakeholders to access material supply chains enhanced.						

Project component 4	**Knowledge Management, Communication, Program-level Coordination.**						
Outcome 4.1	Indicator 15: z. Communication strategy developed, and number of people reached. aa. Document of guidelines and contents for the inclusion of integrated management of WEEE in educational institutions developed, including gender considerations.	Official records of MinAmbiente.	z. No previous experiences. aa. No previous experiences.	z. Communication strategy developed. aa. One (1) document of guidelines and contents for the inclusion of integrated management of WEEE in educational institutions developed, including gender considerations.	z. 3,000 people (1,200 women and 1,800 men) reached.	Keep records of people reached through communication activities. Officially document the educational guidelines and contents.	Risks: Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Marginalization of stakeholder groups by not giving them the opportunity to participate in the project and benefiting from its outcomes. (Related to Risk 3) Assumptions: The implementation of the stakeholder engagement plan and the gender action plan will promote the equal and fair participation of women/men, and marginalized stakeholders groups in the design of innovative alternatives, benefits, and opportunities in each of its components.
	Indicator 16: bb. Number of people in the EEE value chain trained. cc. Number of regional working groups of environmental authorities and private sector to enhance implementation of the National Policy for the integrated managemen	Official records of MinAmbiente.	bb. 0. cc. 0.	bb. 15 people (6 women and 9 men) from environmental authorities; 30 people (12 women and 18 men) from value chain companies; 150 people (60 women and 90 men) from other trained stakeholders. cc. Two (2) regional working groups of environmental authorities and	bb. 50 people (20 women and 30 men) from environmental authorities; 100 people (40 women and 60 men) from value chain companies; 500 people (200 women and 300 men) from other trained stakeholders. cc. Five (5) regional working groups of	Keep records of training activities. Keep records of regional working groups meetings and performance.	Risks: Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Marginalization of stakeholder groups by not giving them the opportunity to participate in the project and benefiting from its outcomes. (Related to Risk 3) Assumptions: The implementation of the stakeholder engagement plan and the gender

	t of WEEE conducted.			private sector to enhance implementation of the National Policy for the integrated management of WEEE conducted.	environmental authorities and private sector to enhance implementation of the National Policy for the integrated management of WEEE conducted.		action plan will promote the equal and fair participation of women/men, and marginalized stakeholders groups in the design of innovative alternatives, benefits, and opportunities in each of its components.
Outputs to achieve Outcome 4.1	Output 4.1.1 Communication plans and capacity development strategies developed. Output 4.1.2 Knowledge management infrastructure designed and set up, aligned to the Global GEM Knowledge Management Strategy and Platform.						
Outcome 4.2	Indicator 17: dd. Number of participation activities in the Global GEM program.	Official records of MinAmbiente.	-	dd. At least twelve (12) evidenced participation activities within the Global GEM program.	dd. At least twenty (20) evidenced participation activities within the Global GEM program.	Keep record of the participating activities at Global level.	Risks: Gender discrimination reproduced through limiting women to benefit from the project. (Related to risk 2) Assumptions: The implementation of the gender action plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.
Outputs to achieve Outcome 4.2	Output 4.2.1 The global program and child projects introduced and linked to existing relevant platforms, including the Global GEM Knowledge Management Platform. Coordination mechanism between the global program and the child projects designed and implemented.						
Project component 5	**Monitoring & Evaluation**						
Outcome 5.1	Indicator 18: ee. Project-level monitoring and evaluation completed through documentation from Inception Workshop, Annual GEF Project Implementat	Inception Workshop Report Annual GEF Project Implementation Report (PIR) Board meeting reports	-	ee. Inception Workshop, PIRs, annual Board meetings, annual update of GEF core indicators, gender, stakeholder participation and ESMF, and MTR completed.	ee. Independent TE completed. Final core indicators updated. Final project board meeting carried out.	Review of report generated by the project´s monitoring and evaluation plan.	Risks: Poor and / or scarce monitoring and evaluation. It may lead to deviations in the expected results of the project. (Related to Risk 15) Assumptions: Periodic monitoring and follow-up activities

	ion Reviews (PIR), M&E of GEF core Indicators, Gender Plan, Safeguards Frameworks and Action Plans, Independent Mid-Term Review, and Independent Terminal Evaluation.	M&E reports of GEF core indicators Reports of gender, stakeholder participation and ESMF monitoring Independent Mid-Term Review Independent Terminal Evaluation					as well as a comprehensive reporting during the MTR, may early identified possible deviations from the programmed actions.
	Indicator 19: ff. Percentage of project expenditure spent on the Colombia Project planned activities.	UNDP Expenditures as reported in Quantum.	-	ff. 40%	ff. 100%	External financial audit retained by UNDP	Risks: Fluctuations in macroeconomic indicators may affect project total budget execution. (Related to Risk 8) Assumptions: UNDP monitors expenditure on a daily basis and budget is revised at least once a year adjusted to real execution. Further UNDP HQ provides global oversight of project delivery minimizing the risk of operational risk due to currency risks.

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed
International Project Development Specialist (GEF PPG Team Leader)	57,600.00	28,785.00	17,770.00
National PPG Planner, institutional and Policy Expert; Gender consultant; Stakeholder engagement consultant; Social and Environmental Safeguards consultant.	66,350.00	77,395.00	0.00
Travel	10,014.00	3,582.00	6,432.00
PPG workshops and meetings.	8,036.00	6,067.00	1,969.00
Professional services (HACT, Partner Capacity Assessment)	3,000.00	0.00	3,000.00

Translation costs	5,000.00	0.00	5,000.00
Total	150,000.00	**115,829.00**	**34,171.00**

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
Barranquilla	10.96854	-74.78132	3,689,147

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Bogotá DC	4.25	-74.18333	3,688,685

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Cúcuta	7.89391	-72.50782	3,685,533

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Funza	4.73058	-74.21787	3,682,282

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Manizales	5.08333	-75.5	3,675,444

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Medellín	6.25184	-75.56359	3,674,962

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Mosquera	4.68935	-74.23599	3,674,295

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Neiva	2.9273	-75.28189	3,673,899

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Pasto	1.21361	-77.28111	3,672,778

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Popayán	2.43823	-76.61316	3,671,916

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Quibdó	5.69188	-76.65835	3,671,116

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Sogamoso	5.71434	-72.93391	3,667,973

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Tunja	5.53528	-73.36778	3,666,608

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Villavicencio	4.142	-73.62664	3,665,900

Location Description:

Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

Location Name	Latitude	Longitude	GeoName ID
Yumbo	3.58234	-76.49146	3,665,657

Location Description:

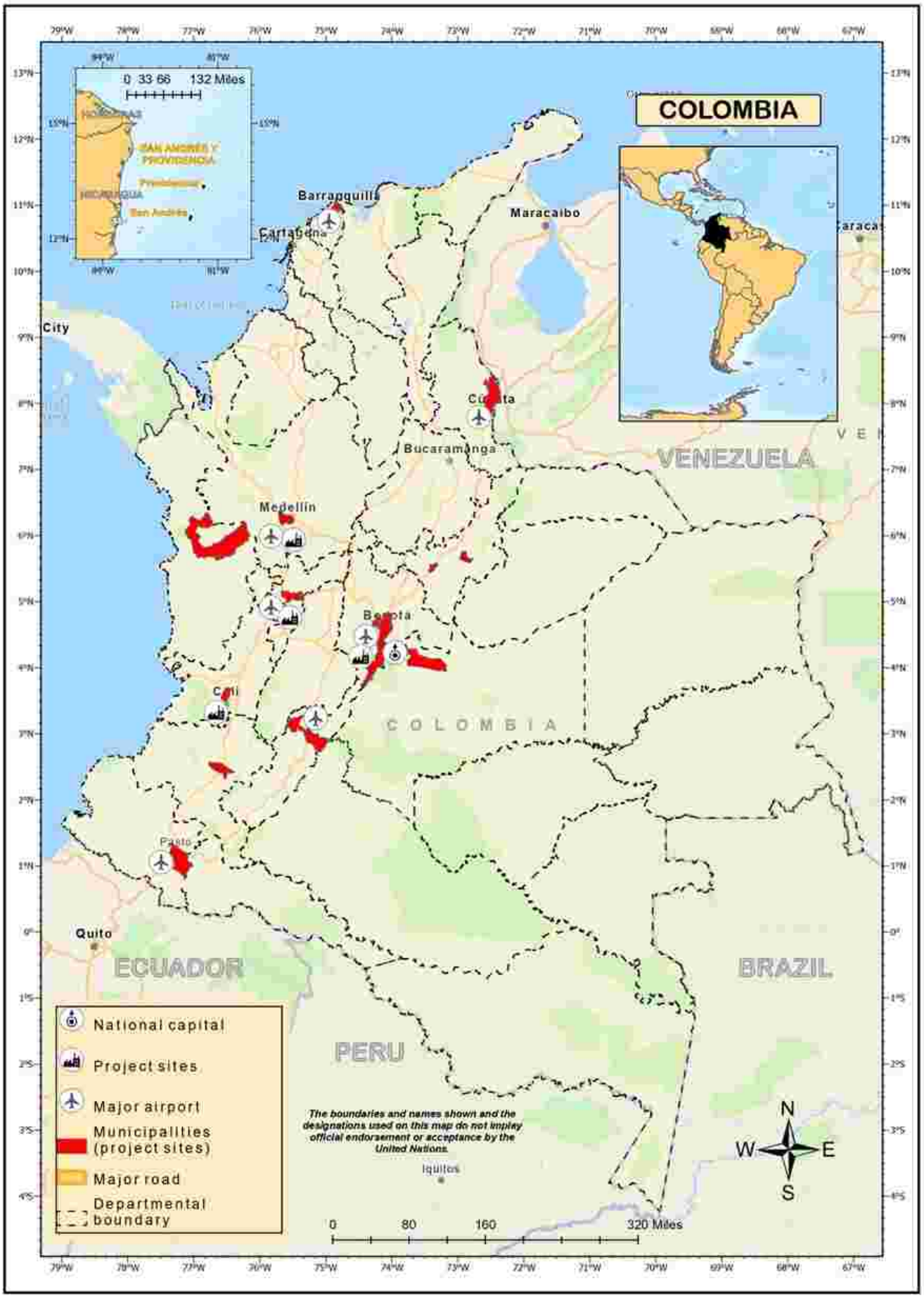
Activity Description:

Municipalities to get involved through components 1, 2, 3 and 4.

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

"Strengthening the value chain for WEEE management in Colombia"

Map 1. *Project sites for WEEE. Municipalities to get involved through components 1, 2, 3 and 4.*


COLOMBIA
0 33 66 132 Miles
SAN ANDRÉS Y PROVIDENCIA
Providencia
San Andrés
Barranquilla
Cartagena
Maracaibo
Caracas
City
Cúcuta
Bucaramanga
VENEZUELA
Medellín
Bogotá
Cali
COLOMBIA
Pasto
Quito
ECUADOR
BRAZIL
PERU
Iquitos
National capital
Project sites
Major airport
Municipalities (project sites)
Major road
Departmental boundary
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
0 80 160 320 Miles
N
W
E
S

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS DOCUMENTS INCLUDING RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title
Annex 9. ESMF updated
Annex 5. SESP updated

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Expenditure Category	Detailed Description	Component (USDeq.)							Total (USDeq.)	Responsible Entity
		Component 1	*Component 2*	*Component 3*	*Component 4*	*Sub-Total*	*M&E*	*PMC*		(Executing Entity receiving funds from the GEF Agency)[1]
Equipment	Equipment required for the implementation of the software tool (iv, b) + Tools and equipment for verifying the quality of equipment maintenance in sub-activities i, ii and iii of activity b.	51,000				51,000			51,000	MinAmbiente
Equipment	Standard IT equipment for the PMU (computers USD 8,154)					-		8,154	8,154	MinAmbiente
Equipment	Tools to be used in the integration activities of the associations of professional recyclers of Output 3.1.1, activity b. Total USD60,000 + Tools required for the design of 3D printed parts in			100,000		100,000			100,000	MinAmbiente

	Output 3.1.3, sub-activity a.ii. Total USD20,000 + Tools for the realization of the demonstration project of Output 3.1.3, activity b. Total USD $20,000.									
Subtotal Equipment		51,000	-	100,000	-	151,000	-	8,154	159,154	
Grants	Subscription of low-value grant agreements with the associations of informal recyclers involved in the implementation of activity b of Output 3.1.1. Total USD 20,000.			20,000		20,000			20,000	MinAmbiente
Subtotal Grants		-	-	20,000	-	20,000	-	-	20,000	
Contractual services-Individual	One (1) individual contractor for the design and writing of communication campaign contributions to the GEM Community Platform and other coordination activities set forth in Output 4.2.1, activity d. Total USD 45,000 (USD9,000/year).				45,000	45,000			45,000	MinAmbiente
Contractual services-Individual	One (1) Professional Expert (Policies, Regulation, Circular Economy & WEEE management) to support implementation of Component 2, particularly, the Innovation and Technology Hub creation and the behavioral change strategy. Total USD 216,000 (USD48,000/year for 4.5 years)		216,000			216,000			216,000	MinAmbiente
Contractual services-Individual	One (1) Technical Consultant (circular economy & WEEE management) to support the implementation of Component 1, some sub-activities of Output 1.1.1, analysis, conclusions and training of stakeholders within the framework of the ESMF. Total USD $240,000 (USD48,000/year)	240,000				240,000			240,000	MinAmbiente

Contractual services-Individual	One (1) Technical Consultant to support productive chaining activities (b. i and ii) in Comp 1 and to support productive chaining activities in Output 3.1.1. on the integration of recyclers (SDG value chains).	48,000		48,000		96,000			96,000	MinAmbiente
Contractual services-Individual	One (1) Technical Consultant (WEEE environmental sound management) to support the technical implementation of Component 3, particularly POPs environmental sound management in Output 3.2.1. Total USD240,000 (USD48,000/year)			240,000		240,000			240,000	MinAmbiente
Contractual services-Individual	One (1) individual contractor for the implementation of the gender plan in Output 4.1.1, activity b. Total USD36,000 for 4 years (USD9,000/year). See annex 7 for additional details.				36,000	36,000			36,000	MinAmbiente
Contractual services-Individual	One (1) Technical Consultant at USD 56,400 in Year 3 to support the development and implementation of Output 1.2.2.	56,400				56,400			56,400	MinAmbiente
Contractual services-Individual	One administrative/finance assistant. Total USD100,000 (USD20,000/year)					-		100,000	100,000	MinAmbiente
Contractual services-Individual	One Project Coordinator: the Project Coordinator will undertake day-to-day project implementation, administration, procurement and management activities. Total USD140,000 (USD28,000/year)							140,000	140,000	MinAmbiente
Contractual services-Individual	Project M&E Officer engaged for the coordination, implementation, oversight and follow-up of the Gender Action Plan, Social and Environmental Risks Management and the Stakeholder					-	86,000		86,000	MinAmbiente

	Engagement Plan follow-up as well as Mandatory reports production. Total USD86,000 (USD$17,200/year). See M&E budget table on the PRODOC and Annex 7 for additional details.									
Subtotal Contractual services-Individual		344,400	216,000	288,000	81,000	929,400	86,000	240,000	1,255,400	
Contractual services-Company	One (1) consulting firm for the design and implementation of the national strategy for maintenance and repair of EEE (c). Total USD 120,000	120,000				120,000			120,000	MinAmbiente
Contractual services-Company	One (1) consulting firm for the diagnosis, initial modeling, design, implementation and follow-up of improvement plans for productive units (i and ii, b). Total USD60,000	60,000				60,000			60,000	MinAmbiente
Contractual services-Company	One (1) consulting firm for the implementation of the demonstration project (iii, b). Total USD200,000.	200,000				200,000			200,000	MinAmbiente
Contractual services-Company	One (1) consulting firm for software development, guidelines and technical guide (e). Total USD70,000	70,000				70,000			70,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to carry out the strengthening of the management companies for Output 1.2.2, activity a. Total USD150,000.	150,000				150,000			150,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to develop and implement the pilot project of Output 1.2.2, activity b (including the professionals required to implement the ESMF). Total USD50,000.	50,000				50,000			50,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support the implementation of Outptut 1.2.1 (sustainable public procuremen and WEEE	115,200				115,200			115,200	MinAmbiente

	management), activities a and b. Total USD115,200 (USD38,400/year in Year 2,3 and 4).									
Contractual services-Company	One (1) consulting firm to support the feasibility study of Output 1.2.2 activity b. Total USD 30,000 in year 3.	30,000				30,000			30,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support EEE producers in the development and implementation of the Output 2.2.1, activity. Total USD20,000.		20,000			20,000			20,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 2.2.2, subactivity i,b, on the design of the pilot project. Total USD 50,000		50,000			50,000			50,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Outptut 2.2.2, subactivity ii,b, on the implementation of the pilot project. Total USD100,000		100,000			100,000			100,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support the implementation of Output 2.2.2, subactivity iii (b). Total USD50,000.		50,000			50,000			50,000	MinAmbiente
Contractual services-Company	One (1) consulting firm at USD 56,400 in Year 4 with specific support to the development and implementation of Output 2.2.1, activities a and b.		56,400			56,400			56,400	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 2.2.1, activity b, on the advise of the beneficiary producers. Total USD$50,000 in Year 2.		50,000			50,000			50,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 2.2.2, activity a, on the analysis of statistical information (including the gender focus established in the gender and risk management plan). Total USD30,000 in Year 2.		30,000			30,000			30,000	MinAmbiente

Contractual services-Company	One (1) consulting firm to execute the capacity building of the WEEE management companies of Output 3.2.1, sub-activity i. Total USD60,000			60,000		60,000			60,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to carry out the management and disposal of WEEE in Output 3.2.1, sub-activity ii. Total USD200,000			200,000		200,000			200,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to implement the demonstration project of Output 3.2.1, sub-activity iii. Total USD120,000.			120,000		120,000			120,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to carry out the design of the demonstration project of Output 3.2.1, sub-activity iii. Total USD40,000.			40,000		40,000			40,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 3.1.1, sub-activity i, a, on the optimization and feasibility analyses, preparation of guidelines and recommendations. Total USD100,000,			100,000		100,000			100,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 3.1.1., sub-activity ii, a, on the design and implementation of the demonstration activity. Total USD 116,400			116,400		116,400			116,400	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 3.1.1., activity c, on the technical accompaniment of activity. Total USD60,000.			60,000		60,000			60,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Output 3.1.2, activity a, on the training of auditors. Total USD20,000.			20,000		20,000			20,000	MinAmbiente
Contractual services-Company	One (1)consulting firm to support implementation of Output 3.1.2, activity b. Total USD200,000.			200,000		200,000			200,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to carry out the training of			40,000		40,000			40,000	MinAmbiente

	laboratory personnel to support Output 3.1.2, sub-activity iv.c (including the management of chemical and environmental risks due to the content of hazardous chemicals). Total USD40,000									
Contractual services-Company	One (1) consulting firm to carry out the design of the Computers to Educate robotics kit in Output 3.1.2,sub-activity i.a. Total USD50,000.			50,000		50,000			50,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to elaborate the design of 3D printed parts in Output 3.1.3, sub-activity ii.a. Total USD $100,000.			100,000		100,000			100,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to carry out the pedagogical design support in Output 3.1.2, sub-activity iii.a. Total USD50,000.			50,000		50,000			50,000	MinAmbiente
Contractual services-Company	One (1) a consulting firm for the feasibility study and demonstration project of Output 3.1.2, activity b (including the identification of environmental risks in the development of the demonstration project). Total USD200,000.			200,000		200,000			200,000	MinAmbiente
Contractual services-Company	One (1) consulting firm at USD 56,400 in Year 2 to support the development and implementation of Output 3.1.1, activity a.			56,400		56,400			56,400	MinAmbiente
Contractual services-Company	One (1) consulting firm to support Outptu 3.1.2, activity iv.c, to carry out technical capacity building. Total USD30,000.			30,000		30,000			30,000	MinAmbiente
Contractual services-Company	One (1) consulting firm to support the implementation of Outptu 4.2.1,activity b and c. Total USD40,000 (USD8,000/year).				40,000	40,000			40,000	MinAmbiente

Contractual services-Company	One (1) consulting firm to update the virtual courses offered by Minambiente and provide technical support for their offer, activity b of Output 4.1.2. Total USD40,000				40,000	40,000			40,000	MinAmbiente
Contractual services-Company	One (1) consulting firm at USD 112,800 (USD22,560/year) to support to the development and implementation of Output 4.1.1				112,800	112,800			112,800	MinAmbiente
Contractual services-Company	One (1) consulting firm for the development of the communication strategy for Output 4.1.1, activity a. Total USD38,400 (USD7,680/year)				38,400	38,400			38,400	MinAmbiente
Subtotal Contractual services-Company		795,200	356,400	1,442,800	231,200	2,825,600	-	-	2,825,600	
International Consultants	One (1) international consultant to generate the contents of the knowledge products that will contribute to the GEM Community Platform and other tasks established in Output 4.2.1, activity k. Total USD25,000 (USD5,000/year).				25,000	25,000			25,000	MinAmbiente
International Consultants	One (1) international consultant to perform risk analysis and report recommendations for management company facilities under the ESMF in Output 3.2.1. Total USD15,000 in Year 3.			15,000		15,000			15,000	MinAmbiente
International Consultants	One (1) international consultant to support Output 2.2.2, activity b, on the implementation of the behavioral change strategy. Total USD20,000 in Year 3.		20,000			20,000			20,000	MinAmbiente
International Consultants	One (1) International Consultant to support the implementation of	30,000				30,000			30,000	MinAmbiente

	the demonstration project (b.iii). Total USD30,000 distributed as follows: Year 3 USD12,000, Year 4 USD12,000, Year 5 USD6,000.									
International Consultants	One International Consultant for the MTR					-	25,000		25,000	UNDP
International Consultants	One International Consultant for the TE					-	25,000		25,000	UNDP
Subtotal International Consultants		30,000	20,000	15,000	25,000	90,000	50,000	-	140,000	
Local Consultants	One (1) local consultant for the design of the capacity building of the WEEE management companies of Output 3.2.1, sub-activity i. Total USD20,000.			20,000		20,000			20,000	MinAmbiente
Local Consultants	One (1) local consultant for the development of the information management system (b.iv). Total USD 30,000	30,000				30,000			30,000	MinAmbiente
Local Consultants	One (1) local consultant for the development of technical procedures (d). Total USD35,000	35,000				35,000			35,000	MinAmbiente
Local Consultants	One (1) local consultant to support Output 2.2.1, activity a, on the analysis of alternatives. Total USD 18,000 in Year 1		18,000			18,000			18,000	MinAmbiente
Local Consultants	One (1) local consultant to support Output 3.1.1, activity b, on the intervention to the associations of recyclers (including the management of the risk of inclusion of these actors). Total USD36,000			36,000		36,000			36,000	MinAmbiente
Local Consultants	One (1) local consultant to support Output 3.1.2, activity a, on the technical support to companies that produce EEE and manage WEEE. Total USD50,000			50,000		50,000			50,000	MinAmbiente

Local Consultants	One (1) local consultant to support the incentives analysis of Output 1.2.1. Total USD30,000 in year 2.	30,000				30,000			30,000	MinAmbiente
Local Consultants	One (1) local consultant to update the virtual courses offered by Minambiente and provide technical support for ANLA's REP+ platform in the development of Output 4.1.1, activity b. Total USD15,000.				15,000	15,000			15,000	MinAmbiente
Local Consultants	One Local consultant for MTR					-	5,000		5,000	UNDP
Local Consultants	One Local Consultant for TE					-	5,000		5,000	UNDP
Subtotal Local Consultants		95,000	18,000	106,000	15,000	234,000	10,000	-	244,000	
Training, Workshops, Meetings	Events for socialization of the results of the Output 2.1.1, activity a.		24,000			24,000			24,000	MinAmbiente
Training, Workshops, Meetings	Inception workshop and final workshop (see M&E budget table for additional details)					-	9,000		9,000	MinAmbiente
Training, Workshops, Meetings	Training to WEEE SR&G and logistic operators for the demonstration activity in Output 3.1.1, sub-activity a.ii. Total USD30,000 + Workshops with WEEE SR&G and recyclers associations for their articulation in the development of Output 3.1.1, activity b. Total USD20,000. + Training and technical capacity building activities for actors in the electric mobility value chain in the development of Output 3.1.2, activity b. Total USD25,000 + Training of laboratory personnel in Output 3.1.2, sub-activity c.iv. Total USD 20,000. + Workshops with a gender focus for the design of 3D printed			145,000		145,000			145,000	MinAmbiente

	parts in Output 3.1.3, sub-activity a.ii. Total USD 30,000 + Training or coaching in the realization of the demonstration project of Output 3.1.3, activity b. Total USD20,000.									
Training, Workshops, Meetings	Workshops and training sessions for the implementation of the gender plan in Output 4.1.1. Total USD20,000. + Workshops, training and socialization sessions for the actors of the EEE value chain in the execution of Output 4.1.2, activity a. Total USD29,300 + Working sessions of the regional roundtables with environmental authorities in the development of Output 4.1.2, activity c. Total USD9,900.				59,200	59,200			59,200	MinAmbiente
Training, Workshops, Meetings	Workshops to strengthen the management companies of Output 3.2.1, sub-activity i. Total USD8,000 + Trainings carried out during the implementation of the demonstration project in Output 3.2.1, sub-activity iii. Total USD15,000.			23,000		23,000			23,000	MinAmbiente
Training, Workshops, Meetings	Workshops to support the implementation of activities: a (i and v - including those on the gender plan, vii - including on the ESM plan) and b (including the ESM plan); training or capacity building on activities c(iii) and d.	68,800				68,800			68,800	MinAmbiente
Training, Workshops, Meetings	Workshops to support the implementation of Output 1.2.1, activity a. Total USD 5,000 + Trainings to support the implementation of Output 1.2.1, activity b. Total USD 20,000 + Technical training to support the implementation	55,000				55,000			55,000	MinAmbiente

	of Output 1.2.2, activity a (including risk management training as set forth in the ESMF). Total USD30,000.									
Training, Workshops, Meetings	Workshops with EEE producers to support Output 2.2.1, activity a. Total USD10.000 in Year 1 + Workshops for the analysis of information to support Output 2.2.2, activity a. Total USD6,000 in Year 2 + Workshops required for the implementation of the behavior change strategy to support Output 2.2.2, activity b. Total USD13,600 in Year 3.		29,600			29,600			29,600	MinAmbiente
Subtotal Training, Workshops, Meetings		123,800	53,600	168,000	59,200	404,600	9,000	-	413,600	
Travel	Supervision and learning missions. See M&E budget table on PRODOC section VI					-	8,000		8,000	UNDP
Travel	Travel for participation in the annual Global Program conference. Total USD25,000 (5 trips) + Travel for participation in Thematic Working Group coordination meetings. Total USD25,000 (5 trips).				50,000	50,000			50,000	MinAmbiente
Travel	Travel required to carry out the strengthening of the management companies in Output 3.2.1, sub-activity i. Total USD15,000 + Travel required to implement the demonstration project in Output 3.2.1, sub-activity iii. Total USD8,000.			23,000		23,000			23,000	MinAmbiente
Travel	Travel to support for the implementation of the gender plan in Output 4.1.1.activity b. Total USD6,000 + Travel for workshops, training and socialization sessions for the actors of the EEE value chain in the				27,600	27,600			27,600	MinAmbiente

	execution of Output 4.1.2, activity a. Total USD11,600 + Travel for travel to work sessions of the regional roundtables with environmental authorities in the development of Output 4.1.2, activity c. Total USD10,000.									
Travel	Travel to support the implementation and socialization of Output 2.1.1.		11,500			11,500			11,500	MinAmbiente
Travel	Travel to support the implementation and socialization of Output 2.2.1, activity a. Total USD10,000 + Travel to support the implementation and socialization of Output 2.2.2, activity b. Total USD10,000.		20,000			20,000			20,000	MinAmbiente
Travel	Travel to support the implementation of activities (a.i, v and vii ; b; iii, c and d).	23,200				23,200			23,200	MinAmbiente
Travel	Travel to support the implementation of Output 1.2.1, activity a) and Output 1.2.2, activity a) (including travel required for ESMF training).	7,400				7,400			7,400	MinAmbiente
Travel	Travel to support the implementation of Output 3.1.1, activity ii.a, b, c. Total USD45,000 + Travel to support the implementation of Output 3.1.2, activity a, b, i-iv.c. Total USD 30,000 + Travel to support the implementation of Output 3.1.3, activity b. Total USD20,000.			95,000		95,000			95,000	MinAmbiente
Subtotal Travel		30,600	31,500	118,000	77,600	257,700	8,000	-	265,700	
Office Supplies	Basic office supplies for duration of project period					-		1,250	1,250	MinAmbiente
Subtotal Office Supplies		-	-	-	-	-	-	1,250	1,250	
Other Operating Costs	Audio Visual and Print Production Cost to support the publication of technical reports and guidelines for activities c (ii) and e.	12,000				12,000			12,000	MinAmbiente

Other Operating Costs	Communication pieces development and their dissemination for the implementation of the communication strategy for Output 4.1.1, activity a. Total USD 25,000 + Preparation and publication of the guidance document resulting from Output 4.1.2, activity c. Total USD 6,000.				31,000	31,000			31,000	MinAmbiente
Other Operating Costs	Development of communication campaign contributions to the GEM Community Platform established in Output 4.2.1, activity d. Total USD40,000.				40,000	40,000			40,000	MinAmbiente
Other Operating Costs	Mandatory Audit Services (USD$1,000 per year for 5 years)					-		5,000	5,000	UNDP
Other Operating Costs	Materials (such as personal protective equipment) required in sub-activities i, ii and iii of activity b.	12,000				12,000			12,000	MinAmbiente
Other Operating Costs	Materials (such as Personal protective equipment) used in the integration activities of the associations of professional recyclers of Output 3.1.1, activity b. Total USD9,000 + Materials (such as Personal protective equipment) for technical training of laboratory personnel in Output 3.1.2, sub-activity c. iv. Total USD 5,000. + Materials (such as Personal protective equipment) required for the design of 3D printed parts in Output 3.1.3, sub-activity a.ii. Total USD5,000 + Materials (such as Personal protective equipment) for the realization of the demonstration project of Output 3.1.3, activity b. Total USD $5,000.			24,000		24,000			24,000	MinAmbiente

Other Operating Costs	Preparation and publication of the results document of Output 3.1.1., sub-activity a.i. Total USD6,200 + Preparation and publication of results of inventories of chemical substances in the execution of Output 3.1.2, sub-activity c.iii. Total USD6,000.			12,200		12,200			12,200	MinAmbiente
Other Operating Costs	Print of training materials for Output 1.2.1, Activity b.	1,000				1,000			1,000	MinAmbiente
Other Operating Costs	Printing and publication of catalogs to be developed within Output 2.1.1, activity a.		7,500			7,500			7,500	MinAmbiente
Other Operating Costs	Printing and publication of reports for the socialization of the results of the analysis of the Output 2.2.2, activity a.		15,096			15,096			15,096	MinAmbiente
Other Operating Costs	Printing of technical documents to strengthen the capacity of WEEE management companies in the development of Output 3.2.1, sub-activity i. Total USD6,000.			6,000		6,000			6,000	MinAmbiente
Other Operating Costs	Translation of MTR and TE					-	2,000		2,000	UNDP
Other Operating Costs	Connectivity expenses (USD 1,500/year, total USD7,500)					-		7,500	7,500	MinAmbiente
Subtotal Operating Costs		25,000	22,596	42,200	71,000	160,796	2,000	12,500	175,296	
Grand Total		**1,495,000**	**718,096**	**2,300,000**	**560,000**	**5,073,096**	**165,000**	**261,904**	**5,500,000**	

Please explain any aspects of the budget as needed here

N/A

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

N/A