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United Nations Development Programme

Project title: Supporting a Green Economy - Decoupling Hazardous Waste Generation from Economic Growth in Rwanda		
Country(ies): Rwanda	**Implementing Partner (GEF Executing Entity):** Rwanda Environment Management Authority (REMA)	**Execution Modality:** National Implementation Modality (full NIM)
Contributing Outcome (UNDAF/CPD, RPD, GPD): UNDAF Outcome 1: By 2023, people in Rwanda benefit from more inclusive, competitive and sustainable economic growth that generates decent work and promotes quality livelihoods for all. UNDAF Outcome 2: By 2023 Rwandan institutions and communities are more equitably, productively and sustainably managing natural resources and addressing climate change.		
UNDP Social and Environmental Screening Category: High	**UNDP Gender Marker:** *2*	
Atlas Award ID: 00135438	**Atlas Project/Output ID:** 00126667	
UNDP-GEF PIMS ID number: 6482	**GEF Project ID number:** 10373	
LPAC meeting date: TBD		
Latest possible date to submit to GEF: 18 June 2021		
Latest possible CEO endorsement date: 18 December 2021		
Planned start date: March 2022	**Planned end date:** March 2027	
Expected date of Mid-Term Review: December 2024	**Expected date of Terminal evaluation:** October 2026	
Brief project description: The project aims to support the Government of Rwanda and its private and public sector in decoupling hazardous waste generation and harmful releases from economic growth by enhancing the introduction of the 4R approach (Reuse, Reduce, Recycle and Recovery) in priority industries and economic sectors, while at the same time enhancing private sector-led national waste treatment capacity to ensure the sound management of wastes. The project will provide global environmental benefits in terms of reduction and elimination of chemicals of global concern and their waste including 122 metric tons (MT) of PCBs and PCB-contaminated waste, 3 MT of POPs pesticides, 44 MT of non-POPs pesticides, 35,000 MT of PBDE-containing waste (equivalent to 35 MT of PBDEs), 250 MT of PCB-contaminated soil, and 40 MT of mercury (Hg)-containing waste (equivalent to 1 MT of		

Hg); 24.5 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided; and direct benefits to at least 150,000 women and 150,000 men.

The project consists of the following four components:
1. Establishment of an enabling policy/regulatory framework to create (financial) incentives for the sound management of chemicals, the introduction of safer alternatives, minimization of hazardous waste generation and its environmentally safe treatment.
2. Minimize hazardous waste generation through the introduction of safer alternatives and cleaner (production) processes in selected industries and priority sectors.
3. Improve private sector and institutional capacity for the sound environmental treatment and disposal of hazardous waste streams.
4. Raise awareness to support behavioral change, capture and disseminate experiences, lessons-learned and environmental best practices.

(1) FINANCING PLAN	
GEF Trust Fund	USD 6,300,000
UNDP TRAC resources	USD 500,000
(1) Total Budget administered by UNDP	**USD 6,800,000**
(2) CONFIRMED CO-FINANCING	
Government – REMA	USD 5,099,580
Government – Ministry of Environment (MoE)	USD 1,000,000
Government – CPCIC/NIRDA	USD 650,000
Government – City of Kigali	USD 8,164,327
Government – Magerwa	USD 31,605
Government – FONERWA	USD 1,500,000
Private sector – Enviroserve Rwanda Green Park	USD 1,800,000
Private sector – Prime Economic Zones Ltd.	USD 4,247,798
Private sector – CIMERWA	USD 45,000
Private sector – Dépôt Kalisimbi Ltd	USD 1,800,000
Private sector – Utexrwa Industry	USD 150,000
Private sector – COPED	USD 2,400,000
Private sector – AGRUNI Ltd	USD 2,850,000
Private sector – AgroPlast	USD 2,627,621

Private sector – Inyange Industries Ltd	USD 1,068,000
Nongovernmental Organisation – Association pour le Développement de Nyabimata (ADENYA)	USD 200,000
(3) Total confirmed co-financing	**USD 33,633,931**
(4) Grand-Total Project Financing (1)+(2)	**USD 40,433,931**

SIGNATURES:

Signature: Hon. Uzziel Ndagijimana, Minister of Finance	**Agreed by Government Development Coordination Authority**	**Date/Month/Year:** 30/05/2022
Signature: Juliet Kabera, Director General of Rwanda Environment Management Authority	**Agreed by Implementing Partner**	**Date/Month/Year:** 12/05/2022
Signature: Maxwell Gomera, Resident Representative of UNDP Rwanda	**Agreed by UNDP**	**Date/Month/Year:** 11/05/2022

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List of Acronyms and Abbreviations

ADENYA	Association pour le Développement de Nyabimata
ASGM	artisanal small scale gold mining
BAT	Best Available Techniques
BEP	Best Environmental Practices
BFR	Brominated flame retardants
COPED	Company for Protection of Environment and Development
CPCIC/NIRDA	Cleaner Production and Climate Innovation Centre/National Industrial Research and Development Agency
CSO	Civil Society Organisation
DPMM Kalisimbi	Dépôt Pharmaceutique et Materiel Medical Kalisimbi
EIA	Environmental Impact Assessment
ELV	End-of-life vehicle
Enviroserve	Enviroserve Rwanda Green Park (Enviroserve)
EPR	Extended Producer Responsibility
ESIA	Environmental and Social Impact Assessment
ESM	Environmentally sound management
ESMP	Environmental and Social Management Plan
E-waste	Electronic and electrical equipment waste
ESMF	Environmental Social Management Framework
FSP	Full Sized Project
GEF	Global Environment Facility
GEFSEC	Secretariat of the Global Environment Facility
HDPE	High Density Polyethylene
Hg	Mercury
M&E	Monitoring and Evaluation
MIA	Minamata Initial Assessment
MT	Metric Tons
MTR	Independent Mid-term Review
NAP	National Action Plan on Mercury in the Artisanal and Small-Scale Gold Mining Sector
NGO	Nongovernmental organisation
NIP	National Implementation Plan
PBDEs	Polybrominated diphenyl ethers
PCBs	Polychlorinated biphenyls
PET	Polyethylene terepthalate

PIF	Project Identification Form
PIR	Project Implementation Report
PMC	Project Management Cost
POPs	Persistent Organic Pollutants
PPE	Personal Protective Equipment
PPG	Project Preparation Grant
PPP	Public Private Partnership
PPP	Polluter-pays-principle
PSC	Project Steering Committee
REG	Rwanda Energy Group
REMA	Rwanda Environment Management Authority
SAICM	Strategic Approach to International Chemicals Management
SES	Social and Environmental Standards
SESA	Strategic Environmental and Social Assessment
SME	Small and Medium-size Enterprise
SOPs	Standard Operating Procedures
TE	Terminal Evaluation
ToC	Theory of Change
TOR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
WASAC	Water and Sanitation Corporation

II. DEVELOPMENT CHALLENGE

Rwanda is a landlocked country situated in central Africa, also known as *"the land of a thousand hills"*. Rwanda's Volcanoes National Park in the Virunga volcanic mountains with its high altitude forests is world famous for mountain gorillas and golden monkeys. In the southwest is Nyungwe National Park, with ancient mountain rainforests providing a habitat for chimpanzees and other primates.

Rwanda is part of two water catchments, the River Nile and the Congo Basin. The River Nile catchment area (through the Akagera River, which is the most important tributary of Lake Victoria from which flows the River Nile) is shared with the country's neighbours Burundi, Tanzania, and Uganda, while Rwanda shares the Congo Basin catchment area (through the Rusizi River and Lake Kivu) with the Democratic Republic of Congo. Rwanda is an important source of water for its own inhabitants and those of the countries benefitting from the Nile and the Congo Basin.

Rwanda has one of the highest population densities in Africa (538/km^2) with a young, mostly rural population. In February 2021, the population was estimated at 13.1 million, a 30% increase from 2010's estimate.[1]

For 27 years (since the war and the 1994 genocide, which destroyed major parts of the country's human and economic capital) Rwanda has been developing very quickly. As such, like many other countries around the world, Rwanda is faced with the growing challenge of managing municipal, hazardous, and toxic wastes as well as minimizing the environmental consequences of rapid industrialization impacting land, air, and water quality and threatening the health of humans, water bodies, and ecosystems.

The country has made great strides through a number of well-known waste related interventions. For example, Rwanda is renowned for its excellent policy on the banning of plastic bags. The plastic ban policy entered in force in 2008, and it has had a tremendously beneficial impact on the nature of the country, and inspired other countries worldwide (in particular developing countries) to replicate similar measures. Moreover, the collection of waste in large municipalities, like Kigali, is quite effective and is ensured by a proper collaboration between private operators (e.g. Company for Protection of Environment and Development (COPED) and Depot Kalisimbi Ltd) and the government (e.g. Water and Sanitation Corporation (WASAC)). Another waste-related highlight is the partnership between Enviroserve Rwanda Green Park (Enviroserve), FONERWA (the Rwanda Green Fund), and the Government, which led to the construction of an e-waste recycling facility that started operations in 2018.

On the other hand, however, there remain significant shortcomings that expose the country to the severe impacts of improper waste management. While rapidly growing sectors like industry, agriculture, and healthcare are implementing some cleaner production measures (e.g. hospitals in Kigali are mandated to work with licensed hazardous waste management facilities), there are still numerous waste streams that require attention.

As a result these sectors lead to releases of persistent organic pollutants (POPs) and mercury (Hg) though air emissions, waste disposal, effluent discharge, and soil contamination such as unintentionally produced POPs (uPOPs) (e.g. from the unsafe incineration or open burning of waste containing chlorinated chemicals and point sources like cement kilns), POPs, and Hg (which may be contained in products such as old computer monitors, end-of-life vehicles, spent batteries, paints, obsolete chemicals, empty chemical containers, and Hg-added medical devices, etc.). Releases of such chemicals, in particular releases to water sources and air, have a global impact.

The main root causes and barriers that need to be addressed to overcome the challenges mentioned are the following:

- **A growing population and economy, which without applying the 4R approach (Reuse, Reduce, Recycle and Recovery) is leading to the generation of increased emissions, releases, and waste volumes of hazardous and toxic chemicals**, putting pressure on existing waste management facilities and disposal options, which are in short supply and do not conform with best practices/international standards.

[1] http://worldpopulationreview.com/countries/rwanda-population/

- **A policy and regulatory environment that does not promote/incentivize or prescribe cleaner production, the assessment and introduction of POPs/Hg-free alternatives, or management/treatment for hazardous waste streams**, etc. in economic sectors such as industry, agriculture, and healthcare, resulting in POPs and Hg releases to the environment. E.g. the implementation of a Polluter Pays Principle might be one of the incentives for industry to minimize waste generation, emissions or effluent discharge (with support provided by the Cleaner Production and Climate Innovation Centre/National Industrial Research and Development Agency (CPCIC/NIRDA), while the country also needs to ensure that POPs and Hg regulations (to support phase-out) are put in place in order to meet obligations under related chemicals related Conventions, and regulations on how to reduce the generation of hazardous wastes and its management/treatment/disposal are developed and put in place.
- **Limited investment opportunities to launch new businesses in waste recovery, reuse, recycling or disposal/treatment**, as interest rates are very high[2] and the country does not have in place an Extended Producer Responsibility (EPR) framework that could provide the necessary and sustainable financing for the treatment of certain priority waste products/streams which cannot be avoided. Opportunities need to be created for the private sector to be able to make investments, benefit from seed funding (e.g. FONERWA), sustain business operations, and create jobs in the recovery, reuse, recycling, or disposal/treatment of (hazardous) waste.
- **Lack of data to inform needed investment and decision-making** because waste data is not regularly collected, monitored or managed (except for a few limited baseline studies) and an **increase in the complexity of hazardous waste streams** because of urbanization and industrialization which directly affects the complexity of its management. There is a need for a detailed Hazardous Waste Inventory to obtain a better understanding for which waste streams recovery, recycling or reuse would be viable, potential for valorisation of priority waste streams needs to be assessed and initiated through engagement of research institutes/universities and private sector partners, and capacity on waste separation at source needs to be built to facilitate its management.
- **Too few adequate, compliant landfills, hazardous waste treatment facilities, or interim storage facilities,** which hinders the safe storage, disposal/treatment of all waste streams and results in POPs and Hg releases to the environment. The capacity of existing hazardous waste treatment/disposal facilities requires expansion (in terms of volume and type of waste streams that can be treated) and environmental performance of existing facilities require improvements to minimize releases. Furthermore, there are a few waste streams (e.g. pure PCB-containing transformers, and obsolete POPs and non-POPs pesticides) that the country does not have (or will have) the capacity to treat and which need to be exported. Systems need to be put in place to allow the country to do so.

The project is also consistent with the National Implementation Plan (NIP) under the Stockholm Convention. In 2016, the Government of the Republic of Rwanda and the Rwanda Environment Management Authority (REMA) completed the updated NIP, which identified the following priorities for POPs management:

- "Old" POPs:
  - Conduct yearly national inventory of pesticides used in the agriculture sector, obsolete pesticides included
  - Evaluation and Popularization of Alternatives to POPs pesticides adapted to the local context
  - Stockpiles of obsolete pesticides assembled and secured; and evacuated for elimination
  - Availability of database of identified contaminated sites by Pesticides
  - Security of identified contaminated sites by pesticides and sensitization of the surrounding communities
  - Rehabilitation of identified contaminated sites containing POPs pesticides and obsolete pesticides
  - Institutional arrangements and Inter-Sectoral Collaboration for better monitoring of pesticides management
- "New" POPs:
  - Establishment of a data acquisition system that should avail reliable data timely.
  - Lack of understanding and knowledge on "New" POPs
  - Management and disposal of POPs-contaminated articles ("New" POPs-containing wastes)
  - Monitoring and surveillance of health status relevant to potential impacts of "New" POPs.

[2] 16.5% as of 16 February 2021 (https://data.worldbank.org/indicator/FR.INR.LEND?locations=RW)

- Identification of contaminated sites;
- Setup mechanisms to reduce and control the release of uPOPs
- Strengthening of the current regulatory and institutions framework
- Establishment of guidelines for "New" POPs wastes management, including the reuse and recycling
- Publication of research data of "New" POPs to increase the public awareness

The analysis of the above priorities led to the formulation of country actions plans for the updated NIP that were divided into three categories: (i) common action plans for both old and new POPS; (ii) action plans specific to old POPs; and (iii) action plans specific to new POPs. The proposed project will directly and indirectly support all the actions plans taken up in the NIP update.

The project is also consistent with the preliminary work that has been undertaken leading up to the Minamata Initial Assessment (MIA) and National Action Plan on Mercury in the Artisanal and Small-Scale Gold Mining Sector (NAP) enabling activities that are currently underway. For example, the project will support the following six of the seven priority activities, outlined in the 2018 National Survey of Mercury and Mercury Compounds, to reduce Hg releases in the country and as an initial step in meeting Minamata Convention obligations: (i) To assess national capacity to implement the Minamata Convention through policy analysis, institutional capacity strengthening and to conduct in depth countrywide Hg and Hg compounds inventory; (ii) To improve the policy and regulatory framework governing the management of hazardous waste and Hg and Hg compounds specifically; (iii) To undertake awareness raising among priority groups and built capacity through training on Hg management; (iv) To improve waste management practices for Hg and Hg-containing wastes; (v) To phase-down and to phase-out the use of Hg and Hg-added products; and (vi) To control and reduce emissions of Hg and Hg compounds to the atmosphere from waste incineration facilities; smelting and roasting processes used in the recycling of metals and cement production plant.

III. STRATEGY

The objective of this project is to support the Government of Rwanda and its private and public sector in decoupling hazardous waste generation and harmful releases from economic growth by enhancing the introduction of the 4R approach (Reuse, Reduce, Recycle, and Recovery) in priority industries and economic sectors, while at the same time enhancing private sector-led national waste treatment capacity to ensure the sound management of wastes, generate income, create jobs, and protect human health and the environment.

This will prevent future accumulation of materials and chemicals entering Rwanda that contain POPs and Hg and other harmful chemicals; minimize the generation of hazardous waste, releases, and emissions; and safely manage and dispose of existing harmful chemicals, products, and materials in the country and future unavailable waste.

The ultimate goal of the project is to protect human health and the environment from the harmful effects of chemicals and hazardous waste.

In order to achieve the project objective, the barriers outlined in Section II above must be addressed. The Theory of Change (ToC) developed for this project has been illustrated in Figure 1 below, and is based on the removal of barriers through the following strategies and approaches.

Barrier 1: A growing population and economy, which without applying the 4R approach is leading to the generation of increased emissions, releases, and waste volumes of hazardous and toxic chemicals

Project strategy:

- Develop and disseminate specific learning, knowledge management, and awareness raising products on chemicals and waste management including customs control, waste sorting, waste generation reduction, and introduction of best practices and alternative products

- Conduct training, capacity building, and awareness raising activities
- Develop and disseminate case studies that capture best practices

Barrier 2: A policy and regulatory environment that does not promote/incentivize or prescribe cleaner production, introduction of POPs/Hg-free alternatives, or management/treatment for hazardous waste streams

Project strategy:

- Strengthen legislative, regulatory, policy measures, and guidelines to adequately control and prevent imports of chemicals controlled under the Stockholm and Minamata Conventions and other chemicals and products that may result in (hazardous) waste at the end of their life cycle, and to support the phase-out of key products in use such as Hg-containing products and introduction of POPs/Hg-free alternatives.
- Improve the capacity of the Customs Services Department to prevent the import and use of banned or to-be-banned products and other hazardous products and waste through tailored guidance and training for the related identification, handling, and management/treatment/disposal including establishing standard operating procedures (SOPs) and solutions such as the establishment/strengthening and use of interim storage for suspected items.
- Establish incentives for industry to minimize waste generation and emissions, through the introduction of resource efficient and cleaner production, polluter-pays-principle, Extended Producer Responsibility (EPR) framework, and green procurement, among other measures.

Barrier 3: Limited investment opportunities to launch new businesses in waste recovery, reuse, recycling, or disposal/treatment

Project strategy:

- Identify waste valorisation opportunities for key waste streams, in partnership with interested private sector partners, research institutes, universities, and implement waste valorisation pilots that include the enhancement of technical and financial capacity and inform the scale-up of waste valorisation concepts into viable economic activities
- Use the strengthened legislative, regulatory, and policy framework measures, including the EPR framework, to ensure a reliable market and design and implement financial incentives to make attract the private sector to engage and remain involved in the recovery, reuse, recycling, or disposal/treatment of (hazardous) waste

Barrier 4: Limited understanding of the main hazardous waste flows and an increase in the complexity of hazardous waste streams

Project strategy:

- Put in place legal measures to monitor the generation, releases, and transfers of hazardous waste (identifying waste flows and streams) in the country and facilitate regular reporting
- Strengthen awareness and capacity of industry and other stakeholders to ensure waste separation at its source to facilitate appropriate waste treatment
- Building on the reporting and collection of data (through the hazardous waste inventory), strengthen capacity of the enforcement entities to better monitor industry activities
- Provide government ministries with access to an up-to-date detailed hazardous waste inventory (including current stocks and production rates) to inform policy, support, and future interventions to achieve reductions in hazardous waste generation and releases including priority setting, potential waste management approaches, Best Available Techniques/Best Environmental Practices (BAT/BEP), and financial needs for the long-term operation of waste management mechanisms

Barrier 5: Too few adequate, compliant landfills, hazardous waste treatment facilities, or interim storage facilities

Project strategy:

- Assess facility-specific environmental performance and identify process measures to reduce releases

- Assess priority waste streams to identify interim storage needs, safekeeping measures required, and locally suitable disposal/treatment solutions
- Expand existing hazardous waste treatment/disposal facilities regarding volume and type of waste streams that can be treated and strengthen their environmental performance to minimize releases
- Assess, strengthen, and expand interim storage infrastructure and related management system to international standards to accommodate the necessary hazardous waste streams and volumes
- Support the introduction of safer alternatives and cleaner production practices in priority economic sectors to reduce dependence on hazardous chemicals in supply chains and reduce the generation of waste
- Support the export of hazardous waste for environmentally sound recycling/treatment/final disposal abroad, which cannot be treated domestically
- Strengthen the capacity of national public and private sector entities for the collection, transport, interim storage, treatment, and export of chemicals and wastes.
- Closely collaborate with potential investors, existing private sector waste management operators, and others to facilitate investments in the waste management sector and to increase the economic viability of the hazardous waste management sector

The project is fully aligned with the GEF-7 Programming Directions and its Chemicals and Waste Focal Area Strategy. The project is aligned, for example, with the GEF-7 investment framework that aims (among other objectives) to:

- Eliminate/restrict/control emissions of the chemicals listed in Annex A, B and C of the Stockholm Convention
- Eliminate emissions and releases of mercury in activities and processes listed in Annexes A, B, C and D of the Minamata Convention on Mercury, particularly those activities that emit or uses the highest level of mercury as well as support the control of supply and trade, waste and sound management and storage of mercury and mercury containing waste
- Support the objectives of the Strategic Approach to International Chemicals Management, specifically in supporting the global phase out of the manufacture of lead based paint, building capacity for management and disposal of e-waste, elimination of chemicals of global concern from the supply chain of commercial and domestic products and support to countries to control and prevent the unsafe use and disposal of highly hazardous pesticides

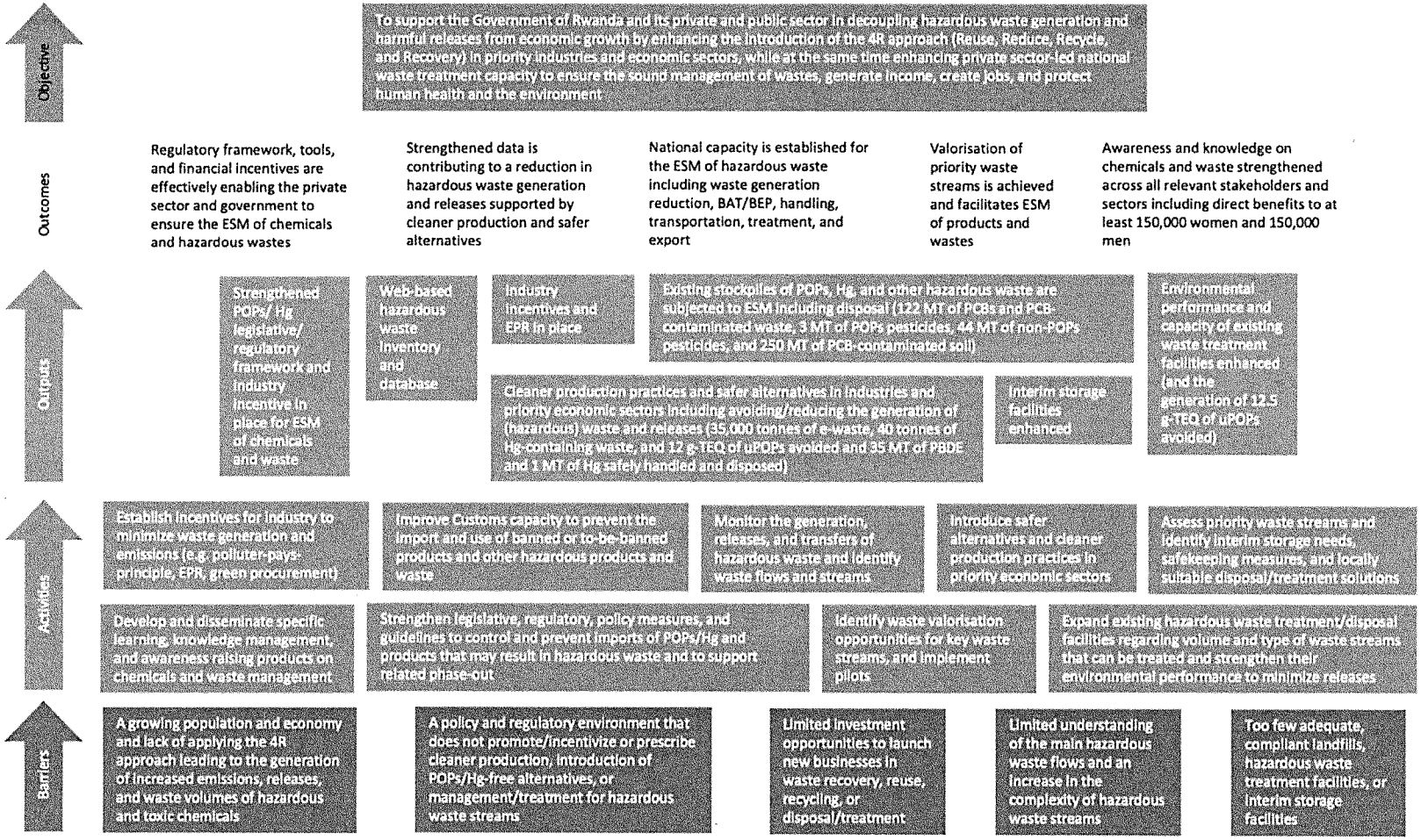
This project has been designed in accordance with the principles of GEF-7: cost-effectiveness; sustainability; innovation; private sector involvement; promotion of resource efficiency (including circular economy approaches); and builds on the use of existing networks.

This project has also been designed in accordance with the following main GEF-7 chemicals and waste focal area programs:

- Industrial Chemicals Program (Program 1), which seeks to eliminate or significantly reduce chemicals subject to better management by the Stockholm and Minamata Conventions and SAICM, and through supporting projects and programs that address: chemicals and waste at the end of life; chemicals that are used or emitted from or in processes and products; and management of the waste, or waste containing these chemicals. The project will address, among others: elimination of the use of PCBs in equipment by 2025; ESM of PCBs by 2028; ESM of Hg/Hg-containing waste; prevention of waste/products containing POPs from entering material recovery supply chains (including e-waste management with the aim of preventing e-waste from entering solid waste); introduction and use of BAT/BEP to minimize and ultimately eliminate releases of uPOPs and Hg from major source categories included in both the Stockholm and Minamata Conventions; and elimination of the use of Hg, POPs, and Hg in products by phasing out manufacturing of the pure chemicals and introduction of alternatives in the products with a preference to non-toxic chemicals.
- Agriculture Chemicals Program (Program 2), which seeks to address the agricultural chemicals that are listed as POPs under the Stockholm Convention and agricultural chemicals that contain mercury or its compounds. The specific areas that will be addressed by the project in line with this program include: (i) where the chemicals are in use, investments will be made to introduce alternatives; and (ii) targeting the reduction of Endosulfan, Lindane, and highly/severely hazardous pesticides that enter the global food supply chain as well as address end of life, waste and obsolete POPs and Hg-based agricultural chemicals and management and safe disposal of agricultural plastics contaminated by POPs and mercury based agricultural chemicals.

- Least Developing Countries and Small Island Developing States Program (Program 3), which seeks to address the sound management of chemicals and waste through strengthening the capacity of sub-national, national, and regional institutions and strengthening the enabling policy and regulatory framework in these countries including through the development of public-private partnerships. The project will address the following in accordance with this program: implementing Sustainable Low and Non-Chemical Development Strategies in SIDS and LDCs; promoting BAT/BEP to reduce uPOPs releases from sectors relevant to the Minamata and Stockholm Conventions in SIDS and LDCs; Promoting cleaner health-care waste management based on the lessons learnt from GEF funded healthcare waste projects to reduce uPOPs and Hg releases; strengthening the management system for e-waste, addressing all stages of the life cycle (i.e. acquisition of raw materials, design, production, collection, transportation and recycling) in SIDS and LDCs; phasing out of Hg-added products; undertaking gender mainstreaming and project monitoring and evaluation; and developing a strategy to ensure that technical assistance and investments are solidly linked to enhance countries' ability to deal with the management of POPs and Hg in a sustainable manner.

Figure 1: Theory of Change



IV. RESULTS AND PARTNERSHIPS

Expected results: This section provides details on how the strategy outlined in Section III above will be translated into the work to be implemented under the project. It describes the planned interventions and outputs to be delivered, in accordance with the ToC presented above, and how these will contribute to achieving the targets, intended outcomes, and overall objective of the project.

The objective of the project is to support the Government of Rwanda and its private and public sector in decoupling hazardous waste generation and harmful releases from economic growth by enhancing the introduction of the 4R approach (Reuse, Reduce, Recycle and Recovery) in priority industries and economic sectors, while at the same time enhancing private sector-led national waste treatment capacity to ensure the sound management of wastes, generate income, create jobs, and protect human health and the environment.

The project will provide global environmental benefits in terms of reduction and elimination of chemicals of global concern and their waste including 122 metric tons (MT) of PCBs and PCB-contaminated waste, 3 MT of POPs pesticides, 44 MT of non-POPs pesticides, 35,000 MT of PBDE-containing waste (equivalent to 35 MT of PBDEs), 250 MT of PCB- contaminated soil; and 40 MT of Hg-containing waste (equivalent to 1 MT of Hg); 24.5 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided; and direct benefits to at least 150,000 women and 150,000 men.

COMPONENT 1: **Establishment of an enabling policy/regulatory framework to create (financial) incentives for the sound management of chemicals, the introduction of safer alternatives, minimization of hazardous waste generation and its environmentally safe treatment**

Outcome 1: **Creation/improvement of the regulatory framework, tools and (financial) incentives that allow private sector and government to improve the management of chemicals and hazardous wastes**

Output 1.1: ***Approval of drafted PCB Law facilitated***

Activity 1.1.1: *Review, revise, and submit for approval the PCB Law*

As part of the GEF-4 project "*Management of PCBs stockpiles and equipment containing PCBs*", the *Law on PCBs Disposal and Management in Rwanda* was drafted and four technical guidelines on various aspects of the PCB waste management cycle were elaborated and adopted: (i) Guidelines for PCBs inventory; (ii) Guidelines for inspection, monitoring and assessment of PCBs in Rwanda; (iii) Guidelines for mitigation of cross contamination of PCBs oil during the power transformer reparation; (iv) Guidelines for recycling, decontamination and rehabilitation of PCB contaminating equipment, oil and sites. However, the legislative process for the new PCB Law was put on hold because the country was simultaneously revising the framework *Organic Law on Environment*. The *Organic Law on Environment*, which was enacted in 2018, has been serving as a temporary legislative base for PCB management, and the PCB guidelines are being applied on a voluntary basis.

This project activity will relaunch the approval process of the PCB Law to ensure the sound management of PCBs in the future and adherence to the PCB guidelines by PCB holders. It will support the review, revision, and approval process of the PCB Law.

A Strategic Environmental and Social Assessment (SESA) will be undertaken prior to the start of this activity.

Output 1.2: ***POPs/Hg legislative/regulatory framework strengthened to support the phase-out of Hg/POPs and products that contain them, and support the introduction of safer alternatives***

Activity 1.2.1: *Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention*

Environmental protection policies, laws, and regulations exist (including E-waste Policy and Strategy, single use plastic bag ban, and draft, but not endorsed PCB Law), but do not adequately address POPs/Hg and other hazardous waste management. The Stockholm Convention's controls on new POPs (with the exception of POPs pesticides) and the Minamata Convention's controls on the reduction/phase-out of Hg and Hg-containing products listed in Part 1 of Annex A of the Minamata Convention have not been domesticated into national regulations.

This project activity will undertake a comprehensive legislative assessment to identify which legislative and regulatory gaps exist and how to address these gaps as early as possible. This will be followed by drafting the regulatory measures related to import, phase-out, management, disposal and/or treatment as well as environmental standards for POPs/Hg in various media, including the facilitation of the introduction of safer alternatives, and a ban on the import of (i) new POPs, (ii) Hg-containing products listed in Annex A of the Minamata Convention, and (iii) other hazardous products and waste as appropriate. This activity will also take into account and address the possibility of importing waste (such as PBDE-containing plastic) and recyclable materials from neighbouring countries for environmentally sound treatment in Rwanda.

This will be followed by a technical review process of the proposed regulatory measures and facilitate, to the extent possible, the approval process for the regulatory measures.

Upstream activities, such as ban on the import of new POPs and Hg-containing products, that may have environmental or social implications will undergo a participatory SESA to ensure that economic impacts on small and medium-sized enterprises and their workers are taken into consideration in the decision-making process while developing the legislative tools. In addition, the Stakeholder Engagement Plan (Annex 7) will ensure participation of affected stakeholders during these activities.

Guidance and training will be provided to the project team and other relevant stakeholders on conducting a legislative assessment and relevant issues regarding Stockholm, Basel, and Minamata Conventions compliance.

Output 1.3: ***Regulations/guidelines on the handling/treatment of priority hazardous waste streams developed and disseminated***

Activity 1.3.1: *Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg*

Elements of a national system for the ESM of chemicals and waste exists (including some aspects of e-waste recycling and PCB, healthcare, and other hazardous waste disposal), but overall capacity remains inadequate. The 2016 National Sanitation Policy does not provide sufficient details on how to handle hazardous wastes, resulting in hazardous waste (other than HCW and wastewater) typically being disposed of along with regular household waste in the municipal dumpsites or stored under inadequate conditions. Furthermore, the absence of regulations/ guidelines on hazardous waste management prevents enforcement. There is also a need to develop guidelines on the accurate identification and characterization of toxic elements present in waste (see Annex 17: Private Sector Strategy and Plan). National import permit regulations, e.g. regarding e-waste, are also required.

This project activity will undertake a review of the related regulatory framework (in coordination with Activity 1.2.1), internationally available guidelines, and national draft guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg. This will include an assessment and identification of the existing gaps and needs regarding required guidelines and needs for enforcement.

This will be followed by development of draft regulatory measures, a technical review process of the proposed regulatory measures and guidelines, including enforcement tools, and facilitate, to the extent possible, the approval process.

Guidance and training will be provided to the relevant stakeholders on undertaking/supporting regulatory, guidelines, and needs assessments and drafting regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg and in compliance with Stockholm, Basel, and Minamata Conventions obligations.

An SESA will be undertaken prior to the start of this activity.

Output 1.4: ***Industry incentives introduced to generate less (hazardous) waste***

Activity 1.4.1: *Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives*

Incentives to reduce the generation of (hazardous) wastes by waste generators, e.g. through the introduction of the Polluter Pays Principle, are not in place. This typically results in a lack of efforts to reduce environmental releases and wastes and a corresponding mandate for environmental enforcement entities to monitor these aspects when inspections are carried out.

This project activity will design a Polluter-Pays-Principle system (and other measures as appropriate to transfer costs for remediation and pollution management to waste generators), building on related text in the Law N°48/2018 of 13/08/2018 On Environment. This will be followed by technical validation of the Polluter-Pays-Principle system, submission for approval, and operationalisation.

This project activity will also design a "best performer awards" programme for industries/SMEs that achieve resource efficient and cleaner production, to provide market-based incentives for adoption of environmentally sound practices. This will build on similar initiatives in Rwanda, such as an award for companies that properly manage their chemical stockpiles without expirations over a three-year period. This will be followed by technical validation of the programme, submission for approval, and operationalisation.

This project activity will also conduct an assessment of existing and potentially feasible economic instruments in Rwanda and elsewhere to finance the long-term management, collection, recycling, and treatment/export of priority product/waste streams. This will include an assessment of the national regulatory framework, import tax levies and other measures such as tax breaks and green procurement, and legal revisions as required (in coordination with Activities 1.2.1 and 1.3.1). This will be followed by the design, technical validation, submission for approval, and operationalisation of economic instruments to provide incentives for polluters to reduce environmental releases and wastes as well as measures and tools to ensure enforcement.

Upstream activities, such as applying a Polluter-Pays-Principle system, that may have environmental or social implications will undergo a participatory SESA to ensure that economic impacts on small and medium-sized enterprises (SMEs) and their workers are taken into consideration in the decision-making process while developing the legislative tools. In addition, the Stakeholder Engagement Plan (Annex 7) will ensure participation of affected stakeholders during these activities.

Guidance and training will be provided to relevant stakeholders, including public and private sector waste generators and waste management enterprises, on developing and implementing a Polluter-Pays-Principle system, best performer awards programme, and other incentives in compliance with Stockholm, Basel, and Minamata Conventions obligations.

Output 1.5: ***Extended Producer Responsibility (EPR) framework developed and introduced to finance treatment of priority waste products/streams***

Activity 1.5.1: *Develop and operationalise an EPR framework*

A lack of dedicated financing and financial incentives is inhibiting the treatment/disposal of priority waste streams/products (e.g. lead-acid batteries, PBDE-containing products, electronics) and not enticing entities to become involved in the management of more "difficult" waste streams.

This project activity will involve the establishment of a working group with key government ministries and agencies (including REMA, Rwanda Revenue Authority, Customs Department, municipal governments, CPCIC/NIRDA, among others), private sector enterprises, and international experts to guide the process. This will involve a review of the findings of the hazardous waste inventory and database (Output 2.1) to identify target waste streams/products, such as those outlined above and in particular those that cannot be avoided. An assessment of EPR schemes implemented in other countries including lessons learned from OECD countries and UNDP projects (including Georgia and China, among others) and a review of the recently published EPR regulations in South Africa and draft EPR regulations in Kenya, among others will be undertaken. By the time this activity starts, lessons learned from South Africa's implementation of the EPR regulations should also be available.

Various EPR approaches will considered including take-back requirements; economic or market based instruments, such as advance disposal fees, deposit/refund schemes, and taxes; regulations and performance standards including technical standards and mandatory recycling rates; and information-based instruments that serve to raise awareness such as mandatory labelling requirements and information campaigns about producer responsibility and waste separation. The aim is to ensure the availability of long-term financial resources for the treatment of key waste streams.

This will be followed by the design of an EPR framework that finances the treatment/disposal of priority waste streams/products and creates financial incentives for entities to become involved in the collection, management, and disposal/treatment of more difficult waste streams that cannot be avoided.

This will be followed by technical validation of the EPR framework, submission for approval, and operationalisation.

EPR regulations will also be developed to establish a transparent and legal basis for EPR implementation compliance and enforcement. Adequately resourced monitoring systems will also be established and regular auditing of the EPR scheme will take place. The EPR scheme will start with a pilot of a limited set of products to gain experience in Rwanda. Design aspects will also be taken into account where applicable.

Producers or importers of identified products will be required to register with REMA and be subject to the EPR scheme. The establishment of collective EPR systems managed by accredited Producer Responsibility Organisations (PROs) will also be evaluated and considered. Coordination with the informal sector will also be ensured and formalization activities will be undertaken where applicable.

Guidance and training will be provided to the relevant stakeholders, including public and private sector waste generators and waste management enterprises, on developing and implementing an EPR framework, including compliance and enforcement aspects.

An SESA will be undertaken prior to the start of this activity.

The development of the EPR scheme will also be closely coordinated with this project's activities on waste valorisation to support an efficient, cost-effective, and financially sustainable implementation of the scheme.

Output 1.6: ***Capacity of the Customs administration strengthened to identify hazardous waste at entrance and act on it with adequate measures in cooperation with REMA***

Activity 1.6.1: *Develop and implement a Customs strengthening strategy*

The Customs Services Department under Rwanda Revenue Authority (RRA) does not have sufficient awareness and capacity regarding the Stockholm and Minamata Conventions' waste streams and related requirements. It also lacks the tools for screening, evaluating risks and compliance with the current and to-be-strengthened regulations, and transmitting information to REMA for potential action.

This project activity will develop a comprehensive strategy to support Customs to prevent the import and use of banned or to-be-banned products (e.g. PCBs, PBDE), Hg-containing products listed in Part 1 of Annex A of the Minamata Convention, banned pesticides (POPs, HHP/PED), and other hazardous products and waste. This will address the identification of hazardous products and waste potentially entering the country, standard operating procedures (SOPs), and solutions, such as the establishment/strengthening and use of interim storage of suspected items. This will be coordinated with REMA in order to take appropriate action in case of suspected irregularities.

This will be followed by technical validation of the strategy, submission for approval, and implementation. This will include the development of guidance materials and recurrent training programmes for customs officers. This will be undertaken in cooperation with the World Customs Organization, which has introductory on-line courses available for customs administration officers on chemicals and waste-related MEAs (such as the Green Customs Initiative's modules). This activity will also build on successful experience in Rwanda regarding Customs training related to implementation of the Montreal Protocol.

The development and implementation of the strategy will be informed by undertaking a training needs assessment (guided by the Social and Environmental Standards (SES)) and a post-training assessment to ensure that the information has been delivered to the participants as required and will have a meaningful impact on their job performance.

COMPONENT 2: **Minimize hazardous waste generation through the introduction of safer alternatives and cleaner (production) processes in selected industries and priority sectors**

Outcome 2: **Data that contributes to a reduction in hazardous waste generation and releases from selected industries and other priority sectors achieved and safer alternatives is strengthened**

Output 2.1: ***Web-based hazardous waste inventory and database (with a focus on chemicals and waste-related Conventions) and web/phone-based monitoring tool for private sector/ enforcement entities established***

Activity 2.1.1: *Develop and implement a web-based hazardous waste inventory and database*

While the baseline situation regarding chemicals and waste management in Rwanda is fairly well established (through the original and updated Stockholm NIP, Minamata Convention NAP, Basel Convention Inventory and NIP, National E-waste Management Strategy, and Baseline Study on Waste Collection and Recycling Countrywide, among other assessments), specific data on hazardous waste generation and releases (e.g. type, characterisation, volume, source/location) and management is generally limited.

This project activity will design a web-based hazardous waste inventory and database (accessible by computer and mobile phones/tablets) in partnership with the relevant private sector and enforcement agencies. It will build on REMA's current "Waste Information Management System (WIMS)", which is hosted on REMA's website, but has not yet been widely implemented. WIMS has been designed to provide importers with details on what can be imported and regulators with details on what chemicals have been imported, including expiration dates. Import data is submitted by importers, but the WIMS is not yet connected to the Customs data system.

The system will enable collected information and data to be uploaded and managed in a centralised system and relevant private and public sector stakeholders will be required to report on waste generation, releases, and

transfers for treatment (in coordination with the legal requirements established in Component 1). The system will also facilitate the enforcement entities to better monitor industry activities and provide government ministries with access to an up-to-date detailed hazardous waste inventory to inform policy, support, and future interventions to achieve reductions in hazardous waste generation and releases.

This will be followed by technical validation of the web-based hazardous waste inventory, submission for approval, and operationalisation including private sector reporting.

All relevant stakeholders, such as industry, higher learning institutions, and pharmacies, will be informed of their need to regularly provide data to the hazardous waste inventory and database. This will cover inputs, outputs (waste generation and releases), and expiration aspects, among others. Guidance and training will be provided for data entry and data generation, complemented by the provision of guidance regarding hazardous waste reduction and environmentally sound treatment.

This project activity will also undertake an assessment of the national laboratory capacity and develop a national laboratory capacity strengthening plan that includes resource mobilisation aspects. This will build on the 2014 *Assessment of National Laboratories Capacity to Analyze POPs Substances including PCBs Oil and Suggest their Upgrading Strategy* and ensure national capacity to undertake key analysis (ignitability, corrosivity, and reactivity) to determine whether a waste is hazardous.

Relevant government ministries will receive guidance and training on using the web-based hazardous waste database to identify the types, volumes, and locations of hazardous waste generation and releases (and to inform future interventions to achieve reductions in hazardous waste generation and releases) in coordination with the scheduling of regular checks and site visits. This will be coordinated with training on enforcement of regulations.

Outcome 3: **Technical capacities of industries and major hazardous wastes generators strengthened to develop and implement innovative and environmental best practices**

Output 3.1: ***Selected industries and priority economic sectors (e.g. agriculture, textile, paint, healthcare) supported in avoiding/reducing the generation of (hazardous) waste and releases (35,000 tonnes of e-waste, 40 tonnes of Hg-containing waste, and 12 g-TEQ of uPOPs) through the introduction of cleaner production practices and safer alternatives (e.g. to POPs/Hg/chemicals of concern) and 35 MT of PBDE and 1 MT of Hg safely handled and disposed***

In line with the ESMF that has been prepared for the project, an Environmental and Social Impact Assessment (ESIA) will also be conducted for all pilot demonstrations and disposal activities (Activities for Outputs 3.1, 4.1, and 4.2) and will identify environmentally sensitive receptors that may be affected by accidental releases such that mitigation measures will be developed and included in the ESMP through a Spill Prevention and Management Plan. This plan will describe how the project will handle, transport, and store hazardous material in accordance with IFC Health and Safety Guidelines.

Prior to engaging any enterprise, in particular those participating in the demonstration and disposal activities a private sector risk assessment using the UNDP tool will be conducted. In addition, during selection of the enterprises to be engaged in the demonstration pilots and disposal activities, and as part of the private sector risk assessment, the project will ensure that an Occupational Safety and Health Plan is in place prior to commencement of the work.

Activity 3.1.1: *Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives*

Phasing-out and disposing/treating POPs/Hg and other chemicals of concern is at an early stage in Rwanda, largely due to the lack of appropriate domestic hazardous waste disposal and treatment facilities. The introduction of safer

alternatives and cleaner production processes and practices is also currently limited, though interventions have been increasing including through the support of the CPCIC/NIRDA to selected industries and priority economic sectors such as ICT, health, agro-processing, leather, and energy value chains. A number of industries/sectors have been identified as the main sources of releases and wastes which contain chemicals of concern and therefore prioritised for the introduction of safer alternatives and cleaner production interventions, such as the tea industry, paint industry, textile industry, automotive industry, pharmacies, food and beverage industry, construction sector, beauty industry, cosmetic industry, solar product companies, telecommunication companies, and the healthcare sector (see Activity 3.1.2 below).

This project activity will include the following regarding support to avoid/reduce the generation of (hazardous) waste and releases including POPs, Hg, and other chemicals of concern: (i) Building on the data from the hazardous waste inventory and database, undertake an assessment of priority sectors regarding their practices and capacity, and prioritise for demonstration pilots, followed by technical validation and submission for approval; (ii) develop hazardous waste reduction and management plans for the key sectors (including introduction of safer alternatives and cleaner production practices to support the phase-out of Hg, POPs, HHP-containing products/chemicals and reducing uPOPs releases), followed by technical validation and submission for approval; and (iii) design and implement pilot interventions on cleaner production and safer alternatives in selected industries and priority economic sectors. This will also include the development and provision of guidance and training to the relevant stakeholders and develop the capacity of CPCIC/NIRDA to replicate successes across the entire sectors, among others.

The priority sectors and potential activities related to waste reduction, cleaner production, and safer alternatives that have been identified thus far include the: (i) tea industry, which generates plastic, rubber, and metal waste and wastewater; (ii) paint industry, which generates polymer dispersion effluents, wastewater, waste paint, paint sludge, and containers; (iii) textile industry, which generates cotton waste, garment waste, and wastewater; (iv) automotive industry, which generates plastic, glass, metal, and oil waste and wastewater; (v) pharmacies, which generate expired pharmaceuticals and plastic; (vi) beverage and food industry, which generates organic, plastic, and glass waste and wastewater; (vii) construction sector, which generates damaged bricks and tiles, dust, and sludge or very fine sand residues; (viii) beauty industry, which generates synthetic hair, plastic, and aluminium waste, chemical waste from detergent, and wastewater with high grease oil content; and (iv) cosmetic industry, which generates plastic and carton waste and wastewater. Other possible sectors include solar products and telecommunications.

Potential private sector partners for the pilot interventions include, among others: Enviroserve, CIMERWA, Dépôt Kalisimbi Ltd, Inyange Industries, Utexrwa Industry, Prime Economic Zone, COPED, Braliwara/Coca-Cola, AGRUNI Ltd, and AgroPlast. All such stakeholders, among others, will be invited to participate in the assessments and development of hazardous waste reduction and management plans, and will have access to technical advice and support under the project.

This activity will be coordinated with Activity 5.1.1 regarding demonstration pilots to valorise priority waste streams and Activity 5.2.1 regarding demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance.

Linkages will also be made, where applicable, with the establishment of a fecal sludge treatment plant by CoK in partnership with WASAC, and with initiatives for improving Nduba Landfill, following completion of the current landfill study being undertaken with the support of Swedfund. Safer alternatives for agricultural interventions, such as tea plantations, will be in line with FAO's guidance on HHPs.

Activity 3.1.2: *Safely handle and dispose of Hg-containing products*

A preliminary national survey to map out different institutions and priority areas suspected to have Hg and Hg compounds was conducted in 2018 and the MIA is currently underway. Regarding Hg-containing products in healthcare, such as thermometers and sphygmomanometers, healthcare facilities generally segregate Hg-containing waste from other medical waste. Most healthcare facilities in Kigali currently provide their healthcare waste to a

single service provider (Depot Kalisimbi Ltd). Enviroserve provides a service for Hg-containing waste healthcare waste and has a small quantity stockpiled.

Regarding the healthcare sector, this project activity will support the healthcare facilities in Rwanda to phase-out Hg-containing medical devices and introduce Hg-free devices. This will include the following: (i) coordinate with MIA implementation regarding an assessment of Hg-containing healthcare products and waste; (ii) develop a national strategy for phasing-out Hg-added thermometers and sphygmomanometers in healthcare, followed by technical validation and submission for approval; (iii) implement the national strategy for phasing out Hg-added thermometers and sphygmomanometers in healthcare; and (iv) as part of implementation, provide guidance and training at the healthcare facilities on the collection, separation, handling, and disposal of Hg-containing wastes, the selection, use, and calibration of Hg-free alternative, and green procurement (using training methods developed and improved under the Global Biomedical Waste Project and the African Regional Biomedical Waste Project implemented by UNDP). The project will also support the procurement of the Hg -free medical devices (alternatives will be selected in consultation with the Ministry of Health and procurement departments of selected hospitals).

Regarding other Hg-containing products, Hg-containing compact fluorescent lamp (CFLs) are collected by Enviroserve and treated with a lamp crusher, but the Hg has not yet been recovered. Enviroserve currently has 2 MT of stockpiled Hg-containing CFLs and REG has more than 5 MT stockpiled awaiting collection by Enviroserve pending a viable solution. Enviroserve also has 0.4 MT of Hg switches stockpiled, as well as Hg-containing button batteries, Hg-containing LCD screens and old televisions, and other Hg-containing e-waste. DPMM Kalisimbi/Depot Kalisimbi Ltd support healthcare facilities and collects Hg-containing products.

The is project will support the following regarding these other Hg-containing products: (i) coordinate with MIA implementation regarding an assessment of Hg-containing products and waste; (ii) develop a national strategy for phasing-out priority waste streams including e-waste, batteries, and CFLs (in coordination with the healthcare sector products strategy), followed by technical validation and submission for approval; (iii) implement the national strategy; and (iv) as part of implementation, provide guidance and training to relevant stakeholders (including Enviroserve and electronic workshops) on procurement of alternatives, collection, handling, transport, and environmentally sound interim-storage of Hg-containing wastes.

Support will also be provided to Enviroserve to establish sustainable collection channels and procurement of appropriate equipment for storage and treatment/recycling of Hg-containing e-waste and to Depot Kalisimbi Ltd regarding the collection, storage, and treatment of Hg-containing products.

The project will also assess the different solutions for Hg-containing waste generated following disposal (e.g. centralized interim storage (see Activity 5.3.1) and subsequent joint export with other hazardous waste envisaged under the project). This will be undertaken in coordination with Output 4.1, regarding possible export of PCB-containing equipment and oil, and Output 4.3, regarding possible export of POPs pesticides, and the provision of guidance and training for government institutions to support the export procedures.

An SESA and a site-specific ESIA will also be conducted in accordance with UNDP's SES policy and the UNDP SES Guidance Note on Assessment and Management prior to the start of this activity.

Activity 3.1.3: *Safely handle and dispose of PBDE-containing plastics*

Forty (40) MT of PBDE- and BFR-containing plastic (80% are from electrical and electronic equipment and 20% from other equipment) is crushed and stockpiled at Enviroserve (based on visual inspection and density separation for different plastics in its plastics washing line) awaiting appropriate treatment solutions. Some electronic workshops are also stockpiling such waste. In other cases, PBDE-containing plastic is landfilled as part of municipal waste management.

This project activity will include the following: (i) undertake sampling and analysis of stockpiled PBDE-containing plastics as needed; develop a management plan for PBDE-containing plastics, including cost-effective options for its elimination, with a preference for a domestic service provider (i.e. CIMERWA or Depot Kalisimbi Ltd), followed by technical validation and submission for approval; (ii) safeguard stored stockpiles; (iii) explore and where applicable facilitate import of PBDE-containing plastic from neighbouring countries; (iv) undertake disposal of at least 35,000 MT of (stockpiled and additional) PBDE-containing waste in Rwanda (including possible import from neighbouring countries; subject to confirmation of national capacity for environmentally sound disposal; see Activity 5.2.1); and (v) undertake continuous implementation of the management plan for PBDE-containing plastics including the introduction of safer alternative products. Domestic storage and disposal aspects will be assessed under Activity 5.3.1 (regarding improving capacity of existing hazardous waste interim storage facilities) and Activity 5.2.1 (as part of the facility-specific environmental performance assessments).

Support will also be provided to establish sustainable collection channels, including incentives to facilitate easy take-back schemes, and procurement of appropriate treatment/recycling equipment.

Guidance and training will be provided to relevant stakeholders, including public and private sector waste generators and waste management enterprises, on safely handling and disposing of PBDE-containing plastics. Guidance and training for government institutions to support export procedures, if relevant, will be provided in coordination with export requirements of other waste such as Hg, pesticides, and PCBs.

A site-specific ESIA will be conducted prior to the start of this activity.

COMPONENT 3: **Improve private sector and institutional capacity for the sound environmental treatment and disposal of hazardous waste streams**

Outcome 4: **Increased capacity of the private sector and government entities to sustainably handle and treat: (i) existing stockpiles of hazardous and obsolete chemicals; and (ii) various hazardous waste streams which cannot be avoided**

Output 4.1: ***Remaining PCB-containing equipment and oil (122 MT) phased out/disposed of***

Activity 4.1.1: *Safely handle and dispose of remaining PCB-containing equipment and oil*

There are a small number of outstanding PCB-related disposal activities that the Government of Rwanda needs to complete as a follow up to the GEF-4 PCB project and to meet its commitments under the 2025/2028 Stockholm Convention deadlines. 55.2 MT of PCB oil was co-incinerated in 2018 at CIMERWA cement kiln. The remaining PCBs and PCB-contaminated waste is estimated to be 122 tonnes.

This project activity will include the following: (i) Review and update the comprehensive PCB inventory and database undertaking sampling and analysis of transformer oil as required; (ii) establish disposal plan and a long-term agreement with CIMERWA to enable incineration of PCB-contaminated oil (up to 1,000 ppm) or Depot Kalisimbi Ltd if appropriate, and if needed issue a tender for services for disposal abroad; (iii) phase-out and undertake safe pre-treatment of PCB-contaminated transformers and oil still in use (including testing of the drained and rinsed transformers currently stored at the interim PCB storage facility to ensure that they can be safely scrapped or returned to service after refilling with new transformer oil, or alternatively, if PCB levels prove too high, to support another rinsing cycle); (iv) safeguard stored equipment and waste; (v) undertake disposal of PCBs and PCB-contaminated waste in Rwanda or exported as required (see Output 4.3 regarding export procedures). Domestic storage and disposal aspects will be assessed under Activity 5.3.1 (regarding improving capacity of existing hazardous waste interim storage facilities) and Activity 5.2.1 (as part of the facility-specific environmental performance assessments).

Guidance from the PCB project (with updates as required) and refresher training will be provided to the relevant stakeholders, such as REG, CIMERWA, and waste transporters (such as DPMM Kalisimbi/Depot Kalisimbi Ltd and

COPED, which are the only operators licensed by RURA for hazardous waste transportation), on PCB management aspects, such as sampling and analysis, decommissioning, draining, handling, transport, storage, and disposal, tailored to the training recipient groups.

This activity will be coordinated with Output 4.1 (Obsolete POPs and non-POPs pesticides disposed of) and Output 3.1 (regarding Hg and PBDE treatment).

As part of the ESIA that will be prepared for the project, CO2 emissions from the disposal of remaining PCB-containing oil will be estimated, options compared, and measures proposed to minimize CO2 emissions such that the alternative technologies must ensure compliance with BAT/BEP as per the Stockholm and Basel Conventions. This will build on the burning test of PCB contaminated oil undertaken at CIMERWA in 2017 as part of the GEF-4 PCB project. A site-specific ESIA will be also conducted prior to the start of this activity.

Output 4.2: ***One PCB-contaminated site (including 250 MT of of PCB-contaminated soil) remediated***

Activity 4.2.1: *Remediate one PCB-contaminated site*

The REG transformer maintenance site, located at Gikondo Industrial Park, which has been closed (and equipment and operations relocated to the REG Jabana interim storage facility) is suspected to be PCB-contaminated.

This project activity will include the following: (i) test the soil at Gikondo Industrial Park for PCB contamination (and other locations, such as Kicukiro Nyanza (Kigali) and Nyamagabe (Southern Province); (ii) develop contaminated site remediation plans; (iii) undertake technical validation of the remediation plans, and submit for approval; (iv) undertake and finalise tender for service, with an international service provider, which includes the export of the excavated contaminated soil; (v) conduct training on contaminated site remediation; and (vi) implement the remediation plan, with the potential of testing and applying innovative bioremediation measures (e.g. addressing lower-contaminated soil).

An estimated 250 MT of contaminated soil will need to be excavated and disposed. Guidance and training will be provided to relevant stakeholders, such as REG and waste management enterprises, on all steps, from contaminated site analysis to remediation including excavation, collection, handling, repacking, transportation, cleaning of residual contamination, treatment, storage, and export.

Knowledge of soil remediation options developed in other UNDP projects will be applied to this project. Lessons learned to be shared with this project will address: site assessment and risk assessment; remediation technologies including mechano-chemical destruction, thermal desorption, and biodegradation technology; national contaminated sites registration and information system; development of standards; interim storage; and training. Lessons learned from the testing and application of innovative bioremediation measures in areas with lower levels of PCB or pesticides contamination will also provide important inputs to the development of future interventions in Rwanda and other countries.

This project activity will also be coordinated with the Government's broader initiative to vacate all business activities from the Gikondo Industrial Park by Q4 2021 and initiate restoration and conservation of the wetlands, in which the Industrial Park is located, with the support of the World Bank Rwanda Urban Development Project II (GEF Project ID: 10530).

While an international service provider has been planned for this activity, domestic service providers for disposal will also be considered. The assessment and testing of whether domestic disposal of waste from the contaminated sites would be a viable environmental, financial, and technical solution will be coordinated with Activity 5.2.1 (Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance) and facility-specific environmental performance assessments.

The project will also put in place a project-level Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them (e.g. related to contaminated sites remediation or the demonstration pilots to valorise priority waste streams (Activity 5.1.1)).

A site-specific ESIA will be also conducted prior to the start of this activity to address risks from contaminated site remediation.

Output 4.3: ***Obsolete POPs (3 MT) and non-POPs pesticides (44 MT) disposed of***

Activity 4.3.1: *Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides*

Rwanda has a total of 3 MT of POPs pesticides and 44 MT of non-POPs pesticides stockpiled. Specifically: 3 MT of obsolete POPs pesticides (Lindane 25% and Endosulfan 3% dust); 0.067 MT of confiscated stockpiles of prohibited pesticides; 0.9 MT of solid and 668 liters (~0.7 MT) of liquid obsolete pesticides; 12.5 MT of obsolete fertilizers; 28.823 MT of obsolete pesticides (including some POPs pesticides) that have been temporarily buried at the former Kicukiro Nyanza dumping site; and 14 MT of obsolete pesticides (Pirimiphos) and fungicides (Mancozeb) that have been temporarily buried at the Nyamagabe disposal site and some waste is stored in drums above ground.

This project activity will include the following: (i) Undertake sampling and analysis of stockpiled pesticides as needed; (ii) prepare a financing plan to support identification of domestic or international/bilateral resources for the disposal of contaminated soil; (iii) establish disposal plan including tender for services (for an international service provider); (iv) undertake safe pre-treatment of stockpiled pesticides including recovery, excavation, packaging, and transport; (v) safeguard stored stockpiles; (vi) undertake disposal of stockpiled pesticides in Rwanda or exported as required.

While an international service provider has been planned for this activity, guidance and training will be provided for private sector operators on recovering/excavating, repacking, and safely transporting the obsolete POPs (and non-POPs) pesticides.

This activity will also provide guidance and training for government institutions to support the export procedures of POPs pesticides (as required), as well as PCB- and Hg-containing waste to an appropriate facility(ies) abroad for environmentally sound disposal.

Domestic service providers for disposal will also be considered. The assessment and testing of whether domestic disposal of POPs and non-POPs obsolete pesticides/fertilizers would be a viable environmental, financial, and technical solution (e.g. at CIMERWA and DPMM Kalisimbi/Depot Kalisimbi Ltd) will be coordinated with Activity 5.2.1 (Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance) and the facility-specific environmental performance assessments.

This activity will also be coordinated with Output 4.1 (Remaining PCB-containing equipment and oil phased out/disposed of) and Output 3.1 (regarding Hg and PBDE treatment).

A site-specific ESIA will be also conducted prior to the start of this activity and will address risks from disposal of POPs and non-POPs pesticides.

Outcome 5: **Capacity and environmental performance of hazardous wastes treatment facilities improved**

Output 5.1: ***Potential for valorisation of priority waste streams assessed and initiated through engagement of research institutes/universities and private sector partners***

Activity 5.1.1: *Design and undertake demonstration pilots to valorise priority waste streams*

Various assessments conducted in Rwanda have indicated that large quantities and varieties of waste and hazardous waste are produced and either inadequately stored or indiscriminately disposed of at the municipal dump sites. Some valorisation of waste is taking place, for example: e-waste collection, dismantling, and recycling by Enviroserve; and recycling of paper, carton, metal scrap, aluminum, and some plastics such as plastic bags, but conducted at a low scale/capacity. However, there are a number of priority waste streams that have significant potential for valorisation. The main stream sources of hazardous waste in Rwanda are generated by industry, including a wide range of materials such as industrial solvents, waste oils, industrial sludges, and other chemical wastes. Households, SMEs, farms, and the healthcare and construction sectors also generate quantities of hazardous waste including batteries, electrical and electronic equipment, healthcare waste, solvent-based paint and varnish waste, sheep dip, and fluorescent lamps. A strong interest was also expressed from the private sector, during the PPG, to engage in waste valorisation initiatives addressing plastic/polyethylene terepthalate (PET) waste, organic waste, healthcare waste, liquid waste, and methane gas among others.

This project activity will include the following: (i) undertake a waste valorisation assessment of key waste streams (based on the outcomes of the hazardous waste inventory and database; Output 2.1) in partnership with interested private sector partners, research institutes, universities, and CPCIC/NIRDA, followed by technical validation and submission for approval; (ii) design and implement a waste valorisation challenge competition to raise awareness and generate innovative ideas from stakeholders such as SMEs, NGOs, individuals, and investors; and (iii) design and implement waste valorisation pilots, which include the enhancement of technical and financial capacity (facilitated by the engagement of investments including FONERWA and the private sector), consideration of industrial symbiosis[3] arrangements, and informing the scale-up of waste valorisation concepts into viable economic activities. Guidance and training will be provided to relevant stakeholders, including public and private sector waste generators and waste management enterprises, to address all of the above steps.

One pilot will address PET recycling. PET bottles are currently sorted and stored at Nduba Landfill where they are compacted and baled (by DPMM Kalisimbi Ltd), but not recycled. DPMM Kalisimbi and Depot Kalsimbi Ltd has been in discussion with Inyange Industries, Bralirwa-Coca-Cola, and COPED to partner in the management of PET bottles. DPMM Kalisimbi, in collaboration with Depot Kalisimbi Ltd, has plans to start (in April 2021 on already secured land) the construction of a warehouse to house a plastic bottle recycling line and convert the PET bottles into flakes, green charcoal, and construction materials, such as pavers, bricks, and tiles. It plans to order the required equipment by June 2021 and start producing pavers from PET (see Annex 14) by August 2021, followed by the production of other products. PET bottle-to-bottle recycling will also be explored including a feasibility study of the market. The project will provide support to Rwanda and relevant private sector partners to: evaluate the PET recycling situation in Rwanda, identify appropriate BAT/BEP for recycling PET in Rwanda, procure equipment, and improve efficiency of PET recycling and marketability of PET-recycled products.

Other priority sectors that may be addressed include the tea industry, paint industry, textile industry, automotive industry, pharmacies, food and beverage industry, construction sector, beauty industry, cosmetic industry, solar products, telecommunications, and healthcare sector. Potential waste streams that may be addressed include, among others: waste oil, plastics (PET and High Density Polyethylene (HDPE)), organic waste, paint waste, tires, textile waste, carton waste, glass, and wastewater. This may involve the following waste valorisation approaches, among others: compost and briquettes made from organic waste; production of alternative liquid and solid fuel (for CIMERWA cement plant) based on the use of organic waste and waste oils; methane gas capture from landfills; and generating energy from healthcare waste incineration. This activity will also take into account the possibility of, and procedures for, importing waste and recyclables from neighbouring countries for environmentally sound treatment in Rwanda.

All relevant stakeholders will be invited to participate in this project activity and will have access to technical advice and support under the project.

[3] Industrial symbiosis is the process by which wastes or by-products of an industry or industrial process become the raw materials for another. (https://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2018/05/Industrial_Symbiosis.pdf)

This project activity will also develop an online waste management platform with a view to providing a one-stop shop solution that connects all actors in the waste management value chain to promote waste recovery in a larger circular economy context. This will support industrial symbiosis and provide an online market for recycled products to help other initiatives be more viable/scale-up. The platform will build on the experience and lessons learned from Ghana's Waste Recovery Platform (https://ghanawasteplatform.org). The platform will be led/hosted by REMA and will also: (i) ensure coordination between all projects/initiatives/stakeholders related to chemicals and hazardous wastes in order to promote collaboration and avoid duplication; (ii) support the development of national partnerships on the management of recyclable materials, and (hazardous) chemicals and wastes; and (iii) provide an outlet to advise the government on any issues related to chemical/(hazardous) wastes, among others.

The national waste management platform will include representation by the public, private, and NGO sectors. The project will support the national waste management platform so that there will be meaningful exchanges between the different public, private, and NGO actors to promote collaboration and avoid duplication. The establishment of the platform and regular meetings between stakeholders will also provide an opportunity for stakeholders to reflect on the progress of the project and propose improvements to its implementation.

This will be undertaken in coordination with Output 2.1, building on the hazardous waste inventory and database, Activity 3.1.1 regarding demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives and Activity 5.2.1 regarding demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance.

In line with the Environmental Social Management Framework (ESMF), an Environmental and Social Impact Assessment (ESIA) will be carried out and an Environmental and Social Management Plan (ESMP) developed at the start of Project Implementation and ahead of the pilots. The ESMP will include a Livelihoods Restoration Plan to address this risk if it was found to be significant.

Output 5.2: ***Environmental performance of existing waste treatment facilities enhanced and national treatment capacity for hazardous waste increased (volume + diversification) through the introduction of new locally suitable disposal/treatment solutions (and avoidance of the generation of 12.5 g-TEQ of uPOPs)***

Activity 5.2.1: *Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance*

There are a limited number of waste treatment facilities (e.g. Enviroserve's e-waste recycling facility, CIMERWA, and DPMM Kalisimbi and Depot Kalisimbi Ltd's incineration/treatment and stabilization facilities). However, these facilities are quite instrumental in treating wastes that cannot be avoided, and also rather innovative compared to most other countries in Africa. There is significant potential for, and interest from the private sector in, enhancing the current capacity and performance. This activity will build on the experience from the GEF-4 project regarding the disposal of PCB-contaminated waste and other current waste management practices such as DPMM Kalisimbi and Depot Kalisimbi Ltd's incineration of healthcare waste.

This project activity will address three areas for improvements: (i) improve the environmental performance of the processes applied by these centralized waste facilities in order to reduce releases of uPOPs, heavy metals, POPs, Hg and other hazardous substances; (ii) increase the amount of waste that could potentially be treated by these facilities; and (iii) increase the types of waste that could potentially be treated by these waste treatment facilities.

For example, Enviroserve imported e-waste from DRC and Uganda prior to the COVID-19 pandemic. This was undertaken in compliance with the Basel Convention control system for the transboundary movement of hazardous wastes and other wastes. Enviroserve plans to resume importing of e-waste from DRC and Uganda and expand to other countries in the region for treatment in an environmentally sound manner, including repairing, refurbishing,

and recycling. Enviroserve has also hosted delegations from several countries in Africa to share its experience and lessons learned for managing e-waste and will resume this in the future subject to COVID-19 pandemic restrictions.

This project activity will include the following: (i) undertake facility-specific environmental performance assessments and identify process measures to reduce releases (uPOPs, heavy metals, POPs, Hg, and other hazardous substances) and determine domestic capacity for treatment and disposal of hazardous waste in accordance with the Stockholm and Basel Conventions and national legislation; (ii) undertake waste treatment assessments for priority waste streams to identify interim storage needs, safekeeping measures required, and locally suitable disposal/treatment solutions for hazardous waste streams, including the potential for increasing the facilities' capacity in terms of both volume and type of waste; and (iii) design, implement, and assess for viability demonstration pilots to test locally suitable disposal/treatment solutions for hazardous waste streams. Guidance and training will be provided to relevant stakeholders, including waste treatment facility operators (such as Enviroserve, CIMERWA, and DPMM Kalisimbi and Depot Kalisimbi Ltd), REMA, and others to address all of the above steps.

This will be undertaken in coordination with: Output 2.1, regarding the hazardous waste inventory and database; Output 3.1, regarding the avoidance/reduction of the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives; and Component 1 regarding regulatory interventions (such as PPP and EPR) and the introduction of incentives; among others.

This activity will also closely collaborate with potential investors (e.g. FONERWA, banks), existing private sector waste management operators (e.g. Enviroserve, CIMERWA, DPMM Kalisimbi and Depot Kalisimbi Ltd, and COPED), and others to facilitate investments in the waste management sector and to increase the economic viability of the hazardous waste management sector.

The selection of sites for the demonstration pilots (and interim storage facilities; Output 5.3) will consider that the infrastructure to be used is not located in areas classified as high risk due to landslides, erosion, floods, or extreme weather conditions. A climate vulnerability risk assessment will be undertaken as part of the ESIA that will be prepared as described in the ESMF and proposed adaptation measures will be included in the ESMP.

Output 5.3: ***Capacity improved of existing hazardous waste interim storage facilities to handle additional hazardous waste streams***

Activity 5.3.1: *Assess and improve capacity of existing hazardous waste interim storage facilities*

Obsolete wastes (including obsolete pesticides and laboratory wastes) are currently stored in inadequate locations with inadequate conditions (e.g. at district offices, police stations, Ministry of Agriculture (MINAGRI) and Energy Utility Corporation Limited (EUCL) stores, research labs, schools, and universities). Other waste streams (to be confirmed and specified through the implementation of the hazardous waste inventory and database; see Output 2.1) may also require interim storage.

This project activity will include the following: (i) based on the detailed hazardous waste inventory (Output 2.1) assess what types of wastes present or generated in Rwanda require interim storage at the national/regional level (while awaiting disposal/treatment); (ii) identify the type of measures that need to be put in place to ensure safekeeping of these wastes (e.g. capacity, occupational safety and health, environmental protection, security); (iii) develop an interim storage facilities upgrade plan including recommendations for capacity and type of interim storage required; (iv) undertake technical validation of the assessment and interim storage facilities upgrade plan and submit for approval; and (v) upgrade/expand existing interim storage facilities' infrastructure and related management system to international standards and can accommodate the necessary hazardous waste streams. Guidance and training will be provided to relevant stakeholders including REMA and other relevant stakeholders to address all of the above steps.

This activity may build on the REG interim storage facility (Jabana) that was established through the GEF-4 PCB project and which has additional space available that could potentially be used for the interim storage of other

hazardous wastes (e.g. obsolete pesticides, POPs/Hg containing wastes) awaiting disposal/treatment. Other options, such as a public-private-partnership to strengthen a private sector company's interim storage capacity and national storage role will also be considered. For example, DPMM Kalisimbi/Depot Kalisimbi Ltd has expressed strong interest in this approach and already has specific storage facilities for hazardous waste and sufficient land to construct additional facilities depending on the determined needs. Private sector compliance with related regulations may also be easier to achieve and enforce compared to public sector facilities.

The ESIA and ESMP will also addresses risks from improving the capacity of existing hazardous waste interim storage facilities.

Component 4: **Raise awareness to support behavioral change, capture and disseminate experiences, lessons-learned and environmental best practices**

Outcome 6: **Awareness raised on the sound management of POPs, Hg, and related wastes**

Output 6.1: *Awareness raised of 7,500 people (4,000 female and 3,500 male) on the sound management of POPs chemicals and Hg and related wastes through tailored training and awareness raising activities and 300,000 people (150,000 female and 150,000 male) directly benefit from the GEF investment*

Activity 6.1.1: *Design and implement an awareness raising plan*

There is generally a low level of awareness among a wide range of stakeholders on the sound management of POPs, Hg, and other (hazardous) wastes and adverse effects. This contributes to a lack of household participation in sorting waste into different streams to facilitate recycling, and a lack of appropriate practices by waste management companies and lack of knowledge on existing documents and policies. There is currently no awareness raising plan about the sound management of POPs and Hg and related wastes.

This project activity will design and implement an awareness raising plan that will focuses on a number of axes and specific target groups: (i) the phase-out of Hg-containing products including increasing awareness and capacity of hospital staff, health workers, and pharmacies and the introduction, use, and calibration of Hg-free alternatives; (ii) increasing the collection of waste streams for which already valorisation and/or recycling options exist (e.g. e-waste, medical waste, plastics, used motor oil); (iii) increasing awareness and capacity of interested private sector entities to explore opportunities and potential investments (e.g. FONERWA) related to the collection, management, treatment, and disposal of chemicals and waste of concern; (iv) increasing awareness of customs, private sector, enforcement entities, ministries, and others on the types of products that may contain POPs and Hg and their suitable alternatives; and (v) national communication to change public perception and its relationship with waste, take ownership of the implementation of best waste management practices, and create a willingness to pay for waste management services.

The project will identify and involve NGOs/CSOs involved in carrying out awareness raising activities on the safe use of chemicals or other relevant environmental or health-related issues to support implementation of the awareness raising plan.

Outcome 7: **Project results sustained and replicated**

Output 7.1: *Results, lessons-learned, and best practices captured in knowledge products and disseminated at national, regional, and global level to support replication (including development and implementation of an awareness raising and knowledge management plan)*

Activity 7.1.1: *Develop and implement a knowledge management (KM) plan that extracts, compiles, and disseminates experiences, lessons-learned, knowledge and best practices including yearly lessons-learned reports, case study reports, and end of project*

Rwanda serves as an example to many African countries and developing nations in other regions with its past initiatives in the area of chemicals and waste management, such as the: 2008 ban of plastic bags; public-private-partnerships for waste collection in large municipalities, like Kigali; and the second-ever Africa-based e-waste recycling facility, in partnership with Enviroserve, FONERWA (the Rwanda Green Fund), and the Government.

This project activity will develop and implement a knowledge management (KM) and communications plan/strategy that will extract, compile, and disseminate experiences, lessons-learned, knowledge and best practices from all the project interventions through the development of a number of knowledge products in order to support national, regional, and global replication.

Output 7.2: *M&E and adaptive management applied in response to needs and Mid-term Evaluation findings*

Activity 7.2.1: *Apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-term Evaluation findings*
Activity 7.2.2: *Implement the Gender Action Plan to mainstream gender throughout project activities*
Activity 7.2.3: *Develop and implement an ESIA and ESMP based on the SESP*

This project activity will: (i) apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-term Evaluation findings; (ii) implement the Gender Action Plan (prepared during the PPG phase) to mainstream gender throughout project activities; and (iii) develop and implement an Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) based on the UNDP Social and Environmental and Social Screening Template (SESP) (prepared during the PPG phase).

The ESIA report and ESMP will provide a set of avoidance, mitigation, monitoring, and institutional measures – as well as actions needed to implement these measures – to achieve the desired social and environmental sustainability outcomes. The measures will be adopted and integrated into the project activities, monitoring and reporting framework and budget, and captured in a revised SESP for the project. The ESMP will include: a spill prevention and management plan; and an occupational health and safety plan. If confirmed by the ESIA as required for SES compliance, then the ESMP will also include: a livelihoods restoration/action plan; and site-specific management plans.

The ESIA and ESMP will addresses risks from the following activities: Demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases, valorise priority waste streams, enhance national hazardous waste treatment capacity and environmental performance, and improving capacity of existing hazardous waste interim storage facilities (Activities 3.1.1, 5.1.1, 5.2.1, and 5.3.1); Disposal of Hg-containing products, PBDE, PCB-containing equipment and stockpiled obsolete POPs and non-POPs pesticides (Activities 3.1.2, 3.1.3, 4.1.1, and 4.3.1); and Remediating a PCB-contaminated site (Activity 4.2.1).

Partnerships: During the PPG phase, key stakeholders and their roles and responsibilities were identified in the context of the project, which also led to the development of the SEP (Annex 7). The project will work with a multitude of partners and initiatives to achieve these objectives. Table 1 below provides an overview of the partners/initiatives to address development challenges and the role of the partner/initiative in the implementation of the project, which will support achievement of the project's results.

Table 1: Partnerships

Partner/Initiative	Role in project implementation
Government – Rwanda Environmental Management Authority (REMA)/Ministry of Environment (MoE)	• Primary responsibility for the management of this project, including the monitoring and evaluation of project interventions, the achievement of project results and the effective use of UNDP resources for the GEF • Assist in the implementation of activities to improve compliance with the chemicals and waste conventions • Support the implementation of the recommendations of the Stockholm NIP, relevant aspects of the MIA (when available), and as well as other national plans • Lead the development of new/revised legislation, regulations, and guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Lead the development and testing of the Hazardous Waste Inventory • Oversee all demonstration pilots and disposal activities • Provide co-financing for the implementation of the project
Government – Ministry of Health and Social Protection (MINISANTE)	• Serve as key partner on healthcare waste management and disposal in a multi-sectoral collaboration • Facilitate the implementation of the project within the framework of healthcare waste management • Support the development of new legislation, regulations, guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Support the development of an assessment of Hg-containing healthcare products and waste (in coordination with MIA) • Support the development and implementation of a national strategy for phasing-out Hg-added thermometers and sphygmomanometers • Support the provision of guidance and training at healthcare facilities on the collection, separation, handling, and disposal of Hg-containing wastes, the selection, use, and calibration of Hg-free alternative, and green procurement • Support the procurement of the Hg-free medical devices in the healthcare sector • Support the health related aspects of project activities including awareness raising and gender mainstreaming • Ensure linkages between the project remediation of the PCB-contaminated transformer maintenance site (Gikondo) and the Government's broader initiative to restore the wetlands at Gikondo Industrial Park, in which the maintenance site is located
Government – Ministry of Infrastructure (MININFRA) & Water and Sanitation Cooperation (WASAC)	• Support implementation of investment and labour-intensive Water and Sanitation projects; fund sanitation projects; prepare, monitor and regulate water quality and hygiene standards; set policies related to sanitation, water supply, infrastructure, urbanization and settlements; and support districts in the construction of water supply systems, latrines; and hygiene promotion • Support water production and distribution in countrywide; hold responsibility for urban sewerage systems and sludge emptying services; coordinate all activities related to the programmes aimed at development of water and sanitation; sensitize users of water and sanitation infrastructure; ensure proper management of water and sanitation; fund the construction of sanitation and water facilities; and support waste management related to the project (e.g. Nduba Landfill operations) • Collect waste collection fees from households and enterprises to help fund waste management practices and improvements • Support project activities related to control the trade of industrial POPs and the products that contain them
Government – City of Kigali	• Support project activities related to management of household and municipal waste • Ensure linkages are made, where applicable, between the project and the establishment of a fecal sludge treatment plant (by CoK in partnership with WASAC), and with initiatives for improving Nduba Landfill • Advise on public-private partnerships for waste management • Provide co-financing for the implementation of the project
Government – Rwanda Utilities Regulatory Authority (RURA)	• Ensure that basic services including Water and Sanitation are provided according to the required standards and that there are good conditions for fair completion in provision of those public services • Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Support the implementation of project activities to design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance; and assess and improve capacity of existing hazardous waste interim storage facilities
Government – Rwanda Bureau of Standards (RBS)	• Participate in inspection of Sanitation systems of hotels and other businesses along with MINISANTE, REMA and the City of Kigali

	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Provide technical expertise to project beneficiaries (healthcare, waste treatment facilities, hotels, among others) in introducing cleaner production practices • Support the introduction of Hg-free alternatives • Support laboratory aspects of the project
Government – Rwanda Revenue Authority (RRA), Customs Department, and MAGERWA	• Help increase Rwanda Customs services awareness of waste streams controlled by the Stockholm and Minamata Conventions and set SOPs with REMA in order to take appropriate action in case of suspected irregularities • Embed introductory modules on waste in primary and recurrent training programmes for Customs officers • Provide inputs into and review the development of the Hazardous Waste Inventory
Government – FONERWA	• Support the development of new legislation, regulations, guidelines pertaining to hazardous wastes, especially e-waste • Support to Enviroserve infrastructure
Government – Rwanda Energy Group (REG)	• Support revision, approval, and implementation of the PCB Law • Support the phase-out of remaining PCB-containing/contaminated equipment, oil, and waste owned by REG (and other holders) • Support the disposal/treatment of PCB-containing/contaminated equipment, oil, and waste • Support the remediation of the PCB-contaminated transformer maintenance site (Gikondo)
Government – Universities/research institutes/schools including CPCIC/NIRDA, University of Rwanda, and Rwanda Resource Efficient and Cleaner Production Centre (RRECPC)	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Provide technical expertise to the development of the Hazardous Waste Inventory • Provide technical expertise to project beneficiaries (industry, agriculture, healthcare, waste treatment facilities, among others) in introducing cleaner production practices, supporting the phase-out of harmful chemicals and the identification, assessment, and introduction of safer alternatives (e.g. to POPs, Hg, and other chemicals of concern) • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives; and design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance including the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams (e.g. new POPs, e-waste, Hg containing waste, lead batteries,) • Support the introduction of new/enhanced treatment processes introduced led by the private sector • Provide co-financing for the implementation of the project
Private sector – PCB holders: Banks and Hotel	• Support the phase-out of remaining PCB-containing/contaminated equipment, oil, and waste owned by REG (and other holders) • Support the disposal/treatment of PCB-containing/contaminated equipment, oil, and waste
Private sector – Hazardous waste treatment facilities and other waste collection and disposal companies (including Enviroserve Rwanda Green Park; CIMERWA; Dépôt Kalisimbi Ltd; and others)	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Improve the environmental performance of the respective waste treatment facilities and increase treatment capacity (volumes/additional hazardous waste streams) • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Build/further improve capacity for the collection, packaging, transportation, storage, treatment/disposal of POPs/Hg-containing and other hazardous wastes • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; support recycling; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the improvement of national capacity of existing hazardous waste interim storage facilities • Provide co-financing in the form of investments in technologies/infrastructure to treat hazardous wastes (including those wastes containing industrial POPs/Hg/chemicals of concern) • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams
Private sector – Chemical companies (manufacturers and distributors), tea industry, paint industry, textile industry, automotive industry, agro-companies	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Support and participate in the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives

pharmacies, food and beverage industry, construction sector, beauty industry, cosmetic industry, and healthcare sector including Prime Economic Zones Ltd., Inyange Industries, Utexrwa Industry, COPED, Braliwara/Coca-Cola, AGRUNI Ltd., and AgroPlast, solar product companies, telecommunication companies, among others	• Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Provide co-financing in the form of investments in technologies/infrastructure to valorise priority waste streams, support recycling, and avoid/ reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams • Participate in the "best performer awards" programme for industries/SMEs
Communities located in poor urban and rural areas that are living close to contaminated sites, industry, or waste dumps	• Communities, in partnership with local and national CSOs/NGOs/CBOs and environmental authorities, will support the monitoring of project activities carried out in their areas (e.g. remediation of contaminated sites) and participate in the development of a comprehensive awareness raising/communication strategy (Component 4) as well as provide inputs to project activities that are relevant to the general public (e.g. waste segregation at source, phase-out of Hg-containing products, reduction of open burning, increasing collection rates for e-waste) • Participating in green jobs created with support of the project, which will benefit local communities
CSOs/NGOs/IGOs – Association pour le Développement de Nyabimata (ADENYA), and others, Global Green Growth Initiative Rwanda (GGGI), and others	• Participate in the development of a comprehensive awareness raising/communication and knowledge management and communication strategy for all project activities • Support awareness raising activities, in partnership with local CBOs and NGOs, in order to reach project beneficiaries and stakeholders • Support dissemination of project results at national and local level • Supporting studies and research in the field of chemicals and hazardous products • Provide co-financing for the implementation of the project
Audiovisual media, written press, social networks	• Serve as main vectors for conveying information related to project implementation to the public • Participate in the implementation of the project • Support awareness campaigns for the general public
Minamata Initial Assessment	• Serve as a key input for the assessment of Hg-containing products and related management interventions
Green City Kigali	• Coordinate with this project regarding household waste management, hazardous waste management, cleaner production practices, and introduction of safer alternatives
Zero Waste Strategy Project	• Coordinate with this project regarding Zero Waste Strategy Project outputs (and specifically related to Kigali) including identifying challenges and opportunities; analysing and reviewing existing plans; proposing an initial strategy towards zero waste; developing training material; describing future concrete projects; and capacity building for a waste management association

Risks:

The table below lists the main risks identified for the project, as well as the key risk management strategies that will be required to mitigate the identified risks throughout the project. For a more detailed overview of the risks, please see the UNDP Risk Register in Annex 5.

In addition to a risk assessment, the SESP was updated during the PPG phase and can be found in Annex 4. The risks identified by the SESP are also reflected in the risk table below and in the UNDP Risk Register in Annex 5. As the SESP identified the project as a substantial risk project, an ESMF was also developed (see Annex 8).

Further evaluation and management plans must be undertaken during project implementation, and the project activities listed below can only begin once these plans are in place:

- New regulations for controlling the import of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention
- Developing and operationalizing a Polluter-Pays-Principle system
- Demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases, valorise priority waste streams, enhance national hazardous waste treatment capacity and environmental performance, and improving capacity of existing hazardous waste interim storage facilities
- Disposal of Hg-containing products, PBDE, PCB-containing equipment and stockpiled obsolete POPs and non-POPs pesticides

- Remediating a PCB-contaminated site

The project-level dispute resolution mechanism is described in both the Stakeholder Engagement Plan (SEP) in Annex 7 and the ESMF in Annex 4.

Table 2: Project Risks and Management Measures

#	Description	Risk Treatment / Management Measures
1	Difficulties in obtaining the data/ information required to develop a detailed Hazardous Waste Inventory and populate the web-based hazardous waste monitoring tool	The project will ensure during its implementation to fully engage all stakeholders and to raise adequate awareness on the importance of the inventory, the monitoring of waste generation rates as well as the ultimate objectives of the inventory to keep workers, the population and the environment safe.
2	Authorities, civil servants, private sector, and other stakeholders may lack the knowledge and skills necessary for the environmentally sound management of chemicals	An awareness raising plan and training/capacity building plan will be developed and implemented for national authorities, civil servants, private sector, and other stakeholders who are working on aspects related to chemicals and waste management, to ensure that they obtain the necessary knowledge, expertise, and experience to perform their tasks properly.
3	National waste treatment facilities in Rwanda are unable to eliminate priority hazardous waste streams/POPs/Hg-containing wastes in an environmentally-sound manner, or they do not have sufficient capacity to do so	The project will assess installed and operational capacity/technologies in Rwanda and determine if technology changes can be made to existing installations to treat/dispose of hazardous waste streams/POPs/Hg and where not possible the project will export POPs/Hg-containing wastes for sound disposal/treatment.
4	Industries and priority economic sectors are reluctant to replace chemicals of concern/or products containing them with alternative substances	The project will compile and share technical information on feasible substitutes for industrial POPs/Hg-containing products/chemicals of concern (including agro-chemicals) and their application. The project, in partnership with CPCIC/NIRDA, will conduct facility/entity assessments and subsequently train industries and private sector entities on the assessment/selection and introduction of alternatives into existing processes, the optimization of production processes (cleaner production), and familiarize them with the benefits of safer alternatives and cleaner production processes.
5	Environmental, health, and trade authorities do not actively participate in the development and implementation of project activities	A project team as well as a project steering committee will be established and will be made up of representatives from all involved authorities and main stakeholders, in order to regularly share results of the project and to plan for upcoming activities. Meetings will be held with executives from different government organizations to communicate the relevance of their participation in the project. Project partners will benefit from the awareness raising and training/capacity building programmes, which will further increase their project participation, engagement, ownership, and commitment.
6	Private sector partners are reluctant to invest in the management, collection, treatment/disposal of less viable (more complicated) hazardous waste streams	The project will support the drafting/revision and approval of PCB/POPs/Hg laws/regulations; regulations/guidelines on the handling/treatment of priority hazardous waste streams; industry incentives to generate less (hazardous) waste (e.g. PPP) and develop an EPR framework. These regulatory measures will help put in place economic incentives for waste disposal/treatment facilities to enter into the management/disposal/treatment of additional hazardous waste streams. Furthermore, the project will also collaborate with FONERWA, which is interested in providing seed funding to support greening of the private sector. The project and FONERWA, in partnership with CPCIC/NIRDA will provide training on how to develop the necessary documentation in order to be eligible for FONERWA support.
7	Travel to/from Rwanda is limited due to COVID-19 pandemic and hinders the implementation of project activities (e.g. training, meetings, facility visits, assessments). (COVID-19 related risk[4])	If travel restrictions (international, regional and/or national) remain in place due to the ongoing COVID-19 pandemic, remote support will be provided by: (i) conducting training and capacity building activities virtually; (ii) making training modules available via online training options, which will facilitate participation as training will not be limited in time or location; (iii) facilitating online exchanges (using Zoom, Teams, Skype, WhatsApp, email, phone, etc.); (iv) providing face-to-face training and capacity building activities through collaboration between international, regional, and national experts; and (iv) conducting evaluations in partnership with local stakeholders via videos or drones (e.g. Zoom, Teams, Skype, WhatsApp, email, phone, etc.). If face-to-face project activities (e.g. trainings, meetings, field visits) will/can take place, they will take into account international and national COVID-19 guidelines (including but not limited to:

[4] At the start of the project's implementation, in close coordination with the national partners, including, if already on-board, the national project team, REMA and UNDP will do a quick risk assessment to assess the impact of COVID-19 on the project and how the pandemic will impact project implementation. Subsequentely recommendations will be proposed on how to mitigate those risks or reduce their impact.

		social distancing measures, wearing of masks, hand hygiene stations, open-air sites, and before and after deep cleaning).
8	National project partners might be working at a low(er) capacity, resulting in reduced attention/dedication to the project's implementation resulting in a slower implementation rate (COVID-19 related risk)	In order to increase the capacity of national project partners/experts, the project can provide support in the form of providing fast mobile/data allocations, and in certain cases (if deemed critical to project success) enter into agreements to provide (temporarily) computer/conferencing equipment or purchase such equipment that would facilitate virtual work for key stakeholders and personnel. However it is assumed that by the time the project starts implementation a lot of these measures will have already been put in place by national partners themselves.
9	Reduced markets for recyclables, at national, regional and international level making recycling systems less viable and sustainable. (COVID-19 related risk)	Due to COVID-19 many recycling markets came to a halt or significantly reduced because of safety issues related to the segregation of recyclables, closed borders, limited affordable transport, slow processing of customs, etc. This is an important risk, as recycling markets only operate and function when there is a buyers' market that offers a price that makes it viable to collect, process (e.g. shred, compact), transport, and export recyclables. Some recyclables, such as printed circuit boards, are exported from Rwanda for processing. In other cases, there is an opportunity to import certain waste to Rwanda for recycling or environmentally sound disposal (such as PET plastic and PBDE-containing plastic, respectively). To mitigate this risk, the project will assess national and regional opportunities for private sector collaboration on recycling and disposal approaches for priority waste streams.
10	A likely reduction in the availability of (co-)financing for waste/chemicals related investments (COVID-19 related risk)	Due to the economic impact of COVID-19, the government might redirect investments from chemicals and waste related infrastructure/systems to reviving the economy, and economic sectors (e.g. tourism, agriculture, industry) might be less likely to want to invest in going green, shipping companies might increase their transport fees (impacting the viability of recycling schemes), etc. This is a risk that is challenging for the project to address as most economic activities have been severely impacted by the COVID-19 pandemic and will require time to rebound. It is expected that government and private sector companies, when they have the means, will use stimulus packages for particular (if not all) economic sectors to keep them operational and allow employees to earn a salary. This might mean that the government and private sector partners are less likely to invest in waste and chemicals related priorities, greener practices, including infrastructure, and that co-financing allocations (especially investment mobilized) might be lower than committed. To mitigate the impact of this risk, the project will design and develop economic instruments, such as a Polluter-Pays-Principle system, best performer awards programme, EPR framework, and other incentives; design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives; and design and undertake demonstration pilots to valorise priority waste streams. Such instruments and initiatives are intended to stimulate private sector involvement, and thus job creation, in the waste and recycling sector. It is expected that the government and private sector partners will be supportive of such incentives, which provide sustainable financial means to operate waste and recycling systems and create and sustain jobs in the process.
11	**SESP Risk 1:** Duty bearers, such as customs officials, enforcement officers and other government officials, may not have the capacity to meet their obligations in the Project Related to: • Human Rights; P.2 • Accountability; P.14	Customs Service Department officers and other government officials might not be adequately trained on their duties and responsibilities and may not be able to perform their functions properly and misinterpret new legislation implementing them improperly. The project was designed to provide targeted training to customs officials and will address the needs of the participants (Activity 1.6.1) and training for various other stakeholders engaged who will be engaged in the various components. Training needs assessment will be undertaken (guided by the SES, as noted in the ProDoc), and a post-training assessment will be conducted to ensure that the information has been delivered to the participants as required and will have a meaningful impact on their job performance. In line with the Environmental and Social Management Framework (ESMF) that has been prepared for the Project, additional capacity building will be done as needed per the ESMPs.
12	**Risk 2:** Risk to enterprise viability and worker employment, in the course of the transition to alternatives to new POPs and mercury-	Some enterprises, especially those with limited resources, may not be able to provide alternatives to banned new POPs and Hg-containing products or abide by standards in line with the Polluter-Pays-Principle system.

	containing products and during the implementation of the Polluter-Pays-Principle system Related to: • Human Rights; P.5 • Accountability; P.13, P.14 • Standard 7: Labour and Working Conditions; 7.1, 7.5	As in the ESMF prepared for the Project (Annex 8 of the ProDoc), upstream activities such as ban on the import of new POPs and mercury-containing products (Activity 1.2.1) or applying a Polluter-Pays-Principle System (Activity 1.4.1) that may have environmental or social implications will each undergo a participatory Strategic Environmental and Social Assessment (SESA). This will ensure that economic impacts on small and medium sized enterprises and their workers are taken into consideration in the decision-making process while developing the legislative tools. In addition, the Stakeholder Engagement Plan (Annex 7 of the ProDoc) will ensure participation of affected stakeholders during these activities.
13	**SESP Risk 3:** Marginalized population relying on their income as informal waste-pickers, who are predominantly women, will have found their waste resources reduced Related to: • Human Rights; P.5 • Gender Equality and Women Empowerment; P.9 • Accountability; P.13, P.14 • Standard 5: Displacement and Resettlement; 5.2	The project will promote more organized recycling of waste through the waste valorisation pilots and this may result in certain cases in shifts from informal to formal waste management activities. There is thus a risk that marginalized population groups, predominantly women, relying on their income as waste-pickers, will have found their waste resources reduced. In line with the ESMF, an Environmental and Social Impact Assessment (ESIA) will be carried out and an Environmental and Social Management Plan (ESMP) developed at prior to implementation of the PET waste valorization pilot (Activity 5.1.1), while additional waste valorization pilots will be subject to a SESP to determine the level of assessment/management required. The resulting ESMP will include a Livelihoods Restoration Plan to address this risk if it was found to be significant.
14	**SESP Risk 4**: Affected stakeholders and marginalized groups may have grievances regarding selected contaminated site for remediation and companies involved in waste valorization or hazardous waste treatment Related to: • Accountability; P.13	Some communities living near contaminated sites, existing disposal/treatment sites and industries treating hazardous waste may have concerns about the project. As mentioned in the ESMF, the remediation activity for PCB contaminated site (Activity 4.2.1) and waste valorization pilots (Activity 5.1.1) will undergo an ESIA each to assess the various potential impacts on stakeholders surrounding communities who will be closely involved and engaged through implementation of the ESMP. The plan will ensure effective engagement between various stakeholders by creating and disseminating information, fostering cooperation, and enhancing capacities. Stakeholders identified include representatives from central and local government, private sector, NGOs and civil society, academia and research institutions, vulnerable population groups and the general public. This will be done in line with the Stakeholder Engagement Plan that has been prepared for the Project. The project will also put in place a project-level Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them.
15	**SESP Risk 5**: The project could reproduce existing discriminations against women through excluding them from decision-making on project activities, benefiting from project outputs and capacity building initiatives. Related to: • Gender Equality and Women Empowerment; P.10	The Gender Analysis conducted found that there is an access gap in investments and entrepreneurship skills between men and women for medical waste disposal and incineration business. It also found that even though formalization of waste management increased community safety and stopped informal waste pickers, formal waste collection efforts excluded women from benefits that include wages and financial gain from the reuse of plastic containers and textiles. A Gender Action Plan (Annex 9 of the ProDoc) has been prepared to mitigate the identified risk and propose measures that ensure that women are represented in decision-making on project activities and are included in capacity building activities. Proposed strategies to mainstream gender in hazardous waste management include an enabling policy environment, awareness raising and education, gender equity in the access to opportunities, and data collection and research. This will be further assessed in the SESAs and ESIAs/ESMPs that will be undertaken during project implementation as described in the ESMF.
16	**SESP Risk 6**: Accidental release of PCBs, POPs pesticides, HHPs or mercury into the environment due to improper handling, storage, transport and treatment/disposal of these chemicals and exposing the workers as well as the local communities living nearby. Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.2, 3.5 • Standard 7: Labour and Working Conditions; 7.6	Accidental releases of chemicals into the environmental would have a severe impact but are unlikely to occur in high amounts. In line with the ESMF that has been prepared for the project, an ESIA will be conducted for identified pilot demonstrations and disposal activities (handling and disposal of Hg-containing products (Activity 3.1.2), PBDE-containing plastics (Activity 3.1.3) and PCB-containing equipment and oil (Activity 4.1.1), remediation of the PCB-contaminated site (Activity 4.2.1) and handling and disposal of stockpiled obsolete POPs and non-POPs pesticides (Activity 4.3.1)) and will identify environmentally sensitive receptors that may be affected by accidental releases such that mitigation measures will be developed and included in the ESMP through a Spill Prevention and Management Plan. This plan will describe how the project will handle, transport and store hazardous material in accordance with IFC Health and Safety Guidelines.

	• Standard 8: Pollution Prevention and Resource Efficiency; 8.1, 8.2	
17	**SESP Risk 7:** Contamination or damage to sites of cultural heritage, biodiversity or socioeconomic value to the local community from pilot demonstrations Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.1, 3.2, 3.5, 3.6, 3.7 • Standard 4: Cultural Heritage; 4.1, 4.2 • Standard 5: Resettlement and Displacement; 5.1, 5.2 • Standard 6: Indigenous Peoples; 6.1, 6.2, 6.3, 6.6 • Standard 8: Pollution Prevention and Resources Efficiency; 8.1, 8.2, 8.3, 8.4, 8.6	The impact and likelihood of this risk can be better determined once the pilot sites and activities have been selected. Pilot demonstrations that have not yet been selected (pilot interventions to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production and safer alternatives (Activity 3.1.1), waste valorization pilots (Activity 5.1.1) and demonstration pilots to enhance national hazardous waste treatment capacity, environmental performance (Activity 5.2.1) and upgrade/expansion of existing interim storage facility infrastructure (Activity 5.3.1)) will incorporate SES criteria during the selection process including assessment of sites of these activities. A list of exclusion criteria will be prepared to eliminate high risk sites. These will include sites with high cultural heritage value, inhabited sites, sites with high biodiversity values (such as protected areas) or sites used by indigenous peoples. Once defined, the pilots will undergo a SESP to determine the level of assessment/management needed.
18	**SESP Risk 8**: Adopted legislation, guidelines, strategies and plans may lead to practices that could result in accidental release of PCBs, POPs pesticides, HHPs or mercury into the environment due to improper handling, storage, transport and treatment/disposal of these chemicals and exposing the workers as well as the local communities living nearby. Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.2, 3.5 • Standard 7: Labour and Working Conditions; 7.6 • Standard 8: Pollution Prevention and Resource Efficiency; 8.1, 8.2	This risk is not a direct result of project activities but may result from legal and policy instruments proposed by the project. In line with the ESMF, a SESA will be prepared during review of the PCB Law (Activity 1.1.1), drafting of regulatory texts and guidelines for new POPs and Hg and their hazardous waste streams (Activities 1.2.1 and 1.3.1), developing the EPR framework (Activity 1.5.1) and the national strategies for Hg (Activity 3.1.2). The SESA will consider the risk of accidental release of chemicals and worker exposure that may result from implementing the legislation and strategies at the national level and incorporate measures to mitigation them.
19	**SESP Risk 9:** Disruption to wetland where PCB-contaminated site will be remediated Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.4, 1.6, 1.11	Remediation of PCB-contaminated site will test bioremediation measures that may introduce alien invasive species to the wetland if the species is not properly selected. Activity 4.2.1 will undergo a site-specific ESIA and an ESMP will be developed to ensure that this risk is avoided or mitigated.
20	**SESP Risk 10:** Flooding of interim storage and waste treatment/disposal facilities for hazardous waste used during the demonstration activities Related to: • Standard 2: Climate Change and Disaster Risks; 2.1, 2.2 • Standard 3: Community Health, Safety and Security; 3.3	Sensitivity and sustainability of the project may be affected by the occurrence of natural disasters due to landslides, erosion, floods or extreme weather conditions or greater vulnerability thereto. As part of the selection process for the demonstration pilots, considerations will be made that waste treatment (Activity 5.2.1) and interim storage facilities (Activity 5.3.1) to be used are not located in areas classified as high risk due to landslides, erosion, floods or extreme weather conditions. Once pilot demonstrations are selected, a SESP will be undertaken to determine the extent of the assessment/management needed.
21	**SESP Risk 11:** The project's demonstrative interventions for the elimination of PCBs may result in the increase of (or no reduction of) CO2 emissions or other air emissions due to current technologies for incineration treatment/destruction of PCBs. Related to: • Standard 2: Climate Change and Disaster Risks; 2.4	It is estimated that 122 tons of PCB oil will need to be disposed of as part of the project activities. The disposal method will be through co-incineration (of PCB under 1,000 ppm) at a local private enterprise (cement kiln) as has been done in the past under a previous GEF project. Otherwise, it will be exported. As part of the ESIA that will be prepared for the project, technologies that be used for PCB treatment/elimination (Activity 4.1.1) will be evaluated in terms of their CO2 emissions and potential chemical release, options compared and measures proposed to minimize CO2 emissions and chemicals produced such that the alternative technologies must ensure compliance with "Best Available Techniques" (BAT) and "Best Environmental Practices" (BEP) practices as per the Stockholm and Basel Conventions. This will

	• Standard 3: Community Health, Safety and Security; 3.2	build on the burning test of PCB contaminated oil undertaken at CIMERWA in 2017 as part of the GEF-4 PCB project.
22	**SESP Risk 12**: As the project will lead to employment opportunities in hazardous conditions, risk exists of child labor, which is prevalent in the target country, as well as other practices in contravention to principles and standards of ILO fundamental conventions. Related to: • Standard 7: Labour and Working Conditions; 7.1, 7.2, 7.3, 7.4, and 7.5	During selection of the enterprises to be engaged in the demonstrations and disposal activities, and as part of the private sector risk assessment that will be undertaken, the project will ensure that an Occupational Health and Safety Plan; Labour Assessment and Management Plan; and/or any other plan required for SES compliance is in place prior to commencement of the works. The interim storage (Activity 5.3.1) and waste treatment facilities (Activity 5.2.1) that will be used by the project will be subject to a visit to ensure compliance with international best practice.
23	**SESP Risk 13**: The project may pose risks to occupational health and safety due to exposure to harmful chemicals during site remediation, transport and interim storage of chemicals and their treatment/final disposal. Workers may also be exposed to risk of accidents and physical injuries on the job. Related to: • Standard 7: Labour and Working Conditions; 7.6	As mentioned earlier, the ESIAs that will be undertaken for each selected pilot, will take into consideration occupational health and safety measures to ensure they are in line with best practices such that adequate measures are included in the pursuant ESMPs. Pilots that have not been selected will undergo a SESP to determine the level of assessment/management During selection of the enterprises to be engaged in the demonstrations and disposal activities, and as part of the private sector risk assessment that will be undertaken, the project will ensure that an Occupational Health and Safety Plan; Labour Assessment and Management Plan; and/or any other plan required for SES compliance is in place prior to commencement of the works. This includes a visit to interim storage (Activity 5.3.1) and waste treatment (Activity 5.2.1) facilities that will be used by the project.

Stakeholder engagement and south-south cooperation:
A Stakeholder Engagement Plan (SEP) has been designed (Annex 7) to ensure effective engagement between various stakeholders throughout the lifecycle of the project. It will ensure regular dialogue with the relevant government ministries and parastatals, private sector entities, local community groups, NGOs, public stakeholders, and international partners.

The SEP will be implemented according to five basic principles that will ensure its effectiveness and inclusiveness: participation; gender equity; respect for cultural diversity; communication and transparency; and partnerships and synergies. The SEP outlines the various stakeholders that have been identified as interested and/or affected by the project, their expectations and concerns, and the methods for stakeholder engagement, types of information that will be provided to stakeholders, and methods of communication with stakeholders.

The methods/methodologies that will be used by the project to target and involve stakeholders and beneficiaries will depend on the actor(s) and the stage of implementation of the project. In summary, the engagement of stakeholders and beneficiaries would be attempted through one or more of the following approaches/means: Project Steering Committee (PSC); workshops; strategic/informal meetings; liaisons; expert consultations; field visits; and exchange visits, among others. More details are provided in the SEP.

Contents and format of information dissemination will be specifically adapted to targeted audiences, their educational background, cultural contexts, and languages in order to obtain the highest possible levels of understanding, buy-in, and continued support including through the following mechanisms: community skits and bulletin boards; brochures/leaflets/newsletters; radio, TV, newspapers, press releases, social media; exhibitions; policy briefs; progress reports; and online media, among others. More details are provided in the SEP.

Learning opportunities and technology transfer from peer countries will be further explored during project implementation. To present opportunities for replication in other countries, the project will codify good practices and facilitate dissemination through global on-going South-South and global platforms (Outcome 7), such as Africa Solutions Platform, the UN South-South Galaxy knowledge sharing platform, and PANORAMA[5]. In addition, to bring the voice of Rwanda to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on chemicals and

[5] https://panorama.solutions/en

waste management. The project will furthermore provide opportunities for regional cooperation with countries that are implementing initiatives on chemicals and waste management in geopolitical, social and environmental contexts relevant to the proposed project in Rwanda.

Gender equality and Women's Empowerment:
The project will take into account the vulnerabilities, needs, experiences and skills of women and men as an integral dimension of the implementation, monitoring, and evaluation processes. This will result in the participation and benefit of women and men according to their respective needs and ensure that the project draws on the full range of knowledge, skills, and expertise needed to achieve maximum development results.

The gender analysis undertaken during the PPG (Annex 9) revealed that gender integration in the hazardous waste management and recycling sector has been minimal in general, there is limited awareness and education in the country regarding gender mainstreaming in hazardous waste management, and an associated national gender action plan has not been put in place. National data on gender and chemicals and waste is scarce.

In some areas, Rwanda has made remarkable progress on gender equality. For example, it ranks first worldwide for women's political participation. Rwandan women secured 61% seats in parliament[6], 52.3% in cabinet and 32% ambassadorial positions and 49.7% in the judiciary[7]. Rwanda ranks nineth worldwide for World Economic Forum global gender gap index (GGGI).[8] However, gender inequalities continue to persist in areas related to the chemicals and waste management. Regarding private sector participation, women accessing formal finance stands at 63% compared to 74% of men (Finscope, 2016), thus accounting for some of the reasons for women's investment challenges. Women in rural areas of Rwanda are socially, economically, and culturally disadvantaged and have poorer access to resources and information, have poorer representation and less authority than men and are often marginalized in decision-making over household resources and incomes.

These and other findings informed the Gender Action Plan (Annex 9) for this project, which aims to achieve an equitable distribution of its benefits and resources, thus addressing the different vulnerabilities and needs of women and men in the context of chemicals and waste management. This includes close collaboration with stakeholders working on gender equality and women's empowerment and raising awareness, particularly among private sector representatives, on the importance and benefits of women's inclusion in the labour market for enterprises, households, and communities as a whole, accompanied by guidance on how to achieve this. The project also aims to bring about transformative changes in norms, cultural values, and the roots of gender inequality and discrimination, for example, by integrating gender issues and opportunities into capacity building and knowledge management activities, and by focusing on gender-sensitive recruitment processes. Assessments, evaluations, and monitoring of project activities will also include sex-disaggregated indicators to ensure gender-related feedback and course correction where necessary. The Gender Action Plan proposed for the project is in line with the national efforts in mainstreaming gender, as outlined by the Gender Monitoring Office and the project's results framework and logical framework include gender-sensitive indicators.

The project plans to include gender-sensitive measures to close gender gaps and promote gender equality and women's empowerment, including improvements related to women's participation in decision-making, access to resources and economic empowerment. This will be facilitated by involvement and representation of women in project implementation and management structures, providing specific training on gender mainstreaming, developing gender-sensitive awareness raising material, and appointing a gender specialist, among other interventions.

Innovativeness, Sustainability and Potential for Scaling Up:

[6] Parliament Administrative Data, 2018
[7] GMO, 2019. The State of Gender Equality in Rwanda. From transition to transformation. (http://gmo.gov.rw/fileadmin/user_upload/Researches%20and%20Assessments/State%20of%20Gender%20Equality%20in%20Rwanda.pdf).
[8] (WEF, 2020).

Innovation: The proposed project for Rwanda is considered innovative. First and foremost, Rwanda is one of the few countries in the world where a ban on single use plastic bags has been fully and effectively implemented (and for over a decade). Based on experiences and lessons learned from the introduction and implementation of this plastic bag ban, it is expected that the phase-out of Hg- and POPs-containing products and the introduction of safer alternatives under the project will be implemented as effectively and successfully, and will demonstrate to other countries located in the region and beyond that the introduction and implementation of such measures is doable, feasible, and viable.

Furthermore, Rwanda is one of the few countries in Africa where an e-waste facility has been established with private sector (Enviroserve) and government support (through provision of seed money from FONERWA (the Rwanda Green Fund)), and is operating in a manner that is achieving compliance with international standards. The project will build on the activities of the e-waste facility and work with Enviroserve on (i) the feasibility of locally suitable disposal/treatment solutions for additional hazardous waste streams (e.g. lead batteries, Hg-containing waste); (ii) subsequently introduce management/treatment processes for new hazardous waste streams; and (iii) further enhance the environmental performance of the waste treatment facilities (under Activities 5.1.1 and 5.2.1 among others). Such achievements would be a first in the region. Similar collaboration will also take place with other waste management operators including DPMM Kalisimbi/Depot Kalisimbi Ltd and COPED.

The project will also focus on further enhancing the environmental performance of CIMERWA as well as assessing opportunities for expanding the type of hazardous waste streams that could be treated by the cement kiln and which would be suitable options as alternative fuels and/or sources of income (e.g. PBDE-plastics, waste oils from garages). As part of the UNDP/GEF project "Management of PCBs stockpiles and equipment containing PCBs", capacity of the CIMERWA cement kiln was built and the process adjusted to enable the facility to dispose of PCB-contaminated oil (a total of 55.2 MT of PCB-contaminated oil was treated in that manner). Furthermore, the project will also aim to formalize CIMERWA's offer of PCB-contaminated waste oil disposal for REG, to allow for the disposal of approximately 122 MT under the current project (subject to appropriate levels of PCB PPM) and additional identified contaminated oil to be disposed of in the future (in case more will be identified). The project will also explore the disposal of PBDE-contaminated plastic at CIMERWA. An assessment of disposal capacity at DPMM Kalisimbi/Depot Kalisimbi Ltd and other relevant facilities in Rwanda will also be undertaken. Finally, the project will also assess opportunities for disposal of PCB-contaminated oil, PBDE-plastic, and other waste, as well as the treatment of recyclables, from neighbouring countries in the region.

Furthermore, the project will also look at suitable remediation options for the contaminated former REG transformer maintenance site (Gikondo Industrial Park) and other contaminated sites. The project will test the site and assess the opportunity to remediate the site using innovative bioremediation solutions that would be in line with BAT/BEP as included in the guidelines of the Stockholm Convention.

Sustainability: In terms of sustainability, the proposed project will:

- Put in place regulatory measures/incentives to ensure the availability of long-term financial resources for the treatment of hazardous waste streams (e.g. development of an EPR framework, initially focusing on a number of priority products; introduction and implementation of the PPP; and strengthening of the national legislative framework pertaining to POPs/Hg).
- Build on on-going efforts driven by the private sector (e.g. Enviroserve e-waste facility; DPMM Kalisimbi/Depot Kalisimbi Ltd; COPED; CIMERWA; recycling companies; among others) to improve their performance and increase their capacity to expand services to additional hazardous waste streams, while focusing on waste streams of which the treatment or valorisation can create income and generate livelihoods/jobs.
- Create capacity of interested private sector partners to apply for FONERWA seed funding to launch new endeavours in waste management, waste valorisation, waste recycling, and waste treatment, in order to reduce the risks of initial investments.
- Strengthen capacity of Customs and environmental enforcement/inspection officers including data availability that supports importing and systems to limit/eliminate the import and disposal of (future) banned chemicals and related wastes and to improve the management of hazardous wastes.

Potential for scaling-up: There is substantial potential for scaling-up within the country, as well as within the African continent. Initially the project will predominantly focus on the capital Kigali, but potential for scaling up lies in the expansion to secondary cities as well as newly established industrial zones.

The potential for scaling-up within the African continent predominantly lies in the fact that Rwanda is an excellent example for other African countries and is demonstrating new approaches (and their successful implementation), which could be replicated in other countries. These approaches range from the implementation of a ban on single use plastics, to the treatment of complicated hazardous waste streams, to the greening of their industry and its relocation to industrial zones. The synergy of this project with the Rwanda innovation funds such as FONERWA is also to be underlined as great potential to foster replication and scale-up in Rwanda and for providing a model for implementation of such funds in other developing countries.

V. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): SDG 3: Good Health and Well-being; SDG 5: Gender Equality; SDG 6: Clean Water and Sanitation; SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; and SDG 12: Responsible Consumption and Production				
This project will contribute to the following country outcome (UNDAP/CPD,: By 2023 people in Rwanda benefit from more inclusive, competitive and sustainable economic growth that generates decent work and promotes quality livelihoods for all.				
	Objective and Outcome Indicators (no more than a total of 20 indicators)	**Baseline**	**Mid-term Target**	**End of Project Target**
Project Objective: The project aims to support the Government of Rwanda and its private and public sector in decoupling hazardous waste generation and harmful releases from economic growth by enhancing the introduction of the 4R approach (Reuse, Reduce, Recycle and Recovery) in priority industries and economic sectors, while at the same time enhancing private sector led national waste treatment capacity to ensure the sound management of wastes, generate income, create jobs and protect human health and the environment.	Indicator 1 (GEF Core Indicator 11): # direct project beneficiaries disaggregated by gender (individual people)	0 direct project beneficiary	150,000 direct beneficiaries of the project (75,000 women + 75,000 men)	300,000 direct beneficiaries of the project (150,000 women + 150,000 men)
	Indicator 2 (GEF Core Indicator 9): Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (thousand metric tons of toxic chemicals reduced)	55.2 MT of PCB oil was co-incinerated in 2018 at CIMERWA cement kiln Chemicals of global concern and their wastes, materials, and products are stockpiled or remain in use and are not reduced, disposed/ destroyed, phased out, eliminated and avoided	62.9 MT of chemicals of global concern and their wastes, materials, and products in the environment and in processes are collected and stockpiled: - 15 MT of PCBs - 3 MT of POPs pesticides - 44 MT on non-POPs pesticides - 0.4 MT of PBDEs (40 MT of PBDE-containing waste) - 0.5 MT of Hg (20 MT of Hg-containing waste)	35,4595 MT of chemicals of global concern and their wastes, materials, and products in the environment and in processes reduced, disposed/ destroyed, phased out, eliminated and avoided: - 122 MT of PCBs - 3 MT of POPs pesticides - 44 MT of non-POPs pesticides - 35 MT of PBDEs (+35,000 MT of PBDE-containing waste) - 250 MT of PCB-contaminated soil - 1 MT of Hg (+40 MT of Hg-containing waste)
	Indicator 3 (GEF Core Indicator 10): Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)	0 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided	10 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided	24.5 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided
Project component 1	**Establishment of an enabling policy/regulatory framework to create (financial) incentives for the sound management of chemicals, the introduction of safer alternatives, minimization of hazardous waste generation and its environmentally safe treatment**			
Project Outcome 1 Creation/improvement of the regulatory framework, tools and (financial) incentives that allow private sector and government to improve the management of chemicals and hazardous wastes.	Indicator 4: Number of national regulatory/policy frameworks strengthened/developed to support the phase-out of Hg/POPs and products that contain them, the introduction of safer alternatives, and strengthening of related Customs capacity	Environmental protection policies, laws, and regulations exist (including E-waste Policy and Strategy, single use plastic bag ban, and draft, but not endorsed PCB Law), but don't adequately address POPs/Hg and other hazardous waste	One comprehensive legislative assessment to identify legislative and regulatory gaps exist and how to address them completed Two regulatory measures related to import, phase-out, management, disposal and/or treatment as well as environmental standards for POPs/Hg in various media and	Two regulatory measures related to import, phase-out, management, disposal and/or treatment (including a ban on the import of Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention) as well as environmental standards for POPs/Hg in various media drafted and approved One PCB Law approved

		management Elements of a national system for the ESM of chemicals and waste exists (including some aspects of e-waste recycling and PCB, healthcare, and other hazardous waste disposal), but overall capacity remains inadequate	the introduction of safer alternatives drafted One comprehensive strategy developed for dealing with identification of hazardous waste potentially entering the country	One regulation/guideline on the handling/treatment of priority hazardous waste streams (including PCBs, e-waste, PBDE-containing plastic, and Hg) and the introduction of safer alternatives developed and disseminated One comprehensive strategy for dealing with identification of hazardous waste potentially entering the country implemented with standard operating procedures, and related online courses and in-person training undertaken by Customs and other relevant stakeholders
	Indicator 5: Number of industry incentives to generate less (hazardous) waste and Extended Producer Responsibility (EPR) frameworks to finance treatment of priority waste products/streams developed and introduced	No incentives to reduce the generation of (hazardous) wastes by waste generators are in place No EPR framework is in place, which contributes to a lack of necessary and sustainable financing for the treatment of certain priority waste products/streams that cannot be avoided	Three incentives to reduce the generation of (hazardous) wastes by waste generators through the introduction of the Polluter Pays Principle (PPP) and other measures are developed to transfer costs for remediation and pollution management to waste generators One EPR framework is designed in consultation with the government and the private sector, and based on the outcomes of the hazardous waste inventory (Output 2.1)	Three industry incentives to generate less (hazardous) waste and Extended Producer Responsibility (EPR) frameworks to finance treatment of priority waste products/streams developed and introduced, including: - Polluter Pays Principle (PPP) and other measures such as tax breaks and green procurement are operationalized and provide an incentive for polluters to reduce environmental releases and wastes - Implementation of an EPR framework that finances the treatment/disposal of priority waste streams/products (e.g. acid lead batteries, PBDE-containing products, electronics, among others) and creates financial incentives for entities to get involved in the collection, management and disposal/ treatment of more difficult waste streams that cannot be avoided
Outputs to achieve Outcome 1	Output 1.1: Approval of drafted PCB law facilitated Output 1.2: POPs/Hg legislative/regulatory framework strengthened to support the phase-out of Hg/POPs and products that contain them, and support the introduction of safer alternatives Output 1.3: Regulations/guidelines on the handling/treatment of priority hazardous waste streams developed and disseminated Output 1.4: Industry incentives introduced to generate less (hazardous) waste (e.g. through introduction of resource efficient and cleaner production, best			

	performer awards) Output 1.5: Extended Producer Responsibility (EPR) framework developed and introduced to finance treatment of priority waste products/streams Output 1.6.: Capacity of the customs administration to identify hazardous waste at entrance and act on it with adequate measures in cooperation with REMA increased			
Project component 2	**Minimize hazardous waste generation through the introduction of safer alternatives and cleaner (production) processes in selected industries and priority sectors**			
Outcome 2 Data that contributes to a reduction in hazardous waste generation and releases from selected industries and other priority sectors achieved and safer alternatives is strengthened.	Indicator 6: Number of national hazardous waste databases used to report on waste generation and release, support legal enforcement, and inform future interventions in the area of chemicals and waste management	Data on hazardous waste generation and releases from industry and other priority sectors is limited, particularly regarding waste characterization and volumes, however, a general set of information exists from the NIPs, MIA/NAP, Basel Convention inventory, hazardous waste inventory, among other assessments REMA's "Waste Information Management System (WIMS) can serve as a starting point.	One web-based hazardous waste database that will be used by the private sector to report on waste generation and releases, enforcement entities to better monitor industry activities, and government ministries to have access to a detailed hazardous waste inventory upgraded and tested	One web-based hazardous waste database that will be used by the private sector to report on waste generation and releases, enforcement entities to better monitor industry activities, and Government ministries to have access to a detailed hazardous waste inventory upgraded, finalized, and approved Industry is comprehensively reporting on its waste generation and releases through the hazardous waste database and hazardous waste quantification in the country is available Enforcement agencies are using the hazardous waste database to identify priority industry and inform the scheduling of regular checks and provision of guidance regarding hazardous waste reduction and environmentally sound treatment Relevant government ministries are using the hazardous waste database to identify the types, volumes, and locations of hazardous waste generation and releases, and to inform future interventions to achieve reductions in hazardous waste generation and releases
Outputs to achieve Outcome 2	Output 2.1: Web-based hazardous waste inventory and database (with a focus on Chemicals Conventions) and web/phone based monitoring tool for private sector/enforcement entities established			
Outcome 3 Technical capacities of industries and major hazardous wastes generators strengthened to develop and implement	Indicator 7: Number of interventions to phase-out all Hg-containing products (listed in Annex A of the Minamata Convention) and 35,000 MT of PBDE-containing waste across Rwanda	A Hg inventory is available, but significant challenges exist regarding Hg-containing products treatment other than	One national strategy for phasing out Hg-added thermometers and sphygmomanometers in healthcare developed and	1 MT of Hg-containing waste from healthcare, e-waste, and CFLs is managed in an environmentally sound manner, from storage to disposal

innovative and environmental best practices.		interim storage Hg-containing CFLs are collected (by Enviroserve) and treated with a lamp crusher, and Hg switches are stored, but the Hg is not recovered; DPMM Kalisimbi/Depot Kalisimbi Ltd support healthcare facilities and collects Hg-containing products.	endorsed One Hg-management plan for priority waste streams including e-waste, batteries, and CFLs developed and endorsed 0.2 MT of Hg-added (thermometers and sphygmomanometers) phased-out from healthcare, from procurement of alternatives to the safe and environmentally sound interim-storage of Hg-containing wastes 0.3 MT of Hg-added e-waste, such as Hg switches and batteries, and CFLs phased-out from consumer use, from procurement of alternatives to the safe and environmentally sound interim-storage of Hg-containing wastes	
		40 MT of PBDE-containing plastic is stockpiled (at Enviroserve) and in other cases is landfilled as part of municipal waste management	One preliminary PBDE-containing plastic inventory is developed One management plan for PBDE-containing plastic, including cost-effective options for its elimination, is drafted and endorsed One agreement for PBDE-containing plastic with a service provider in Rwanda is confirmed, subject to confirmation of technical capacity 6,000 MT of PBDE-containing wasteis collected by service providers in Rwanda	35,000 MT of PBDE-containing waste (equivalent to 35 MT of brominated POPs) removed, treated, and/or disposed of in Rwanda or by export to a qualified disposal facility
	Indicator 8: Number of cleaner production and safer alternatives interventions that phase-out POPs-containing products and other chemicals of concern and reduce uPOPs releases	CPCIC/NIRDA is supporting selected industries and priority economic sectors with	Three assessment and hazardous waste reduction and management plans developed for key sectors including tea	Two pilot interventions on cleaner production and safter alternatives in selected industries and priority economic sectors implemented

		cleaner production initiatives	industry, paint industry, textile industry, automobile industry, pharmacies, and restaurants	
Outputs to achieve Outcome 3	Output 3.1: Selected industries and priority economic sectors (e.g. agriculture, textile, paint, healthcare) supported in avoiding/reducing the generation of (hazardous) waste and releases (35,000 tonnes of e-waste, 40 tonnes of Hg-containing waste, and 12 g-TEQ of uPOPs) through the introduction of cleaner production practices and safer alternatives (e.g. to POPs/Hg/chemicals of concern) and 35 MT of PBDE and 1 MT of Hg safely handled and disposed			
Project component 3	**Improve private sector and institutional capacity for the sound environmental treatment and disposal of hazardous waste streams**			
Outcome 4 Increased capacity of the private sector and government entities to sustainably handle and treat: (i) Existing stockpiles of hazardous and obsolete chemicals; and (ii) Various hazardous waste streams which cannot be avoided.	Indicator 9: Amount of PCB-containing equipment or waste, PBDEs, and obsolete POPs and non-POPs pesticides disposed in an environmentally sound manner	55.2 MT of PCB oil was co-incinerated in 2018 at CIMERWA cement kiln 122 MT of PCBs and PCB-contaminated waste require incineration under the current project (15 MT are stockpiled at CIMERWA)	One updated comprehensive PCB inventory is completed Two management plans (one for PCB-containing equipment or waste, and one for obsolete POPs and non-POPs pesticides), including cost-effective options for their elimination, is drafted and endorsed One agreement for the elimination of PCBs, and POPs and non-POPs pesticides with a service provider in Rwanda or internationally is confirmed, subject to confirmation of technical capacity	122 MT of PCBs and PCB-contaminated waste removed, treated, and/or disposed of in Rwanda or by export to a qualified disposal facility for pure PCB oil
		3 MT of POPs pesticides (Lindane 25% and Endosulfan 3% dust) and 44 MT non-POPs pesticides are buried at the former Kicukiro Nyanza dumpsite and Nyamagabe dumpsite		3 MT of POPs pesticides and 44 MT non-POPs pesticides are excavated and appropriately managed and disposed of in Rwanda or by export to a qualified disposal facility for the POPs pesticides
	Indicator 10: Number of contaminated sites remediated	The REG transformer maintenance site (Gikondo Industrial Park) is suspected to be a PCB-contaminated site	Soil is tested for PCB contamination at the REG transformer maintenance site and one remediation plan for the site is designed Two other potential contaminated sites tested	One remediation plan is implemented by local private sector entities involved in hazardous waste management and innovative bioremediation is tested and applied if applicable
Outputs to achieve Outcome 4	Output 4.1: Remaining PCB-containing equipment and oil (122 MT) phased out/disposed of Output 4.2: One (1) PCB contaminated site (including 250 MT of of PCB-contaminated soil) remediated (e.g. transformer maintenance site) Output 4.3: Obsolete POPs (3 MT) & non-POPs pesticides (44 MT) safely disposed of			
Outcome 5 Capacity and environmental performance of hazardous wastes treatment facilities improved.	Indicator 11: Number of priority waste streams assessed and response measures initiated for valorisation and treatment	Rwanda has large quantities and varieties of waste and hazardous waste that are produced and either inadequately stored or indiscriminately disposed of at the municipal dump sites. Some valorisation of	One waste valorisation assessment of key waste streams (based on the outcomes of the waste inventory; Output 2.1) drafted and endorsed One waste valorisation challenge competition	Design and implementation of two pilot waste valorisation pilots including enhanced technical and financial capacity

		waste is taking place, for example: e-waste collection, dismantling, and recycling and recycling of paper, carton, metal scrap, aluminum, and some plastics such as plastic bags, but at a very low scale/capacity. However, there are various priority waste streams that have significant potential for valorisation and a strong interest from the private sector to engage in waste valorisation initiatives addressing plastic/PET waste, organic waste, healthcare waste, liquid waste, and methane gas among others.	designed and implemented	
	Indicator 12: Number of existing waste treatment facilities with enhanced treatment and interim storage capacity	A limited number of waste treatment facilities (e.g. for e-waste, healthcare waste, PCBs, and other hazardous waste) exist Obsolete wastes (including obsolete pesticides and laboratory wastes) are stored in locations and under conditions that are unfit and inadequate for such wastes (e.g. District Offices, Police Stations, Ministry of Agriculture (MINAGRI) or Energy Utility Corporation Limited (EUCL) stores, research labs, and school, universities An interim storage facility for PCB-containing waste was built under the PCB project, which has	Three facility-specific environmental performance assessments undertaken, which introduce process measures to reduce releases (uPOPs, heavy metals, POPs, Hg, and other hazardous substances) and improve environmental performance linked to up-stream support provided to waste generators through Output 2.1 and 2.2.1 to ensure waste is minimized and properly segregated Three waste treatment assessments for priority waste streams conducted to identify interim storage needs, safekeeping measures required, and locally suitable disposal/treatment solutions for hazardous waste streams (building on the waste inventory (Output 2.1)	Two pilot projects to test locally suitable disposal/treatment solutions for hazardous waste streams implemented and assessed for viability Two existing waste treatment facilities' environmental performance is enhanced and national treatment capacity for hazardous waste (volume and diversification) is increased through the introduction of new or improved locally suitable disposal/treatment solutions (in coordination with the development of an enabling regulatory environment and incentives (Component 1) and awareness raising of waste generators to ensure an increase in the amount of properly collected and treated wastes (Component 4)) Potential investors, existing private sector waste management operators, and others collaborating

		additional space available that could potentially be used for the interim storage of other hazardous wastes (e.g. obsolete pesticides, POPs/Hg-containing wastes) awaiting disposal/treatment. Other options, such as a public-private-partnership to strengthen a private sector company's interim storage capacity and national storage role will also be considered. For example, DPMM Kalisimbi/Depot Kalisimbi Ltd has expressed strong interest in this approach and already has specific storage facilities for hazardous waste and sufficient land to construct additional facilities depending on the determined needs.	Recommendations for required capacity and type of interim storage of hazardous wastes developed	to facilitate investments in the waste management sector and the economic viability of the hazardous waste management sector is increased One existing hazardous waste interim storage facility and related system is upgraded to international standards and can accommodate the necessary hazardous waste streams
Outputs to achieve Outcome 5	Output 5.1: Potential for valorisation of priority waste streams assessed and initiated through engagement of research institutes/universities and private sector partners Output 5.2: Environmental performance of existing waste treatment facilities enhanced and national treatment capacity for hazardous waste increased (volume + diversification) through the introduction of new locally suitable disposal/treatment solutions (and avoidance of the generation of 12.5 g-TEQ of uPOPs) Output 5.3: Capacity improved of existing hazardous waste interim storage facilities (e.g. existing interim PCB facility) to handle additional hazardous waste streams			
Project component 4	**Raise awareness to support behavioral change, capture and disseminate experiences, lessons-learned and environmental best practices**			
Outcome 6 Improved awareness of waste generators on how to introduce alternatives, cleaner and safer processes and better practices.	Indicator 13: Number of persons awareness raised about the sound management of POPs and Hg and related wastes	No awareness raising plan about the sound management of POPs and Hg and related wastes	Awareness raising plan about the sound management of POPs and Hg and related wastes drafted and endorsed	Awareness raised of 7,500 people (4,000 female and 3,500 male) on the sound management of POPs and Hg and related wastes through tailored training and awareness raising activities
		Zero (0) persons' awareness raised about the sound management of POPs and Hg and related wastes	Awareness raised of 3,7500 people (2,000 female and 1,750 male) on the sound management of POPs and Hg and related wastes through tailored training and	

			awareness raising activities	
Outputs to achieve Outcome 6	Output 6.1: Awareness raised on the sound management of POPs, Hg, and related wastes and 300,000 people (150,000 female and 150,000 male) directly benefit from the GEF investment			
Outcome 7 Project results sustained and replicated.	Indicator 14: Number of knowledge management documents that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels	No materials published that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels	Two documents that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels published and shared	Four documents that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels published and shared
	Indicator 15: Required UNDP/GEF M&E and adaptive management processes have been applied	These requirements only apply once the project has started	UNDP GEF M&E requirements were met and adaptive management was applied in response to the PIRs, and the mid-term evaluation and final evaluation was planned in a timely manner	UNDP GEF M&E requirements were met and adaptive management was applied in response to the needs and findings of the mid-term evaluation. The final evaluation was conducted in a timely manner and the final recommendations were taken into account. A Gender Action Plan to mainstream gender throughout project activities was implemented. Lessons from project implementation are being developed and finalized before the operational closure of the project.
Outputs to achieve Outcome 7	Output 7.1: Results, lessons-learned and best practices captured in knowledge products and disseminated at national, regional and global level to support replication (incl. development and implementation of an awareness raising and knowledge management plan) Output 7.2: M&E and adaptive management applied in response to needs and Mid-Term Evaluation findings			

VI. MONITORING AND EVALUATION (M&E) PLAN

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex details the roles, responsibilities, and frequency of monitoring project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[9]. The costed M&E plan included below, and the Monitoring plan in Annex, will guide the GEF-specific M&E activities to be undertaken by this project.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

Additional GEF monitoring and reporting requirements:

Inception Workshop and Report: A project inception workshop will be held within 60 days of project CEO endorsement, with the aim to:

a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
c. Review the results framework and monitoring plan.
d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
g. Plan and schedule Project Board meetings and finalize the first-year annual work plan.
h. Formally launch the Project.

GEF Project Implementation Report (PIR):
The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the Project Board. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

GEF Core Indicators:
The GEF Core indicators included as Annex will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation

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

missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website.

Independent Mid-term Review (MTR):

The terms of reference, the review process and the final MTR report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC).

The evaluation will be 'independent, impartial and rigorous'. The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by December 2024. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

Terminal Evaluation (TE):

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center.

The evaluation will be 'independent, impartial and rigorous'. The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by October 2026. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

Final Report:

The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Agreement on intellectual property rights and use of 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 in accordance with relevant policies notably the UNDP Disclosure Policy[10] and the GEF policy on public involvement[11].

[10] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/
[11] See https://www.thegef.org/gef/policies_guidelines

Monitoring and Evaluation Plan and Budget:		
GEF M&E requirements	**Indicative costs (US$)**	**Time frame**
Inception Workshop	5,000	Within 60 days of CEO endorsement of this project.
Inception Report	None	Within 90 days of CEO endorsement of this project.
M&E of GEF core indicators and project results framework	None	Annually and at mid-point and closure.
GEF Project Implementation Report (PIR)	None	Annually typically between June-August
Monitoring of Gender Action Plan	21,000	On-going
Supervision missions	None	Annually
International Safeguards Expert	14,000	On-going
Independent Midterm Review	30,000	36 months from CEO Endorsement date
Independent Terminal Evaluation (TE)	30,000	Two months prior to project closure
TOTAL indicative COST	100,000	

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Roles and responsibilities of the project's governance mechanism:

Implementing Partner: The Implementing Partner for this project is Rwanda Environment Management Authority (REMA).

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.
- Risk management as outlined in this Project Document;
- 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.

Project stakeholders and target groups: The project target groups and their representatives will be invited to participate in the project kick-off workshop at the beginning of the project. The kick-off workshop is an opportunity

for the project's target groups to provide additional comments on the project design and planning and to propose changes (if necessary).

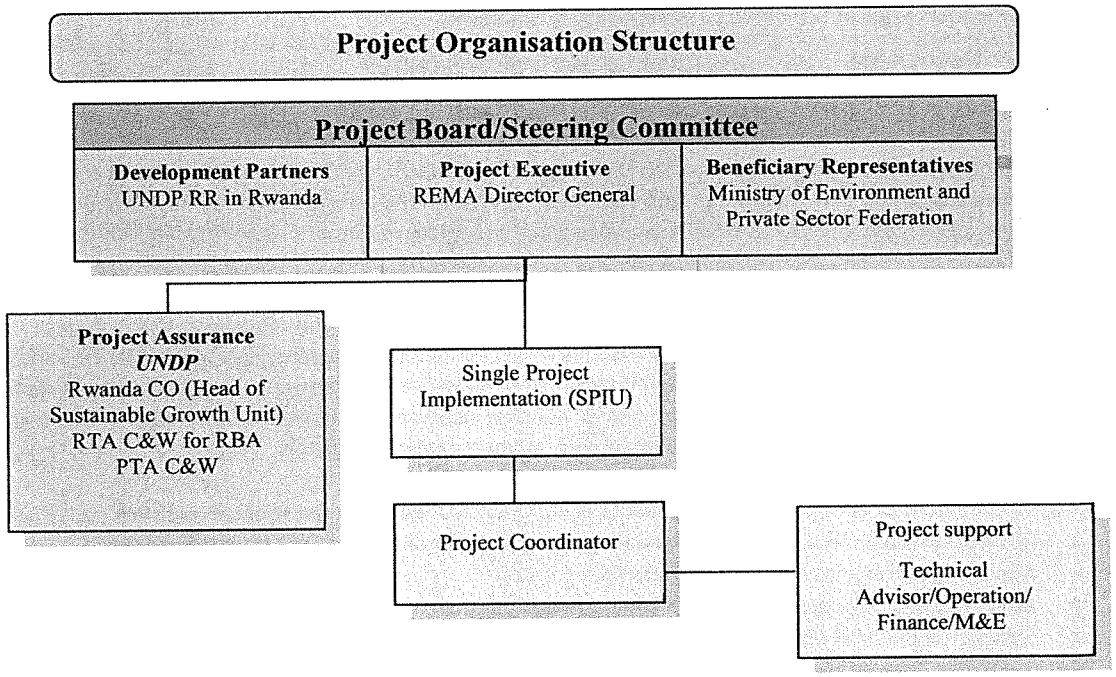
The project will also develop an online national waste management platform with a view to providing a one-stop shop solution that connects all actors in the waste management value chain to promote waste recovery in a larger circular economy context. This will support industrial symbiosis and provide an online market for recycled products to help other initiatives be more viable/scale-up. The platform will be led/hosted by REMA and will also: (i) ensure coordination between all projects/initiatives/stakeholders related to chemicals and hazardous wastes in order to promote collaboration and avoid duplication; (ii) support the development of national partnerships on the management of recyclable materials, and (hazardous) chemicals and wastes; and (iii) provide an outlet to advise the government on any issues related to chemical/(hazardous) wastes, among others.

The national waste management platform will include representation by the public, private, and NGO sectors. The project will support the national waste management platform so that there will be meaningful exchanges between the different public, private, and NGO actors to promote collaboration and avoid duplication. The establishment of the platform and regular meetings between stakeholders will also provide an opportunity for stakeholders to reflect on the progress of the project and propose improvements to its implementation.

Finally, the annual project board meetings are another opportunity for the project's target groups to participate in project decision-making and to propose improvements to project implementation.

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 being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is also responsible for the Project Assurance role of the Project Board/Steering Committee.

Project organisation structure:



The Project Board (also called Project Steering Committee) is responsible for taking corrective action as needed to ensure the project achieves the desired results. 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 Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

Specific responsibilities of the Project Board/Steering Committee include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;
- Agree on project manager's tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded;
- Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
- Ensure coordination between various donor and government-funded projects and programmes;
- Ensure coordination with various government agencies and their participation in project activities;
- Track and monitor co-financing for this project;
- Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
- Appraise the annual project implementation report, including the quality assessment rating report;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Review combined delivery reports prior to certification by the implementing partner;
- Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Address project-level grievances;
- Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
- Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.
- Ensure highest levels of transparency and take all measures to avoid any real or perceived conflicts of interest.

The composition of the Project Board must include the following roles:

a. Project Executive: Is an individual who represents ownership of the project and chairs the Project Board. The Executive is normally the national counterpart for nationally implemented projects. The Project Executive is: *REMA Director*

b. Beneficiary Representative(s): Individuals or groups representing the interests of those 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 civil society representative(s) can fulfil this role. The Beneficiary representative (s) is/are: *Ministry of Environment and Private Sector Federation*

c. Development Partner(s): Individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project. The Development Partner(s) is: *Maxwell Gomera, UNDP Resident Representative in Rwanda*

d. Project Assurance: UNDP performs the quality assurance and supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed and conflict of interest issues are monitored and addressed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. UNDP provides a three – tier oversight services involving the UNDP Country Offices and UNDP at regional and headquarters levels. Project assurance is totally independent of the project execution function.

e. *National Technical Advisory Committee:* This is a technical team made of experts from various institutions that can meet on regular basis to review technical documents before they are submitted to the project's steering committee for approval.

Project extensions: The UNDP Resident Representative and UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs in excess of the CO's Agency fee specified in the DOA during the extension period must be covered by non-GEF resources.

VIII. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD 40,433,931. This is financed through a GEF grant of USD 6,300,000, USD 500,000 in cash co-financing to be administered by UNDP and USD 33,633,931 in other co-financing. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Confirmed Co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. Note that all project activities included in the project results framework that will be delivered by co-financing partners (even if the funds do not pass through UNDP accounts) must comply with UNDP's social and environmental standards. Co-financing will be used for the following project activities/outputs:

Co-financing source	Co-financing type	Co-financing amount	Planned Co-financing Activities/Outputs	Risks	Risk Mitigation Measures
Government (REMA)	In kind	USD 5,099,580	• Supporting all components • Assist in the implementation of activities to improve compliance with the chemicals and waste conventions • Support the implementation of the recommendations of the Stockholm NIP, relevant aspects of the MIA (when available), and as well as other national plans • Lead the development of new/revised legislation, regulations, and guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Lead the development and testing of the Hazardous Waste Inventory • Oversee all demonstration pilots and disposal activities	*Modification of the budget allocation by the Ministry of Finance or REMA, but low risk since the resources belong to the national budget.* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Government (Ministry of Environment (MoE))	In kind	USD 1,000,000	• Assist in the implementation of activities to improve compliance with the chemicals and waste conventions • Support the implementation of the recommendations of the Stockholm NIP, relevant aspects of the MIA (when available), and as well as other national plans • Support the development of new/revised legislation, regulations, and guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Support the development and testing of the Hazardous Waste Inventory • Support all demonstration pilots and disposal activities	*Modification of the budget allocation by the Ministry of Finance or MOE, but low risk since the resources belong to the national budget.* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Government (CPCIC/NIRDA)	Grant In-kind	USD 450,000 USD 200,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to PCBs, POPs, Hg, and hazardous wastes, and tools such as PPP and EPR • Provide technical expertise to the development of the Hazardous Waste Inventory • Provide technical expertise to project beneficiaries (industry, agriculture, healthcare, waste treatment facilities, among others) in introducing cleaner production practices, supporting the phase-out of harmful chemicals and the identification, assessment, and introduction of safer alternatives (e.g. to POPs, Hg, and other chemicals of concern) • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives; and design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance including the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams (e.g. new POPs, e-waste, Hg containing waste, lead batteries,) • Support the introduction of new/enhanced treatment processes introduced led by the private sector	*Modification of the budget allocation by the Ministry of Finance or CPCIC/NIRDA, but low risk since the resources belong to the national budget.* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*

Government (City of Kigali)	Equity Investment In-kind	USD 4,164,327 USD 4,000,000	• Support project activities related to management of household and municipal waste • Ensure linkages are made, where applicable, between the project and the establishment of a fecal sludge treatment plant (by CoK in partnership with WASAC), and with initiatives for improving Nduba Landfill • Advise on public-private partnerships for waste management	*Modification of the budget allocation by WASAC/City of Kigali* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Government (Magerwa)	In-kind	USD USD 31,605	• Help increase Rwanda Customs services awareness of waste streams controlled by the Stockholm and Minamata Conventions and set SOPs with REMA in order to take appropriate action in case of suspected irregularities • Embed introductory modules on waste in primary and recurrent training programmes for Customs officers • Provide inputs into and review the development of the Hazardous Waste Inventory	*Modification of the budget allocation by Magerwa, but low risk since the resources belong to the national budget.* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Government (FONERWA)	In-kind	USD 1,500,000	• Support the development of new legislation, regulations, guidelines pertaining to hazardous wastes, especially e-waste • Support to Enviroserve infrastructure	*Modification of the budget allocation by FONERWA, but low risk since the resources belong to the national budget.* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Private sector (Enviroserve Rwanda Green Park)	Equity Investment In-kind	USD 1,000,000 USD 800,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Improve the environmental performance of the respective waste treatment facilities and increase treatment capacity (volumes/additional hazardous waste streams) • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Build/further improve capacity for the collection, packaging, transportation, storage, treatment/disposal of POPs/Hg-containing and other hazardous wastes • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; support recycling; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the improvement of national capacity of existing hazardous waste interim storage facilities	*Modification of the budget allocation by Enviroserve* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*

			• Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams		
Private sector (Prime Economic Zones Ltd.)	Equity Investment In-kind	USD 2,247,798 USD 2,000,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Support and participate in the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Provide co-financing in the form of investments in technologies/infrastructure to valorise priority waste streams, support recycling, and avoid/ reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams • Participate in the "best performer awards" programme for industries/SMEs	*Modification of the budget allocation by PEZ* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Private sector (CIMERWA)	Grant	USD 45,000	• Undertake incineration of PCB oil, as applicable • Improve the environmental performance of the respective waste treatment facilities and increase treatment capacity (volumes/additional hazardous waste streams) • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Build/further improve capacity for the collection, packaging, transportation, storage, treatment/disposal of POPs/Hg-containing and other hazardous wastes • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; support recycling; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the improvement of national capacity of existing hazardous waste interim storage facilities	*Modification of the budget allocation by CIMERWA* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Private sector (Dépôt Kalisimbi Ltd)	Equity Investment In-kind	USD 1,700,000 USD 100,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Improve the environmental performance of the respective waste treatment facilities and increase treatment capacity (volumes/additional hazardous waste streams) • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Build/further improve capacity for the collection, packaging, transportation, storage, treatment/disposal of POPs/Hg-containing and other hazardous wastes • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; support recycling; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the improvement of national capacity of existing hazardous waste interim storage facilities • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams	*Modification of the budget allocation by DPMM Kalisimbi* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*

Private sector (Utexrwa Industry)	In kind	USD 150,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Support and participate in the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Provide co-financing in the form of investments in technologies/infrastructure to valorise priority waste streams, support recycling, and avoid/ reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams • Participate in the "best performer awards" programme for industries/SMEs	*Modification of the budget allocation by Utexrwa Industry* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Private sector (COPED)	Equity Investment In-kind	USD 1,800,000 USD 600,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Improve the environmental performance of the respective waste treatment facilities and increase treatment capacity (volumes/additional hazardous waste streams) • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Build/further improve capacity for the collection, packaging, transportation, storage, treatment/disposal of POPs/Hg-containing and other hazardous wastes • Support the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; support recycling; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the improvement of national capacity of existing hazardous waste interim storage facilities • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams	*Modification of the budget allocation by COPED* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Private sector (AGRUNI Ltd)	Equity Investment In-kind	USD 2,000,000 USD 850,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Support and participate in the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Provide co-financing in the form of investments in technologies/infrastructure to valorise priority waste streams, support recycling, and avoid/ reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams • Participate in the "best performer awards" programme for industries/SMEs	*Modification of the budget allocation by AGRUNI Ltd* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*

Private sector (AgroPlast)	Equity Investment In-kind	USD 1,527,621 USD 1,100,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Support and participate in the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Provide co-financing in the form of investments in technologies/infrastructure to valorise priority waste streams, support recycling, and avoid/ reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams • Participate in the "best performer awards" programme for industries/SMEs	*Modification of the budget allocation by AgroPlast* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Private sector (Iyange Industries Ltd)	Equity Investment In-kind	USD 978,000 USD 90,000	• Provide inputs into and review the development of new legislation, regulations, guidelines pertaining to the relevant fields of operation • Provide inputs to the design of, and relevant data for inclusion in, the Hazardous Waste Inventory • Support and participate in the implementation of project activities to design and undertake demonstration pilots to valorise priority waste streams; and to design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the assessment of the feasibility of locally suitable disposal/treatment solutions for hazardous waste streams • Provide co-financing in the form of investments in technologies/infrastructure to valorise priority waste streams, support recycling, and avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the design of the awareness raising plan/campaign to increase collection rates of particular hazardous waste streams • Participate in the "best performer awards" programme for industries/SMEs	*Modification of the budget allocation by* Iyange Industries Ltd *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*
Nongovernmental Organisation – Association pour le Développement de Nyabimata (ADENYA)	In-kind	USD 200,000	• Participate in the development of a comprehensive awareness raising/communication and knowledge management strategy for all project activities • Support awareness raising activities, in partnership with local CBOs and NGOs, in order to reach project beneficiaries and stakeholders • Support dissemination of project results at national and local level • Supporting studies and research in the field of chemicals and hazardous products	*Modification of the budget allocation by ADENYA* *Increase in inflation, decrease in the purchasing power of the allocated co-financing*	*The project team and the UNDP country office will monitor the co-financing contribution to the project*

Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board.

Should the following deviations occur, the Project Manager/CTA and UNDP Country Office will seek the approval of the BPPS/GEF team to ensure accurate reporting to the GEF:
a) Budget re-allocations among components in the project budget with amounts involving 10% of the total project grant or more;
b) Introduction of new budget items that exceed 5% of original GEF allocation.

Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. **Operational closure must happen within 3 months after posting the TE report to the UNDP ERC.** The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

Transfer or disposal of assets: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file[12]. The transfer should be done before Project Management Unit complete their assignments.

Financial completion (closure): The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project will be financially completed **within 6 months of operational closure or after the date of cancellation.** Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the BPPS/GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

12 See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/GEF Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF Trustee.

IX. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas Award ID:	00135438	Atlas Output Project ID:	00126667
Atlas Business Unit	RWA10		
Atlas Primary Output Project Title	Supporting a Green Economy - Decoupling Hazardous Waste Generation from Economic Growth in Rwanda		
UNDP-GEF PIMS No.	6482		
Implementing Partner	*Rwanda Environment Management Authority (REMA)*		

Atlas Activity (GEF Component)	Atlas Implementing Agent	Atlas Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Account Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	*See Budget Note:*
COMPONENT 1: Establishment of an enabling policy/regulatory framework to create (financial) incentives for the sound management of chemicals, the introduction of safer alternatives, minimization of hazardous waste generation and its environmentally safe treatment	REMA	62000	GEF	71200	International Consultants	29,530	33,870	22,430	13,370	3,500	102,700	*1*
				71300	Local Consultants	33,200	33,200	20,000	13,600	-	100,000	*2*
				71600	Travel	10,700	10,700	2,700	2,700	2,700	29,500	*3*
				74200	Audio Visual & Print Production Costs	6,000	6,000	6,000	6,000	6,000	30,000	*4*
				75700	Training, Workshops and Conferences	30,000	117,399	78,266	22,335	-	248,000	*5*
					Total Outcome 1	**109,430**	**201,169**	**129,396**	**58,005**	**12,200**	**510,200**	
COMPONENT 2: Minimize hazardous waste generation through the introduction of safer alternatives and cleaner (production) processes in selected	REMA	62000	GEF	71200	International Consultants	19,390	20,930	17,080	14,700	3,500	75,600	*6*
				71300	Local Consultants	10,800	10,800	8,600	4,800	4,000	39,000	*7*
				71600	Travel	5,904	10,904	10,904	15,904	5,904	49,520	*8*

industries and priority sectors				72100	Contractual Services-Companies	84,500	62,000	34,500	62,000	30,000	273,000	9
				72200	Equipment and Furniture	-	82,500	447,778	240,000	-	770,278	10
				72500	Supplies		500				500	11
				74200	Audio Visual & Print Production Costs	5,000	5,000	5,000	5,000	5,000	25,000	12
				75700	Training, Workshops and Conferences	-	95,064	61,468	44,670	-	201,202	13
					Total Outcome 2	**125,594**	**287,698**	**585,330**	**387,074**	**48,404**	**1,434,100**	
COMPONENT 3: Improve private sector and institutional capacity for the sound environmental treatment and disposal of hazardous waste streams	REMA	62000	GEF	71200	International Consultants	9,240	22,680	22,680	12,600	-	67,200	14
				71300	Local Consultants	5,600	6,400	6,400	5,600	4,000	28,000	15
				71600	Travel	3,600	7,600	7,600	3,600	3,600	26,000	16
				72100	Contractual Services-Companies	50,000	150,000	452,950	1,374,450	-	2,027,400	17
				72200	Equipment and Furniture	7,200	10,200	290,213	803,113	-	1,110,725	18
				74200	Audio Visual & Print Production Costs	-	11,560	11,560	5,780	-	28,899	19
				75700	Training, Workshops and Conferences	-	117,399	95,064	83,803	22,335	318,601	20
					Total Outcome 3	**75,640**	**325,839**	**886,466**	**2,288,945**	**29,935**	**3,606,825**	
COMPONENT 4: Raise awareness to support behavioral change, capture and disseminate	REMA	62000	GEF	71200	International Consultants	1,750	1,750	-	-	-	3,500	21
				71300	Local Consultants	12,000	12,000	12,000	12,000	12,000	60,000	22

experiences, lessons-learned and environmental best practices				71600	Travel	6,500	27,000	19,125	3,125	3,125	58,875	23
				72100	Contractual Services-Companies	27,500	35,000	35,000	30,000	2,500	130,000	24
				74200	Audio Visual & Print Production Costs	21,800	16,800	16,800	16,800	16,800	89,000	25
				75700	Training, Workshops and Conferences	1,500	1,500	1,500	1,500	1,500	7,500	26
					Subtotal Outcome 4 (KM and AR) - GEF	**71,050**	**94,050**	**84,425**	**63,425**	**35,925**	**348,875**	
				75700	Training, Workshops and Conferences	5,000					5,000	27
				71200	International Consultants	9,100	9,100	36,300	2,100	38,400	95,000	28
					Subtotal Outcome 4 (M&E) - GEF	**14,100**	**9,100**	**36,300**	**2,100**	**38,400**	**100,000**	
		40000	UNDP in Rwanda	71600	Travel	6,750	6,750	6,750	22,750	22,750	65,750	29
				72100	Contractual Services-Companies	-	40,000	30,000	30,000		100,000	30
				74200	Audio Visual & Print Production Costs	-	20,000	20,000	20,000		60,000	31
				75700	Training, Workshops and Conferences	27,425	68,563	68,563	68,563	41,136	274,250	32
					Subtotal Outcome 4 - UNDP in Rwanda	**34,175**	**135,313**	**125,313**	**141,313**	**63,886**	**500,000**	
					Total Outcome 4	**119,325**	**238,463**	**246,038**	**206,838**	**138,211**	**948,875**	
Project Management	REMA	62000	GEF TF	71600	Travel	6,300	6,300	10,300	6,300	10,300	39,500	33
				71800	Contractual services – Implementing Partner	36,000	36,000	36,000	36,000	36,000	180,000	34
				72500	Supplies	2,000	2,000	2,000	2,000	2,000	10,000	35

				72800	Information Technology Equipment	10,000	-	-	-	-	10,000	36
				74100	Professional Services	4,500	4,500	4,500	4,500	4,500	22,500	37
				74500	Miscellaneous	2,600	2,600	2,600	2,600	2,600	13,000	38
				75700	Training, Workshops and Conferences	5,000	5,000	5,000	5,000	5,000	25,000	39
					Total Project Management	66,400	56,400	60,400	56,400	60,400	300,000	
					PROJECT TOTAL	496,389	1,109,569	1,907,630	2,997,262	289,150	6,800,000	

SUMMARY OF FUNDS:

	Amount Year1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
GEF	462,214	974,256	1,782,317	2,855,949	225,264	6,300,000
Donor 2 (e.g. UNDP	34,175	135,313	125,313	141,313	63,886	500,000
Donor 3 (cash and in-kind) e.g. Government	6,726,786	6,726,786	6,726,786	6,726,786	6,726,787	33,633,931.00
TOTAL	7,223,175	7,836,355	8,634,416	9,724,049	7,015,937	40,433,931.00

Budget Note:	***Comments***

1	International consultants: 1 Intl Chief Technical Expert (50 days*700 USD/day = 35,000); 1 Intl Customs Expert (30 days*600 USD/day = 18,000 USD; Intl Health Care Waste Management Expert (23 days*700 USD/day = 16,100 USD); International Chemicals Expert (18 days*700 USD/day = 12,600 USD); International Finance Expert (30 days*700 USD/day = 21,000 USD)
2	Local consultants: National Environmental Law Expert (80 days*550 USD/day = 44,000 USD); National Customs Expert (30 days*400 USD/day = 12,000 USD); National Hazardous Waste Management Expert (50 days*400 USD/day = 20,000 USD); National Finance & Private Sector Expert (60 days*400 USD/day = 24,000 USD)
3	Mission costs of the International Consultants (4*4,000 USD = 16,000 USD); In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (60 days*225 USD/day = 13,500 USD)
4	Printing and publications costs in support of Component 1 activities (6,000 USD/year = 30,000 USD)
5	Training and Workshops: 1 National Inception Workshop (1*30,000 USD = 30,000 USD); 5 Validation Workshops to review (i) drafted legislative regulatory documents, (ii) regulations/guidelines, (iii) industry incentives, (iv) EPR framework, and (v) Customs strategy (5*16,798 USD = 83,990 USD); 6 training events on (i) drafted legislative regulatory documents, (ii) regulations/guidelines, (iii) industry incentives, (iv) EPR framework, and (v+vi) Customs officers training programme (6*22,335 USD = 134,010 USD)
6	International consultants: 1 Intl Chief Technical Expert (50 days*700 USD/day = 35,000 USD); Intl Health Care Waste Management Expert (12 days*700 USD/day = 8,400 USD); International Chemicals Expert (36 days*700 USD/week = 25,200 USD); International Finance Expert (10 days*700 USD/day = 7,000 USD)
7	National Environmental Law Expert (20 days*550 USD/day = 11,000 USD); National Hazardous Waste Management Expert (50 days*400 USD/day = 20,000 USD); National Finance & Private Sector Expert (20 days*400 USD/day = 8,000 USD)
8	Mission costs of the International Consultants (5*4,000 USD = 20,000 USD); In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (130 days*225 USD/day = 29,520 USD)
9	Contracted Company for development of hazardous waste inventory and database (100,000 USD); Assessment of the national laboratory capacity and development of a national laboratory capacity strengthening plan that includes resource mobilisation aspects (20,000 USD); PBDE analysis services (20*400 USD = 8,000 USD); PBDE-containing plastics collection and disposal (1,200 MT * 100 USD = 120,000 USD); and COVID-related waste (from PCR testing and vaccination, such as Guanidine Thiocyanate) collection and disposal (25,000 USD)
10	Hg-free healthcare devices (10,000 thermometers * 3 USD + 500 sphygmomanometer * 25 USD = 42,500 USD); Collection buckets for Hg-added thermometers (10*100 USD = 1,000 USD); XRF analysis device for Hg-related inspection (1*35,000 USD = 35,000 USD); Chemical analysis proofing of XRF results (100*50 USD = 5,000 USD); Shredder for PBDE-containing plastic (20,000 USD); Storage containers for Hg-containing e-waste (10*150 USD = 1,500 USD); Equipment for demonstration pilots on waste generation minimisation, cleaner production, safer alternatives (400,000 USD); Equipment for national laboratory capacity strengthening (265,278 USD)
11	Supplies for PBDE sampling/analysis (500 USD)
12	Audio-visual & print production costs related to trainings conducted as part of Component 2 (25,000 USD)
13	Training and Workshops: 4 Validation Workshops to review (i) hazardous waste inventory and database, (ii) demonstration pilots on waste generation, cleaner production, safer alternatives, (iii) Hg-containing products management, (iv) PBDE-containing plastic (4*16,798 USD = 67,192 USD); 6 training events on (i) hazardous waste inventory and database, (ii+iii) demonstration pilots on waste generation, cleaner production, safer alternatives, (iv+v) Hg-containing products management, (vi) PBDE-containing plastic (6*22,335 USD = 134,010 USD)
14	International consultants: 1 Intl Chief Technical Expert (50 days*700/day = 35,000); International Chemicals Expert (36 days*700 USD/week = 25,200 USD); International Finance Expert (10 days*700 USD/day = 7,000 USD)
15	National Hazardous Waste Management Expert (50 days*400 USD/day = 20,000 USD); National Finance & Private Sector Expert (20 days*400 USD/day = 8,000 USD)
16	Mission costs of the International Consultants (2*4,000 USD = 8,000 USD); In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (80 days*225 USD/day = 18,000 USD)

17	PCB disposal (122 MT * 200 USD = 24,400 USD); PCB transportation and pre-treatment of the oil (250,000 USD); PCB contaminated site remediated (250 MT of contaminated soil * 5,600 USD = 1,400,000 USD) including management; Pesticides disposal ((47 MT of pesticides * 4,000 USD = 188,000 USD) including management; training on contaminated site remediation, testing and application of innovative bioremediation measures, and preparation of financing plan for site remediation (90,000 USD); assessments for demonstration pilots to valorise priority waste streams, demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, and interim storage strengthening (75,000 USD)
18	Equipment for demonstration pilots to valorise priority waste streams (370,000 USD); Equipment for demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance (370,025 USD); Equipment for improvement of interim storage facilities (337,500 USD); Supplies for PCB sampling and analysis (200*150 USD = 30,000 USD); Supplies for soil contamination sampling and analysis (20*150=3,000 USD)
19	Audio-visual & print production costs related to trainings conducted as part of Component 3 (28,899 USD)
20	Training and Workshops: 7 Validation Workshops to review (i) PCB management, (ii) contaminated site remediation, (iii) pesticides excavation and disposal, (iv) hazardous waste export procedures, (v) demonstration pilots to valorise priority waste streams, (vi) demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, (vii) improvement of existing hazardous waste interim storage facilities) (7*16,798 USD = 117,586 USD); 9 training events on (i) PCB management, (ii) contaminated site remediation, (iii) pesticides stockpile management, (iv) hazardous waste export procedures, (v+vi) demonstration pilots to valorise priority waste streams, (vii+viii) demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, (ix) improvement of interim storage facilities)(9*22,335 USD = 201,015 USD)
21	Intl Health Care Waste Management Expert (5 days*700 USD/day = 3,500 USD)
22	National Gender Expert (100 days*300 USD/day = 30,000 USD); National Monitoring and Evaluation and Safeguards Officer (60 months*25%*1000 USD/month = 15,000); National Communications and Stakeholder Engagement Consultant (60 months*25%*1000 USD/month = 15,000)
23	Cost of travel for local consultants organizing M&E process with Intl M&E consultants (5*2,000 USD/year = 10,000 USD); for local consultants (including car hire, fuel, drivers, DSA) for SESA, ESIA, and ESMP consultations (50 days*225 USD/day = 11,250 USD; In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (25 days*225 USD/day = 5,625 USD); Study tour (8*4,000 USD = 32,000 USD)
24	Contracted Company for SESA, ESIA, and ESMP (110,000 USD); for creating 1 national platform (website) on waste exchange and information exchange (10,000 USD); Translation (10,000 USD)
25	Audio-visual & print production expenses for SESA, ESIA, and ESMP (5,000 USD); for awareness raising and communication (84,000 USD)
26	SESP Capacity building/training expenses (7,500 USD)
27	Training and Workshops: 1 National Inception Workshop (1*5,000 USD = 5,000 USD)
28	MTR & TE International Consultant (MTR = 30,000 USD; TE = 30,000 USD); International Gender Expert (30 days*700 USD/day = 21,000 USD), International Safeguards Expert (20 days*700 USD/day = 14,000 USD)
29	Cost of travel for local consultants for awareness raising, knowledge management, and gender mainstreaming activities and for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (150 days*225 USD/day = 33,750 USD); Study tour (8*4,000 USD = 32,000 USD)
30	Contracted Company for awareness raising, knowledge management, and gender mainstreaming activities including translation (100,000 USD)
31	Audio-visual & print production expenses for awareness raising and communication (60,000 USD)
32	Awareness raising, knowledge management, and gender mainstreaming expenses (274,250 USD)
33	Travel related to the inception workshop, Project Board meetings, PMU management and supervision travel, PIR and monitoring gender and results framework indicators (car hire, fuel, drivers, DSA) for the implementation of the project activities (140 days*225 USD/day = 31,500 USD); Presentation of project results at international meetings (2*4,000 USD = 8,000 USD)
34	Salary of National Project Manager (1,500 USD/month * 60 months = 90,000 USD); Financial/Administrative Accountant (750 USD/month * 60 months = 45,000 USD); Salary of National Procurement Officer (750 USD/month * 60 months = 45,000 USD)
35	Supplies for PMC activities (2,000 USD/year = 10,000 USD)
36	Cost of 3 computers for the PMC including software and licenses (2,500*3 = 7,500 USD); 2 cell phones (400*2 = 800 USD); and running costs (340/year = 1,700 USD)

37	Audit at 4,500 USD/year for the 5 years (22,500 USD)
38	Miscellaneous expenses for PMC activities: printing of materials, translation, and office supplies (2,600 USD/year = 13,000 USD)
39	Training for PMU on SESP, procurement, project management (25,000 USD)

X. LEGAL CONTEXT

Option a. Where the country has signed the Standard Basic Assistance Agreement (SBAA)
This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Rwanda and UNDP, signed in 1977. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by Rwanda Environment Management Authority (REMA) ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

XI. RISK MANAGEMENT

Option a. Implementing Partner is a Government Entity (NIM)

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
   a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
   b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

   (a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

    i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

    ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

    iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

    iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

    v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

    b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any

concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

10. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

11. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

12. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

    Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

13. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

    Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

    Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

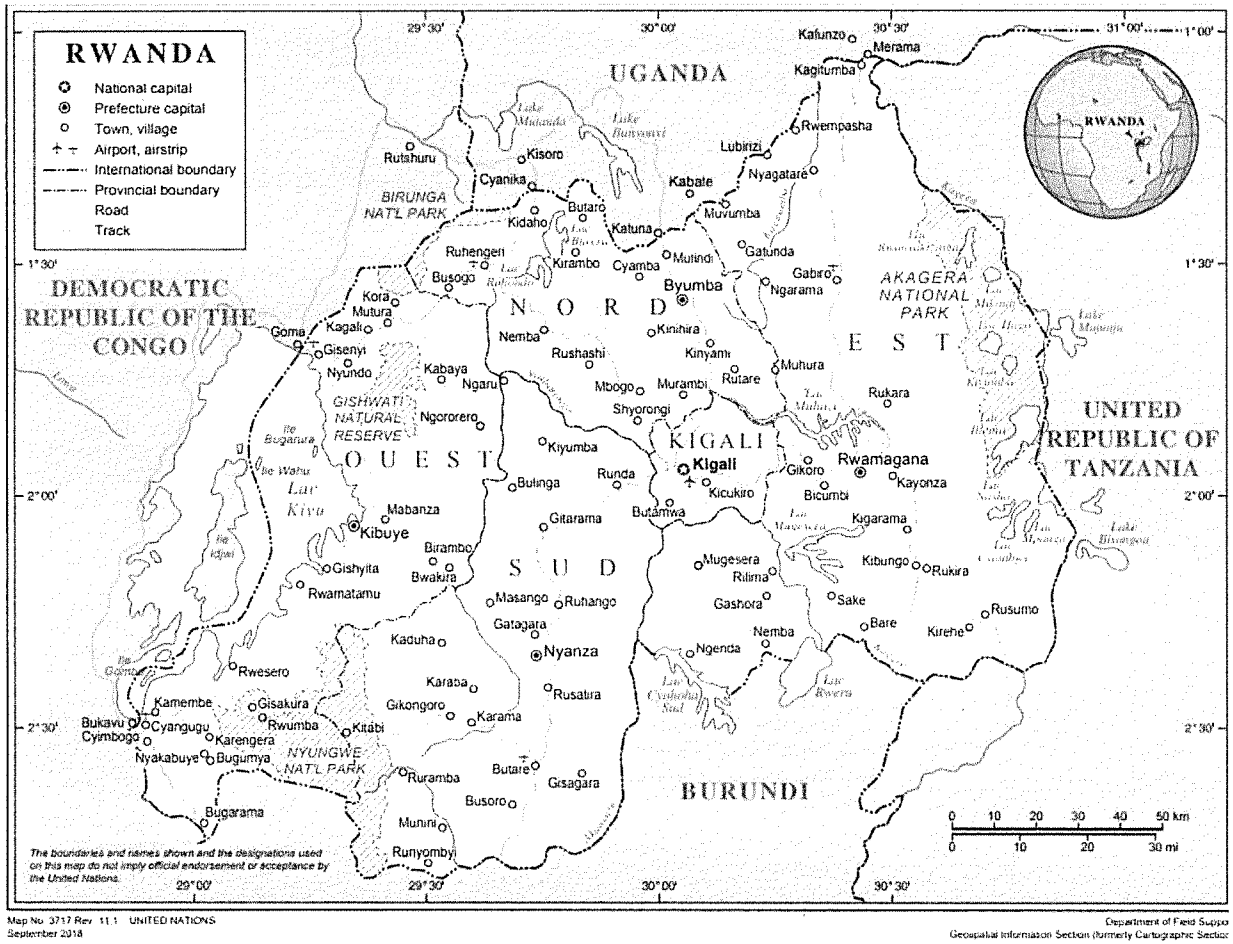
14. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

15. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

16. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XII. MANDATORY ANNEXES

Annex 1: Project map and Geospatial Coordinates of project sites



Annex 2: Multi Year Work Plan

Outcomes	Outputs	Activities	Year 1				Year 2				Year 3				Year 4				Year 5			
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
1: Creation/ improvement of the regulatory framework, tools and (financial) incentives that allow private sector and government to improve the management of chemicals and hazardous wastes	1.1: Approval of drafted PCB law facilitated	1.1.1: Review, revise, and submit for approval the PCB Law																				
	1.2: POPs/Hg legislative/regulatory framework strengthened to support the phase-out of Hg/POPs and products that contain them, and support the introduction of safer alternatives	1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Undertake a comprehensive legislative assessment to identify gaps and solutions • Draft the regulatory measures • Undertake technical review process • Facilitate the approval process of the regulatory measures • Undertake SESA • Provide guidance and training on conducting a legislative assessment and relevant issues regarding Stockholm, Basel, and Minamata Conventions compliance																				
	1.3: Regulations/ guidelines on the handling/treatment of priority hazardous waste streams developed and disseminated	1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Review of regulatory framework and international and national guidelines • Identify gaps and models • Draft regulatory measures and guidelines • Strengthen enforcement capacity • Provide guidance and training																				
	1.4: Industry incentives introduced to generate less (hazardous) waste	1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Conduct an assessment of existing and potentially feasible economic instruments • Design a Polluter-Pays-Principle system (and other measures as appropriate to transfer costs for remediation and pollution management to waste generators) • Design a "best performer awards" programme for industries/SMEs • Provide guidance and training																				
	1.5: Extended Producer Responsibility (EPR) framework developed and introduced to finance treatment of priority waste products/streams	1.5.1: Develop and operationalise an EPR framework • Establish a working group with key government ministries and agencies, private sector enterprises, and international experts • Identify target waste streams/products (review the hazardous waste inventory and database) • Assess EPR schemes implemented in other countries including lessons learned and various EPR approaches • Design an EPR framework that finances the treatment/disposal • Pilot a limited set of products to gain experience in Rwanda • Provide guidance and training																				
	1.6: Capacity of the customs	1.6.1: Develop and implement a Customs strengthening strategy																				

	administration strengthened to identify hazardous waste at entrance and act on it with adequate measures in cooperation with REMA	• Develop and implement a comprehensive strategy to support Customs to prevent the import and use of banned or to-be-banned products (identification, solutions, SOPs, interim storage, coordination with REMA) • Provide guidance materials and recurrent training programmes for customs officers																				
2: Data that contributes to a reduction in hazardous waste generation and releases from selected industries and other priority sectors achieved and safer alternatives is strengthened	2.1: Web-based hazardous waste inventory and database (with a focus on chemicals and waste-related Conventions) and web/phone-based monitoring tool for private sector/ enforcement entities established	2.1.1: Develop and implement a web-based hazardous waste inventory and database • Design a web-based HW inventory and database (build on REMA's Waste Information Management System (WIMS) • Require reporting on imports, waste generation, releases, and transfers for treatment (in coordination with regulations) • Facilitate enforcement entities to better monitor industry activities • Facilitate government to inform policy, support, and future interventions • Undertake an assessment of the national laboratory capacity and develop a national laboratory capacity strengthening plan including resource mobilisation aspects • Provide guidance and training																				
3: Technical capacities of industries and major hazardous wastes generators strengthened to develop and implement innovative and environ-mental best practices	3.1: Selected industries and priority economic sectors (e.g. agriculture, textile, paint, healthcare) supported in avoiding/reducing the generation of (hazardous) waste and releases (35,000 tonnes of e-waste, 40 tonnes of Hg-containing waste, and 12 g-TEQ of uPOPs) through the introduction of cleaner production practices and safer	3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Build on data from the hazardous waste inventory and database and undertake assessment of priority sectors regarding their practices and capacity, and prioritise sectors/interventions • Develop HW reduction and management plans for the key sectors (including introduction of safer alternatives and CP practices to support phase-out of Hg, POPs, HHP-containing products/chemicals and reducing uPOPs releases) • Design and implement pilot interventions on cleaner production and safer alternatives in selected industries and priority economic sectors • Provide technical support to all sectors (assessments, plans, guidance)																				
		3.1.2: Safely handle and dispose of Hg-containing products • Healthcare sector: • Undertake an assessment of Hg-containing healthcare products and waste (in coordination with MIA) • Develop and implement a national strategy for phasing-out Hg-added thermometers and sphygmomanometers																				

	alternatives (e.g. to POPs/Hg/chemicals of concern) and 35 MT of PBDE and 1 MT of Hg safely handled and disposed	• Provide guidance and training at the healthcare facilities on the collection, separation, handling, and disposal of Hg-containing wastes, the selection, use, and calibration of Hg-free alternative, and green procurement • Support the procurement of the Hg-free medical devices • Other Hg-containing products: • Undertake an assessment of Hg-containing products and waste (in coordination with MIA) • Develop and implement a national strategy for phasing-out priority waste streams including (in coordination with healthcare sector) • Provide guidance and training to relevant stakeholders on procurement of alternatives, collection, handling, transport, and environmentally sound interim-storage of Hg-containing wastes • Support establishment of sustainable collection channels and procurement of appropriate equipment for storage and treatment/recycling of Hg-containing e-waste • Assess the different solutions for Hg-containing waste generated following disposal (e.g. centralized interim storage and subsequent joint export)																					
		3.1.3: Safely handle and dispose of PBDE-containing plastics • Undertake sampling and analysis of stockpiled PBDE-containing plastics as needed • Develop a management plan for PBDE-containing plastics, including cost-effective options for its elimination • Establish sustainable collection channels, including incentives to facilitate easy take-back schemes, and procurement of appropriate treatment/recycling equipment • Safeguard stored stockpiles • Establish introduction of alternative products • Undertake disposal of at least 35,000 MT of PBDE-containing waste • Provide guidance and training on safely handling and disposing of PBDE-containing plastics																					
4: Increased capacity of the private sector and government entities to sustainably handle and treat: (i) existing stockpiles of hazardous and obsolete chemicals; and (ii) various hazardous	4.1: Remaining PCB-containing equipment and oil (122 MT) phased out/disposed of	4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil • Review and update the PCB inventory and database undertaking sampling and analysis of transformer oil as required • Establish disposal plan and a long-term agreement with CIMERWA and if needed issue a tender for services for disposal abroad • Phase-out and undertake safe pre-treatment of PCB-contaminated transformers and oil still in use • Safeguard stored equipment and waste • Undertake disposal of PCBs and PCB-contaminated waste • Provide guidance from the PCB project (with updates as required) and refresher training will be provided to the relevant stakeholders, such as REG, CIMERWA, and waste transporters (such as DPMM Kalisimbi/Depot Kalisimbi Ltd and COPED)																					
	4.2: One PCB-contaminated site (including 250 MT of of PCB-contaminated soil) remediated	4.2.1: Remediate one PCB-contaminated site • Test the soil for PCB contamination (and other locations such as Kicukiro Nyanza (Kigali) and Nyamagabe (Southern Province) • Develop a contaminated site remediation plan • Undertake and finalise tender for service																					

waste streams which cannot be avoided		• Conduct training on contaminated site remediation • Implement the remediation plan, with the potential of testing and applying innovative bioremediation measures (e.g. addressing lower-contaminated soil) (an estimated 250 MT of contaminated soil will need to be excavated and disposed) • Provide guidance and training on all steps, from contaminated site analysis to remediation including excavation, collection, handling, repacking, transportation, cleaning of residual contamination, treatment, storage, and export • Coordinate with the Government's broader initiative to vacate all business activities from the Gikondo Industrial Park by Q4 2021 and initiate restoration and conservation of the wetlands, in which the Industrial Park is located																				
	4.3: Obsolete POPs (3 MT) and non-POPs pesticides (44 MT) disposed of	4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides • Undertake sampling and analysis of stockpiled pesticides as needed • Prepare a financing plan to support identification of domestic or international/bilateral resources for the disposal of contaminated soil • Establish disposal plan including tender for services (including assessment of whether domestic disposal is a viable environmental, financial, and technical solution) • Undertake safe pre-treatment of stockpiled pesticides including recovery, excavation, packaging, and transport • Safeguard stored stockpiles • Provide guidance and training for private sector operators to recover/excavate, repack, and safely transport the obsolete POPs (and non-POPs) pesticides • Guidance and training for government institutions to support the export procedures of obsolete pesticides (as well as PCB- and Hg-containing waste)																				
5: Capacity and environmental performance of hazardous wastes treatment facilities improved	5.1: Potential for valorisation of priority waste streams assessed and initiated through engagement of research institutes/universities and private sector partners	5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Undertake a waste valorisation assessment of key waste streams (building on hazardous waste inventory and database) • Design and implement a waste valorisation challenge competition to raise awareness and generate innovative ideas • Prioritise waste streams/interventions • Design and implement waste valorisation pilots including enhancement of technical and financial capacity; consideration of industrial symbiosis arrangements; and informing scale-up of waste valorisation concepts into viable economic activities • Provide guidance, training, and technical support to all sectors (assessments, plans, best practices) • Develop an online waste management platform																				
	5.2: Environmental performance of existing waste treatment facilities enhanced and national treatment capacity for hazardous	5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Undertake facility-specific environmental performance assessments and identify process measures to reduce releases (uPOPs, heavy metals, POPs, Hg, and other hazardous substances) • Undertake waste treatment assessments for priority waste streams to identify interim storage needs, safekeeping measures required, locally suitable																				

	waste increased (volume + diversification) through the introduction of new locally suitable disposal/treatment solutions (and avoidance of the generation of 12.5 g-TEQ of uPOPs)	disposal/treatment solutions for HW streams, and potential for increasing the facilities' capacity (volume and type of waste) • Design, implement, and assess for viability demonstration pilots to test locally suitable disposal/treatment solutions for hazardous waste streams • Procure equipment • Provide guidance and training will be provided to relevant stakeholders, including waste treatment facility operators (such as Enviroserve, CIMERWA, and DPMM Kalisimbi and Depot Kalisimbi Ltd), REMA, and others • Closely collaborate with potential investors (e.g. FONERWA, banks, private sector)																				
	5.3: Capacity improved of existing hazardous waste interim storage facilities to handle additional hazardous waste streams	5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities • Based on the HW inventory, assess types of wastes present/generated that require interim storage (while awaiting disposal/treatment) • Identify measures to ensure safekeeping of these wastes (e.g. capacity, occupational safety and health, environmental protection, security) • Develop and validate an interim storage facilities upgrade plan • Upgrade/expand interim storage facilities' infrastructure and related management system to international standards and to accommodate the necessary hazardous waste streams • Provide guidance and training will be provided to relevant stakeholders including REMA, REG, private sector																				
6: Awareness raised of 7,500 people (4,000 female and 3,500 male) on the sound management of POPs and Hg and related wastes through tailored training and awareness raising activities	6.1: Awareness raised of 7,500 people (4,000 female and 3,500 male) on the sound management of POPs chemicals and Hg and related wastes through tailored training and awareness raising activities and 300,000 people (150,000 female and 150,000 male) directly benefit from the GEF investment	6.1.1: Design and implement an awareness raising plan																				
7: Project results sustained	7.1: Results, lessons-learned, and best practices captured in knowledge products	7.1.1: Develop and implement a knowledge management (KM) plan that extracts, compiles, and disseminates experiences, lessons-learned, knowledge and best practices including yearly lessons-learned reports, case study reports, and end of project publication																				

and replicated	and disseminated at national, regional, and global level to support replication (including development and implementation of an awareness raising and knowledge management plan)																						
	7.2: M&E and adaptive management applied in response to needs and Mid-term Evaluation findings	7.2.1: Apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-term Evaluation findings																					
		7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities																					
		7.2.3: Develop and implement an ESIA and ESMP based on the SESP																					

Annex 3: Monitoring Plan

This Monitoring Plan and the M&E Plan and Budget in Section VI of this project document will both guide monitoring and evaluation at the project level for the duration of project implementation.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
Project objective: The project aims to support the Government of Rwanda and its private and public sector in decoupling hazardous waste generation and harmful releases from economic growth by enhancing the introduction of the 4R approach (Reuse, Reduce, Recycle and Recovery) in priority industries and economic sectors, while at the same time enhancing private sector led national waste treatment capacity to ensure the sound management of wastes, generate income, create jobs and protect human health and the environment.	***Indicator 1*** # direct project beneficiaries disaggregated by gender (individual people)	*Midterm:* 150,000 direct beneficiaries of the project (75,000 women + 75,000 men) *End of project:* 300,000 direct beneficiaries of the project (150,000 women + 150,000 men)	Number of people (women and men) who will directly benefit from the project	*Data sources:* Consultations with stakeholders; National Statistics Reports; Reports on the status and structure of the institutions benefiting from the project; Project evaluation report *Collection methods:* Meeting and training attendance sheets; Number of training beneficiaries in key institutions; Population census of the areas where the project provided support	Annually Reported in DO tab of the GEF PIR	Project Manager, National Monitoring and Evaluation and Safeguards Officer, National Gender Expert, National Communications and Stakeholder Engagement Consultant	Training workshop reports; Training attendance sheets; Consultants reports; Reports on the results of the awareness raising activities	*Risks:* Challenges in determining who benefits directly or indirectly from the project activities implemented *Assumptions:* Risks associated with poor management of hazardous chemicals and waste are reduced as a result of the project and the project will target direct and indirect beneficiaries
	Indicator 2 Reduction, disposal/ destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (thousand metric tons of	*Midterm:* 482.9 MT of chemicals of global concern and their wastes, materials, and products in the environment and in processes are collected and stockpiled: - 15 MT of PCBs - 3 MT of POPs pesticides - 44 MT of non-POPs pesticides - 0.4 MT of PBDEs (400 MT of PBDE-containing plastic) - 0.5 MT of Hg (+20 MT of Hg-containing waste) *End of the project:* 35,459 MT of chemicals of global concern and their wastes, materials, and products in the environment and in processes reduced, disposed/ destroyed, phased out, eliminated	The indicators and targets are based on MT of PCB-contaminated oil and waste in use or stockpiled, POPs and non-POPs pesticides stockpiled, e-waste, plastic waste, and Hg-containing products being collected and stored, and generation of uPOPs avoided through BAT/BEP. On this basis, MT of hazardous and	*Data sources:* REMA and private sector entities involved in the collection, recycling, and treatment/export of hazardous waste *Collection methods:* Certified disposal certificates from treatment and disposal facilities; Customs export records (e.g. PCBs, POPs and non-POPs pesticides, PBDE-containing plastic, Hg-containing products, other hazardous waste); interim records from storage facilities; quantities of waste stored awaiting export	Bi-annually	REMA, National Monitoring and Evaluation and Safeguards Officer, Customs, Export Company	Official reports, national statistics reports; approvals for entities involved in the collection, disposal and treatment/ export of waste; Customs registers	*Risks:* High costs of waste disposal and lack of cooperation from private sector entities and/or the competent national authority *Assumptions:* The collection and disposal of hazardous waste will be subsidized by project support and government. Private sector entities and hazardous waste generators are aware of the dangers associated with the mismanagement of chemicals and waste

[13] Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
	toxic chemicals reduced)	and avoided: - 122 MT of PCBs - 3 MT of POPs pesticides - 44 MT of non-POPs pesticides - 35 MT of PBDEs (35,000 MT of PBDE-containing waste) - 250 MT of PCB-contaminated soil - 1 MT of Hg (+40 tonnes of Hg-containing waste)	chemical waste will be prevented and disposed/treated.					and are willing to participate in project activities and invest in the continuity of the process.
	Indicator 3 Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)	*Midterm*: 10 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided *End of project*: 24.5 gTEQ of emissions of POPs to air from point and non-point sources reduced and avoided	The indicators and targets are based on the reduction and avoidance of gTEQ of emissions of POPs to air from point and non-point sources from current levels of activities and processes.	*Data sources:* REMA and private sector entities involved in the collection, recycling, and treatment/export of hazardous waste. *Collection methods:* Certified disposal certificates from treatment and disposal facilities; Records from storage facilities, landfills, and waste management operations	Annually	National Monitoring and Evaluation and Safeguards Officer	Official reports, national statistics reports; approvals for entities involved in the collection, disposal and treatment/ export of waste	*Risks:* Lack of stakeholder engagement *Assumptions: The* collection and disposal of hazardous waste will be subsidised by the project/government. Awareness campaigns organised by the project will convince the general public, waste generators, and others to reduce open burning and use BAT/BEP.
Project Outcome 1 Creation/improvement of the regulatory framework, tools and (financial) incentives that allow private sector and government to improve the management of chemicals and hazardous wastes.	***Indicator 4*** Number of national regulatory/ policy frameworks strengthened/ developed to support the phase-out of Hg/POPs and products that contain them, the introduction of safer alternatives, and strengthening	*Midterm*: One comprehensive legislative assessment to identify legislative and regulatory gaps exist and how to address them completed Two regulatory measures related to import, phase-out, management, disposal and/or treatment as well as environmental standards for POPs/Hg in various media and the introduction of safer alternatives drafted One comprehensive strategy developed for dealing with identification of hazardous waste potentially entering the country *End of project*: Two regulatory measures related to import, phase-out, management,	Ensures that the regulations/policies drafted/updated takes into account the complete list of Hg-containing products in Part I, Annex A of the Minamata Convention, as well as all aspects related to the management of chemical waste (including POPs).	*Data sources:* Draft PCB Law, 2018 Environment Law, E-waste Policy and Strategy, single use plastic bag ban Framework Law on the Environment *Collection methods:* Desk review and requests to agencies	Annually	National Monitoring and Evaluation and Safeguards Officer, Environmental Focal Point at the National Assembly	Draft laws/regulations on the import, phase-out, management, disposal and/or treatment of Hg-containing products listed in Part 1 of Annex A of the Minamata Convention and POPs. Any new policies and frameworks developed that provide safer alternatives and	*Risks:* Difficulty in reaching agreements between the various national authorities, particularly the national assembly for the approval of regulatory texts. Lack of stakeholder buy-in for their implementation. Changes in national priorities. *Assumptions:* Through the implementation of its Stakeholder Engagement Plan and Gender Equality Action

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
	of related Customs capacity	disposal and/or treatment (including a ban on the import of Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention) as well as environmental standards for POPs/Hg in various media drafted and approved One PCB Law approved One regulation/guideline on the handling/treatment of priority hazardous waste streams (including PCBs, e-waste, PBDE-containing plastic, and Hg) and the introduction of safer alternatives developed and disseminated One comprehensive strategy for dealing with identification of hazardous waste potentially entering the country implemented with standard operating procedures, and related online courses and in-person training undertaken by Customs and other relevant stakeholders					strengthen Customs capacity.	Plan, the project creates sufficient opportunities for dialogue with relevant stakeholders, which will facilitate the conclusion of agreements.
	Indicator 5 Number of industry incentives to generate less (hazardous) waste and Extended Producer Responsibility (EPR) frameworks to finance treatment of priority waste products/streams developed and introduced	*Midterm*: Three incentives to reduce the generation of (hazardous) wastes by waste generators through the introduction of the Polluter Pays Principle (PPP) and other measures are developed to transfer costs for remediation and pollution management to waste generators One EPR framework is designed in consultation with the government and the private sector, and based on the outcomes of the hazardous waste inventory (Output 2.1) *End of project*: Three industry incentives to generate less (hazardous) waste and Extended Producer Responsibility (EPR) frameworks to finance treatment of	The project will carry out an evaluation of existing potential economic instruments and will develop PPP and EPR among others	*Data sources*: Stakeholders, including municipalities and the Department of Finance. *Collection methods*: Evaluation report on existing and potential financial instruments. Implementation plans and reports of operationalised PPP and EPR.	Annually	National Project Manager, National Monitoring and Evaluation and Safeguards Officer	Evaluation report on existing and potential financial instruments; PPP and EPR monitoring reports and evaluation of compliance	*Risks:* Difficult to achieve enforcement and compliance regarding the PPP, EPR, and other instruments operationalised. Lack of cooperation from private sector. *Assumptions:* The project will create, through the implementation of its stakeholder engagement plan, sufficient opportunities for dialogue with stakeholders, facilitating the operationalising the instruments and will

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequen-cy	Responsible for data collection	Means of verification	Risks/ Assumptions
		priority waste products/streams developed and introduced, including: - Polluter Pays Principle (PPP) and other measures such as tax breaks and green procurement are operationalized and provide an incentive for polluters to reduce environmental releases and wastes - Implementation of an EPR framework that finances the treatment/disposal of priority waste streams/products (e.g. acid lead batteries, PBDE-containing products, electronics, among others) and creates financial incentives for entities to get involved in the collection, management and disposal/treatment of more difficult waste streams that cannot be avoided						provide training and capacity building for enforcement agencies and private sector waste generators and waste management operators.
Project Outcome 2 Data that contributes to a reduction in hazardous waste generation and releases from selected industries and other priority sectors achieved and safer alternatives is strengthened.	***Indicator 6*** Number of national hazardous waste databases used to report on waste generation and release, support legal enforcement, and inform future interventions in the area of chemicals and waste management	*Midterm*: One web-based hazardous waste database that will be used by the private sector to report on waste generation and releases, enforcement entities to better monitor industry activities, and government ministries to have access to a detailed hazardous waste inventory upgraded and tested *End of project*: One web-based hazardous waste database that will be used by the private sector to report on waste generation and releases, enforcement entities to better monitor industry activities, and Government ministries to have access to a detailed hazardous waste inventory upgraded, finalized, and approved	Development of a hazardous waste database that includes waste types, industry activities, location, and other data Coordination and exchange of information on chemicals and hazardous wastes related projects/initiatives. Planning and decision making regarding (hazardous) chemicals and wastes is supported; support and advice to government on	*Data sources:* Database review, document review, consultations with stakeholders. *Collection methods:* Reports, data from monitoring agencies	Annually	National Monitoring and Evaluation and Safeguards Officer, Environmental Focal Point at the National Assembly, Consultant/expert group in charge of preparing database	TOR for database development; operationalised database; lessons learned reports	*Risks*: Sensitive information does not allow for a proper documentation process and lack of coordination among key partners (e.g. REMA, Customs, private sector). *Assumptions*: The contracted consultant/expert is able to develop the database without having to incorporate sensitive data and information. The project partners recognise the benefits (and legal obligations) of the database to their operation.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
		Industry is comprehensively reporting on its waste generation and releases through the hazardous waste database and hazardous waste quantification in the country is available Enforcement agencies are using the hazardous waste database to identify priority industry and inform the scheduling of regular checks and provision of guidance regarding hazardous waste reduction and environmentally sound treatment Relevant government ministries are using the hazardous waste database to identify the types, volumes, and locations of hazardous waste generation and releases, and to inform future interventions to achieve reductions in hazardous waste generation and releases	any chemical/ (hazardous) waste related issues, among others					
Project Outcome 3 Technical capacities of industries and major hazardous wastes generators strengthened to develop and implement innovative and environmental best practices.	***Indicator 7*** Number of interventions to phase-out all Hg-containing products (listed in Annex A of the Minamata Convention) and 35,000 MT of PBDE-containing waste across Rwanda	*Midterm*: One national strategy for phasing out Hg-added thermometers and sphygmomanometers in healthcare developed and endorsed One Hg-management plans for priority waste streams including e-waste, batteries, and CFLs developed and endorsed 0.2 MT of Hg-added (thermometers and sphygmomanometers) phased-out from healthcare, from procurement of alternatives to the safe and environmentally sound interim-storage of Hg-containing wastes 0.3 MT of Hg-added e-waste, such as Hg switches and batteries, and CFLs phased-out from consumer use, from procurement of alternatives to the safe and environmentally sound	Number of interventions to phase-out/ avoid/reduce the generation of (hazardous) waste and releases. Amount of Hg phased out from healthcare, e-waste, and CFLs and PDBEs from waste or managed in an environmentally sound manner	*Data source:* Management plans; monitoring agencies, reports from industry (healthcare facilities and waste management operators), REMA and private sector entities involved in the collection, recycling, and treatment/export of hazardous waste. *Collection methods:* Requesting information from monitoring agencies, and healthcare and manufacturers	Bi-annually	REMA, National Monitoring and Evaluation and Safeguards Officer, Customs, Export Company	Official reports; management plans; national statistics reports; approvals for entities involved in the collection, disposal and treatment/ export of waste; Customs registers; Certification from a central authority that the amount of Hg phased out is correct	*Risks:* Difficult to reach agreements between different national authorities on a national management plan. Hg data is collected is not collected in a standardized manner. *Assumptions:* Political will to enact needed regulations and plans exists. The project will create, through the implementation of its stakeholder engagement plan, sufficient opportunities for dialogue with stakeholders, facilitating the national management plans for

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
		interim-storage of Hg-containing wastes One preliminary PBDE-containing plastic inventory is developed One management plan for PBDE-containing plastic, including cost-effective options for its elimination, is drafted and endorsed One agreement for PBDE-containing plastic with a service provider in Rwanda is confirmed, subject to confirmation of technical capacity 6,000 MT of PBDE-containing waste is collected by service providers in Rwanda *End of project*: 1 MT of Hg-containing waste from healthcare, e-waste, and CFLs is managed in an environmentally sound manner, from storage to disposal (+40 tonnes of Hg-containing waste) 35,000 MT of PBDE-containing waste (equivalent to 35 MT of brominated POPs) removed, treated, and/or disposed of in Rwanda or by export to a qualified disposal facility						Hg and PBDEs. The project will outline collection and verification methods to ensure data is accurate.
	Indicator 8 Number of cleaner production and safer alternatives interventions that phase-out POPs-containing products and other chemicals of concern and	*Midterm*: Three assessment and hazardous waste reduction and management plans developed for key sectors including tea industry, paint industry, textile industry, automobile industry, pharmacies, and restaurants *End of project*: Two pilot interventions on cleaner production and safter alternatives in selected industries and priority economic sectors implemented	Number of plans and pilot interventions for key sectors to phase out POPs, Hg, uPOPs, and other chemicals, including introduction of safer alternatives and cleaner production practices. CPCIC/NIRDA is providing support to partners in key	*Data source:* Assessments, plans, and pilot interventions submitted to REMA *Collection methods:* Records from storage facilities, landfills, and waste management operations, requests to agencies and private sector partners	Annually	REMA, National Monitoring and Evaluation and Safeguards Officer, Private Sector Companies	Assessments of priority sectors regarding their practices and capacity, hazardous waste reduction and management plans, M&E reports; hazardous waste inventory database	*Risks:* Lack of commitment or capacity from private sector entities and/or the competent national authority *Assumptions:* Partners in key sectors are aware of the dangers associated with the mismanagement of chemicals and waste and are willing to participate in project

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
	reduce uPOPs releases		sectors and will work with them to develop plans and pilot interventions.					activities and invest in the continuity of the process.
Project Outcome 4 Increased capacity of the private sector and government entities to sustainably handle and treat: (i) Existing stockpiles of hazardous and obsolete chemicals; and (ii) Various hazardous waste streams which cannot be avoided.	***Indicator 9*** Amount of PCB-containing equipment or waste, and obsolete POPs and non-POPs pesticides disposed in an environmentally sound manner	*Midterm*: One updated comprehensive PCB inventory is completed Two management plans (one for PCB-containing equipment or waste, and one for obsolete POPs and non-POPs pesticides), including cost-effective options for their elimination, is drafted and endorsed One agreement for the elimination of PCBs, and POPs and non-POPs pesticides with a service provider in Rwanda or internationally is confirmed, subject to confirmation of technical capacity *End of project*: 122 MT of PCBs and PCB-contaminated waste removed, treated, and/or disposed of in Rwanda (or by export to a qualified disposal facility for pure PCB oil). 3 MT of POPs pesticides and 44 MT non-POPs pesticides are excavated and appropriately managed and disposed of in Rwanda or by export to a qualified disposal facility for the POPs pesticides	The PCB inventory and data on the stockpiled pesticides will be updated and sampling and analysis undertaken, followed by establishing disposal plans and agreements with disposal services providers such as CIMERWA and an international waste management operator.	*Data sources:* PCB inventory, pesticides inventory REMA and private sector entities involved in the collection, recycling, and treatment/export of hazardous waste *Collection methods:* Certified disposal certificates from treatment and disposal facilities; Customs export records (e.g. PCBs, POPs and non-POPs pesticides); interim records from storage facilities and former dumpsites	Annually	REMA, National Monitoring and Evaluation and Safeguards Officer, Customs, Export Company	Official reports, national statistics reports; approvals for entities involved in the collection, disposal and treatment/ export of waste; Customs registers; hazardous waste inventory database	*Risks:* High costs of waste disposal and lack of cooperation from private sector entities and/or the competent national authorities *Assumptions:* The collection and disposal of hazardous waste will be subsidized by project support and government. Private sector entities are aware of the dangers and have the appropriate capacity and expertise including the contracting of international waste management operators.
	Indicator 10 Number of contaminated sites remediated	*Midterm*: Soil is tested for PCB contamination at the REG transformer maintenance site and one remediation plan for the site is designed Two other potential contaminated sites tested *End of project*: One remediation plan is implemented by local private sector entities	Soil at the Gikondo Industrial Park will be tested for PCB contamination, and a remediation plan developed. Other locations may include Kicukiro Nyanza (Kigali) and Nyamagabe	*Data source:* REMA, REG, private sector waste management operators *Collection methods:* Detailed (PCB and other chemical) tests and analysis at the site(s). Remediation plan for the site is developed, including economically viable options.	Bi-annually	REMA, National Monitoring and Evaluation and Safeguards Officer, Customs, National Communications and Stakeholder Engagement Consultant, Export Company	Soil test results, remediation plan. Meeting reports, stakeholder plans, and work plans showing implementation with international	*Risks*: Survey reports incomplete/not made available *Assumption*: The preliminary survey completed within the expected timeframe and made available

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
		involved in hazardous waste management and innovative bioremediation is tested and applied if applicable	(Southern Province), among others A remediation plan will be developed and implemented, with the potential of testing and applying innovative bioremediation measures				and local private sector engagement	
Project Outcome 5 Capacity and environmental performance of hazardous wastes treatment facilities improved.	***Indicator 11*** Number of priority waste streams assessed and response measures initiated for valorisation and treatment	*Midterm*: One waste valorisation assessment of key waste streams (based on the outcomes of the waste inventory; Output 2.1) drafted and endorsed One waste valorisation challenge competition designed and implemented *End of project*: Design and implementation of two pilot waste valorisation pilots including enhanced technical and financial capacity	Priority waste streams for assessment and valorisation will reduce the generation of hazardous waste.	*Data source:* Assessments, plans, and pilot interventions submitted to REMA, hazardous waste inventory database *Collection methods:* Records from storage facilities, landfills, and waste management operations, requests to agencies and private sector partners	Annually	REMA, National Monitoring and Evaluation and Safeguards Officer, Customs, Export Company	Assessments of priority waste streams, hazardous waste reduction and management plans, M&E reports, hazardous waste inventory database	*Risks:* Lack of commitment or capacity from private sector entities and/or the competent national authority *Assumptions:* Partners in key sectors are aware of the dangers associated with the mismanagement of chemicals and waste and are willing to participate in project activities and invest in the continuity of the process.
	Indicator 12 Number of existing waste treatment facilities with enhanced treatment and interim storage capacity	*Midterm*: Three facility-specific environmental performance assessments undertaken, which introduce process measures to reduce releases (uPOPs, heavy metals, POPs, Hg, and other hazardous substances) and improve environmental performance linked to up-stream support provided to waste generators through Output 2.1 and 2.2.1 to ensure waste is minimized and properly segregated Three waste treatment assessments for priority waste streams conducted to identify interim storage needs,	Environmental performance assessments will introduce process measures to reduce releases (uPOPs, heavy metals, POPs, Hg, and other hazardous substances) and improve environmental performance linked to up-stream support provided to	*Data sources:* Waste management operators, potential investors, relevant national agencies *Collection methods:* Closely collaborate with potential investors (e.g. FONERWA, banks), existing private sector waste management operators, REMA, and others to collect data and assessments; hazardous waste inventory database.	Annually		Environmental performance assessments, hazard waste storage upgrade plans, pilot project plans, hazardous waste inventory database	Risks: Lack of commitment or capacity from private sector entities and/or the competent national authority *Assumptions:* Potential investors, existing private sector waste management operators, and others willing to collaborate to facilitate investments in the waste management sector

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequen-cy	Responsible for data collection	Means of verification	Risks/ Assumptions
		safekeeping measures required, and locally suitable disposal/treatment solutions for hazardous waste streams (building on the waste inventory (Output 2.1) Recommendations for required capacity and type of interim storage of hazardous wastes developed *End of project*: Two pilot projects to test locally suitable disposal/treatment solutions for hazardous waste streams implemented and assessed for viability Two existing waste treatment facilities' environmental performance is enhanced and national treatment capacity for hazardous waste (volume and diversification) is increased through the introduction of new or improved locally suitable disposal/treatment solutions (in coordination with the development of an enabling regulatory environment and incentives (Component 1) and awareness raising of waste generators to ensure an increase in the amount of properly collected and treated wastes (Component 4)) Potential investors, existing private sector waste management operators, and others collaborating to facilitate investments in the waste management sector and the economic viability of the hazardous waste management sector is increased One existing hazardous waste interim storage facility and related system is upgraded to international standards	waste generators to ensure waste is minimized and properly segregated					

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
		and can accommodate the necessary hazardous waste streams						
Project Outcome 6 Improved awareness of waste generators on how to introduce alternatives, cleaner and safer processes and better practices.	***Indicator 13*** Number of persons awareness raised about the sound management of POPs and Hg and related wastes	*Midterm*: Awareness raising plan about the sound management of POPs and Hg and related wastes drafted and endorsed Awareness raised of 3,750 people (2,000 female and 1,750 male) on the sound management of POPs and Hg and related wastes through tailored training and awareness raising activities *End of project*: Awareness raised of 7,500 people (4,000 female and 3,500 male) on the sound management of POPs and Hg and related wastes through tailored training and awareness raising activities	The awareness raising plan will focus on hospital staff, health workers, and pharmacies; private sector entities; customs, private sector, enforcement entities, ministries, and others; and the general public.	*Data source:* Surveys targeted at key audiences *Collection methods:* The project will identify and involve NGOs/CSOs involved in carrying out awareness raising activities on the safe use of chemicals or other relevant environmental or health-related issues to support implementation of the awareness raising plan.	Annually	Project Manager, National Monitoring and Evaluation and Safeguards Officer, National Gender Expert, National Communications and Stakeholder Engagement Consultant	Survey results, questionnaires and interviews with select target audiences	*Risks:* Key audiences are not properly identified and the awareness raising activities do not clearly communicate the importance of safer, cleaner practices. *Assumptions:* Awareness raising activities are designed to effectively communicate information on the sound management of POPs and Hg and related wastes and people are motivated to act on the new understanding.
Project Outcome 7 Project results sustained and replicated	***Indicator 14*** Number of knowledge management documents that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels	*Midterm*: Two documents that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels published and shared *End of project*: Four documents that capture project results, lessons-learned, and best practices published and shared at national, regional and global levels published and shared	Development of documents/ publications that reflect best practices and technologies in chemicals and waste management. Mapping the project's areas of intervention as well as risk areas to raise awareness Planning and decision-making regarding chemicals and (hazardous) wastes is supported	*Data sources:* Document review and consultations with stakeholders. *Collection methods:* Finalized documents/publication from [agencies]	Annually	Project Manager, National Monitoring and Evaluation and Safeguards Officer, National Gender Expert, National Communications and Stakeholder Engagement Consultant	Documents/ finalized, published, Lessons learned report Actions implemented in coordination with the REMA	*Risks*: Sensitive information does not allow for a proper documentation process. *Assumptions*: The contracted consultant/ expert is able to write the publications without having to incorporate sensitive data and information. The project partners are open about the challenges and successes of the project, as well as lessons learned.
	Indicator 15 Required UNDP/GEF	*Midterm*: UNDP GEF M&E requirements were met and adaptive management was	The project foresees undertaking an ESIA and developing and	*Data sources:* Consultations with resource persons and review of the baseline	Annually	Project Manager, National Monitoring and Evaluation and	ESIA, ESMP, SEP, GAP, quarterly, half-yearly and	*Risks:* Lack of proper planning or duplication

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[13]	Frequency	Responsible for data collection	Means of verification	Risks/ Assumptions
	M&E and adaptive management processes have been applied	applied in response to the PIRs and the mid-term evaluation and final evaluation was planned in a timely manner *End of project*: UNDP GEF M&E requirements were met and adaptive management was applied in response to the needs and findings of the mid-term evaluation. The final evaluation was conducted in a timely manner and the final recommendations were taken into account. A Gender Action Plan to mainstream gender throughout project activities was implemented. Lessons from project implementation are being developed and finalized before the operational closure of the project.	implementing an ESMP, and implementing the SEP and GAP prepared under the PPG. These documents will enable monitoring and reporting on the progress of the project.	situation; Consultations with stakeholders *Collection methods:* Communication Plan, Stakeholder Engagement Plan, Awareness Raising Activity Reports and Stakeholder Engagement reported against the figures presented (Number of project beneficiaries and number of people reached).		Safeguards Officer, National Gender Expert, National Communications and Stakeholder Engagement Consultant	annual activity reports, report of the missions carried out during the implementation of the project, l Lessons learned by the project, reports on awareness-raising activities and stakeholder engagement (Number of project beneficiaries and, attendance record of awareness-raising meetings/ workshops, etc).	of activities, lack of transparency *Assumptions:* The project team is able to develop appropriate planning and scheduling for activities related to project implementation to disseminate the project's achievements and ensure the publication and archiving of technical and financial documents.

Annex 4: UNDP Social and Environmental Screening Procedure (SESP)

SOCIAL AND ENVIRONMENTAL SCREENING TEMPLATE (2021 SESP TEMPLATE, VERSION 1)

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document at the design stage. Note: this template will be converted into an online tool. The online version will guide users through the process and will embed relevant guidance.

Project Information

Project Information	
1. Project Title	Supporting a Green Economy - Decoupling Hazardous Waste Generation from Economic Growth in Rwanda
2. Project Number (i.e. Atlas project ID, PIMS+)	Atlas Project ID: 00126667; UNDP-GEF PIMS: 6482
3. Location (Global/Region/Country)	Rwanda
4. Project stage (Design or Implementation)	Design (ProDoc stage)
5. Date	05/03/2021

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the project mainstreams the human rights-based approach
The project will benefit population groups who are exposed to hazardous chemical substances in their work environment or due to their occupations, population groups living and/or working near contaminated sites, vulnerable groups such as informal workers engaged in the application of pesticides or recycling/waste management, and population groups which are particularly exposed, through the following approach: • *Assess and understand the degree of relevance to the project of each vulnerable population group and ensure there are no groups which remain unidentified.* • *Support meaningful participation and inclusion of all stakeholders, in particular marginalized individuals and groups, in processes that may impact them, including design, implementation and monitoring of the project through capacity building and the creation of an enabling environment for participation.* • *Undertake a human-centered design approach to co-create better solutions with these population groups and increase their inclusion in decision-making processes that may impact them.* • *Collaborate with civil society on generating and disseminating information, as well as raising awareness on POPs, mercury and other hazardous chemicals.* • *Raise awareness on the global impact of our individual actions and disseminate information on safer alternatives which are being promoted/introduced with government support, as well as ways on how to dispose of waste and waste products containing hazardous chemicals.*

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment
A detailed Gender Analysis has been conducted to identify potential gender-responsive measures that can be introduced during project implementation in order to address gender gaps, promote gender equality and improve women's participation and decision-making (women empowerment) with respect to the sound management of chemicals and wastes. This was followed by development of a Gender Action Plan to mainstream gender throughout the project's activities, incorporate measurable indicators related to gender equality and women's empowerment and collect gender-disaggregated data and gender statistics wherever possible. The Plan also includes the collection of sex-disaggregated data and gender statistics working closely with gender experts, organizations and/or institutions that have expertise on gender issues. The plan follows the UNDP "Guide into Mainstreaming Gender into UNDP Chemicals & Waste Projects". Boosted with the implementation of a communication strategy and a gender action plan, the project anticipates reducing the direct exposure to hazardous chemicals of 300,000 beneficiaries (150,000 female + 150,000 male).
Briefly describe in the space below how the project mainstreams sustainability and resilience
The project primarily aims to minimize the risk posed by POPs, mercury and other hazardous chemicals to human health and the environment and to promote compliance with the Stockholm and Minamata Conventions through: • *Establishment of an enabling policy/regulatory framework to create (financial) incentives for the sound management of chemicals, the introduction of safer alternatives, minimization of hazardous waste generation and its environmentally safe treatment.* • *Minimizing hazardous waste generation through the introduction of safer alternatives and cleaner (production) processes in selected industries and priority sectors.* • *Improving private sector and institutional capacity for the sound environmental treatment and disposal of hazardous waste streams.* • *Raising awareness to support behavioral change, capturing and disseminating experiences, lessons-learned and environmental best practices.*
Briefly describe in the space below how the project strengthens accountability to stakeholders
The project will: • *Provide meaningful means for local communities and affected populations to raise concerns and/or grievances including a redress processes for local communities when activities may adversely impact them.* • *Support stakeholder participation in preparation of legislations, strategies and guidelines by solicitating feedback from various relevant sectors including the private sector and local community. This is highlighted in the project's Stakeholder Engagement Plan.* *In addition, UNDP's Accountability Mechanism, which includes the Social and Environmental Compliance Review (SECU) and Stakeholder Response Mechanism (SRM) will also serve as an additional layer of grievance redress and empower stakeholders to push for accountability.*

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5below before proceeding to Question 5*	**QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High**

Risk Description (broken down by event, cause, impact)	*Impact and Likelihood (1-5)*	*Significance (Low, Moderate Substantial, High)*	*Comments (optional)*	*Description of assessment and management measures for risks rated as Moderate, Substantial or High*
Risk 1: Duty bearers, such as customs officials, enforcement officers and other government officials, may not have the capacity to meet their obligations in the Project Related to: • Human Rights; P.2 • Accountability; P.14	I=3 L=3	Moderate	Customs Service Department officers and other government officials might not be adequately trained on their duties and responsibilities and may not be able to perform their functions properly and misinterpret new legislation implementing them improperly.	The project was designed to provide targeted training to customs officials and will address the needs of the participants (Activity 1.6.1) and training for various other stakeholders engaged who will be engaged in the various components. Training needs assessment will be undertaken (guided by the SES, as noted in the ProDoc), and a post-training assessment will be conducted to ensure that the information has been delivered to the participants as required and will have a meaningful impact on their job performance. In line with the Environmental and Social Management Framework (ESMF) that has been prepared for the Project, additional capacity building will be done as needed per the ESMPs.
Risk 2: Risk to enterprise viability and worker employment, in the course of the transition to alternatives to new POPs and mercury-containing products and during the implementation of the Polluter-Pays-Principle system Related to: • Human Rights; P.5 • Accountability; P.13, P.14 • Standard 7: Labour and Working Conditions; 7.1, 7.5	I = 4 L = 3	Substantial	Some enterprises, especially those with limited resources, may not be able to provide alternatives to banned new POPs and mercury-containing products or abide by standards in line with the Polluter-Pays-Principle system.	As in the ESMF prepared for the Project (Annex 8 of the ProDoc), upstream activities such as ban on the import of new POPs and mercury-containing products (Activity 1.2.1) or applying a Polluter-Pays-Principle System (Activity 1.4.1) that may have environmental or social implications will each undergo a participatory Strategic Environmental and Social Assessment (SESA). This will ensure that economic impacts on small and medium sized enterprises and their workers are taken into consideration in the decision-making process while developing the legislative tools. In addition, the Stakeholder Engagement Plan (Annex 7 of the ProDoc) will ensure participation of affected stakeholders during these activities.

Risk 3: Marginalized population relying on their income as informal waste-pickers, who are predominantly women, will have found their waste resources reduced Related to: • Human Rights; P.5 • Gender Equality and Women Empowerment; P.9 • Accountability; P.13, P.14 • Standard 5: Displacement and Resettlement; 5.2	I = 3 L =3	Moderate	The project will promote more organized recycling of waste through the waste valorization pilots and this may result in certain cases in shifts from informal to formal waste management activities. There is thus a risk that marginalized population groups, predominantly women, relying on their income as waste-pickers, will have found their waste resources reduced.	In line with the ESMF, an Environmental and Social Impact Assessment (ESIA) will be carried out and an Environmental and Social Management Plan (ESMP) developed at prior to implementation ofthe PET waste valorization pilot (Activity 5.1.1), while additional waste valorization pilots will be subject to a SESP to determine the level of assessment/management required. The resulting ESMP will include a Livelihoods Restoration Plan to address this risk if it was found to be significant.
Risk 4: Affected stakeholders and marginalized groups may have grievances regarding selected contaminated site for remediation and companies involved in waste valorization or hazardous waste treatment Related to: • Accountability; P.13	I = 4 L = 2	Moderate	Some communities living near contaminated sites, existing disposal/treatment sites and industries treating hazardous waste may have concerns about the project.	As mentioned in the ESMF, the remediation activity for PCB contaminated site (Activity 4.2.1) and waste valorization pilots (Activity 5.1.1) will undergo an ESIA each to assess the various potential impacts on stakeholders surrounding communities who will be closely involved and engaged through implementation of the ESMP. The plan will ensure effective engagement between various stakeholders by creating and disseminating information, fostering cooperation, and enhancing capacities. Stakeholders identified include representatives from central and local government, private sector, NGOs and civil society, academia and research institutions, vulnerable population groups and the general public. This will be done in line with the Stakeholder Engagement Plan that has been prepared for the Project. The project will also put in place a project-level and/or site-level Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them.

Risk 5: The project could reproduce existing discriminations against women through excluding them from decision-making on project activities, benefiting from project outputs and capacity building initiatives. Related to: • Gender Equality and Women Empowerment; P.10	I = 3 L = 3	Moderate	The Gender Analysis conducted found that there is an access gap in investments and entrepreneurship skills between men and women for medical waste disposal and incineration business. It also found that even though formalization of waste management increased community safety and stopped informal waste pickers, formal waste collection efforts excluded women from benefits that include wages and financial gain from the reuse of plastic containers and textiles.	A *Gender Action Plan* (Annex 9 of the ProDoc) has been prepared to mitigate the identified risk and propose measures that ensure that women are represented in decision-making on project activities and are included in capacity building activities. Proposed strategies to mainstream gender in hazardous waste management include an enabling policy environment, awareness raising and education, gender equity in the access to opportunities, and data collection and research. This will be further assessed in the SESAs and ESIAs/ESMPs that will be undertaken during project implementation as described in the ESMF.
Risk 6: Accidental release of PCBs, POPs pesticides, HHPs or mercury into the environment due to improper handling, storage, transport and treatment/disposal of these chemicals and exposing the workers as well as the local communities living nearby. Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.2, 3.5, 3.6 • Standard 7: Labour and Working Conditions; 7.6 • Standard 8: Pollution Prevention and Resource Efficiency; 8.1, 8.2	I = 4 L = 3	Substantial	Accidental releases of chemicals into the environment would have a severe impact but are unlikely to occur in high amounts.	In line with the ESMF that has been prepared for the project, an ESIA will be conducted for identified pilot demonstrations and disposal activities (handling and disposal of Hg-containing products (Activity 3.1.2), PBDE-containing plastics (Activity 3.1.3) and PCB-containing equipment and oil (Activity 4.1.1), remediation of the PCB-contaminated site (Activity 4.2.1) and handling and disposal of stockpiled obsolete POPs and non-POPs pesticides (Activity 4.3.1)) and will identify environmentally sensitive receptors that may be affected by accidental releases such that mitigation measures will be developed and included in the ESMP through a Spill Prevention and Management Plan. This plan will describe how the project will handle, transport and store hazardous material in accordance with IFC Health and Safety Guidelines.

Risk 7: Contamination or damage to sites of cultural heritage, biodiversity or socioeconomic value to the local community from pilot demonstrations Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.1, 3.2, 3.5, 3.6, 3.7 • Standard 4: Cultural Heritage; 4.1, 4.2 • Standard 5: Resettlement and Displacement; 5.1, 5.2 • Standard 6: Indigenous Peoples; 6.1, 6.2, 6.3, 6.6 • Standard 8: Pollution Prevention and Resources Efficiency; 8.1, 8.2, 8.3, 8.4, 8.6	I = 3 L = 3	Moderate	The impact and likelihood of this risk can be better determined once the pilot sites and activities have been selected.	Pilot demonstrations that have not yet been selected (pilot interventions to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production and safer alternatives (Activity 3.1.1), waste valorization pilots (Activity 5.1.1) and demonstration pilots to enhance national hazardous waste treatment capacity, environmental performance (Activity 5.2.1) and upgrade/expansion of existing interim storage facility infrastructure (Activity 5.3.1)) will incorporate SES criteria during the selection process including assessment of sites of these activities. A list of exclusion criteria will be prepared to eliminate high risk sites. These will include sites with high cultural heritage value, inhabited sites, sites with high biodiversity values (such as protected areas) or sites used by indigenous peoples. Once defined, the pilots will undergo a SESP to determine the level of assessment/management needed.
Risk 8: Adopted legislation, guidelines, strategies and plans may lead to practices that could result in accidental release of PCBs, POPs pesticides, HHPs or mercury into the environment due to improper handling, storage, transport and treatment/disposal of these chemicals and exposing the workers as well as the local communities living nearby. Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.7, 1.14	I = 4 L = 3	Substantial	This risk is not a direct result of project activities but may result from legal and policy instruments proposed by the project.	In line with the ESMF, a SESA will be prepared during review of the PCB Law (Activity 1.1.1), drafting of regulatory texts and guidelines for new POPs and Hg and their hazardous waste streams (Activities 1.2.1 and 1.3.1), developing the EPR framework (Activity 1.5.1) and the national strategies for Hg (Activity 3.1.2). The SESA will consider the risk of accidental release of chemicals and worker exposure that may result from implementing the legislation and strategies at the national level and incorporate measures to mitigation them.

• Standard 3: Community Health, Safety and Security; 3.2, 3.5 • Standard 7: Labour and Working Conditions; 7.6 • Standard 8: Pollution Prevention and Resource Efficiency; 8.1, 8.2				
Risk 9: Disruption to wetland where PCB-contaminated site will be remediated Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.4, 1.6, 1.11	I = 4 L = 3	Substantial	Remediation of PCB-contaminated site will test bioremediation measures that may introduce alien invasive species to the wetland if the species is not properly selected.	Activity 4.2.1 will undergo a site-specific ESIA and an ESMP will be developed to ensure that this risk is avoided or mitigated.
Risk 10: Flooding of interim storage and waste treatment/disposal facilities for hazardous waste used during the demonstration activities Related to: • Standard 2: Climate Change and Disaster Risks; 2.1, 2.2 • Standard 3: Community Health, Safety and Security; 3.3	I = 3 L = 2	Moderate	Sensitivity and sustainability of the project may be affected by the occurrence of natural disasters due to landslides, erosion, floods or extreme weather conditions or greater vulnerability thereto.	As part of the selection process for the demonstration pilots, considerations will be made that waste treatment (Activity 5.2.1) and interim storage facilities (Activity 5.3.1) to be used are not located in areas classified as high risk due to landslides, erosion, floods or extreme weather conditions. Once pilot demonstrations are selected, a SESP will be undertaken to determine the extent of the assessment/management needed.
Risk 11: The project's demonstrative interventions for the elimination of PCBs may result in the increase of (or no reduction of) CO2 emissions or other air emissions due to current technologies for incineration treatment/destruction of PCBs. Related to: • Standard 2: Climate Change and Disaster Risks; 2.4	I = 3 L = 3	Moderate	It is estimated that 122 tons of PCB oil will need to be disposed of as part of the project activities. The disposal method will be through co-incineration (of PCB under 1,000 ppm) at a local private enterprise (cement kiln) as has been done in the past under a previous GEF project.	As part of the ESIA that will be prepared for the project, technologies that be used for PCB treatment/elimination (Activity 4.1.1) will be evaluated in terms of their CO2 emissions and potential chemical release, options compared and measures proposed to minimize CO2 emissions and chemicals produced such that the alternative technologies must ensure compliance with "Best Available Techniques" (BAT) and "Best Environmental Practices" (BEP) practices as per the Stockholm and Basel Conventions. This will build on the burning test of PCB contaminated oil undertaken at CIMERWA in 2017 as part of the GEF-4 PCB project.

• Standard 3: Community Health, Safety and Security; 3.2			Otherwise, it will be exported.	
Risk 12: As the project will lead to employment opportunities in hazardous conditions, risk exists of child labor, which is prevalent in the target country, as well as other practices in contravention to principles and standards of ILO fundamental conventions. Related to: • Standard 7: Labour and Working Conditions; 7.1, 7.2, 7.3, 7.4, and 7.5	I=4 L=2	Moderate	Given the fact that the project will work with licensed, legitimate and reputable international and national hazardous waste operators, and activities will take place at specific sites with the control of Rwandan authorities, there is very little chance that children could be exposed to the Project's activities and/or that child labor will be used for project activities, especially in regard to handling of chemicals.	During selection of the enterprises to be engaged in the demonstrations and disposal activities, and as part of the private sector risk assessment that will be undertaken, the project will ensure that an Occupational Health and Safety Plan; Labour Assessment and Management Plan; and/or any other plan required for SES compliance is in place prior to commencement of the works. The interim storage (Activity 5.3.1) and waste treatment facilities (Activity 5.2.1) that will be used by the project will be subject to a visit to ensure compliance with international best practice.
Risk 13: The project may pose risks to occupational health and safety due to exposure to harmful chemicals during site remediation, transport and interim storage of chemicals and their treatment/final disposal. Workers may also be exposed to risk of accidents and physical injuries on the job. Related to: • Standard 7: Labour and Working Conditions; 7.6	I = 4 L = 2	Moderate	Workers could be exposed to chemicals and accident risks during implementation of the pilot projects and disposal activities but the probability that this exposure will be long term is unlikely.	As mentioned earlier, the ESIAs that will be undertaken for each selected pilot, will take into consideration occupational health and safety measures to ensure they are in line with best practices such that adequate measures are included in the pursuant ESMPs. Pilots that have not been selected will undergo a SESP to determine the level of assessment/management During selection of the enterprises to be engaged in the demonstrations and disposal activities, and as part of the private sector risk assessment that will be undertaken, the project will ensure that an Occupational Health and Safety Plan; Labour Assessment and Management Plan; and/or any other plan required for SES compliance is in place prior to commencement of the works. This includes a visit to interim storage (Activity 5.3.1) and waste treatment (Activity 5.2.1) facilities that will be used by the project.

	QUESTION 4: What is the overall project risk categorization?				
	Low Risk	☐			
	Moderate Risk	☐			
	Substantial Risk	X	Thirteen potential risks have been identified for this project, nine of which are assessed as MODERATE and four as SUBSTANTIAL. As a result, this project is rated overall as a SUBSTANTIAL Risk project. During the PPG, an ESMF, Stakeholder Engagement Plan and Gender Action Plan have been prepared to meet SES requirements. During project implementation, several SESAs addressing potential environmental and socioeconomic impacts of upstream activities will be performed, and ESIAs along with ESMPs that will include Occupational Health and Safety Plans, Spill Prevention Plans, and any other plans required for SES compliance including potentially a Livelihoods Restoration Plan, will be developed and put in place prior to commencement of the pilot demonstrations and disposal activities. Pilots that have not yet been identified will undergo selection criteria that include SES and once selected, a SESP to determine the level of assessment/management needed. In addition, all private enterprises that will be engaged in the project will undergo a private sector risk assessment in line with UNDP SES requirements.		
	High Risk	☐			
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)				
	Question only required for Moderate, Substantial and High Risk projects				
	Is assessment required? (check if "yes")	X			*Status? (completed, planned)*
	if yes, indicate overall type and status		X	Targeted assessment(s)	Completed during PPG:

					gender analysis, stakeholder analysis
			X	ESIA (Environmental and Social Impact Assessment)	Planned (for during implementation)
			X	SESA (Strategic Environmental and Social Assessment)	Planned (for during implementation)
	Are management plans required? (check if "yes)	X			
	If yes, indicate overall type		X	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	Completed during PPG: Gender Action Plan, Stakeholder Engagement Plan
			X	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	Planned (for during implementation)
			X	ESMF (Environmental and Social Management Framework)	Completed during PPG
	Based on identified <u>risks</u>, which Principles/Project-level Standards triggered?		**Comments (not required)**		
	Overarching Principle: Leave No One Behind				
	Human Rights	X			
	Gender Equality and Women's Empowerment	X			
	Accountability	X			
	1. Biodiversity Conservation and Sustainable Natural Resource Management	X			
	2. Climate Change and Disaster Risks	X			
	3. Community Health, Safety and Security	X			
	4. Cultural Heritage	X			

	5. Displacement and Resettlement	X	
	6. Indigenous Peoples	X	
	7. Labour and Working Conditions	X	
	8. Pollution Prevention and Resource Efficiency	X	

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	*Date*	*Description*
QA Assessor		UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks	
INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the SES toolkit for further guidance on addressing screening questions.	
Overarching Principle: Leave No One Behind **Human Rights**	**Answer (Yes/No)**
P.1 Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	*No*
P.2 Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	*Yes*
P.3 Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	*No*
Would the project potentially involve or lead to:	
P.4 adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
P.5 inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? [14]	Yes
P.6 restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	No
P.7 exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gender Equality and Women's Empowerment	
P.8 Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
Would the project potentially involve or lead to:	
P.9 adverse impacts on gender equality and/or the situation of women and girls?	Yes
P.10 reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
P.11 limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
P.12 exacerbation of risks of gender-based violence?	No

[14] Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

	For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	
Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below		
Accountability		
Would the project potentially involve or lead to:		
P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	Yes
P.14	grievances or objections from potentially affected stakeholders?	Yes
P.15	risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
Would the project potentially involve or lead to:		
1.1	adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	Yes
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	Yes
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	Yes
1.5	exacerbation of illegal wildlife trade?	No
1.6	introduction of invasive alien species?	Yes
1.7	adverse impacts on soils?	Yes
1.8	harvesting of natural forests, plantation development, or reforestation?	No
1.9	significant agricultural production?	No
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11	significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	Yes
1.12	handling or utilization of genetically modified organisms/living modified organisms?[15]	No

[15] See the Convention on Biological Diversity and its Cartagena Protocol on Biosafety.

1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)[16]	No
1.14	adverse transboundary or global environmental concerns?	Yes
Standard 2: Climate Change and Disaster Risks		
Would the project potentially involve or lead to:		
2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	Yes
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? *For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes*	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	No
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	Yes
Standard 3: Community Health, Safety and Security		
Would the project potentially involve or lead to:		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	Yes
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	Yes
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	Yes
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	Yes
3.7	influx of project workers to project areas?	Yes
3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Standard 4: Cultural Heritage		
Would the project potentially involve or lead to:		

[16] See the Convention on Biological Diversity and its Nagoya Protocol on access and benefit sharing from use of genetic resources.

4.1	activities adjacent to or within a Cultural Heritage site?	Yes
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	Yes
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
Would the project potentially involve or lead to:		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	Yes
5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Yes
5.3	risk of forced evictions?[17]	No
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
Would the project potentially involve or lead to:		
6.1	areas where indigenous peoples are present (including project area of influence)?	Yes
6.2	activities located on lands and territories claimed by indigenous peoples?	Yes
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to screening question 6.3 is "yes", then the potential risk impacts are considered significant and the project would be categorized as either Substantial Risk or High Risk*	Yes
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No

[17] Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? *Consider, and where appropriate ensure, consistency with the answers under Standard 5 above*	Yes
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	No
6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? *Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.*	No
Standard 7: Labour and Working Conditions		
Would the project potentially involve or lead to: (note: applies to project and contractor workers)		
7.1	working conditions that do not meet national labour laws and international commitments?	Yes
7.2	working conditions that may deny freedom of association and collective bargaining?	Yes
7.3	use of child labour?	Yes
7.4	use of forced labour?	Yes
7.5	discriminatory working conditions and/or lack of equal opportunity?	Yes
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	Yes
Standard 8: Pollution Prevention and Resource Efficiency		
Would the project potentially involve or lead to:		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Yes
8.2	the generation of waste (both hazardous and non-hazardous)?	Yes
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	Yes
8.4	the use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention*	Yes
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	Yes

Annex 5: UNDP Risk Register

#	Description	Risk Category	Impact & Likelihood	Risk Treatment / Management Measures	Risk Owner
1	Difficulties in obtaining the data/ information required to develop a detailed Hazardous Waste Inventory and populate the web-based hazardous waste monitoring tool	Operational	L = 2 I = 4 Moderate	The project will ensure during its implementation to fully engage all stakeholders and to raise adequate awareness on the importance of the inventory, the monitoring of waste generation rates as well as the ultimate objectives of the inventory to keep workers, the population and the environment safe.	Project team
2	Authorities, civil servants, private sector, and other stakeholders may lack the knowledge and skills necessary for the environmentally sound management of chemicals	Operational	L = 2 I = 3 Moderate	An awareness raising plan and training/capacity building plan will be developed and implemented for national authorities, civil servants, private sector, and other stakeholders who are working on aspects related to chemicals and waste management, to ensure that they obtain the necessary knowledge, expertise, and experience to perform their tasks properly.	Project team
3	National waste treatment facilities in Rwanda are unable to eliminate priority hazardous waste streams/POPs/Hg-containing wastes in an environmentally-sound manner, or they do not have sufficient capacity to do so	Operational	L = 2 I = 2 Low	The project will assess installed and operational capacity/technologies in Rwanda and determine if technology changes can be made to existing installations to treat/dispose of hazardous waste streams/POPs/Hg and where not possible the project will export POPs/Hg-containing wastes for sound disposal/treatment.	Project team
4	Industries and priority economic sectors are reluctant to replace chemicals of concern/or products containing them with alternative substances	Financial/ Operational	L = 2 I = 3 Moderate	The project will compile and share technical information on feasible substitutes for industrial POPs/Hg-containing products/chemicals of concern (including agro-chemicals) and their application. The project, in partnership with CPCIC/NIRDA, will conduct facility/entity assessments and subsequently train industries and private sector entities on the assessment/selection and introduction of alternatives into existing processes, the optimization of production processes (cleaner production), and familiarize them with the benefits of safer alternatives and cleaner production processes.	Project team
5	Environmental, health, and trade authorities do not actively participate in the development and implementation of project activities	Operational	L = 2 I = 3 Moderate	A project team as well as a project steering committee will be established and will be made up of representatives from all involved authorities and main stakeholders, in order to regularly share results of the project and to plan for upcoming activities. Meetings will be held with executives from different government organizations to communicate the relevance of their participation in the project. Project partners will benefit from the awareness raising and training/capacity building programmes, which will further increase their project participation, engagement, ownership, and commitment.	Project team
6	Private sector partners are reluctant to invest in the management, collection, treatment/disposal of less viable (more complicated) hazardous waste streams	Financial/ Operational	L = 2 I = 4 Moderate	The project will support the drafting/revision and approval of PCB/POPs/Hg laws/regulations; regulations/guidelines on the handling/treatment of priority hazardous waste streams; industry incentives to generate less (hazardous) waste (e.g. PPP) and develop an EPR framework. These regulatory measures will help put in place economic incentives for waste disposal/treatment facilities to enter into the management/disposal/treatment of additional hazardous waste streams. Furthermore, the project will also collaborate with FONERWA, which is interested in providing seed funding to support greening of the private sector. The project and FONERWA, in partnership with CPCIC/NIRDA will provide training on how to develop the necessary documentation in order to be eligible for FONERWA support.	Project team
7	Travel to/from Rwanda is limited due to COVID-19 pandemic and hinders the implementation	Operational	L = 4 I = 1	If travel restrictions (international, regional and/or national) remain in place due to the ongoing COVID-19 pandemic, remote support will be provided by: (i) conducting training and capacity	Project team

	of project activities (e.g. training, meetings, facility visits, assessments). (COVID-19 related risk[18])		Moderate risk	building activities virtually; (ii) making training modules available via online training options, which will facilitate participation as training will not be limited in time or location; (iii) facilitating online exchanges (using Zoom, Teams, Skype, WhatsApp, email, phone, etc.); (iv) providing face-to-face training and capacity building activities through collaboration between international, regional, and national experts; and (iv) conducting evaluations in partnership with local stakeholders via videos or drones (e.g. Zoom, Teams, Skype, WhatsApp, email, phone, etc.). If face-to-face project activities (e.g. trainings, meetings, field visits) will/can take place, they will take into account international and national COVID-19 guidelines (including but not limited to: social distancing measures, wearing of masks, hand hygiene stations, open-air sites, and before and after deep cleaning).	
8	National project partners might be working at a low(er) capacity, resulting in reduced attention/dedication to the project's implementation resulting in a slower implementation rate (COVID-19 related risk)	Operational	L = 4 I = 2 Moderate Risk	In order to increase the capacity of national project partners/experts, the project can provide support in the form of providing fast mobile/data allocations, and in certain cases (if deemed critical to project success) enter into agreements to provide (temporarily) computer/conferencing equipment or purchase such equipment that would facilitate virtual work for key stakeholders and personnel. However it is assumed that by the time the project starts implementation a lot of these measures will have already been put in place by national partners themselves.	Project team
9	Reduced markets for recyclables, at national, regional and international level making recycling systems less viable and sustainable. (COVID-19 related risk)	Operational	L = 2 I = 4 Moderate Risk	Due to COVID-19 many recycling markets came to a halt or significantly reduced because of safety issues related to the segregation of recyclables, closed borders, limited affordable transport, slow processing of customs, etc. This is an important risk, as recycling markets only operate and function when there is a buyer's market that offers a price that makes it viable to collect, process (e.g. shred, compact), transport, and export recyclables. Some recyclables, such as printed circuit boards, are exported from Rwanda for processing. In other cases, there is an opportunity to import certain waste to Rwanda for recycling or environmentally sound disposal (such as PET plastic and PBDE-containing plastic, respectively). To mitigate this risk, the project will assess national and regional opportunities for private sector collaboration on recycling and disposal approaches for priority waste streams.	
10	A likely reduction in the availability of (co-)financing for waste/chemicals related investments (COVID-19 related risk)	Operational	L = 4 I = 4 High Risk	Due to the economic impact of COVID-19, the government might redirect investments from chemicals and waste related infrastructure/systems to reviving the economy, and economic sectors (e.g. tourism, agriculture, industry) might be less likely to want to invest in going green, shipping companies might increase their transport fees (impacting the viability of recycling schemes), etc.	Project team

[18] At the start of the project's implementation, in close coordination with the national partners, including, if already on-board, the national project team, REMA and UNDP will do a quick risk assessment to assess the impact of COVID-19 on the project and how the pandemic will impact project implementation. Subsequentely recommendations will be proposed on how to mitigate those risks or reduce their impact.

				This is a risk that is challenging for the project to address as most economic activities have been severely impacted by the COVID-19 pandemic and will require time to rebound. It is expected that government and private sector companies, when they have the means, will use stimulus packages for particular (if not all) economic sectors to keep them operational and allow employees to earn a salary. This might mean that the government and private sector partners are less likely to invest in waste and chemicals related priorities, greener practices, including infrastructure, and that co-financing allocations (especially investment mobilized) might be lower than committed. To mitigate the impact of this risk, the project will design and develop economic instruments, such as a Polluter-Pays-Principle system, best performer awards programme, EPR framework, and other incentives; design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives; and design and undertake demonstration pilots to valorise priority waste streams. Such instruments and initiatives are intended to stimulate private sector involvement, and thus job creation, in the waste and recycling sector. It is expected that the government and private sector partners will be supportive of such incentives, which provide sustainable financial means to operate waste and recycling systems and create and sustain jobs in the process.	
11	**SESP Risk 1:** Duty bearers, such as customs officials, enforcement officers and other government officials, may not have the capacity to meet their obligations in the Project Related to: • Human Rights; P.2 • Accountability; P.14	Social and Environmental	I = 3 L = 3 Moderate	Customs Service Department officers and other government officials might not be adequately trained on their duties and responsibilities and may not be able to perform their functions properly and misinterpret new legislation implementing them improperly. The project was designed to provide targeted training to customs officials and will address the needs of the participants (Activity 1.6.1) and training for various other stakeholders engaged who will be engaged in the various components. Training needs assessment will be undertaken (guided by the SES, as noted in the ProDoc), and a post-training assessment will be conducted to ensure that the information has been delivered to the participants as required and will have a meaningful impact on their job performance. In line with the Environmental and Social Management Framework (ESMF) that has been prepared for the Project, additional capacity building will be done as needed per the ESMPs.	Project team
12	**Risk 2:** Risk to enterprise viability and worker employment, in the course of the transition to alternatives to new POPs and mercury-containing products and during the implementation of the Polluter-Pays-Principle system Related to: • Human Rights; P.5 • Accountability; P.13, P.14 • Standard 7: Labour and Working Conditions; 7.1, 7.5	Social and Environmental	I = 4 L = 3 Substantial	Some enterprises, especially those with limited resources, may not be able to provide alternatives to banned new POPs and Hg-containing products or abide by standards in line with the Polluter-Pays-Principle system. As in the ESMF prepared for the Project (Annex 8 of the ProDoc), upstream activities such as ban on the import of new POPs and mercury-containing products (Activity 1.2.1) or applying a Polluter-Pays-Principle System (Activity 1.4.1) that may have environmental or social implications will each undergo a participatory Strategic Environmental and Social Assessment (SESA). This will ensure that economic impacts on small and medium sized enterprises and their workers are taken into consideration in the decision-making process while developing the legislative tools. In addition, the Stakeholder Engagement Plan (Annex 7 of the ProDoc) will ensure participation of affected stakeholders during these activities.	Project team
13	**SESP Risk 3:** Marginalized population relying on their income as informal waste-pickers, who are	Social and Environmental	I = 3 P = 3	The project will promote more organized recycling of waste through the waste valorisation pilots and this may result in certain cases in shifts from informal to formal waste management	Project team

	predominantly women, will have found their waste resources reduced Related to: • Human Rights; P.5 • Gender Equality and Women Empowerment; P.9 • Accountability; P.13, P.14 • Standard 5: Displacement and Resettlement; 5.2		Moderate	activities. There is thus a risk that marginalized population groups, predominantly women, relying on their income as waste-pickers, will have found their waste resources reduced. In line with the ESMF, an Environmental and Social Impact Assessment (ESIA) will be carried out and an Environmental and Social Management Plan (ESMP) developed at prior to implementation of the PET waste valorization pilot (Activity 5.1.1), while additional waste valorization pilots will be subject to a SESP to determine the level of assessment/management required. The resulting ESMP will include a Livelihoods Restoration Plan to address this risk if it was found to be significant.	
14	**SESP Risk 4**: Affected stakeholders and marginalized groups may have grievances regarding selected contaminated site for remediation and companies involved in waste valorization or hazardous waste treatment Related to: • Accountability; P.13	Social and Environmental	I = 4 L = 2 Moderate	Some communities living near contaminated sites, existing disposal/treatment sites and industries treating hazardous waste may have concerns about the project. As mentioned in the ESMF, the remediation activity for PCB contaminated site (Activity 4.2.1) and waste valorization pilots (Activity 5.1.1) will undergo an ESIA each to assess the various potential impacts on stakeholders surrounding communities who will be closely involved and engaged through implementation of the ESMP. The plan will ensure effective engagement between various stakeholders by creating and disseminating information, fostering cooperation, and enhancing capacities. Stakeholders identified include representatives from central and local government, private sector, NGOs and civil society, academia and research institutions, vulnerable population groups and the general public. This will be done in line with the Stakeholder Engagement Plan that has been prepared for the Project. The project will also put in place a project-level Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them.	Project team
15	**SESP Risk 5**: The project could reproduce existing discriminations against women through excluding them from decision-making on project activities, benefiting from project outputs and capacity building initiatives. Related to: • Gender Equality and Women Empowerment; P.10	Social and Environmental	I = 3 L = 3 Moderate	The Gender Analysis conducted found that there is an access gap in investments and entrepreneurship skills between men and women for medical waste disposal and incineration business. It also found that even though formalization of waste management increased community safety and stopped informal waste pickers, formal waste collection efforts excluded women from benefits that include wages and financial gain from the reuse of plastic containers and textiles. A Gender Action Plan (Annex 9 of the ProDoc) has been prepared to mitigate the identified risk and propose measures that ensure that women are represented in decision-making on project activities and are included in capacity building activities. Proposed strategies to mainstream gender in hazardous waste management include an enabling policy environment, awareness raising and education, gender equity in the access to opportunities, and data collection and research. This will be further assessed in the SESAs and ESIAs/ESMPs that will be undertaken during project implementation as described in the ESMF.	Project team
16	**SESP Risk 6**: Accidental release of PCBs, POPs pesticides, HHPs or mercury into the environment due to improper handling, storage, transport and treatment/disposal of these chemicals and exposing the workers as well as the local communities living nearby. Related to:	Social and Environmental	I = 4 L = 3 Substantial	Accidental releases of chemicals into the environmental would have a severe impact but are unlikely to occur in high amounts. In line with the ESMF that has been prepared for the project, an ESIA will be conducted for identified pilot demonstrations and disposal activities (handling and disposal of Hg-containing products (Activity 3.1.2), PBDE-containing plastics (Activity 3.1.3) and PCB-containing equipment and oil (Activity 4.1.1), remediation of the PCB-contaminated site (Activity 4.2.1) and handling and disposal of stockpiled obsolete POPs and non-POPs pesticides (Activity 4.3.1)) and will	Project team

	• Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.2, 3.5 • Standard 7: Labour and Working Conditions; 7.6 • Standard 8: Pollution Prevention and Resource Efficiency; 8.1, 8.2			identify environmentally sensitive receptors that may be affected by accidental releases such that mitigation measures will be developed and included in the ESMP through a Spill Prevention and Management Plan. This plan will describe how the project will handle, transport and store hazardous material in accordance with IFC Health and Safety Guidelines.	
17	**SESP Risk 7:** Contamination or damage to sites of cultural heritage, biodiversity or socioeconomic value to the local community from pilot demonstrations Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.1, 3.2, 3.5, 3.6, 3.7 • Standard 4: Cultural Heritage; 4.1, 4.2 • Standard 5: Resettlement and Displacement; 5.1, 5.2 • Standard 6: Indigenous Peoples; 6.1, 6.2, 6.3, 6.6 • Standard 8: Pollution Prevention and Resources Efficiency; 8.1, 8.2, 8.3, 8.4, 8.6	Social and Environmental	I = 3 L = 3 Moderate	The impact and likelihood of this risk can be better determined once the pilot sites and activities have been selected. Pilot demonstrations that have not yet been selected (pilot interventions to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production and safer alternatives (Activity 3.1.1), waste valorization pilots (Activity 5.1.1) and demonstration pilots to enhance national hazardous waste treatment capacity, environmental performance (Activity 5.2.1) and upgrade/expansion of existing interim storage facility infrastructure (Activity 5.3.1)) will incorporate SES criteria during the selection process including assessment of sites of these activities. A list of exclusion criteria will be prepared to eliminate high risk sites. These will include sites with high cultural heritage value, inhabited sites, sites with high biodiversity values (such as protected areas) or sites used by indigenous peoples. Once defined, the pilots will undergo a SESP to determine the level of assessment/management needed.	Project[4] team
18	**SESP Risk 8**: Adopted legislation, guidelines, strategies and plans may lead to practices that could result in accidental release of PCBs, POPs pesticides, HHPs or mercury into the environment due to improper handling, storage, transport and treatment/disposal of these chemicals and exposing the workers as well as the local communities living nearby. Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.7, 1.14 • Standard 3: Community Health, Safety and Security; 3.2, 3.5 • Standard 7: Labour and Working Conditions; 7.6 • Standard 8: Pollution Prevention and Resource Efficiency; 8.1, 8.2	Social and Environmental	I = 4 L = 3 Substantial	This risk is not a direct result of project activities but may result from legal and policy instruments proposed by the project. In line with the ESMF, a SESA will be prepared during review of the PCB Law (Activity 1.1.1), drafting of regulatory texts and guidelines for new POPs and Hg and their hazardous waste streams (Activities 1.2.1 and 1.3.1), developing the EPR framework (Activity 1.5.1) and the national strategies for Hg (Activity 3.1.2). The SESA will consider the risk of accidental release of chemicals and worker exposure that may result from implementing the legislation and strategies at the national level and incorporate measures to mitigation them.	Project team

19	**SESP Risk 9:** Disruption to wetland where PCB-contaminated site will be remediated Related to: • Standard 1: Biodiversity Conservation and Natural Resource Management; 1.1, 1.2, 1.3, 1.4, 1.6, 1.11	Social and Environmental	I = 4 L = 3 Substantial	Remediation of PCB-contaminated site will test bioremediation measures that may introduce alien invasive species to the wetland if the species is not properly selected. Activity 4.2.1 will undergo a site-specific ESIA and an ESMP will be developed to ensure that this risk is avoided or mitigated.	Project team
20	**SESP Risk 10:** Flooding of interim storage and waste treatment/disposal facilities for hazardous waste used during the demonstration activities Related to: • Standard 2: Climate Change and Disaster Risks; 2.1, 2.2 • Standard 3: Community Health, Safety and Security; 3.3	Social and Environmental	I = 3 L = 2 Moderate	Sensitivity and sustainability of the project may be affected by the occurrence of natural disasters due to landslides, erosion, floods or extreme weather conditions or greater vulnerability thereto. As part of the selection process for the demonstration pilots, considerations will be made that waste treatment (Activity 5.2.1) and interim storage facilities (Activity 5.3.1) to be used are not located in areas classified as high risk due to landslides, erosion, floods or extreme weather conditions. Once pilot demonstrations are selected, a SESP will be undertaken to determine the extent of the assessment/management needed.	Project team
21	**SESP Risk 11:** The project's demonstrative interventions for the elimination of PCBs may result in the increase of (or no reduction of) CO2 emissions or other air emissions due to current technologies for incineration treatment/destruction of PCBs. Related to: • Standard 2: Climate Change and Disaster Risks; 2.4 • Standard 3: Community Health, Safety and Security; 3.2	Social and Environmental	I = 3 L = 3 Moderate	It is estimated that 122 tons of PCB oil will need to be disposed of as part of the project activities. The disposal method will be through co-incineration (of PCB under 1,000 ppm) at a local private enterprise (cement kiln) as has been done in the past under a previous GEF project. Otherwise, it will be exported. As part of the ESIA that will be prepared for the project, technologies that be used for PCB treatment/elimination (Activity 4.1.1) will be evaluated in terms of their CO2 emissions and potential chemical release, options compared and measures proposed to minimize CO2 emissions and chemicals produced such that the alternative technologies must ensure compliance with "Best Available Techniques" (BAT) and "Best Environmental Practices" (BEP) practices as per the Stockholm and Basel Conventions. This will build on the burning test of PCB contaminated oil undertaken at CIMERWA in 2017 as part of the GEF-4 PCB project.	Project team
22	**SESP Risk 12:** As the project will lead to employment opportunities in hazardous conditions, risk exists of child labor, which is prevalent in the target country, as well as other practices in contravention to principles and standards of ILO fundamental conventions. Related to: • Standard 7: Labour and Working Conditions; 7.1, 7.2, 7.3, 7.4, and 7.5	Social and Environmental	I = 4 L = 2 Moderate	During selection of the enterprises to be engaged in the demonstrations and disposal activities, and as part of the private sector risk assessment that will be undertaken, the project will ensure that an Occupational Health and Safety Plan; Labour Assessment and Management Plan; and/or any other plan required for SES compliance is in place prior to commencement of the works. The interim storage (Activity 5.3.1) and waste treatment facilities (Activity 5.2.1) that will be used by the project will be subject to a visit to ensure compliance with international best practice.	Project team
23	**SESP Risk 13:** The project may pose risks to occupational health and safety due to exposure to harmful chemicals during site remediation, transport and interim storage of chemicals and their treatment/final disposal. Workers may also be exposed to risk of accidents and physical injuries on the job. Related to:	Social and Environmental	I = 4 L = 2 Moderate	As mentioned earlier, the ESIAs that will be undertaken for each selected pilot, will take into consideration occupational health and safety measures to ensure they are in line with best practices such that adequate measures are included in the pursuant ESMPs. Pilots that have not been selected will undergo a SESP to determine the level of assessment/management During selection of the enterprises to be engaged in the demonstrations and disposal activities, and as part of the private sector risk assessment that will be undertaken, the project will ensure that an Occupational Health and Safety Plan; Labour Assessment and Management Plan; and/or any other plan required for SES compliance is in place prior to commencement of the works.	Project team

	• Standard 7: Labour and Working Conditions; 7.6			This includes a visit to interim storage (Activity 5.3.1) and waste treatment (Activity 5.2.1) facilities that will be used by the project.	

Annex 6: Overview of Technical Consultancies

Consultant	Time Input	Tasks, Inputs and Outputs
		For Project Management
Local / National contracting		
National Project Manager Rate: 1,500 USD/month Total: 90,00 USD Funding allocated under: PMC: 90,000 USD	60 months over 5 years	The Project Manager (PM)will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants, and sub-contractors. <u>Duties and Responsibilities</u> • Manage the overall conduct of the project; • Plan the activities of the project and monitor progress against the approved workplan; • Execute activities by managing personnel, goods and services, training and low-value grants, including drafting terms of reference and work specifications, and overseeing all contractors' work; • Monitor events as determined in the project monitoring plan, and update the plan as required; • Provide support for completion of assessments required by UNDP, spot checks and audits; • Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the FACE form; • Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports; • Monitor progress, watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results; • Ensure that changes are controlled and problems addressed; • Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities; • Prepare and submit financial reports to UNDP on a quarterly basis; • Manage and monitor the project risks – including social and environmental risks - initially identified; assess new risks associated with COVID-19 pandemic and its response measures; and submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log; • Capture lessons learned during project implementation; • Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required; • Prepare the inception report no later than one month after the inception workshop; • Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR; • Prepare the GEF PIR; • Assess major and minor amendments to the project within the parameters set by UNDP-GEF; • Monitor implementation plans including the gender action plan, stakeholder engagement plan, and any environmental and social management plans; • Monitor and track progress against the GEF Core indicators; • Support the Mid-term review and Terminal Evaluation process.
National Project Accountant/Finance Assistant/Finance Officer Rate: 750 USD/month Total: 45,000 USD Funding allocated under: PMC: 45,000 USD	60 months over 5 years	Under the guidance and supervision of the National Project Manager, the National Project Accountant/Finance Assistant/Finance Officer will carry out the following tasks: <u>Duties and Responsibilities</u> • Keep records of project funds and expenditures, and ensure all project-related financial documentation are well maintained and readily available when required by the Project Manager; • Review project expenditures and ensure that project funds are used in compliance with the Project Document and Government financial rules and procedures; • Validate and certify FACE forms before submission to UNDP; • Provide necessary financial information as and when required for project management decisions; • Provide necessary financial information during project audit(s); • Review annual budgets and project expenditure reports, and notify the Project Manager if there are any discrepancies or issues;

Consultant	Time Input	Tasks, Inputs and Outputs
		• Consolidate financial progress reports submitted by the responsible parties for implementation of project activities; • Liaise and follow up with the responsible parties for implementation of project activities in matters related to project funds and financial progress reports.
National Procurement Officer Rate: 750 USD/month Total: 45,000 USD Funding allocated under: PMC: 45,000 USD	60 months over 5 years	Under the guidance and supervision of the National Project Manager and in coordination with the National Project Accountant/Finance Assistant/Finance Officer, the National Procurement Officer will carry out the following tasks: Duties and Responsibilities • Develop project procurement plans; • Facilitate procurement of goods and services in a timely manner, ensuring compliance with GoR regulations; • Prepare reports on procurement, generate lessons and share them widely – in conjunction with the M&E specialist; • Working with the Safeguards experts, ensure that all risks and safeguard measures are incorporated into the project activities and sustainability mechanisms.
For Technical Support to Project Management Unit		
International / Regional and global contracting		
International Chief Technical Expert Rate: 700 USD/day Total: 105,000 USD Funding allocated under: Comp 1: 35,000 USD Comp 2: 35,000 USD Comp 3: 35,000 USD	150 days over 5 years	The International Chief Technical Expert, in coordination with the National Project Manager and other International and National Experts, including in particular the International Chemicals Expert, International Finance Expert, National Environmental Law Expert, National Hazardous Waste Management Expert, and National Finance & Private Sector Expert, will be responsible for providing overall technical backstopping and management support to the implementation of the Project activities. Duties and Responsibilities • Provide technical expertise and strategic guidance to all project components, assuming quality control of interventions, and support the National Project Manager, National Technical Experts/Consultants, and Contracted Companies in the coordination of the implementation of project activities as stipulated in the UNDP project documents; • Provide a suite of technical advisory, planning, management, and coordination services to the project where key work areas will include: Technical and Management Services; Project Advisory and Guidance; Project Monitoring and Implementation Support; and Training. In addition, support in particular the implementation (in coordination with International and National Experts) of the following activities: • Component 1, Activity 1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Component 1, Activity 1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Component 1, Activity 1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Component 1, Activity 1.5.1: Develop and operationalise an EPR framework • Component 1, Activity 1.6.1: Develop and implement a Customs strengthening strategy • Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database • Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products • Component 2, Activity 3.1.3: Safely handle and dispose of PBDE-containing plastics • Component 3, Activity 4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil • Component 3, Activity 4.2.1: Remediate one PCB-contaminated site • Component 3, Activity 4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides • Component 3, Activity 5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Component 3, Activity 5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Component 3, Activity 5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities

Consultant	Time Input	Tasks, Inputs and Outputs

International Customs Expert
 	
Rate: 600 USD/day
Total: 18,000 USD
 	
Funding allocated under:
Comp 1: 18,000 USD
	30 days over 5 years	Under the guidance and supervision of the National Project Manager, and in coordination with the National Customs Expert, International Chief Technical Expert, and National Environmental Law Expert, the International Customs Expert will be responsible for providing overall guidance and advice to the National Customs Expert and will carry out the following tasks:
		
		<u>Duties and Responsibilities:</u>
		• Provide advice on training needs for customs officials, supporting the design of training materials, and supporting and facilitating trainings for Customs officials and enforcement officers (among others) under Component 1, Activity 1.6.1: Develop and implement a Customs strengthening strategy
		  ◦ Develop and implement a comprehensive strategy to support Customs to prevent the import and use of banned or to-be-banned products (identification, solutions, SOPs, interim storage, coordination with REMA)
		  ◦ Provide guidance materials and recurrent training programmes for Customs officers
		• Support the Customs-related aspects of Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database
		• Support the Customs-related aspects of the import and export of recyclables and waste where applicable (e.g. Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products; Component 3, Activity 4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil; Component 3, Activity 4.2.1: Remediate one PCB-contaminated site; Component 3, Activity 4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides

International Healthcare Waste Management Expert Rate: 700 USD/day Total: 28,000 USD Funding allocated under: Comp 1: 19,5000 USD Comp 2: 9,750 USD Comp 4: 3,250 USD	40 days over 5 years	Under the guidance and supervision of the National Project Manager, and in close coordination with the National Project Manager and Contracted Companies, International and National Experts, the International Health Care Waste Management Expert will carry out the following tasks: <u>Duties and Responsibilities</u> Provide support and advice on healthcare waste management aspects of: • Component 1, Activity 1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Component 1, Activity 1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Component 1, Activity 1.6.1: Develop and implement a Customs strengthening strategy • Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database • Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products • Component 4, Activity 6.1.1: Design and implement an awareness raising plan • Component 4, Activity 7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities
International Chemicals Expert Rate: 700 USD/day Total: 63,000 USD Funding allocated under: Comp 1: 12,600 USD Comp 2: 25,200 USD Comp 3: 25,200 USD	90 days over 5 years	In coordination with the National Project Manager, International Chief Technical Expert, International and National Customs Expert, and International Health Care Waste Management Expert, National Hazardous Waste Management Expert, the International Chemicals Expert will be responsible for providing overall technical backstopping to the implementation of the project activities. <u>Duties and Responsibilities</u> Provide technical expertise and strategic guidance to the following activities regarding PCBs, Pesticides, PDBE, POPs, Hg, and other hazardous chemicals and waste, in particular: • Component 1, Activity 1.1.1: Review, revise, and submit for approval the PCB Law • Component 1, Activity 1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Component 1, Activity 1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database

Consultant	Time Input	Tasks, Inputs and Outputs
		• Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products • Component 2, Activity 3.1.3: Safely handle and dispose of PBDE-containing plastics • Component 3, Activity 4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil • Component 3, Activity 4.2.1: Remediate one PCB-contaminated site • Component 3, Activity 4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides • Component 3, Activity 5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Component 3, Activity 5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Component 3, Activity 5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities
International Finance Expert Rate: 700 USD/day Total: 35,000 USD Funding allocated under: Comp 1: 21,000 USD Comp 2: 7,000 USD Comp 3: 7,000 USD	50 days over 5 years	Under the guidance and supervision of the National Project Manager and in coordination with the International Finance Expert, International Chief Technical Expert, National Hazardous Waste Management Expert, the National Finance & Private Sector Expert will be responsible for providing overall guidance and advice to the National Finance & Private Sector Expert and will carry out the following tasks: Duties and Responsibilities • Support/advise on the financial aspects of Component 1, Activity 1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Support/advise on the financial aspects of Component 1, Activity 1.5.1: Develop and operationalise an EPR framework • Support/advise on the financial aspects of Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database • Support/advise on the financial aspects of Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support/advise on the financial aspects of Component 3, Activity 5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Support/advise on the financial aspects of Component 3, Activity 5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Support/advise on the financial aspects of Component 3, Activity 5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities • Support/advise on the financial aspects of Component 4, Activity 6.1.1: Design and implement an awareness raising plan • Support/advise on the financial aspects of Component 4, Activity 7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities
International Gender Expert Rate: 700 USD/day Total: 21,000 USD Funding allocated under: Comp 4: 21,000 USD	30 days over 5 years	Under the guidance and supervision of the National Project Manager, and in coordination with the National Gender Expert, National Monitoring and Evaluation and Safeguards Officer, and National Communications and Stakeholder Engagement Consultant, the International Gender Expert will be responsible for providing overall guidance and advice to the National Gender Expert and will carry out the following tasks: Duties and Responsibilities • Provide overall guidance and advice to the National Gender Expert, National Monitoring and Evaluation and Safeguards Officer, and National Communications and Stakeholder Engagement Consultant to support the mainstreaming of gender in all project activities; • Support monitoring the progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled; • Support overseeing/developing/coordinating implementation of all gender-related work, in particular carry out Component 4, Activity 7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities; • Support review of the Gender Action Plan annually, and update and revise corresponding management plans as necessary; • Support work with the National Monitoring and Evaluation and Safeguards Officer to ensure reporting, monitoring and evaluation fully address the gender issues of the project; • Support the National Communications and Stakeholder Engagement Consultant regarding the gender-related aspects of Component 4, Activity 6.1.1: Design and implement an awareness raising plan;

Consultant	Time Input	Tasks, Inputs and Outputs
		• Support the gender-related aspects of Component 4, Activity 7.1.1 Develop and implement a knowledge management (KM) plan that extracts, compiles, and disseminates experiences, lessons-learned, knowledge and best practices including yearly lessons-learned reports, case study reports, and end of project publication; • Support the gender-related aspects of Component 4, Activity 7.2.1 Apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-term Evaluation findings; • Support the International Safeguards Expert and National Safeguards Expert regarding the gender-related aspects of Component 4, Activity 7.2.3: Develop and implement an ESIA and ESMP based on the SESP.
International Safeguards Expert Rate: 700 USD/day Total: 14,000 USD Funding allocated under: Comp 4: 14,000 USD	20 days over 5 years	Under the guidance and supervision of the National Project Manager, and in coordination with the National Monitoring and Evaluation and Safeguards Officer, National Gender Expert, and National Communications and Stakeholder Engagement Consultant, the International Safeguards Expert will be responsible for providing overall guidance and advice to the National Safeguards Officer and will carry out the following tasks: <u>Duties and Responsibilities:</u> • Guide the Contracted Company/Experts in Component 4, Activity 7.2.3: Develop and implement an ESIA and ESMP based on the SESP • Guide the Contracted Company/Experts and others in SESA aspects in Component 1, Activity 1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Guide the Contracted Company/Experts in SESA aspects in Component 1, Activity 1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Guide the Contracted Company/Experts in SESA aspects in Component 1, Activity 1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 2, Activity 3.1.3: Safely handle and dispose of PBDE-containing plastics • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 3, Activity 4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 3, Activity 4.2.1: Remediate one PCB-contaminated site • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 3, Activity 4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 3, Activity 5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 3, Activity 5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Guide the Contracted Company/Experts in ESIA and ESMP aspects in Component 3, Activity 5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities • Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to monitor progress in the development/implementation of the project's ESMP/ESMF ensuring that UNDPs SES policy is fully met and the reporting requirements are fulfilled; • Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to oversee/develop/coordinate the implementation of all safeguard related plans; • Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to ensure social and environmental grievances are managed effectively and transparently; • Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to review the SESP annually, and update and revise the corresponding risk log and mitigation/management plans as necessary; • Review the revised SESP and provide recommendations for its improvement; • Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to ensure full disclosure with concerned stakeholders;

Consultant	Time Input	Tasks, Inputs and Outputs
		• Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to ensure environmental and social risks are identified, avoided, mitigated and managed throughout project implementation; • Provide guidance to the National Monitoring and Evaluation and Safeguards Officer on how to ensure project reporting, monitoring and evaluations fully address the safeguard issues of the project.
For Technical Assistance		
Outcome 1		
Local / National contracting		
National Environmental Law Expert Rate: 550 USD/day Total: 55,000 USD Funding allocated under: Comp 1: 44,000 USD Comp 3: 11,000 USD	100 days over 3 years	Under the guidance and supervision of the National Project Manager, and in coordination with the International Chief Technical Expert, International HCWM Expert, International Chemicals Expert, International Finance Expert, National Customs Expert, National Hazardous Waste Management Expert, and National Finance & Private Sector Expert, the National Environmental Law Expert will carry out the following tasks: <u>Duties and Responsibilities:</u> • Carry-out/lead Component 1, Activity 1.1.1: Review, revise, and submit for approval the PCB Law • Carry-out/lead Component 1, Activity 1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Carry-out/lead the regulatory aspect of Component 1, Activity 1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Support development/advise on the legal aspects of Component 1, Activity 1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Support development/advise on the legal aspects of Component 1, Activity 1.5.1: Develop and operationalise an EPR framework • Support development/advise on the legal aspects of Component 1, Activity 1.6.1: Develop and implement a Customs strengthening strategy • Support development/advise on the legal aspects of Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database

National Customs Expert
 	
Rate: 400 USD/day
Total: 12,000 USD
 	
Funding allocated under:
Comp 1: 12,000 USD
	30 days over 3 years	Under the guidance and supervision of the National Project Manager, and in coordination with the International Customs Expert, International Chief Technical Expert, International HCWM Expert, International Chemicals Expert, International Finance Expert, National Environmental Law Expert, National Hazardous Waste Management Expert, and National Finance & Private Sector Expert, the National Customs Expert will carry out the following tasks:
		
		<u>Duties and Responsibilities:</u>
		• Carry-out/lead Component 1, Activity 1.6.1: Develop and implement a Customs strengthening strategy
		  ◦ Develop and implement a comprehensive strategy to support Customs to prevent the import and use of banned or to-be-banned products (identification, solutions, SOPs, interim storage, coordination with REMA)
		  ◦ Provide guidance materials and recurrent training programmes for customs officers
		• Support the Customs-related aspects of Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database
		• Support the Customs-related aspects of the import and export of recyclables and waste where applicable (e.g. Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products; Component 3, Activity 4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil; Component 3, Activity 4.2.1: Remediate one PCB-contaminated site; Component 3, Activity 4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides

National Finance & Private Sector Expert Rate: 400 USD/week Total: 40,000 USD Funding allocated under: Comp 1: 24,000 USD	100 days over 5 years	Under the guidance and supervision of the National Project Manager and in coordination with the International Finance Expert, International Chief Technical Expert, National Hazardous Waste Management Expert, the National Finance & Private Sector Expert will carry out the following tasks: <u>Duties and Responsibilities</u> • Support/advise on the financial and private sector aspects of Component 1, Activity 1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Support/advise on the financial and private sector aspects of Component 1, Activity 1.5.1: Develop and operationalise an EPR framework

Consultant	Time Input	Tasks, Inputs and Outputs
Comp 2: 8,000 USD Comp 3: 8,000 USD		• Support/advise on the financial and private sector aspects of Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database • Support/advise on the financial and private sector aspects of Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support/advise on the financial and private sector aspects of Component 3, Activity 5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Support/advise on the financial and private sector aspects of Component 3, Activity 5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Support/advise on the financial and private sector aspects of Component 3, Activity 5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities • Support/advise on the financial and private sector aspects of Component 4, Activity 6.1.1: Design and implement an awareness raising plan • Support/advise on the financial and private sector aspects of Component 4, Activity 7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities
Outcome 2-5		
Local / National contracting		
National Hazardous Waste Management Expert Rate: 400 USD/day Total: 60,000 USD Funding allocated under: Comp 1: 20,000 USD Comp 2: 20,000 USD Comp 3: 20,000 USD	150 days over 5 years	Under the guidance and supervision of the National Project Manager and in coordination with the International Chief Technical Expert and the International Chemicals Expert, the National Hazardous Waste Expert will carry out the following tasks: <u>Duties and Responsibilities:</u> • Advise on the waste management aspects of Component 1, Activity 1.1.1: Review, revise, and submit for approval the PCB Law • Advise on the waste management aspects of Component 1, Activity 1.2.1: Undertake a legislative/regulatory assessment and draft and submit for approval regulatory text on the control of new POPs and Hg and Hg-containing products, listed in Part 1 of Annex A of the Minamata Convention • Advise on the waste management aspects of the waste management aspects of Support Component 1, Activity 1.3.1: Undertake a regulatory and guidelines assessment and draft and submit for approval regulatory text/guidelines on the management and treatment of hazardous waste streams, in particular those which contain POPs/Hg • Advise on the waste management aspects of Component 1, Activity 1.4.1: Develop and operationalise a Polluter-Pays-Principle system, best performer awards programme, and other incentives • Support the waste management aspects of Component 1, Activity 1.5.1: Develop and operationalise an EPR framework • Support the waste management aspects of Component 2, Activity 2.1.1: Develop and implement a web-based hazardous waste inventory and database • Support the waste management aspects of Component 2, Activity 3.1.1: Design and undertake demonstration pilots to avoid/reduce the generation of (hazardous) waste and releases through the introduction of cleaner production practices and safer alternatives • Support the waste management aspects of Component 2, Activity 3.1.2: Safely handle and dispose of Hg-containing products • Support the waste management aspects of Component 2, Activity 3.1.3: Safely handle and dispose of PBDE-containing plastics • Support the waste management aspects of Component 3, Activity 4.1.1: Safely handle and dispose of remaining PCB-containing equipment and oil • Support the waste management aspects of Component 3, Activity 4.2.1: Remediate one PCB-contaminated site • Support the waste management aspects of Component 3, Activity 4.3.1: Safely handle and dispose of stockpiled obsolete POPs and non-POPs pesticides • Support the waste management aspects of Component 3, Activity 5.1.1: Design and undertake demonstration pilots to valorise priority waste streams • Support the waste management aspects of Component 3, Activity 5.2.1: Design and undertake demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance • Support the waste management aspects of Component 3, Activity 5.3.1: Assess and improve capacity of existing hazardous waste interim storage facilities
Outcome 3		
Local / National contracting		
Outcome 6-7: KM and M&E		

Consultant	Time Input	Tasks, Inputs and Outputs
Local / National contracting		
National Communications and Stakeholder Engagement Consultant Rate: 1,000 USD/ month*25% Total: 15,000 USD Funding allocated under: Comp 4: 15,000 USD	60 months*25%	Under the guidance and supervision of the National Project Manager, and in coordination with the International and National Gender Experts, National Monitoring and Evaluation and Safeguards Officer, and International Chief Technical Expert, the National Communications and Stakeholder Engagement Consultant will carry out the following tasks: <u>Duties and Responsibilities</u> • Carry out and lead Component 4, Activity 6.1.1: Design and implement an awareness raising plan, in line with the SEP (Annex 7) and ensuring gender mainstreaming (see Gender Action Plan; Annex 9); • Carry out and lead Component 4, Activity 7.1.1 Develop and implement a knowledge management (KM) plan that extracts, compiles, and disseminates experiences, lessons-learned, knowledge and best practices including yearly lessons-learned reports, case study reports, and end of project publication; • Support Component 4, Activity 7.2.1 Apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-term Evaluation findings; • Support Component 4, Activity 7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities; • Prepare and disseminate communications pieces and knowledge products targeting different audiences; • Facilitate stakeholders to participate in local and national lesson-sharing events (preferably linked to MTR and TE feedback sessions), and compile lessons learned reports or communications pieces based on this participation; • Set up a dedicated knowledge management system (web-based) where all information relevant to the project can be accessed, in a well-archived form; • Support consultants and institutions in charge of implementing other outputs to reflect on the processes and document lessons to inform adaptive management and implementation of similar initiatives.
National Gender Expert Rate: 300 USD/day Total: 30,000 USD Funding allocated under: Comp 4: 30,000 USD	100 days over 5 years	Under the guidance and supervision of the National Project Manager, International Gender Expert, and National Monitoring and Evaluation and Safeguards Officer, and in coordination with the National Communications and Stakeholder Engagement Consultant, the National Gender Expert will carry out the following tasks: <u>Duties and Responsibilities</u> • Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled; • Oversee/develop/coordinate implementation of all gender-related work, in particular carry out and lead Component 4, Activity 7.2.2: Implement the Gender Action Plan to mainstream gender throughout project activities; • Review the Gender Action Plan annually, and update and revise corresponding management plans as necessary; • Work with the National Monitoring and Evaluation and Safeguards Officer to ensure reporting, monitoring and evaluation fully address the gender issues of the project; • Support the National Communications and Stakeholder Engagement Consultant regarding the gender-related aspects of Component 4, Activity 6.1.1: Design and implement an awareness raising plan; • Support the gender-related aspects of Component 4, Activity 7.1.1 Develop and implement a knowledge management (KM) plan that extracts, compiles, and disseminates experiences, lessons-learned, knowledge and best practices including yearly lessons-learned reports, case study reports, and end of project publication; • Support the gender-related aspects of Component 4, Activity 7.2.1 Apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-term Evaluation findings; • Support the International Safeguards Expert and National Safeguards Expert regarding the gender-related aspects of Component 4, Activity 7.2.3: Develop and implement an ESIA and ESMP based on the SESP.
National Monitoring and Evaluation and Safeguards Officer	60 months*25%	Under the guidance and supervision of the National Project Manager, and in coordination with the International Gender Expert, National Gender Expert, and MTR and TE experts, the National Monitoring and Evaluation and Safeguards Officer will carry out the following tasks: <u>Duties and Responsibilities (M&E)</u> • Monitor project progress and participate in the production of progress reports ensuring that they meet the necessary reporting requirements and standards;

Consultant	Time Input	Tasks, Inputs and Outputs
Rate: 1,000 USD/ month*25% Total: 15,000 USD Funding allocated under: Comp 4: 15,000 USD		• Ensure project's M&E meets the requirements of the Government, the UNDP Country Office, and UNDP-GEF; develop project-specific M&E tools as necessary; • Oversee and ensure the implementation of the project's M&E plan, including periodic appraisal of the Project's Theory of Change and Results Framework with reference to actual and potential project progress and results; • Oversee/develop/coordinate the implementation of the stakeholder engagement plan; • Oversee and guide the design of surveys/assessments commissioned for monitoring and evaluating project results; • Facilitate mid-term and terminal evaluations of the project; including management responses; • Facilitate annual reviews of the project and produce analytical reports from these annual reviews, including learning and other knowledge management products; • Support project site M&E and learning missions; • Visit project sites as and when required to appraise project progress on the ground and validate written progress reports; • Under the guidance and supervision of the International MTR and TE experts and in coordination with the National Project Manager, support the mid-term and terminal evaluations and verification of activities related to project implementation. <u>Duties and Responsibilities (Safeguards)</u> • Monitor progress in development/implementation of the project ESMP/ESMF ensuring that UNDPs SES policy is fully met and the reporting requirements are fulfilled; • Oversee/develop/coordinate implementation of all safeguard related plans; • Ensure social and environmental grievances are managed effectively and transparently; • Review the SESP annually, and update and revise corresponding risk log; mitigation/management plans as necessary; • Ensure full disclosure with concerned stakeholders; • Ensure environmental and social risks are identified, avoided, mitigated and managed throughout project implementation; • Work with the M&E officer to ensure reporting, monitoring and evaluation fully address the safeguard issues of the project.
International / Regional and global contracting		
MTR and TE experts 30,000 USD for MTR 30,000 USD for TE Total: 60,000 USD Funding allocated under: Comp 4: 60,000 USD	In accordance with UNDP-GEF ToRs for MTR and TE	<u>Duties and Responsibilities</u> • Mid-Term Evaluation in line with the UNDP-GEF ToRs; • Terminal Evaluation in line with the UNDP-GEF ToRs.

Annex 7: Stakeholder Engagement Plan

Enclosed

Annex 8: Environmental Social Management Framework (ESMF)

Enclosed

Annex 9: Gender Analysis and Gender Action Plan

Enclosed

Annex 10: Procurement Plan

General Description	Procurement type	Contract Value USD (cumulative)	Procurement By	No. of Contracts	Advertisement/Search Date (quarter/year)	Implementation Start date
National Project Manager	Contract Services	90,000	REMA	1	Y1Q2	Y1Q3
Project Accountant/Finance Assistant/Finance Officer	Contract Services	45,000	REMA	1	Y1Q2	Y1Q3
National Procurement Officer	Contract Services	45,000	REMA	1	Y1Q2	Y1Q3
International Chief Technical Expert	Consultancy Service	105,000	REMA	1	Y1Q2	Y1Q3
International Customs Expert	Consultancy Service	18,000	REMA	1	Y1Q2	Y1Q3
International Health Care Waste Management Expert	Consultancy Service	28,000	REMA	1	Y1Q2	Y1Q3
International Chemicals Expert	Consultancy Service	63,000	REMA	1	Y1Q2	Y1Q3
International Finance Expert	Consultancy Service	35,000	REMA	1	Y1Q2	Y1Q3
International Gender Expert	Consultancy Service	21,000	REMA	1	Y1Q2	Y1Q3
International Safeguards Expert	Consultancy Service	14,000	REMA	1	Y1Q2	Y1Q3
National Environmental Law Expert	Consultancy Service	55,000	REMA	1	Y1Q2	Y1Q3
National Customs Expert	Consultancy Service	12,000	REMA	1	Y1Q2	Y1Q3
National Finance & Private Sector Expert	Consultancy Service	40,000	REMA	1	Y1Q2	Y1Q3
National Hazardous Waste Management Experts	Consultancy Service	60,000	REMA	1	Y1Q2	Y1Q3
National Communications and Stakeholder Engagement Consultant	Consultancy Service	15,000	REMA	1	Y1Q2	Y1Q3
National Gender Expert	Consultancy Service	30,000	REMA	1	Y1Q2	Y1Q3
National Monitoring and Evaluation and Safeguards Officer	Consultancy Service	15,000	REMA	1	Y1Q2	Y1Q3
Contracted company for EIA/SESP/ ESMP	Contractual Services	55,000	REMA	1	Y1Q2	Y1Q3
Contracted company for creating national platform (website) on waste exchange and information exchange	Contractual Services	10,00	REMA	1	Y1Q2	Y1Q3
IT equipment 72800	Contractual Equipment	10,000	REMA	1	Y1Q2	Y1Q3
Contracted Company for development of hazardous waste inventory and database	Contractual Services	100,000	REMA	1	Y1Q3	Y1Q4
Contract company for translation	Contract Services	10,0000	REMA	1	Y2Q1	Y2Q2
Contracted Company for PBDE analysis services (20*400 USD)	Contractual Services	8,000	REMA	1	Y2Q1	Y2Q2
Contracted Company for COVID-related waste (from PCR testing and	Contractual Services	25,000	REMA	1	Y2Q1	Y2Q2

vaccination, such as Guanidine Thiocyanate) collection and disposal						
Contracted Company for PCB transportation and pre-treatment of the oil	Contractual Services	250,000	REMA	1	Y2Q1	Y2Q2
Contracted Company for assessments for demonstration pilots to valorise priority waste streams, demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, and interim storage strengthening	Contractual Services	75,000	REMA	1	Y2Q2	Y2Q3
Equipment for demonstration pilots to valorise priority waste streams	Supply of Equipment	350,000	REMA	1	Y2Q2	Y2Q3
Equipment for demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance	Supply of Equipment	350,000	REMA	1	Y2Q2	Y2Q3
Equipment for improvement of interim storage facilities	Supply of Equipment	350,000	REMA	1	Y2Q2	Y2Q3
Contracted Company for PCB disposal (122 MT)	Contractual Services	24,400	REMA	1	Y2Q3	Y2Q4
Shredder for PBDE-containing plastic	Supply of Equipment	20,000	REMA	1	Y3Q1	Y3Q2
Storage containers for Hg-containing e-waste (10*150 USD)	Supply of Equipment	1,500	REMA	1	Y3Q1	Y3Q2
PET recycling equipment?	Supply of Equipment	TBD	REMA	1	Y3Q1	Y3Q2
Equipment for demonstration pilots on waste generation minimisation, cleaner production, safer alternatives	Supply of Equipment	400,000	REMA	1	Y3Q1	Y3Q2
Contracted Company for PBDE-containing plastics collection and disposal (1,200 MT * 100 USD)	Contractual Services	120,000	REMA	1	Y4Q1	Y4Q2
Hg-free healthcare devices (10,000 thermometers * 3 USD)	Supply of Equipment	30,000	REMA	1	Y4Q1	Y4Q2
Collection buckets for Hg-added thermometers (10*100 USD)	Supply of Equipment	1,000	REMA	1	Y4Q1	Y4Q2
XRF analysis device for Hg-related inspection	Supply of Equipment	35,000	REMA	1	Y4Q1	Y4Q2
Chemical analysis proofing of XRF results (100*50 USD)	Supply of Equipment	5,000	REMA	1	Y4Q1	Y4Q2
Laboratory equipment	Supply of Equipment	265,278	REMA	1	Y4Q1	Y4Q2
Contracted Company for PCB contaminated site remediation (250 MT of contaminated soil) including management	Contractual Services	1,400,000	REMA	1	Y4Q1	Y4Q2
Contracted Company for Pesticides disposal (47 MT of pesticides * 4,000 USD) including management	Contractual Services	188,000	REMA	1	Y4Q1	Y4Q2

Annex 11: GEF Core indicators

Core Indicator 1	**Terrestrial protected areas created or under improved management for conservation and sustainable use**							***(Hectares)***
				Hectares (1.1+1.2)				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	TE	
Indicator 1.1	Terrestrial protected areas newly created							
Name of Protected Area	WDPA ID	IUCN category		Hectares				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	TE	
		(select)						
		(select)						
		Sum						
Indicator 1.2	Terrestrial protected areas under improved management effectiveness							
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score				
				Baseline		Achieved		
					Endorsement	MTR	TE	
		(select)						
		(select)						
		Sum						
Core Indicator 2	**Marine protected areas created or under improved management for conservation and sustainable use**							***(Hectares)***
				Hectares (2.1+2.2)				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	*TE*	
Indicator 2.1	Marine protected areas newly created							
Name of Protected Area	WDPA ID	IUCN category		Hectares				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	TE	
		(select)						
		(select)						
		Sum						
Indicator 2.2	Marine protected areas under improved management effectiveness							
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score				
				Baseline		Achieved		
				PIF stage	Endorsement	MTR	TE	
		(select)						
		(select)						
		Sum						
Core Indicator 3	**Area of land restored**							***(Hectares)***
				Hectares (3.1+3.2+3.3+3.4)				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	TE	
Indicator 3.1	Area of degraded agricultural land restored							
				Hectares				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	TE	
Indicator 3.2	Area of forest and forest land restored							

			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 4	**Area of landscapes under improved practices (hectares; excluding protected areas)**					***(Hectares)***
			Hectares (4.1+4.2+4.3+4.4)			
			Expected		Expected	
			PIF stage	Endorsement	MTR	TE
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided					
Include documentation that justifies HCVF			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 5	**Area of marine habitat under improved practices to benefit biodiversity**					***(Hectares)***
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 5.3	Amount of Marine Litter Avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 6	**Greenhouse gas emission mitigated**					***(Metric tons of CO_2e)***
			Expected metric tons of CO_2e (6.1+6.2)			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Expected metric tons of CO_2e			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.2	Emissions avoided Outside AFOLU					
			Expected metric tons of CO_2e			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.3	Energy saved					
			MJ			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					***(Number)***
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE

Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
Core Indicator 8	**Globally over-exploited fisheries Moved to more sustainable levels**					***(Metric Tons)***
Fishery Details			Metric Tons			
			PIF stage	Endorsement	MTR	TE
Core Indicator 9	**Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products**					***(Metric Tons)***
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
			164			
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Endosulfan and isomers	Lindane	(select)	*3*	*3*		
(select)	(select)	Other pesticides		*44*		
(select)	(select)	Polychlorinated biphenyls (PCB)	*125*	*122*		
(select)	(select)	Polybrominated diphenyl ethers (PBDEs)	*35*	*35*		
(select)	(select)					
(select)	(select)					
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			1	*1*		
Indicator 9.3	Hydrochloroflurocarbons (HCFC) Reduced/Phased out					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			1	1		
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			5	*5*		
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	PIF stage	Endorsement
		35,000 tonnes (WEEE) and 40 tonnes (mercury-containing waste) for the entire weight of the materials/products	35,040	35,040		
		PCB-contaminated soil	*0*	*250*		
Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					***24.5 (grams of toxic equivalent gTEQ)***
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			1	*1*		
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			2	*2*		
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***(Number)***
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female	*150,000*	*150,000*		
		Male	*150,000*	*150,000*		
		Total	*300,000*	*300,000*		

Annex 12: GEF 7 Taxonomy

Level 1	Level 2	Level 3	Level 4
☒Influencing models			
	☒Transform policy and regulatory environments		
	☒Strengthen institutional capacity and decision-making		
	☐Convene multi-stakeholder alliances		
	☒Demonstrate innovative approaches		
	☒Deploy innovative financial instruments		
☒Stakeholders			
	☐Indigenous Peoples		
	☒Private Sector		
		☒Capital providers	
		☐Financial intermediaries and market facilitators	
		☒Large corporations	
		☒SMEs	
		☒Individuals/Entrepreneurs	
		☐Non-Grant Pilot	
		☐Project Reflow	
	☒Beneficiaries		
	☒Local Communities		
	☒Civil Society		
		☐Community Based Organization	
		☒Non-Governmental Organization	
		☒Academia	
		☐Trade Unions and Workers Unions	
	☒Type of Engagement		
		☒Information Dissemination	
		☒Partnership	
		☒Consultation	
		☒Participation	
	☒Communications		
		☒Awareness Raising	
		☐Education	
		☒Public Campaigns	
		☒Behavior Change	
☒Capacity, Knowledge and Research			
	☐Enabling Activities		
	☒Capacity Development		
	☒Knowledge Generation and Exchange		
	☐Targeted Research		
	☐Learning		
		☐Theory of Change	
		☐Adaptive Management	
		☐Indicators to Measure Change	
	☒Innovation		
	☒Knowledge and Learning		
		☒Knowledge Management	
		☒Innovation	
		☒Capacity Development	
		☐Learning	

	☒Stakeholder Engagement Plan		
☒Gender Equality			
	☒Gender Mainstreaming		
		☒Beneficiaries	
		☒Women groups	
		☒Sex-disaggregated indicators	
		☒Gender-sensitive indicators	
	☒Gender results areas		
		☐Access and control over natural resources	
		☒Participation and leadership	
		☒Access to benefits and services	
		☒Capacity development	
		☒Awareness raising	
		☒Knowledge generation	
☒Focal Areas/Theme			
	☐Integrated Programs		
		☐Commodity Supply Chains ([19]Good Growth Partnership)	
			☐Sustainable Commodities Production
			☐Deforestation-free Sourcing
			☐Financial Screening Tools
			☐High Conservation Value Forests
			☐High Carbon Stocks Forests
			☐Soybean Supply Chain
			☐Oil Palm Supply Chain
			☐Beef Supply Chain
			☐Smallholder Farmers
			☐Adaptive Management
		☐Food Security in Sub-Sahara Africa	
			☐Resilience (climate and shocks)
			☐Sustainable Production Systems
			☐Agroecosystems
			☐Land and Soil Health
			☐Diversified Farming
			☐Integrated Land and Water Management
			☐Smallholder Farming
			☐Small and Medium Enterprises
			☐Crop Genetic Diversity
			☐Food Value Chains
			☐Gender Dimensions
			☐Multi-stakeholder Platforms
		☐Food Systems, Land Use and Restoration	
			☐Sustainable Food Systems
			☐Landscape Restoration
			☐Sustainable Commodity Production
			☐Comprehensive Land Use Planning
			☐Integrated Landscapes
			☐Food Value Chains
			☐Deforestation-free Sourcing
			☐Smallholder Farmers
		☐Sustainable Cities	
			☐Integrated urban planning

			☐ Urban sustainability framework
			☐ Transport and Mobility
			☐ Buildings
			☐ Municipal waste management
			☐ Green space
			☐ Urban Biodiversity
			☐ Urban Food Systems
			☐ Energy efficiency
			☐ Municipal Financing
			☐ Global Platform for Sustainable Cities
			☐ Urban Resilience
	☐ **Biodiversity**		
		☐ Protected Areas and Landscapes	
			☐ Terrestrial Protected Areas
			☐ Coastal and Marine Protected Areas
			☐ Productive Landscapes
			☐ Productive Seascapes
			☐ Community Based Natural Resource Management
		☐ Mainstreaming	
			☐ Extractive Industries (oil, gas, mining)
			☐ Forestry (Including HCVF and REDD+)
			☐ Tourism
			☐ Agriculture & agrobiodiversity
			☐ Fisheries
			☐ Infrastructure
			☐ Certification (National Standards)
			☐ Certification (International Standards)
		☐ Species	
			☐ Illegal Wildlife Trade
			☐ Threatened Species
			☐ Wildlife for Sustainable Development
			☐ Crop Wild Relatives
			☐ Plant Genetic Resources
			☐ Animal Genetic Resources
			☐ Livestock Wild Relatives
			☐ Invasive Alien Species (IAS)
		☐ Biomes	
			☐ Mangroves
			☐ Coral Reefs
			☐ Sea Grasses
			☐ Wetlands
			☐ Rivers
			☐ Lakes
			☐ Tropical Rain Forests
			☐ Tropical Dry Forests
			☐ Temperate Forests
			☐ Grasslands
			☐ Paramo
			☐ Desert
		☐ Financial and Accounting	
			☐ Payment for Ecosystem Services
			☐ Natural Capital Assessment and Accounting
			☐ Conservation Trust Funds
			☐ Conservation Finance

		☐ Supplementary Protocol to the CBD	
			☐ Biosafety
			☐ Access to Genetic Resources Benefit Sharing
	☐ **Forests**		
		☐ Forest and Landscape Restoration	
			☐ REDD/REDD+
		☐ Forest	
			☐ Amazon
			☐ Congo
			☐ Drylands
	☐ **Land Degradation**		
		☐ Sustainable Land Management	
			☐ Restoration and Rehabilitation of Degraded Lands
			☐ Ecosystem Approach
			☐ Integrated and Cross-sectoral approach
			☐ Community-Based NRM
			☐ Sustainable Livelihoods
			☐ Income Generating Activities
			☐ Sustainable Agriculture
			☐ Sustainable Pasture Management
			☐ Sustainable Forest/Woodland Management
			☐ Improved Soil and Water Management Techniques
			☐ Sustainable Fire Management
			☐ Drought Mitigation/Early Warning
		☐ Land Degradation Neutrality	
			☐ Land Productivity
			☐ Land Cover and Land cover change
			☐ Carbon stocks above or below ground
		☐ Food Security	
	☐ **International Waters**		
		☐ Ship	
		☐ Coastal	
		☐ Freshwater	
			☐ Aquifer
			☐ River Basin
			☐ Lake Basin
		☐ Learning	
		☐ Fisheries	
		☐ Persistent toxic substances	
		☐ SIDS : Small Island Dev States	
		☐ Targeted Research	
		☐ Pollution	
			☐ Persistent toxic substances
			☐ Plastics
			☐ Nutrient pollution from all sectors except wastewater
			☐ Nutrient pollution from Wastewater
		☐ Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		☐ Strategic Action Plan Implementation	
		☐ Areas Beyond National Jurisdiction	
		☐ Large Marine Ecosystems	

		☐ Private Sector	
		☐ Aquaculture	
		☐ Marine Protected Area	
		☐ Biomes	
			☐ Mangrove
			☐ Coral Reefs
			☐ Seagrasses
			☐ Polar Ecosystems
			☐ Constructed Wetlands
	☒ **Chemicals and Waste**		
		☒ Mercury	
		☐ Artisanal and Scale Gold Mining	
		☐ Coal Fired Power Plants	
		☐ Coal Fired Industrial Boilers	
		☒ Cement	
		☐ Non-Ferrous Metals Production	
		☐ Ozone	
		☒ Persistent Organic Pollutants	
		☒ Unintentional Persistent Organic Pollutants	
		☒ Sound Management of chemicals and Waste	
		☒ Waste Management	
			☒ Hazardous Waste Management
			☒ Industrial Waste
			☒ e-Waste
		☒ Emissions	
		☒ Disposal	
		☒ New Persistent Organic Pollutants	
		☒ Polychlorinated Biphenyls	
		☒ Plastics	
		☐ Eco-Efficiency	
		☒ Pesticides	
		☐ DDT - Vector Management	
		☐ DDT - Other	
		☒ Industrial Emissions	
		☒ Open Burning	
		☒ Best Available Technology / Best Environmental Practices	
		☐ Green Chemistry	
	☐ **Climate Change**		
		☐ **Climate Change Adaptation**	
			☐ Climate Finance
			☐ Least Developed Countries
			☐ Small Island Developing States
			☐ Disaster Risk Management
			☐ Sea-level rise
			☐ Climate Resilience
			☐ Climate information
			☐ Ecosystem-based Adaptation
			☐ Adaptation Tech Transfer
			☐ National Adaptation Programme of Action
			☐ National Adaptation Plan
			☐ Mainstreaming Adaptation
			☐ Private Sector
			☐ Innovation
			☐ Complementarity
			☐ Community-based Adaptation
			☐ Livelihoods
		☐ **Climate Change Mitigation**	

			☐Agriculture, Forestry, and other Land Use
			☐Energy Efficiency
			☐Sustainable Urban Systems and Transport
			☐Technology Transfer
			☐Renewable Energy
			☐Financing
			☐Enabling Activities
		☐**Technology Transfer**	
			☐Poznan Strategic Programme on Technology Transfer
			☐Climate Technology Centre & Network (CTCN)
			☐Endogenous technology
			☐Technology Needs Assessment
			☐Adaptation Tech Transfer
		☐**United Nations Framework on Climate Change**	
			☐Nationally Determined Contribution

Annex 13: Partners Capacity Assessment Tool and HACT assessment

Entered into the GEF Portal

Annex 14: UNDP Project Quality Assurance Report

Completed in UNDP online corporate planning system

Annex 15: Desktop and Field-based Studies and Baseline Data Collection Report

Enclosed

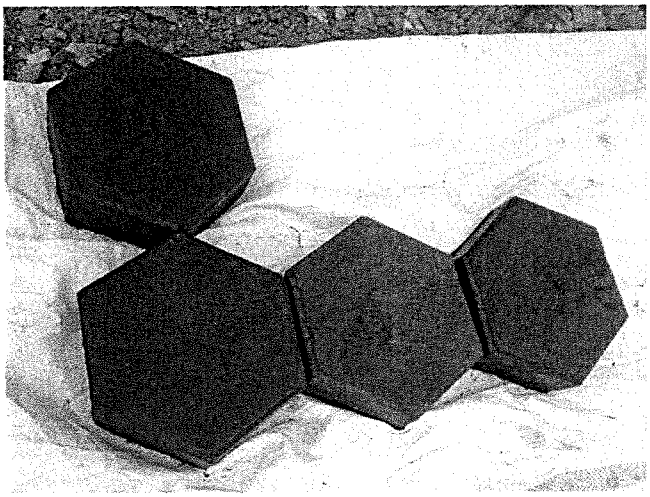
Annex 16: Private Sector Analysis

Enclosed

Annex 17: Private Sector Strategy and Plan

Enclosed

Annex 18: Demonstration Construction Pavers made from PET bottles developed by DPMM Kalisimbi/Depot Kalisimbi Ltd.





Annex 19: GEF Budget Template

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	Hg-free healthcare devices (10,000 thermometers * 3 USD + 500 sphygmomanometer * 25 USD = 42,500 USD); Collection buckets for Hg-added thermometers (10*100 USD = 1,000 USD); XRF analysis device for Hg-related inspection (1*35,000 USD = 35,000 USD); Chemical analysis proofing of XRF results (100*50 USD = 5,000 USD); Shredder for PBDE-containing plastic (20,000 USD); Storage containers for Hg-containing e-waste (10*150 USD = 1,500 USD); Equipment for demonstration pilots on waste generation minimisation, cleaner production, safer alternatives (400,000 USD); Equipment for national laboratory capacity strengthening (265,278 USD)		770,278			770,278			770,278	REMA
Equipment	Equipment for demonstration pilots to valorise priority waste streams (370,000 USD); Equipment for demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance (370,225 USD); Equipment for improvement of interim storage facilities (337,500 USD); Supplies for PCB sampling and analysis (200*150 USD = 30,000 USD); Supplies for soil contamination sampling and analysis (20*150=3,000 USD)			1,110,725		1,110,725			1,110,725	REMA
Equipment	Cost of 3 computers for the PMC including software and licenses (2,500*3 = 7,500 USD); 2 cell phones (400*2 = 800 USD); and running costs (340/year = 1,700 USD)					-		10,000	10,000	REMA

Contractual Services – Individual	Salary of National Project Manager (1,500 USD/month * 60 months = 90,000 USD); Financial/Administrative Accountant (750 USD/month * 60 months = 45,000 USD); Salary of National Procurement Officer (750 USD/month * 60 months = 45,000 USD)					-		180,000	180,000	REMA	
Contractual Services – Company	Contracted Company for development of hazardous waste inventory and database (100,000 USD); Assessment of the national laboratory capacity and development of a national laboratory capacity strengthening plan that includes resource mobilisation aspects (20,000 USD); PBDE analysis services (20*400 USD = 8,000 USD); PBDE-containing plastics collection and disposal (1,200 MT * 100 USD = 120,000 USD); and COVID-related waste (from PCR testing and vaccination, such as Guanidine Thiocyanate) collection and disposal (25,000 USD)		273,000			273,000			273,000	REMA	
Contractual Services – Company	PCB disposal (122 MT * 200 USD = 24,400 USD); PCB transportation and pre-treatment of the oil (250,000 USD); PCB contaminated site remediated (250 MT of contaminated soil * 5,600 USD = 1,400,000 USD) including management; Pesticides disposal ((47 MT of pesticides * 4,000 USD = 188,000 USD) including management; training on contaminated site remediation, testing and application of innovative bioremediation measures, and preparation of financing plan for site remediation (90,000 USD); assessments for demonstration pilots to valorise priority waste streams, demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, and interim storage strengthening (75,000 USD)			2,027,400		2,027,400			2,027,400	REMA	
Contractual Services – Company	Contracted Company for SESA, ESIA, and ESMP (110,000 USD); for creating 1 national platform (website) on waste exchange and information exchange (10,000 USD); Translation (10,000 USD)				130,000	130,000			130,000	REMA	
International Consultants	International consultants: 1 Intl Chief Technical Expert (50 days*700 USD/day = 35,000); 1 Intl Customs Expert (30 days*600 USD/day = 18,000 USD; Intl Health Care Waste Management Expert (23 days*700 USD/day = 16,100 USD); International Chemicals Expert (18 days*700 USD/day = 12,600 USD); International Finance Expert (30 days*700 USD/day = 21,000 USD)	102,700				102,700			102,700	REMA	

International Consultants	International consultants: 1 Intl Chief Technical Expert (50 days*700 USD/day = 35,000 USD); Intl Health Care Waste Management Expert (12 days*700 USD/day = 8,400 USD); International Chemicals Expert (36 days*700 USD/week = 25,200 USD); International Finance Expert (10 days*700 USD/day = 7,000 USD)		75,600			75,600			75,600	REMA	
International Consultants	International consultants: 1 Intl Chief Technical Expert (50 days*700/day = 35,000); International Chemicals Expert (36 days*700 USD/week = 25,200 USD); International Finance Expert (10 days*700 USD/day = 7,000 USD)			67,200		67,200			67,200	REMA	
International Consultants	Intl Health Care Waste Management Expert (5 days*700 USD/day = 3,500 USD); MTR & TE International Consultant (MTR = 30,000 USD; TE = 30,000 USD); International Gender Expert (30 days*700 USD/day = 21,000 USD), International Safeguards Expert (20 days*700 USD/day = 14,000 USD)				3,500	3,500	95,000		98,500	REMA	
Local Consultants	Local consultants: National Environmental Law Expert (80 days*550 USD/day = 44,000 USD); National Customs Expert (30 days*400 USD/day = 12,000 USD); National Hazardous Waste Management Expert (50 days*400 USD/day = 20,000 USD); National Finance & Private Sector Expert (60 days*400 USD/day = 24,000 USD)	100,000				100,000			100,000	REMA	
Local Consultants	National Environmental Law Expert (20 days*550 USD/day = 11,000 USD); National Hazardous Waste Management Expert (50 days*400 USD/day = 20,000 USD); National Finance & Private Sector Expert (20 days*400 USD/day = 8,000 USD)		39,000			39,000			39,000	REMA	
Local Consultants	National Hazardous Waste Management Expert (50 days*400 USD/day = 20,000 USD); National Finance & Private Sector Expert (20 days*400 USD/day = 8,000 USD)			28,000		28,000			28,000	REMA	
Local Consultants	National Gender Expert (100 days*300 USD/day = 30,000 USD); National Monitoring and Evaluation and Safeguards Officer (60 months*25%*1000 USD/month = 15,000); National Communications and Stakeholder Engagement Consultant (60 months*25%*1000 USD/month = 15,000)				60,000	60,000			60,000	REMA	

Trainings, Workshops, Meetings	Training and Workshops: 1 National Inception Workshop (1*35,000 USD = 35,000 USD); 5 Validation Workshops to review (i) drafted legislative regulatory documents, (ii) regulations/guidelines, (iii) industry incentives, (iv) EPR framework, and (v) Customs strategy (5*16,798 USD = 83,990 USD); 6 training events on (i) drafted legislative regulatory documents, (ii) regulations/guidelines, (iii) industry incentives, (iv) EPR framework, and (v+vi) Customs officers training programme (6*22,335 USD = 134,010 USD)	253,000				248,000	5,000		253,000	REMA	
Trainings, Workshops, Meetings	Training and Workshops: 4 Validation Workshops to review (i) hazardous waste inventory and database, (ii) demonstration pilots on waste generation, cleaner production, safer alternatives, (iii) Hg-containing products management, (iv) PBDE-containing plastic (4*16,798 USD = 67,192 USD); 6 training events on (i) hazardous waste inventory and database, (ii+iii) demonstration pilots on waste generation, cleaner production, safer alternatives, (iv+v) Hg-containing products management, (vi) PBDE-containing plastic (6*22,335 USD = 134,010 USD)		201,202			201,202			201,202	REMA	
Trainings, Workshops, Meetings	Training and Workshops: 7 Validation Workshops to review (i) PCB management, (ii) contaminated site remediation, (iii) pesticides excavation and disposal, (iv) hazardous waste export procedures, (v) demonstration pilots to valorise priority waste streams, (vi) demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, (vii) improvement of existing hazardous waste interim storage facilities) (7*16,798 USD = 117,586 USD); 9 training events on (i) PCB management, (ii) contaminated site remediation, (iii) pesticides stockpile management, (iv) hazardous waste export procedures, (v+vi) demonstration pilots to valorise priority waste streams, (vii+viii) demonstration pilots to enhance national hazardous waste treatment capacity and environmental performance, (ix) improvement of interim storage facilities)(9*22,335 USD = 201,015 USD)			318,601		318,601			318,601	REMA	
Trainings, Workshops, Meetings	SESP Capacity building/training expenses (7,500 USD)				7,500	7,500			7,500	REMA	

Trainings, Workshops, Meetings	Training for PMU on SESP, procurement, project management (25,000 USD)					-		25,000	25,000	REMA	
Travel	Mission costs of the International Consultants (4*4,000 USD = 16,000 USD); In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (60 days*225 USD/day = 13,500 USD)	29,500				29,500			29,500	REMA	
Travel	Mission costs of the International Consultants (5*4,000 USD = 20,000 USD); In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (130 days*225 USD/day = 29,520 USD)		49,520			49,520			49,520	REMA	
Travel	Mission costs of the International Consultants (2*4,000 USD = 8,000 USD); In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (80 days*225 USD/day = 18,000 US			26,000		26,000			26,000	REMA	
Travel	Cost of travel for local consultants organizing M&E process with Intl M&E consultants (5*2,000 USD/year = 10,000 USD); for local consultants (including car hire, fuel, drivers, DSA) for SESA, ESIA, and ESMP consultations (50 days*225 USD/day = 11,250 USD; In-country travel costs for local consultants and PMU for site visits, meetings, and training (including car hire, fuel, drivers, DSA) (25 days*225 USD/day = 5,625 USD); Study tour (8*4,000 USD = 32,000 USD)				58,875	58,875			58,875	REMA	
Travel	Travel related to the inception workshop, Project Board meetings, PMU management and supervision travel, PIR and monitoring gender and results framework indicators (car hire, fuel, drivers, DSA) for the implementation of the project activities (140 days*225 USD/day = 31,500 USD); Presentation of project results at international meetings (2*4,000 USD = 8,000 USD)					-		39,500	39,500	REMA	
Office Supplies	Supplies for PBDE sampling/analysis (500 USD)		500			500			500	REMA	
Office Supplies	Supplies for PMC activities (2,000 USD/year = 10,000 USD)					-		10,000	10,000	REMA	
Other Operating Costs	Printing and publications costs in support of Component 1 activities (6,000 USD/year = 30,000 USD)	30,000				30,000			30,000	REMA	
Other Operating Costs	Audio-visual & print production costs related to trainings conducted as part of Component 2 (25,000 USD)		25,000			25,000			25,000	REMA	

Other Operating Costs	Audio-visual & print production costs related to trainings conducted as part of Component 3 (28,899 USD)			28,899		28,899			28,899	REMA	
Other Operating Costs	Audio-visual & print production expenses for SESA, ESIA, and ESMP (5,000 USD); for awareness raising and communication (84,000 USD)				89,000	89,000			89,000	REMA	
Other Operating Costs	Audit at 4,500 USD/year for the 5 years (22,500 USD)					-		22,500	22,500	REMA	
Other Operating Costs	Miscellaneous expenses for PMC activities: printing of materials, translation, and office supplies (2,600 USD/year = 13,000 USD)					-		13,000	13,000	REMA	
Grand Total		515,200	1,434,100	3,606,825	348,875	5,900,000	100,000	300,000	6,300,000		