AFLDC-2 Scaling-up Investment and Technology Transfer to Facilitate Capacity Strengthening and Technical Assistance for the Implementation of Stockholm and Minamata Conventions in African LDCs

Part I: Project Information

GEF ID
10218

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
AFLDC-2 Scaling-up Investment and Technology Transfer to Facilitate Capacity Strengthening and Technical Assistance for the Implementation of Stockholm and Minamata Conventions in African LDCs

Countries
Regional, Africa, Angola, Ethiopia, Gambia, Guinea, Liberia, Mauritania, Senegal, Sierra Leone, Togo, Uganda, Zambia, Senegal

Agency(ies)
AfDB

Other Executing Partner(s)
Angola: Ministry of Environment Ethiopia: Environment, Forest and Climate Change Commission Gambia: National Environment Agency (NEA) Guinea: Ministry of Environment, Water and Forestry Liberia: Environmental Protection Agency (EPA) Senegal: Ministry of Environment and Sustainable Development Sierra Leone: Environmental Protection Agency (EPA) Togo: Ministry of Environment and Forest Resources Uganda: National Environmental Management Agency (NEMA) Zambia: Zambia Environmental Management Agency (ZEMA) Mauritania: Ministry of Environment and Sustainable Development; The Africa Institute for

the Environmentally Sound Management of Hazardous and Other Wastes (Africa Institute); The Basel and Stockholm Convention Regional Centre Senegal (BCRC/SCRC-AF)

Executing Partner Type
Government

GEF Focal Area
Chemicals and Waste

Taxonomy
Stakeholders, Integrated Programs, Focal Areas, Chemicals and Waste, Pesticides, Mercury, Cement, Non Ferrous Metals Production, Open Burning, Emissions, Disposal, Persistent Organic Pollutants, Uninentional Persistent Organic Pollutants, New Persistent Organic Pollutants, Polychlorinated Biphenyls, Plastics, Best Available Technology / Best Environmental Practices, Sound Management of chemicals and waste, Industrial Emissions, Waste Management, Hazardous Waste Management, Industrial Waste, Influencing models, Demonstrate innovative approache, Deploy innovative financial instruments, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Communications, Education, Awareness Raising, Public Campaigns, Behavior change, Private Sector, Individuals/Entrepreneurs, SMEs, Civil Society, Trade Unions and Workers Unions, Non-Governmental Organization, Academia, Community Based Organization, Beneficiaries, Local Communities, Type of Engagement, Information Dissemination, Participation, Consultation, Partnership, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender results areas, Capacity Development, Knowledge Generation and Exchange, Participation and leadership, Access to benefits and services, Sustainable Cities, Municipal waste management

Sector

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 0

Climate Change Adaptation
Climate Change Adaptation 0

Submission Date
4/5/2019

Expected Implementation Start
8/1/2022

Expected Completion Date
7/30/2027

Duration

60In Months

Agency Fee($)

1,917,000.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CW-1-1		GET	9,319,349.00	59,274,402.00
CW-1-2		GET	7,262,924.00	30,868,562.00
CW-2-3		GET	4,717,727.00	147,000,515.00
		Total Project Cost($)	**21,300,000.00**	**237,143,479.00**

B. Project description summary

Project Objective

To promote circular economy approaches within national development frameworks to achieve economic development while scaling-up investments and BAT/BEP to eliminate, reduce and control POPs and Mercury pollution sources in African LDCs

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 1: Strengthening the enabling environment and national enforcement capacities for the management and phase-out of POPs/Mercury and its compounds	Technical Assistance	1. Conducive enabling environments based on legal and regulatory regimes provide a sustainable basis for the environmentally sound management and disposal of chemicals and waste, in particular of POPs and mercury and its compounds	1.1 Up-to-date legislative and regulatory frameworks 1.2 Strengthened application and enforcement of updated legislative and regulatory frameworks 1.3 Strengthened national methodologies to identify, assess, and manage sites contaminated by hazardous chemicals 1.4 Integrated regional and national strategies to implement environmentally sound management of chemicals and waste	GET	2,343,822.00	17,331,977.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 2: Communicating the environmentally sound management of chemicals and wastes	Technical Assistance	2. The environmentally sound management of chemicals and waste mainstreamed into development decision making and into consumer choices.	2.1 Increased awareness amongst regional and national development planners of the role of ESM of chemicals and waste within Sustainable Development policies and strategies	GET	2,992,428.00	27,189,116.00
			2.2 Increased capacity and knowledge of public officials to incorporate ESM of chemicals and waste in public policies and programmes			
			2.3: Increased engagement of key stakeholders in agriculture and industry in efforts to reduce POPs use and release			
			2.4 Increased engagement of civil society organisations, communities and consumers in designing, promoting and implementing ESM for chemicals and wastes			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 3: Scaling up of actions to reduce and wherever possible, eliminate manufacture, trade, use, emission and release of POPs and mercury and its compounds.	Investment	3. POPs and mercury reduced or phased out from agricultural, urban and industrial processes and products through environmentally sound management and the application of BAT/BEP	3.1 National facility established for interim storage of mercury and POPs waste awaiting final disposal 3.2 POPs pesticides wastes destroyed 3.3 Environmentally sound management of PCBs 3.4 Reduced uPOPs emissions and releases from municipal waste management through reduction of open burning of waste 3.5 Reduced availability and use of mercury-containing products and models for their proper disposal	GET	14,056,364.00	170,626,241.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 4: Monitoring and evaluation, learning and adaptive feedback	Technical Assistance	4. Effective and efficient project delivery involving informed decision making at regional and national levels	4.1 Project website created and maintained 4.2 Project Steering Committees established; meetings held 4.3 Yearly lessons-learned report/publication prepared and disseminated, and case study reports prepared 4.4 Measuring increasing awareness and understanding of the requirements for the environmentally sound management of chemicals and waste 4.5 End of project publication prepared and disseminated 4.6 Mid-term and terminal project evaluations	GET	893,100.00	10,630,089.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
				Sub Total ($)	**20,285,714.00**	**225,777,423.00**
Project Management Cost (PMC)						
				GET	1,014,286.00	11,366,056.00
				Sub Total($)	**1,014,286.00**	**11,366,056.00**
				Total Project Cost($)	**21,300,000.00**	**237,143,479.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	AfDB: African Development Fund (Togo)	Grant	Investment mobilized	5,089,000.00
Recipient Country Government	Addis Ababa Solid Waste Management Agency (Ethiopia)	In-kind	Recurrent expenditures	250,000.00
Recipient Country Government	Electricity Distribution and Supply Authority (Sierra Leone)	In-kind	Recurrent expenditures	60,000.00
GEF Agency	AfDB: African Development Fund (Ethiopia)	Grant	Investment mobilized	34,750,000.00
GEF Agency	AfDB (Uganda)	Loans	Investment mobilized	50,000,000.00
GEF Agency	ADF (Uganda)	Loans	Investment mobilized	47,250,000.00
GEF Agency	AfDB (Gambia)	Loans	Investment mobilized	1,713,857.00
GEF Agency	AfDB: African Development Fund (Senegal)	Loans	Investment mobilized	41,634,493.00
GEF Agency	AfDB (Zambia)	Grant	Investment mobilized	3,650,000.00
GEF Agency	AfDB (Angola)	Grant	Investment mobilized	849,246.00
GEF Agency	AfDB: African Development Fund (Guinea)	Grant	Investment mobilized	750,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	AfDB: African Development Fund (Togo)	Loans	Investment mobilized	9,856,000.00
GEF Agency	AfDB: Transition States Facility (Togo)	Grant	Investment mobilized	8,665,000.00
GEF Agency	AfDB: African Development Fund (Liberia)	Loans	Investment mobilized	11,258,240.00
GEF Agency	AfDB: African Development Fund (Sierra Leone)	Grant	Investment mobilized	8,747,868.00
GEF Agency	AfDB: TSF-Pillar 1(Sierra Leone)	Grant	Investment mobilized	6,079,300.00
GEF Agency	AfDB: African Development Fund (Mauritania)	Loans	Investment mobilized	2,286,860.00
GEF Agency	AfDB: Nigeria Trust Fund (Mauritania)	Loans	Investment mobilized	2,109,855.00
GEF Agency	AfDB: African Development Fund (Liberia)	Grant	Investment mobilized	2,143,760.00
			Total Co-Financing($)	**237,143,479.00**

Describe how any "Investment Mobilized" was identified

The investments mobilized originate from the AfDB operations in the respective projects that will make significant contributions to the Global Environment Benefits described in the objectives of the proposed project, if approved. Angola, Zambia and Guinea The Technologies for African Agricultural Transformation (TAAT) program was initiated by the African Development Bank as one of the flagship programs in support of its ?Feed Africa? strategy. The TAAT is funded through the African Development Fund (ADF) which is the concessional window of the African Development Bank (AfDB) Group. The total funding for the TAAT program is 29,000,000 UA (approximately 40,600,000 USD). The TAAT Fall Armyworm Control Compact is tasked with responding to the invasion of the Fall armyworm (FAW)

(Spodoptera frugiperda J.E. Smith) in least developed countries (LDCs) of Africa, given that the funding for TAAT was sourced from the Regional Public Goods window of the Bank that only support activities in LDCs of Africa. Countries can access funding from The FAW Control Compact of TAAT, through the expression of interest, which is how the investments for Angola, Zambia and Guinea where mobilised. is led by the International Institute of Tropical Agriculture (IITA). The FAW Compact collaborates with many national, regional and international partners in implementing FAW activities in its target countries. Ethiopia The Productivity Enhancement Support for the Integrated Agro-Industrial Parks and Youth Employment (PESAPYE) project will contribute to poverty reduction, economic growth, greater resilience and social cohesion in Ethiopia through enhanced productivity and commercialization of agriculture. The project is co-financed in parallel by the Bank and the Arab Bank for Economic Development in Africa (BADEA). The total cost of PESAPYE is UA 72.26 million (approximately, 101.164.000 USD), with the Bank contributing UA 33.25 million and BADEA contributing UA 35.29 million. The Government of Ethiopia (GoE) will contribute UA 3.72 million as counterpart contribution. Gambia, The The African Development Bank (AfDB) has moblized a $3 million grant from the Transition Support Facility (TSF) to the Republic of The Gambia for sustainable urban development of the greater Banjul Area. Liberia The AfDB baseline investment in Liberia is supporting the development of Liberia Special Agro Industrial Processing Zone located in Buchanan, Grand Bassa County, at a total cost of UA 11.31 million (approximately, UA 10,110,000 USD from the African Development Fund and in kind contribution of UA 1.2 million comprising office space, personnel emoluments, and utilities from the Government of Liberia). Mauritania The AfDB baseline investment has a a total cost of UA 14.67 million (approximately, 20,538,000 USD) and will be financed by an ADF loan of UA 7 million and a DSF loan of UA 6 million. The project is a climate change adaptation project par excellence and is part of the support to the transition towards inclusive and sustainable growth. Counterpart financing in-kind is being provided by the Government of Mauritania. Senegal The AfDB baseline investment supports the Phase I of the Cities Modernisation Programme (PROMOVILLES) which will entail providing regional capitals with infrastructure, building the capacity of local councils and laying the foundation for better control of municipal taxation such that councils can play their expected role in economic growth and improvement of the living conditions of the citizenry. the Government intends to support cities in providing themselves with adequate infrastructure through the Cities Modernization Program (PROMO-VILLES). The investments for this project is mainly financed by a loan from the African Development Bank (approximately, 126.930.742 USD). The government of Senegal is providing counterpart financing in-kind (approximately, 22.912.999 USD). Sierra Leone The Sierra Leone Rice Agro-Industrial Cluster (SL RAIC) Project, in the rural floodplain areas of Pujehun and Bonthe Districts of Sierra Leone, will help advance GoSL?s renewed commitment to sustainably transform the agricultural sector, under its New Direction Agenda and the National Agricultural Transformation Program (NAT 2023). The SL RAIC Project will be implemented over five years at a total cost of UA 23.29 million (approximately, 32.606.000 USD), of which the ADF will provide UA 21.17 million and UA 2.12 million will be provided by the GoSL and beneficiaries as in-kind contribution. Togo The Togo Agro-Food Processing Zone Project (PTA-Togo) is a pilot project implemented as part of the Togo Agropoles Strategic Development Plan 2017-2030 and the Feed Africa Initiative 2016-2025. The investments mobilised for this pilot project is UA 45,066,070 (about 45,066,070 USD), which is broken down as follows: (i) ADF loan: UA 8.04 million (17.8%); ADF grant:

UA 4.046 million (10.3%); TSF loan: UA 8.32 million (18.5%) (ii) BOAD: UA 12,804,920 (28.4%); (iii) Saemaul Globalization Foundation: UA 3,524,190 (7.8%); and (iv) State: UA 7,741,950 (17.2%). Uganda The Kampala City Roads Rehabilitation Project (KCRRP) is part of a citywide infrastructural improvement program that seeks to meet the Government?s long-term development strategy as outlined in the Government?s Vision 2040. The Bank through its Urban Development Strategy (2011) has prioritized investments in African cities (Kampala included) to transform them to better places to work and live in. The project is estimated to cost USD 288 million to be financed as a loan by the Bank Group (African Development Bank and African Development Fund). Counterpart financing in-kind is being provided by the Government of Uganda. The Bank?s prioritization of infrastructure development on top of its operational agenda, positions it as a preferred partner to the Government of Uganda in working together to leverage synergies.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
AfDB	GET	Africa	Chemicals and Waste	POPs	16,704,195	1,503,378	18,207,573.00
AfDB	GET	Africa	Chemicals and Waste	Mercury	4,595,805	413,622	5,009,427.00
			Total Grant Resources($)		**21,300,000.00**	**1,917,000.00**	**23,217,000.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

300,000

PPG Agency Fee ($)

27,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
AfDB	GET	Africa	Chemicals and Waste	POPs	300,000	27,000	**327,000.00**
				Total Project Costs($)	**300,000.00**	**27,000.00**	**327,000.00**

Core Indicators

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

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

Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

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

Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
125,000.00	63,000.00		

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 of toxic chemicals reduced)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
1,545.00	1,320.00	0.00	0.00

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

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
SelectDDT		415.50		
SelectPolychlorinated biphenyls (PCB)	400.00	540.00		
SelectAldrin	200.00	30.00		
SelectLindane	200.00	70.00		
SelectToxaphene	200.00	0.00		
SelectHighly Hazardous Pesticides	500.00			
SelectTechnical endosulfan and its related isomers		100.00		
SelectChlordane		126.50		

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
45.00	38.00		

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

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

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

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
11	11		

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

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
11	0		

Indicator 9.6 Quantity of POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
5,545.00	3,775.00		

Indicator 10 Reduction, avoidance of emissions of POP to air from point and non-point sources (grams of toxic equivalent gTEQ)

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)
350.00	356.00		

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

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
11	11		

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

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
11	2		

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,000	58,079		
Male	8,000	26,079		
Total	13000	84158	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

As the PIF was very broad in scope, a scoping process was undertaken during the PPG work in order to increase impact of the measures to be implemented. As part of the scoping process, a questionnaire survey on the baseline conditions in the participating countries was administered, and based on the PIF and the questionnaire response, outputs were sought specified beyond what was done in the PIF. In advance of the 1st regional consultation workshop held in Abidjan, 21-22 January 2020, countries were requested to make presentations on their national priorities in the suggested concrete measures of components 1 and 2, and prioritize three measures for their country among a long-list of potential concrete measures of Component 3. With a few exceptions, there was broad interest in the measures suggested for components 1 and 2. For Component 3, a couple of potential concrete measures were not prioritized by countries, while a few were prioritized by one country only; such measures with little or no prioritization were omitted in the further work. The results of the workshop are described in the meeting report in Annex AA.

The resulting prioritization provided the basis for further investigation of 2-4 potential measures per country. The project outputs presented for implementation in this report were selected based on:

? priorities of the countries? in their NIPs and any MIA?s,

? complementarity to the AfDB co-financing baseline projects in the countries as well as to other ongoing or planned projects,

? complementarity to national development plans and other relevant elements of the national baseline situation,

? stakeholder feedback from the national consultations

? Global Environmental Benefit (GEB) contributions

? and budget constraints.

The country annexes (annexes P-Z) describe the national baseline in more details.

The resulting changes in planned outputs of the project since the PIF are described in detail below. Annex N gives an overview of changes in the outputs and their titles since the PIF.

1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Governments around the World have, over the past decades, become increasingly aware of the risks to human health and the environment created by highly hazardous and persistent chemicals released from intentional use in products and processes, and from processing of raw materials releasing such chemicals. As a result, the manufacture, trade, use, emission/release and disposal of such chemicals, as well as the transboundary movement of emissions and hazardous wastes, are increasingly regulated within a series of multilateral environmental agreements: The Rotterdam, Stockholm, Minamata, Basel, Bamako Conventions[1][1] and the international policy framework of the Strategic Approach to International Chemicals Management (SAICM).

The Stockholm Convention seeks to reduce and, wherever possible, eliminate production, use and releases of a growing list of Persistent Organic Pollutants (POPs) intended for use in agriculture or industry and to reduce and, wherever possible, eliminate unintentional production and release. For African LDCs lacking significant industrial development, principal concerns centre on POPs pesticides, including accumulations of obsolete pesticides, Polychlorinated Biphenyls (PCBs), POPs from open burning of waste (uPOPs), and land contaminated at sites where POPs chemicals have been released during storage, handling and disposal.

Production of many of the controlled **POPs pesticides** has ceased but trade and use is still observed, notably trade and use of some more recently listed chemicals may be continuing. In some African LDCs, POPs pesticide stocks were built up to prepare for periodic swarming of particular pests of concern. Some of these stocks have become degraded and obsolete, presenting particular dangers where safeguarding controls are inadequate.

Since 1930, **PCBs** were synthesised for a variety of industrial uses based on their properties of chemical stability, resistance to thermal breakdown, and low electrical conductivity. They have been used extensively as dielectric fluids in capacitors and transformers but also find application as solvents in construction sealers, flame retardants, ink solvents, plasticizers, amongst others. Exposure to PCBs risks damage to the immune system, liver, skin, reproductive system, gastrointestinal tract and thyroid gland. The Stockholm Convention requires that all equipment containing PCBs or liquids contaminated by PCBs at concentrations above 0.005% be phased out of use by 2025 and that all such liquid wastes should be subject to environmentally sound management (ESM) for final disposal as soon as possible and not later than 2028. For several of the project countries, these goals have not yet been met.]

A wide range of improperly controlled combustion practices may give rise to the unintentional production and emission of a group of POPs (called ?**uPOPs**?). Amongst these, incineration and open burning of waste by households, industries and at municipal waste sites is a major contributor to emissions inventories in many African countries, though they are in some cases likely under-reported due to absence or limited availability of data . This type of emissions may be exacerbated by the growing plastic component in many waste streams, as well as by inadequate burning of medical waste and other complex waste types.

Mercury is a dense, silverish metal element that is liquid at ambient temperature. It occurs naturally in the earth?s crust; the highest concentrations are found in sulphide minerals, notably cinnabar, mercury sulphide (HgS), the key mineral exploited in dedicated mercury mining, but also in other non-ferrous sulphide minerals (zinc, lead, arsenic, gold, etc.). It is also present in trace concentrations (natural or as an impurity) in many other economically valuable materials including fossil fuels such as coal, gas, and oil. Mercury combines with certain commonly used metals to form alloys called amalgams and these decompose on heating with resulting volatilisation of elemental mercury vapour. Liquid elemental mercury is very heavy fluid, a technically excellent electric conductor, and expands and contracts very precisely in response to changes in temperature and maintains its volume in response to change in atmospheric pressure. Mercury?s unique properties have made it useful in a variety of technical devices, such as thermometers, manometers, contacts, fluorescent lamps and many more.

As an element, mercury is persistent in the environment. While natural emissions/releases continue, from processes such as volcanic activity, weathering of rock, etc., emissions from human activity account for an estimated 60 percent of the current total emissions (distributed with about half from new emissions and the other half from re-emission in nature of older human emissions). The human activities emitting/releasing mercury include, among others, the processing of some base metal ores; the burning of coal and hydrocarbon fuels; the use of mercury in industrial processes and in artisanal and small-scale gold mining; and the breakage and improper disposal of mercury-added products. Once in the atmosphere, mercury may cycle globally with atmospheric transport, deposition and re-emission and is only immobilized through strong adsorption on organic matter and some other substances or through deep-sea sedimentation. It also cycles with the ocean current, but at a much slower pace. This global transport of mercury means that even regions with no significant mercury emissions/releases, such as the Arctic, are known to be adversely affected.

Mercury is considered by the World Health Organization (WHO) as one of the top ten chemicals or groups of chemicals of major public health concern. All bioavailable[2][2] forms of mercury are extremely toxic to humans, fauna and microorganisms. Exposure to mercury and its compounds at high levels are fatal. At low levels, the nervous, especially that of developing foetus and the cardiovascular systems are the most affected even at lowest levels of exposure. Mercury may also affect other human organs including the lungs and kidneys and the immune system. The Minamata Convention obliges its Parties to eliminate intentional use of mercury in a range of industrial processes and in products containing mercury additives. It also compels its Parties to ensure the sound environmental management and disposal of mercury and mercury-containing products at the end of their life cycle. Furthermore, mercury is a natural contaminant of many metal ores, coal, oil and gas, and limestone and other raw materials used in clinker manufacture for cement. Processing of these raw materials generally lead to emissions and release of mercury. Parties to Minamata Convention are therefore under the obligation to take measures to reduce emissions and releases, including adoption of best environmental techniques and best environmental practises (BAT/BEP).

Article 6 of the Stockholm Convention and Article 12 of the Minamata Convention require parties to develop appropriate strategies for identifying **sites contaminated by POPs and by mercury (**or mercury compounds**).** They also require any actions to reduce the risks posed by such sites to be performed in an environmentally sound manner.

Despite efforts made in recent years, levels of awareness of the adverse effects of POPs and mercury are still low, particularly in developing countries. Stakeholders are generally not aware of the risks posed on human health and the environment as a result of exposure to these chemicals and therefore, they tend to rank these risks lower than other short-term risks. Low awareness amongst policy makers hampers efforts to mainstream sound chemicals management into sustainable development planning thereby undermining efforts to reduce harm to human health and the environment.

Furthermore, despite a high level of interest in the objectives of the chemicals and waste conventions, LDCs struggle to meet their obligations under these conventions. They may have insufficient capacity to introduce and enforce regulatory approaches; lack the capacity and financial resources to implement plans to address priority issues; lack viable alternative environmentally sound technologies and techniques; struggle to engage the private sector; and lack effective information sharing and dissemination actions to increase overall national understanding. Consequently, the potential of beneficiaries lack the awareness and means undertake highly-needed behavioural changes.

The Table 1 below provides a summary of the major barriers that exist for meeting the objectives of the of the Stockholm Convention and Minamata Convention to eliminate, reduce, and control POPs and mercury pollution sources in African LDCs, - identified in the 11 countries considered in this project. The table summarises barriers indicated in national reports (e.g., NIPs, MIAs), global reports from the Stockholm, Minamata and Basel Conventions, the AFLDC-1 evaluation reports, as well as information collected nationally during the PPG phase in the 11 countries.

Table 1 barriers against LDCs meeting the objectives of the Stockholm and Minamata Conventions

Barrier categorization	**Barrier Description**
Regulatory, policy and institutional	? A key issue is that chemicals management is still not being considered a national development priority. However, there is increasing awareness among countries of the need for better management of municipal solid waste as the urban landscapes are confronting with increasing magnitudes of waste that they are struggling to deal with. Except for certain urban areas, proper management is still generally poor for municipal solid waste and almost absent for hazardous waste. ? There is a lack of adequate legislative and regulatory frameworks within African LDCs, due to weak institutional capacity for planning, guiding and enforcement for the Convention compliance through national policy; lack of financing; and insufficient human resources and expertise. Reasons include also: lack of inter-ministerial coordination; insufficient local management experience for obsolete pesticides, chemical wastes, dioxins and furans and contaminated sites; lack of laboratory equipment and associated analytical capacity to analyse for POPs and mercury; deficiency of expertise in the monitoring of POPs and mercury and in sampling techniques; and lack of understanding of POPs and mercury in the judiciary system and other law enforcement agencies. ? There is a general inadequate level of dissemination of information on POPs and mercury, their management and best practice in the chemicals arena. ? Inadequate institutional infrastructure, management capability, and green human skills. ? Lack of resources, knowledge and capabilities with policy making institutions. ? Several institutions are mandated with some aspects related to the operationalization of the sound management of chemicals and waste. However, there is a weak coordination mechanism among these institutions to achieve the required systems approach.

Technical/ know-how	? Scarce capacity on chemical management and knowledge on how chemicals behave and interact with the environment to properly administer and implement national and regional chemical and waste plans and strategies. The current capacities of participating countries is still limited across their nations and proper technical advice for chemical related work still needs to be sought externally. ? Countries also need to strengthen their capabilities to see the integration or mainstreaming of the objectives of the Stockholm Convention with the Minamata and Basel Conventions, Montreal Protocol and other relevant chemical related frameworks in a synergistic manner. ? Implementation of BAT/BEP: The capacity to introduce BAT/BEP is poor due to the poor linkages among entrepreneurs, government officials and researchers. Entrepreneurs do not have easy access to the information of BAT and BEP. Those government professionals that are believed to be familiar with the state of the art in BATs and BEPs have little knowledge of market finance, commercial enterprise operation and economic project appraisal. ? Possibly high cost of purchase, installation and maintenance. ? Weak policies and lack of standards. ? Inefficient research and development institutes and their disconnection from the operational needs of industry and policy development of government. ? Lack of an enabling infrastructure for general waste segregation, and reuse (involves institutional, legal, regulatory and cultural gaps). ? Weak general waste recovery and recycling infrastructure (some activity is present, mainly informal unregulated and uneducated). ? Weak technology transfer infrastructure that will tend to complicate its ability to introduce environmentally sound technologies. ? Lack of human capacities
Implementation of BAT/BEP/ lack of infrastructure	? In the review of the NIPs, the consultation process and the needs assessment indicated that countries have been generally unable to move from NIP development to NIP implementation. ? Generally, participating countries do not have any infrastructural set up to manage hazardous substances in an environmentally sound manner, nor do they have an adequate institutional system to monitor and manage chemicals that come into the country. There is a major need for these to be put into place if LDCs are going to not only track the chemicals that enter the country but also to provide a system to manage them during their product life and after they have become hazardous wastes.

Business buy-in and financial/ lack of awareness of the business and financial communities	? Limited access to finance to fund activities related to mainstreaming work on implementing the Conventions. ? African LDCs are facing technical and economical inaccessibility to modern technologies for the management of municipal solid waste, POPs solid and liquid waste, mercury waste, as well as health-care waste. ? Likewise, smallholder farmers cannot afford to buy registered pesticides. Hence, current informal polluting practices in waste management in general associated with the non-application of sustainable agricultural pest management methods lead to high risk of exposure to POPs. ? Financial institution, venture capitalists and private equity stakeholders are poorly engaged in chemicals and waste development plans, because incentives are weak. ? Organizational rigidities within firms themselves and their public partners. ? Inadequate human resources and mechanisms for upgrading. ? Lack of incentives to unlock local finance. ? Lending to SMEs involves high interest rates and is therefore not favourable. ? Banks do not provide a load grace period for loans on technologies as they charge immediately with interest rate. ? Lack of access to formal credit markets as a result of the informal nature of the SME and waste sector is a common barrier to implementing change.
Socio-economic and gender Barriers	? Education choices, cultural stereotypes, lack of awareness and lack of role models to support socio-economic fairness, gender mainstreaming and equality. ? Access to finance. ? Lack of means to adopt BAT/BEP. ? Lack of adequate dissemination and sharing of experiences on POPs due to a lack of resources to train teachers, school students and NGO representatives on the dangers of POPs.

2) Baseline scenario and any associated baseline program/projects

Baseline scenario

This section describes the general baseline situation in the 11 participating countries, for which the baseline is similar. For the specific details by country, please see the country annexes (annexes P-Z).

Table 2 below shows the conventions to which the 11 LDCs are party to. All the 11 African LDCs participating in this project are e Party to the Stockholm and Basel Conventions. 10 of them are Party to the Rotterdam Convention; and 8 are Party to the Minamata Convention while a further 3 countries have signed the accord and are working towards accession. The LDCs that are Parties or Signatories to the chemicals and waste conventions recognize the need to reduce chemical and waste risks to human health and the environment. The environmentally sound management of chemicals and wastes is thus a key component of national sustainable development efforts and is a specific target of the Sustainable Development Goals. However, as also indicated in Table xx, the Minamata Convention is new and not yet implemented in the national regulations. The Stockholm Convention is still not implemented in all project countries, and the rest need to implement the most resent amendments to the Convention.

Table 2: status of the countries with respect to different international chemical and waste conventions*

country	Minamata Convention status	Stockholm Convention status	Rotterdam Convention status	Basel Convention status

Angola	Signed, not yet ratified	Ratified, not implemented in national regulation	Signed, not yet ratified	Ratified
Ethiopia	Signed, not yet ratified	Ratified, partly implemented	Ratified	Ratified
Gambia, The	Ratified, not implemented	Ratified, implemented partly	Ratified	Ratified
Guinea	Ratified, not implemented	Regulation drafted, partly implemented	Ratified	Ratified
Liberia	Signed, not yet ratified	Ratified, not implemented	Ratified	Ratified
Mauritania	Ratified, not implemented	Ratified, partly implemented	Ratified	Ratified
Senegal	Ratified, not implemented	Ratified, partly implemented	Ratified	Ratified
Sierra Leone	Ratified, not implemented	Ratified, partly implemented	Ratified	Ratified
Togo	Ratified, not implemented	Ratified, partly implemented	Ratified	Ratified
Uganda	Ratified, partly	Ratified, implemented	Ratified	Ratified
Zambia	Ratified, not implemented	Ratified, partly implemented	Ratified	Ratified

* Sources: Country responses to questionnaire and country presentations for the Abidjan 1st regional workshop (Jan 2020) for this PPG project.

To recall, this project aims to provide an integrated package of support to overcome the barriers to eliminate, reduce, and control POPs and mercury pollution sources in the 11 participating African LDCs.With respect to the actions required under the Stockholm and Minamata Conventions, several priority issues are emerging as common themes for African LDCs, including the 11 project countries:

? Nearly all LDCs have already banned most of the POPs pesticides and no specific exemptions have been requested by African LDCs for continued use of any POPs pesticides for acceptable purposes set out in the Stockholm Convention. However, enforcement capacity is insufficient to overcome illicit trade and continuous use of some POPs pesticides. . Pesticide residues in food are hazardous to human health while residues in export products and commodities may be subject to trade restrictions. Furthermore, many LDCs, particularly in Sub-Saharan Africa, have identified disposal of POPs chemicals, in particular obsolete pesticides, amongst their NIP[3][3] implementation priorities.

? Most LDCs have ceased the use of DDT[4][4] but 4 of the project LDCs are listed in the DDT register[5][5] of the Stockholm Convention permitting their continued use of the substance for disease vector control in accordance with WHO recommendations and guidelines and when suitable alternatives are not available. LDCs using DDT are participating in the global UNEP/WHO/GEF Programme on alternatives to DDT.

? Electricity generation, transmission and distribution form basic national infrastructural elements fundamental to development efforts in all countries. Electrical capacity installed prior to about 1985 may well contain items of equipment, such as transformers and capacitors, that use PCB liquids and

some of this equipment remains in service. Where maintenance and servicing regimes are inadequate PCBs from such equipment may have become mixed with other transformer oils, cross-contaminating equipment that did not originally contain PCBs. Equipment already removed from service may be simply abandoned but, more commonly, it is sold for scrap because of its high copper content. Retired equipment sold for its metal value is likely to be drained of its PCBs which, in the absence of appropriate disposal facilities, may be recovered illegally for sale as skin and hair products, cooking energy oils or as fuel additives or allowed to drain uncontrolled giving rise to locally severe soil contamination.

? For African LDCs, the major concerns related to unintentionally produced POPs (uPOPs) are t improper waste management practices - primarily open burning of municipal solid waste and medical waste. Such burning reduces solid waste volumes and is undertaken by householders living beyond municipal waste collection schemes and at municipal landfill sites. In addition, industries, and commercial entities, including SMEs and informal enterprises, may burn waste to avoid disposal costs. Informal recyclers ?scavenging? for valued materials at informal dumps and formal landfills burn waste to recover metals from cables, tyres and other wastes. Elsewhere the burning of agricultural wastes represents a traditional post-harvest activity but contributes to uPOPs emissions, air pollution more generally, and the loss of carbon from already impoverished soil systems. Such practices generate uPOPs such as dioxins and furans that are emitted to the atmosphere and disbursed nationally and globally.

For **mercury**, priority issues identified in Minamata Initial Assessments of the eight project countries focus on:

? The reduction, eventual elimination, and environmentally sound disposal of a range of specialist and consumer products containing mercury. Each of these products requires careful consideration to find and ensure adoption of suitable alternatives. Furthermore, separate collection and environmentally safe treatment of mercury-containing waste is absent in all the 11 project countries. This means that mercury-containing waste is being dumped and burned along with other municipal solid waste and medical waste, causing both local, national and global exposure to the toxic mercury due to releases and long-range dispersed emissions.

? In some African LDCs with important extractive industries, such as industrial scale non-ferrous metal smelters[6][6], mercury emission and release inventories are dominated by a small number of very large facilities with potentially large emissions and releases of mercury. Engaging these industries, verifying their emissions and release estimates, and where necessary, make them aware of the need for modification to the use of BAT/BEP is a complex task. This may, particularly be the case where such industries are critical to the national economy and thus to development. Similarly, but with higher facility number and generally lower mercury volumes involved per facility, the production of cement clinker (intermediate for cement production) is a source category for which the awareness of the requirements of the Minamata and also the Stockholm Convention is highly needed.

Cities are central stakeholders in the management of POPs and mercury. In many LDCs they represent an important contribution to chemical production and consumption and generate significant proportions of total national industrial and municipal waste. Organised waste management is only available in larger cities and towns of the project LDCs and the systems currently in place typically struggle to cope with the pace of urbanisation, lack of financing of waste collection and treatment services, the continuing growth in waste volumes and the increasingly complex nature of produced waste.

While most participating countries have facilities for treating a few types of hazardous waste, typically waste oils and lead-acid batteries, among others, they do not have the capacity for environmentally safe storage and treatment of POPs and mercury waste required under Stockholm and Minamata Conventions respectively.

Agricultural production is critical to maintaining rural livelihoods and communities and boosting food security. Highly hazardous pesticides, including POPs- (and perhaps still in some case mercury-containing) formulations, have proved too damaging to agricultural ecosystems and to the health of farming communities. They also contribute to elevated global exposures to such toxic substances. Despite this, farmers are reported to be continuing to use such products, particularly when purchased informally and without detailed information on formulation, mode of use and the necessary environment and health precautions. In addition, obsolete pesticides stored for later disposal may be brought back into unauthorised use[7][7], or their containers may degrade in situ and contaminate their surroundings. Poor practice with regard to plant protection may be exacerbated by burning of agricultural wastes that generated uPOPs and removes potentially valuable carbon from the soil.

Improving rural livelihoods is thus a priority for development in LDCs. Adding value to agricultural production through **integrated agro-industrial processing**, helps to sustain farming communities, creates employment and builds capacities and capabilities, improving returns and thus the security of farmers. With increasing concerns over the impact of poor waste management, in relation to open burning and plastics, opportunities to improve practices finding alternative uses for current wastes and joining community recyclers to urban-based networks could provide innovative opportunities for rural business development.

All the 11 African LDCs taking part in this project have utilised the enabling support available from the GEF and have completed their National Implementation Plans (NIPs) and transmitted them to the secretariat of the Stockholm Convention. Some have also benefitted from GEF support to update these plans to incorporate actions in relation to newly listed POPs. Many of the countries have received GEF support for the preparation of Minamata Initial Assessments (and, for those for whom artisanal and small-scale mining is more than insignificant, for the preparation of ASGM National Action Plans (NAPs) as required in Article 7 of the Minamata Convention).

For information about the individual GEF (and other) projects with relevance for AFLDC2, please see Table 3 and the country annexes (annexes P-Z). For on-going related projects, online coordination meetings will be made with their IAs and/or EAs at AFLDC2 inception and thereafter regularly as needed.

During preparation of the initial National Implementation Plans (NIPs) for the Stockholm Convention by African LDCs and SIDS, including the 11 project countries, each country identified capacity gaps to be filled in order to meet their obligations under the Convention. The countries identified a need for strengthened capacity and technology transfer in a range of areas:

? institutional capacity in technical support institutions;
? legislation, regulation, implementation, and enforcement capacities;
? research, development, and dissemination of technical capability for alternative technologies;
? capacities in POPs stockpiles and wastes identification, management, and proper disposal;
? capacities for identification and remediation of contaminated sites; and
? capacities in information exchange, public information, awareness raising, and education.

Some project LDCs have benefitted from participation in GEF-supported projects to initiate implementation of the action plans they identified in their national planning (the relevant projects are mentioned in the country annexes P - Z). Despite this, LDCs lag behind in terms of capacity building, financial resources and the technological solutions necessary to overcome the chemicals and waste issues outlined above and to meet their obligations under the chemicals and waste MEAs.

AFLDC-1

In response to these barriers, the GEF, United Nations for Industrial Development Organization (UNIDO), United Nations Environment Programme (UNEP), and other partners supported many African LDC and SIDS Governments to build and enhance their capacity under the programme *Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention*

National Implementation Plans (NIPs) in African Least Developed Countries (hereinafter referred to as AFLDC-1) in three sub-regions in Africa (ECOWAS, SADC and COMESA) in 2011-2016. Twenty-four African LDCs and several African SIDS took part in AFLDC-1 as follows:

? ECOWAS sub-region: Benin, Burkina Faso, Cape Verde, Central African Republic, Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, S?o Tom? et Pr?ncipe, Senegal, Sierra Leone, Chad, Togo
? COMESA sub-region: Burundi, Democratic Republic of Congo, Ethiopia, Rwanda, Sudan, and Uganda
? SADC sub-region: Lesotho, Mozambique, Eswatini, and Tanzania

The projects included activities at the regional and national levels and addressed: (i) legislative and regulatory framework development; (ii) sustainable enforcement and administrative capacity; (iii) coordinated information dissemination and awareness raising; (iv) BAT/BEP in industrial production processes; (v) reduction on exposure to POPs; and contaminated sites. The project comprised the following components:

? Legislative and regulatory framework development:
? Sustainable enforcement and administrative capacity:
? Two BAT/BEP pilot demonstrations in industrial processes:
? Five BAT/BEP Pilot demonstrations to eliminate or reduce exposure to POPs waste and uPOPs (e.g. at the workplace such as food smoking units):
? Establishment of Regional BAT/BEP Forums and guidelines in each sub-region:
? Coordinated information dissemination and awareness raising

Based on information from the countries, as well as the evaluation of the AFLDC-1 project, the level to which AFLDC-2 project countries benefited from AFLDC-1 varied. Besides, the Minamata Convention was not a part of AFLDC1, and the Stockholm Convention has been amended further since the undertaking of AFLDC1. Therefore, follow-up activities are needed. For a summary on AFLDC1 activities, see Annex O.

Other projects on chemicals and waste in the participating countries

A number of other projects have been or are currently undertaken in the participating countries. These projects constitute part of the baseline for the AFLDC2 project, and current and recently initiated projects will be coordinated closely with in AFLDC2 to complement and where relevante scale up efforts, and to avoid duplication. The projects are listed in Table 3.

Table 3 Other projects on chemicals and waste

Country	Project
Angola	UNEPs Special Programme project: ?Strengthening Angola?s National Chemicals and Waste Management Programme by establishing sustainable, integrated, and coherent national structure with emphasis on Private Sector participation? (2019-2022). The project aims to strengthen the legal and institutional frameworks for Sound Management of Chemicals by: Establishing a National Chemicals and Waste Management Unit; strengthening the inter-sectoral coordination and building national capacity for implementation of the MEAs and SAICM; Establishing Pilot Private Sector Partnerships and Promote Circular Economy initiatives to strengthen resource mobilization for the implementation of the chemicals and waste management agenda; and undertaking an awareness raising and education campaign to increase the knowledge and skills of a wide range of stakeholders to increase their participation in sound chemicals and wastes management in Angola.

Angola	BRS Secretariat: A Plastic Waste Partnership programme project is being implemented in Angola for the prevention, reduction, reuse and recycling of Plastic Waste. The name of the project is Reeduca - Organization of the Angolan Environmental Education Network for the prevention, reduction, reuse and recycling of Plastic Waste Objectives of the project are to: Raise awareness on the potential options of minimizing the use of platics, reuse, recycle or properly dispose. Build, produce and distribute different digital and physical communication tools on the importance of plastic waste prevention and minimization. Build the environmental education network to reduce plastic waste in Angola.
Ethiopia	The GEF project ?Integrated Health and Environment Observatories and Legal and Institutional Strengthening for the Sound Management of Chemicals in Africa (African ChemObs)? was approved in 2017. The project intends to provide health and environment interjectorily response to the essential capacity building and technical assistance needs to increase the awareness of the health, environment and economic impacts of harmful chemicals to be communicated to policy makers nationally to allow the integration of sound chemicals management into national budget and sector level plans.
Ethiopia	GEF 9669 (2018 -): PCB Management in Ethiopia to Meet the 2025 Stockholm Convention Deadline - Phase 1.
Ethiopia	GEF 10683 (PIF approved in 2021): Promotion of circular economy in the textile and garment sector through the sustainable management of chemicals and waste in Ethiopia (UNIDO).
Ethiopia	UNEP/UNDP/UNOPS (EU funded; 201? - 2021): SWITCH Africa Green. The programme supports 7 countries (Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius, South Africa and Uganda) in Africa to achieve sustainable development by engaging in transition towards an inclusive green economy, and promoting a shift to sustainable consumption and production (SCP) patterns. It?s anchored on three components of policy support, green business and networking. The programme focuses on key enablers for the transition, including access to green financing, enabling policies and standards, circular practices, awareness and skills on eco-entrepreneurship, and innovative solutions.
The Gambia	GEF 9570 (2019 - 2024): Capacity Building for PCB and uPOPs in The Gambia (UNDP/UNITAR). Awareness raising activities and demonstration projects in plastics recovery are planned as regards uPOPs.
The Gambia	The UNEP Special Programme project Institutional Capacity Building for the Implementation of the Multi-lateral Environmental Agreements in The Gambia (2018 - 2021) plans to organize awareness raising activities for a wide range of stakeholders on the BRS conventions.
The Gambia	The World Bank project under NaNa has built medical waste incinerators in five (5) regions (North Bank West, North Bank East, Lower River Region, Central River Region and Upper River region. The project has procured two Ecosteryl machines for treatment of waste from health facilities in Banjul, KMC and West Coast. Two waste collection and disposal trucks have also been procured and 58 temporary storage rooms have been constructed in several health facilities across the country.

Guinea	Regional UNEP PCB management project (GEF-2770): 'Demonstration of a regional approach to environmentally sound management of PCB liquid wastes and transformers and capacitors containing PCBs'. In Guinea the project included the following activities: Training of twenty (20) Guinea Electricity agents (EDG) and 10 Environment agents on the PCB inventory; Inventory and sampling of oils from PCB transformers (150 samples sent, 75 of which were positive); Packaging, transport and disposal of 200 tonnes of PCBs for Tredi in France (May 09, 2017), with a disposal cost of $ 170,572; Development of a draft Decree on the regulated management of PCBs, signed on April 18, 2018; Awareness and training on PCBs and the database of civil servants, academics, civil society, NGOs, the informal sector, the private sector, EDG, PCB holders; Identification and obtaining of a temporary storage site for PCB transformers; The additional PCB inventory.
Mauritania	Regional UNEP PCB management project (GEF-2770; 2010-2015): 'Demonstration of a regional approach to environmentally sound management of PCB liquid wastes and transformers and capacitors containing PCBs'. Since the NIP was published further awareness raising activities were conducted in 2015. The main components of this project were: (i) the harmonization of the legal and administrative frameworks for the management of PCBs at the regional level; (ii) the establishment of ESM regimes that sustainable, technically sound, economically viable and socially acceptable for PCB oils, equipment and wastes in participating countries; (iii) The destruction or decontamination of wastes containing or contaminated with PCBs and (iv) The environmentally-sound waste management and decontamination of equipment containing or contaminated with PCBs. This project therefore covered several aspects, thus allowing a strengthening of the existing binding frameworks, the provision of technical support in terms of best practices for the management of PCBs or the information and sensitization of relevant stakeholders on the impacts of the use of PCB oils or the best practices to integrate a rational management of these products in the country.
Liberia	The Liberian government development programme: The Pro-Poor Agenda for Prosperity and Development - PAPD (2018- 2023); ?Towards Accelerated, Inclusive and Sustainable Development?) . It sets, as a major objective, to provide greater income security to an additional one million Liberians and reduce absolute poverty by 23% through sustained and inclusive economic growth. The priority areas of investments are in agriculture, infrastructure, human resource development, and social protection; with emphasis on enhanced domestic food production, skills training towards empowering Liberians, job creation, particularly for the large youth population and, social and economic infrastructure development. Additionally, the Liberian Agricultural Sector Investment Plan II (LASIP II, 2018-2022) represents a plan toward implementing the PAPD based on its pillar Economy and Jobs. The agricultural sector, through LASIP II, is expected to lead the Pro-Poor Agenda to ensure sustainable socio-economic transformation by focusing on five (5) pillars: Food and Nutrition Security; Development of Global Value Chains and Market Linkages; Strengthening of Agricultural Extension, Research and Development; Support of Sustainable Production and Natural Resource Management; and Governance and Institutional Strengthening . Both the Ministry of Agriculture and EPA have expressed their full support to the project. The identification and disposal of the POPS Obsolete pesticides and the adoption of the regulatory elements and sound farming practices will ensure that the country will not allow entry of banned POPs, and that a monitoring plan of POPs pesticides leads to a Sound Management of Obsolete Pesticides.

Liberia	AfDB: Liberia has received a grant and loan from the African Development Bank (AfDB) in 2019 for a project entitled: Renewable Energy for Electrification in Liberia (REEL project). The project aims at developing the run-of-river Gbedin Falls HPP with a total capacity of 9.34 MW, a very significant increase of the national power production capacity. Activities related to the construction of infrastructures are also envisaged including the electrification of communities located in proximity of the existing distribution network and the capacity building for hydropower plant development and management. The project is to end in December 2024. The direct beneficiaries of the project are communities located in Nimba County and the professionals working in the energy sector in Liberia. The project will enable the provision of reliable electricity and will improve socio-economic conditions to an estimated population in excess of 60,000 persons living in the project area through its positive influence on key components of poverty, namely health, education, income and environment, while equally addressing the main drivers of fragility in Liberia. It will contribute to the increase of electricity access rate nationally in Liberia from the current 19.3% (as per the AfDB project document) to 30% at national level by 2024.
Liberia	World Bank P159961 (2017-2023) :The development objective of this Cheesemanburg Landfill and Urban Sanitation Project for Liberia is to provide improved access to solid waste management (SWM) services in Monrovia. There are three components to the project, the first component being construction of the Cheesemanburg regional landfill and partial closure of the Whein town landfill, with associated planning and construction work. This component will finance: technical studies and preparation for the tender documents for the new Cheesemanburg landfill; construction of the first cell of the Cheesemanburg landfill and related facilities (leachate pond, landfill office, maintenance area, etc..); water supply boreholes and extension of the access road to benefit the Cheesemanburg community; partial closure and construction of a perimeter wall around the Whein Town landfill to continue to operate in an environmentally safe manner before the Cheesemanburg landfill opens; permanent closure of the Whein Town site once the Cheesemanburg landfill becomes fully operational; and minor rehabilitation and upgrade work to the existing transfer stations to accommodate larger waste transfer trucks. The second component is the waste collection and disposal. This component will support MCC to continue delivering a consistent level of SWM service. The US dollar 2.0 million US from LRTF will be used to acquire the equipment that is critically needed to reduce the high cost of rental. The Government?s US dollar 7.0 million counterpart funds and other solid waste management revenue will be used for day to day operation and maintenance expenses such as fuel, staff salaries, parts, etc. Finally, the third component is the institutional capacity strengthening and technical assistance.
Mauritania	GEF (ID 4740) FAO CILLS project: In Mauritania the FAO CILSS project identified 399.5 tons of mainly organophosphorus pesticides distributed across 25 stores, of which, up to approximately 130 tons has been considered for disposal. The regional project is operating in seven of the CILSS group of countries. The project objective is to eliminate the existing obsolete pesticides, including Persistent Organic Pollutants (POPs) and associated wastes, undertake risk management of contaminated sites and strengthen the capacity for sound pesticides management at regional and national levels in order to prevent future accumulation.
Senegal	GEF (ID 4740) FAO CILLS project: In Mauritania the FAO CILSS project identified 399.5 tons of mainly organophosphorus pesticides distributed across 25 stores, of which, up to approximately 130 tons has been considered for disposal. In Senegal over 800 tons of pesticide were identified through a detailed countrywide inventory. The project has targeted HHPs and POP pesticides, the majority of which are located at the Senchim site for safeguarding and elimination. CropLife International is working concurrently with the FAO project and will contribute to the safeguarding and disposal of around 35 tons of pesticide waste derived from CropLife member companies.

Senegal	World Bank P161477 (2020-2026): Senegal Municipal Solid Waste Management Project: The development objective of Municipal Solid Waste Management Project is to strengthen the governance of solid waste management in Senegal and improve solid waste management services in selected municipalities. This project has three components. 1) The first component, Strengthening Sector Governance and Institutional Capacity, has the following sub-components: (i) Operationalization of the existing laws and regulations governing SWM; and (ii) Technical assistance. 2) The second component, Improving Solid Waste Infrastructure and Services in Selected Agglomerations, has the following sub-components: (i) Improving waste management services for Greater Dakar; (ii) Establishing integrated waste management systems in selected secondary agglomerations; and (iii) Improving the livelihood of waste pickers. 3) The third component, Project Implementation Support, aims to support implementation of all project activities in accordance with World Bank policies.
Senegal	GEF 9853 (2020 -): Africa Environmental Health and Pollution Management Project ? Senegal (World Bank). The project is composed of 3 components: Component 1: Institutional Strengthening, Capacity Building and Knowledge Sharing Technical Assistance. This will be achieved through improved capacity to identify and address environmental health risks associated with harmful chemicals and waste, including POPs Strengthened environmentally sound management of e-waste Component 2: Support to Policy Dialogue and Regulatory Enhancements . This will be achieved through improvement in policy framework for management of harmful chemicals related to e-waste Component 3: Demonstrating Application of Technological Tools and Economic Approaches This will be achieve through demonstration pilots completed and evaluated and improved treatment of POPs and hazardous waste.
Senegal	GEF ID 9371 /West African Development Bank (2019 -): Impact Investment and Capacity Building in Support of Sustainable Waste Management to Reduce Emissions of Unintentional POPs (UPOPs) and Mercury in West Africa.
Senegal	GEF/UNIDO project : "Environmentally sound management of municipal solid waste and hazardous waste". Specific objectives of PRODEMUD Senegal were to: (i) Demonstrate BAT/BEP for municipal and hazardous waste management through establishing controlled landfills and promoting recycling in the cities of Tivouanea nd Ziguinchor (ii) Develop an awareness-raising and a communication plan, integrating gender dimension, for Environmentally Sound Management (ESM) of hazardous waste for municipalities; (ii) Develop tools and materials for disseminating the ESM of hazardous waste specific to municipalities of Tivaouane and Ziguinchor through media; (iii) Define key messages for identified target audience and (iv) Propose adapted awareness-raising strategy (including gender dimension) and activities for selected municipalities. The project faces many chalenges along the chain from collection to disposal.
Senegal	Minamata Secretariat SIP project/UNEP: Regional Mercury trade project: training, guidelines.
Sierra Leone	Minamata Secretariat SIP project/UNEP: Regional Mercury trade project: training, guidelines.
Uganda	GEF 10716 (2021 -): Phasing out mercury measuring devices in healthcare (UNEP).

Uganda	GIZ project (2020-): The PET plastics Partnership is a partnership involving NEMA, the Ministry of Water and Environment, Kampala Capital City Authority (KCCA), Coca Cola Beverages Africa (CCBA), Uganda Water and Juice Manufacturers Association (UWJMA), Mukwano Group of Companies and Global Green Growth Institute (GGGI). It is a multi-stakeholder partnership of government, business and civil society to ?improve the sustainable management of PET plastic waste in Greater Kampala Metropolitan Area (GKMA) through developing an inclusive green recycling sector? by; (i) Improving the recycling value chain, including upstream collectors, collection hubs, recycling plants and downstream users of plastic waste; (ii) Improving attitude and behaviour towards waste and plastic in the Greater Kampala Metropolitan Area; (iii) Improving the policy framework to facilitate greater recycling by private and public sector actors. The partnership activities are implemented from July 2020 ? June 2021.
Uganda	UNEP/UNDP/UNOPS (EU funded; 201? - 2021): SWITCH Africa Green. The programme supports 7 countries (Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius, South Africa and Uganda) in Africa to achieve sustainable development by engaging in transition towards an inclusive green economy, and promoting a shift to sustainable consumption and production (SCP) patterns. It?s anchored on three components of policy support, green business and networking. The programme focuses on key enablers for the transition, including access to green financing, enabling policies and standards, circular practices, awareness and skills on eco-entrepreneurship, and innovative solutions. In Uganda, the project supports the formulation of sound policy and regulatory frameworks; incentives structures and tax; and market-based instruments in targeted sector. It also ensures that micro and small and medium sized enterprises (MSMEs) are better equipped to apply SCP practices, as well as inform public and private consumers of the multiple benefits of sustainable, resource-efficient products. Under the project, Uganda has developed a National Green Manufacturing strategy under the Ministry of Trade Industries and Cooperatives, is mainstreaming elements of sustainable/green procurement into the national public procurement policy under the Ministry of Finance, Planning and Economic Development, and is Greening the Tourism Act 2008 under the Ministry of Tourism, Wildlife and Antiquities among other interventions. The project also supported MSMEs in greening their production lines with green technologies and processes.
Uganda	A Solid Waste Treatment and Disposal PPP project was launched in 2017 by the Kampala Capital City Authority (KCCA). The Waste treatment plant will dispose of domestic waste. The RIPS project will support the distribution of waste collection kits will introduce the concept of waste separation at source, this concept will be scaled up in the project through training and awareness raising activities so waste segregation at source is applied not only within the RIPS project and the transport system but throughout all activities.
Uganda	World Bank P07740 (Approval 2020): Lake Victoria Environmental Management Project - Supplemental Credit: The objectives of the Lake Victoria Environmental Management Project are to: a) maximize the sustainable benefits to riparian communities from using resources within the basin to generate food, employment and income, supply safe water, and sustain a disease-free environment; and b) conserve biodiversity and genetic resources for the benefit of the riparian communities and the global community. A further project objective is to harmonize national management programs in order to achieve, to the maximum extent possible, the reversal of increasing environmental degradation. This project has eight components. They include: 1) fisheries management; 2) fisheries research; 3) fisheries extension, policies, and laws; 4) water hyacinth control; 5) water quality monitoring; 6) industrial and municipal waste management including pilot investments in industrial and municipal waste management (US$ 1.7 million), and priority waste management investments (US$ 4.0 million) 7) land use and wetland management; and 8) policy and institutional framework.

Uganda	World Bank P117876 (2013-2023): Uganda Support to Municipal Infrastructure Development Program: USMID is being implemented in 14 municipalities across the country to expand infrastructure and improve service delivery. Eligible infrastructure includes 1) roads, 2) waste management including preparation of the solid waste strategies for 14 municipal councils and the collection and disposal of 300,000 tonnes of municipal wastes, 3) water and sewerage extension to peri-urban areas, 4) local economic infrastructure such as markets and slaughterhouses, and 5) bus, taxi, and lorry parks.
Zambia	The GEF project implemented by UNIDO with UNITAR entitled ?Promotion of BAT and BEP to reduce uPOPs releases from waste open burning in the participanting African countries of SADC subregion ? includes training on BAT/BEP in integrated waste management with a focus on reducing uPOPs emissions from open waste burning. The project is projected to end in 2022.
Zambia	GEF 9852 (approved in 2020): Africa Environmental Health and Pollution Management Project ? Zambia (World Bank). The project is composed of 3 components: Component 1: Institutional strengthening, knowledge and capacity building outputs: Guidelines and monitoring protocols developed. Support to awareness on sound management of waste and its impact on human health and the environment Monitoring protocols developed (training materials developed). Component 2: Support for policy dialogue and regulatory enhancements. Outputs: A national strategy and implementation plan for promoting the reduction of emissions and releases of, and exposure to, POPs and priority chemicals developed. A methodology for screening and evaluating health and environment risks associated with POPs releases and other hazardous chemicals developed. Comprehensive assessment of the national and municipal institutional and technical framework for waste management (generation, collection, transportation, sorting, treatment, recycling, and disposal). Training for health-care workers and awareness-raising through health facilities National Steering Committee established and a communication strategy in place. Component 3: Demonstrating application of technological tools and economic approaches outputs: An economic viability and waste value chain study conducted. Hazardous waste management is piloted at existing landfill sites (investment in infrastructure). Upgrading an operational landfill to a recycling facility. Trainings conducted for ragpickers on occupational health and safety.

Table 4 below summarises information on trainings and awareness raising performed in the participating countries, based on country responses to questionnaires and country presentations for the Abidjan 1st regional workshop (Jan 2020) for the preparation project.

Table 4 Knowledge of Minamata and Stockholm Conventions in project countries**

Country	Minamata Convention		Stockholm Convention	
Indicator	No. of persons with knowledge of products/chemicals in Convention in key ministries*	Awareness activities performed	Persons with knowledge of products/chemicals in Convention in key ministries*	Awareness activities performed
Angola	NA	None (/?in-sufficient?)	NA	None (/?in-sufficient?)
Ethiopia	21	None	28	Some workshops

Gambia, The	4	None	>/=5	Some aw and tr
Guinea	NA	Some aw (MIA?)	NA	Customs, regulators
Liberia	6	None	6	Customers; public: open waste burning
Mauritania	9	MIA aw	9	Farming sector
Senegal	NA	NA	NA	Some to different target groups
Sierra Leone	15	Some aw	15	Some aw
Togo	NA	NA	17	Some
Uganda	40	Customs + few in MIA	NA	Only gov. regulatory bodies
Zambia	10	Customs tr, some MIA aw	2	Customs tr, some NIP aw

Table notes: *: Estimated by country; tr = training; aw = awareness raising; NA not available in country questionnaires; NIP: National Implementation Plan projects under Stockholm Convention; MIA: Minamata Initial Assessment projects under Minamata Convention. **Sources: Country responses to questionnaire and country presentations for the Abidjan 1st regional workshop (Jan 2020) for this PPG project.

Baseline scenarios in individual project countries:

For additional information on the baseline scenario in each of the 11 participating countries, see the country annexes (annexes P-Z).

Co-financing AfDB baseline projects

The African Development Bank supports a range of projects in participating countries that will be coordinated with AFLDC-2 and enhance the mainstreaming of the environmentally sound management of chemicals and waste within sustainable development planning. These co-financing baseline projects (hereinafter called ?baseline projects? or in short ?BLP's) pertain to the three AfDB thematic windows: (a) Urban landscape; (b) Agricultural production; and (c) Integrated Agro-industrial processing. These baseline projects and how they link to and support the AFLDC-2 outputs are described in section 5) on incremental/additional cost reasoning below and in the country annexes P-Z. The AfDB baseline project staff in each country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback in cooperation with the national executing agencies. Beyond their strong project management skills in the African context, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the countries.

3) Proposed alternative scenario with a brief description of expected outcomes and components of the project

Proposed alternative scenario

The proposed alternative scenario aims to support the participating countries with the necessary technical and financial assistance to encounter their challenges as LDCs with environmentally safe

management (ESM) of chemicals and waste, and specifically with the proper implementation of the Stockholm and Minamata Conventions. The common denominator of the proposed project interventions is, as described above, the severe and general challenges with securing ESM of chemicals and waste in the participating countries. While the project cannot handle all the identified remaining challenges in this respect in the countries due to budget restraints, a number of prioritised activities have been selected based on needs and opportunities in each country. Together, the selected activities reach across five different but inter-connected sectors and includes activities for cross-pollination and inspiration between participating countries and beyond. Follow-up with national initiatives, bilateral assistance, and future regional projects may provide necessary supplementation of the efforts planned in the current AFLDC-2 project.

The project ensure that:

(i) 742 tonnes of obsolete pesticides are identified, properly managed, and disposed,

(ii) 38 tonnes of mercury is being prevented from being emitted/released through reduction in import of mercury-added products and separate collection and environmentally safe storage and disposal of spent mercury-added products

(iii) 356 gTEQ of uPOPs releases are reduced through the introduction of non-burn waste management practices.

(iv) 540 tonnes of PCBs identified, properly managed, and disposed.

(iv) 3,775 tonnes of Mercury containing materials and products directly avoided

See Annex AB for further details.

GEB	Pesticides eliminated, t	PCB eliminated, t	Mercury reductions, t	uPOP reductions, g TEQ
Angola	75	**	1,9	62
Ethiopia	398	**	15	15
Gambia, The	**	**	2,1	11
Guinea	**	64	3	51
Liberia	94	60	0,1	19
Mauritania	**	60	4	12
Senegal	**	**	0,9	56
Sierra Leone	33	74	0,8	17
Togo	84	282	0,4	43
Uganda	**	**	3	38
Zambia	58	**	7	32
Total	**742**	**540**	**37,8**	**356**

** There may be GEBs as an effect of Components 1 and 2, but these have not been quantified.

The project comprises four principal components:

? Component 1: Strengthening the enabling environment and national enforcement capacities for the management and phase-out of POPs/Mercury and its compounds;
? Component 2: Communicating the environmentally sound management of chemicals and wastes;
? Component 3: Scaling-up actions to reduce and wherever possible, eliminate manufacture, trade, use, emission and release of POPs and mercury and its compounds;

? Component 4: Monitoring and evaluation, learning and adaptive feedback.

This project has been designed to build upon the successes generated during AFLDC1, to address weaknesses identified by the final evaluation of AFLDC1, to take up good practices and lessons learned in completed and continuing GEF and development assistance projects in POPs, mercury and more general waste management; and to mainstream the environmentally sound management of chemicals and waste into regional, national and development bank strategies and programmes directed towards achievement of the Sustainable Development Goals. AFLDC-2 will extend participation in implementing NIP and MIA action plans to two additional African LDC (Angola and Zambia) and deepen implementation experience in participants continuing from AFLDC1. Coordination with other UN agencies working on chemicals and capacity building in the region will be ensured so that the best quality of services can be provided to the country and that experiences gained through this project are fully disseminated in Africa and beyond. Regular coordination and communication with ECOWAS, SADC, and COMESA will also be ensured.

The final evaluation of the AFLDC1 highlighted its successes in building capacity and delivering pilot projects to demonstrate approaches towards meeting convention obligations in relation to POPs (mercury was not addressed in AFLDC-1) but noted that capacity that had been built was not sufficiently deep or broad to ensure the sustainability of national efforts. Regulatory frameworks had been successfully developed but not everywhere adopted and policy-making were not sufficiently aware of the benefits of having such schemes. Similarly, the awareness of farmers and other consumer groups remains insufficient to ensure the market and behavioural changes needed to reduce and eliminate POPs and mercury can be made. For industry, continued effort is required to ensure that successful pilots undertaken in AFLDC1 are replicated suitably, with all participating countries able to take advantage of the knowledge gained in such demonstrations.

This project will address these shortcomings as far as budget allows, by continuing to use established regional and national steering and consultation groups, including national combined health and environment groups where appropriate, to tune actions to local circumstances. It will place particular emphasis on developing focused, timely and innovative approaches to engage and communicate with stakeholders and beneficiaries - including those groups that are usually beyond the remit of chemicals and waste officials. It will also promote direct communication, mentoring and experience exchange between participating countriess, including between those that participated in AFLDC1 and those countries (Angola and Zambia) participating for the first time.

The project will provide support to the development of public-private engagement and partnership specifically adapted to the circumstances of LDCs to enable the sound management of chemicals and waste whilst generating commercial and financial benefits are a result.

To accommodate the various national priorities and baselines, the proposed project provides participating countries with the opportunity to address many of their chemicals and waste related challenges and selected key priorities[1] through one of the following thematic windows: (a) Urban landscape; (b) Agricultural production; and (c) Integrated Agro-industrial processing.

a. Urban landscape

Tracking of resource use and consumption in cities is critical for ensuring the sustainable development pathway sought by cities. The generation of hazardous waste and the increasing amounts of domestic waste contaminated with hazardous waste due to lack of best practices such as segregation at the source, absence of appropriate regulatory framework or enforcement in place remain a major challenge for cities across Africa and notably more pronounced in the project LDCs. Cities should work towards actions to reduce waste and to minimize natural resource extraction by employing circular economy approaches, which promote reducing, redesigning, reusing, repairing, and recycling. At the same time, they should, work on reducing and eventually eliminating POPs, such as PCBs and brominated flame retardants, and mercury. This thematic window also supports the SAICM risk reduction objectives for reducing ?the generation of hazardous waste, both in quantity and toxicity, and to ensure the environmentally sound management of hazardous waste, including its storage, treatment and disposal? in cities. In addition to reducing mercury, POPs, and ODS in infrastructure, products and materials, this thematic window will also contribute to reducing air emissions of relevant POPs and mercury, notably

through reduction of open waste burning that is widespread in LDCs, including in the project countries .

b. Agricultural production

By enhancing capacity for sustainable management of pesticides and promoting safer alternatives to pesticides, this thematic window will support countries to reduce and ultimately eliminate the continued reliance on POPs pesticides in food systems. It will seek to address accumulations of obsolete POPs pesticides to prevent their return to the market or unintentional release into the environment. It will identify opportunities to reduce agricultural waste burning.

c. Integrated Agro-industrial processing zones

Currently, industrial operations are driven by minimum compliance, and the creation of industrial zones brings with it multiple opportunities for environmental gains in terms of resource efficiency and cleaner production, access to finance and BAT/BEP and industrial symbiosis, helping industries move away from the conventional linear economic development models towards circular development models. Linear economic development models are wasteful, in the sense that they entail mining of raw materials, value adding on them, consuming the resultant products, and discarding the resultant wastes into a landfill. Hazardous chemicals in the products reduce the possibilities for safe and sustainable circulation of valuable resources.

Agro-industrial processing zones will provide modern infrastructure, and support services to companies, as well as provide opportunities for skills development, and help attract domestic and foreign investment. The creation of agro-industrial parks is a key instrument for transforming Africa?s agricultural sector and the overall economic transformation on the continent, hence the agro-industrial zones model is increasingly selected as a strategic approach for meeting its development and economic targets. To be successful (and sustainable) this ambitious objective will require the mobilization of significant resources, both domestic and external, public and private.

Coupled with Industrial Symbiosis. When the supply chain components within an industrial system are integrated to be symbiotic, rather than independent, each contributing to an efficient system that generates minimal by-products and pollutants, forms a holistic approach to mitigate and adapt to climate change for industries and the communities they ultimately should serve. Materials, energy, and water resource inputs are optimized, emissions and wastes are minimized. Wastes that remain are recovered for use as feedstocks by other businesses within the system, reducing the need for sourcing and transporting additional virgin and otherwise wasted resources. When implemented holistically, Industrial Symbiosis accelerates the transformation from a linear extraction-use-throw-away model of economic growth into a closed loop supply chain, changing how industries and communities relate to each other.

Agro-industrial sectors have pressing demand toward the safe utilization of agro-materials and chemicals through BAT/BEP. Agro-industry among them releases a lot of waste materials to be utilized in many of the fields such as energy production, composting, and textile industry. In recent times, energy consumption and economic pressure on industries need sustainability in the utilization of resources and to get optimum yield. Agro-industrial wastes can be a good option to meet the demands of the present generation without compromising the future generations, so there is a gravid need for more attention into the depth of agro-industrial waste generation, utilization and recycling solutions. Child projects under this thematic window will promote BAT/BEP to reduce uPOPs releases, phase-out POPs and any mercury used or emitted from or in processes and products and demonstrate the sound management/disposal of POPs and any mercury/mercury containing waste. Emphasis will be on addressing the entire life cycle of products through a Circular Economy approach with strong private sector engagement at national to global scales. The national child projects are developed by building on identified and existing AfDB Investment projects for the respective countries.

Expected outcomes and components of the project

Changes in the project since the PIF stage

The PIF outlined 12 measures in Component 3 (investment measures), as well as a number of measures in Components 1 and 2. During the inception phase, countries were requested to set their key priorities

as regards measures to be investigated further for Component 3, as well as their relative interest in the measures considered for Components 1 and 2, based on priorities in their Stockholm Convention National Implementation plans (NIPs) and their Minamata Initial Assessments (MIAs[2]). This approach encouraged focus on fewer measures in Component 3, and thereby increase the impact of each measure. This culminated in the 1st regional consultation workshop, held in Abidjan 21-22 January 2020, where the process of a common prioritisation was initiated for the 11 countries. The report of the 1st regional consultation workshop is given in Annex K.

Based on further investigations of links to the AfDB co-financing baseline projects, global environmental benefits (GEB) contributions, budget considerations and the outcomes of the national consultations, the outputs presented below for Components 1-4 were selected for implementation in the AFLDC-2 project. An overview table on outputs selected are given in the beginning of the description of each component, along with information on which project countries participate in the individual outputs.

The selection of outputs by country was validated at the regional validation workshop held 24-25 November 2020 online. The report of the regional validation workshop is given in Annex AA. Further changes were made later, in response to GEF SEC feedback to the 1st submission (Dec. 2020).

As a result of the scoping of the project since the PIF phase, the project outputs were adjusted to better reflect the selected measures; the overall goals of the project are however the same. A comparative overview of changes since the PIF is given in Annex N.

Component 1: Strengthening the enabling environment and national enforcement capacities for the management and phase-out of POPs/mercury and its compounds

Outcome: *Conducive enabling environments based on strengthened legal and regulatory regimes provide a sustainable basis for the environmentally sound management and disposal of chemicals and waste, in particular POPs and mercury and its compounds*

Table 2 above gives an overview of the level of implementation of the Stockholm and Minamata Conventions in the project countries.

Participating Countries*:* All

Table 5 below gives an overview of the anticipated activities under Component 1.

Table 5 Component 1 outputs

Component 1 outputs	**Participating countries and expected focus of work**

Output 1.1: Up-to-date legislative and regulatory frameworks	
1.1a: Up-to-date legislative and regulatory frameworks ? for POPs (Stockholm Convention), including provisions for sustainable financing	All/most aspects needed: Angola, Ethiopia, Liberia, Mauritania, Togo, Zambia Regulation and guidelines to support and supplement legislation: The Gambia, Guinea, Sierra Leone, Uganda Minor updates: Senegal
1.1b: Up-to-date legislative and regulatory frameworks ? for mercury (Minamata Convention), including provisions for sustainable financing	All/most aspects needed: Guinea, Mauritania, Togo, Zambia Regulation and guidelines to support and supplement legislation: The Gambia, Senegal, Sierra Leone, Uganda Preparations to ratify and implement Convention: Angola, Ethiopia, Liberia
Output 1.2: Strengthened application and enforcement of updated legislative and regulatory frameworks	
1.2a Enforcement guidelines developed/updated	All countries
1.2c Training workshop(s) for national and local environmental permit and control officers and waste management inspectors	All countries
1.2d Training workshop(s) on the elimination of illegal uses of obsolete POPs pesticides for trainers in the national agricultural sector	Angola, Ethiopia, Guinea, Liberia, Sierra Leone, Togo, Zambia
1.2e Training workshop(s) on the environmentally sound management of PCBs for national electricity sector	Guinea, Liberia, Mauritania, Sierra leone, Togo

1.2f Training workshop(s) on integrated waste management for national and local trainers	All countries
1.2g Training of trainers workshop(s) on customs and police inspections for regulated POPs-containing and mercury-added products	Mercury + POPs: Angola, Ethiopia, The Gambia, Liberia, Senegal, Sierra Leone Mercury + refresher on POPs updates: Mauritania, Togo, Zambia Refresher on mercury + POPs: Guinea, Uganda
Output 1.3 Strengthened national methodologies to identify, assess, and manage sites contaminated by hazardous chemicals	All countries
Output 1.4: Integrated regional and national strategies to implement environmentally sound management of chemicals and waste	
1.4a Regional workshops held back-to-back with regional PSC meetings	Participation from all countries
1.4b A regional industry conference held.	Participation from all countries
1.4c A regional plastics? circular economy forum, fair and conference established.	Participation from all countries
1.4d Project represented at meetings of Regional Cooperation Bodies	AfDB or Regional Executing Agencies for the project

Output 1.1: Up-to-date legislative and regulatory frameworks

Participating countries: See Table 5.

This output will reinforce the national legislative and regulatory frameworks and institutional responsibilities that are required by Parties to the Stockholm and Minamata Conventions in order to meet their obligations under those treaties.

Some participating countries already have legislation that addresses implementation of the Stockholm Convention - a number of these benefitted from the provision of model legal frameworks developed for the AFLDC1 project. These model legislative and regulatory schemes will be used as appropriate and updated as necessary to take into account the experiences and lessons learned during the AFLDC1 project as well as recent developments in the Convention.

Experience sharing between participating countries, in particular amongst those sharing similar legal codes, or members of same regional organisations, will be promoted as a means of encouraging regional harmonisation and best practice as part of Output 1.4a.

Trade and industry groups, consumer associations and other civil society organisations will be actively engaged with government institutions in the development of the legal and regulatory regimes, as specified for each country in the country annexes (annexes P-Z). While many enforcement mandates are a responsibility of government institutions, opportunities will be sought to incorporate concepts of extended producer/importer responsibilities (EPR) as potentially important means to promote the rapid transition away from POPs- and mercury-containing products. This has a potential for improving the separate collection, sorting and environmentally sound management of such products at end of life, as well as for diverting plastics and other potentially valuable recyclables away from waste streams subject to open waste burning and landfilling/dumping.

Accordingly, the broader concept of Circular Economy will be promoted in both regulation, training activities (Component 1), and awareness raising activities (Component 2), and opportunities for industrial symbiosis will be sought.

Enabling elements to be considered for implementation/enhancement in legislation or regulation promoting Circular Economy include, among others:

- ? EPR (Extended Producer Responsibility) as a financing instrument for circular economy promoting activities.
- ? Mapping of options for deposit-based systems for financing collection and recycling activities (inspired by systems on for example. bottles, batteries and PVC plastic in European countries).
- ? The Waste Hierarchy as a guiding principle in product and material design, in ESM of waste, in strategies and planning.
- ? Labelling of recyclable materials with type, such as plastics, to enhance high-value recycling/upcycling and avoid downcycling, where possible.
- ? Exploration of interest for establishing industrial symbiosis networks in private sectors.

Under both activities (1.1a and 1.1b) financial mechanisms to support the continuous ESM of POPs and Hg will be promoted/designed/established. The nature and scope of the financial mechanisms for each country will depend on their social and economic circumstances. A range of options will be considered. These options may include market-based financial mechanisms and Command and Control (CAC) mechanisms.

Each country will undertake an assessment of policy instruments relevant to the ESM of POPs and Hg. The assessment will consider the relevant stakeholders, polluter pays principles, taxations, licencing fees, penalties, and other regimes. Options for achieving economic efficiencies will be prioritised. Subsequently, each country will undertake measures to strengthen the availability and demonstrate the viability of financial mechanism for the support of BAT/BEP to manage POPs and Hg.

1.1a Legal and regulatory frameworks for POPs

1. A comprehensive and up to date assessment of the national legal and regulatory frameworks and institutional responsibilities for POPs will be conducted in each participating country to determine the regulatory and administrative actions and institutional responsibilities necessary to meet Party obligations under the Stockholm Convention, including for those POPs newly listed in the Convention. These assessments will take account of similar work undertaken as part of national implementation planning and any actions arising from it. Some participating countries benefitted from actions to develop regulatory frameworks using models developed under AFLDC1; in these countries, attention will focus on completing the frameworks they have developed and ensuring their compatibility with more recent additions and amendments to the Convention.

The assessment will also consider, in more detail, the model legislation developed under AFLDC-1 including recent advances in national development planning and any strategies to deliver the Sustainable Development Goals, with the objectives of identifying potential mainstreaming opportunities for chemicals and waste actions, and to harmonise national actions with initiatives of regional cooperation organisations.

The assessment will also identify the procedures applied and challenges encountered in enforcement of legislation on chemicals and waste, including any existing legislation relevant to POPs.

2. Convene a committee comprising representatives of appropriate sectors of government, industry and civil society, to consider:

- ? Proposals for legal and regulatory text to infill existing regulations or, if needed, to be put forward as new regulations, by a committee drawn from key government departments as well as representative of private sector stakeholders and civil society; and
- ? proposals for the revision or refinement of institutional responsibilities to facilitate effective implementation, including enforcement of the legislation.

During this process, good practices will be identified and shared with other participants from other countries as they begin the development of their regulatory frameworks.

The logistics (events management) of the above activities will be provided by Output 2.1, by combining awareness raising to key stakeholder groups with the above mentioned committee work; see Output 2.1 for more details.

1.1b Legal and regulatory frameworks for mercury

1. A comprehensive assessment of the national legal and regulatory frameworks and institutional responsibilities for mercury will be conducted in each participating country to determine the regulatory and administrative actions and institutional responsibilities necessary to meet Party obligations under the Minamata Convention. The assessment will build on, and make use of, any previous work undertaken, for example, as part of the mercury initial assessments (MIAs) or national action planning for the artisanal and small-scale gold-mining sector.

Like for POPs, the assessment will also consider any recent advances in national development planning and any strategies to deliver the Sustainable Development Goals, with the objectives of identifying potential mainstreaming opportunities for chemicals and waste actions, and to harmonise national actions with initiatives of regional cooperation organisations.

The assessment will also identify the procedures applied and challenges encountered in enforcement of legislation on chemicals and waste, including any existing legislation relevant to mercury and its compounds.

2. Convene a committee comprising representatives of appropriate sectors of government, industry and civil society, to consider:

- ? Proposals for legal and regulatory text to infill existing regulations or to be put forward as new regulations, by a committee drawn from key government departments as well as representative of private sector stakeholders and civil society; and
- ? proposals for the revision or refinement of institutional responsibilities to facilitate effective implementation, including enforcement of the legislation.

3. Develop, with health sector and dental practitioners, measures to be taken to phase down the use of dental amalgam compatible with Article 4, paragraph 3, and Annex A part II of the Minamata Convention.

The logistics of the activities of Outputs 1.1a and 1.1b will be provided by Output 2.1, by combining awareness raising to key stakeholder groups with the above mentioned committee work; see Output 2.1 for more details.

Output 1.2: Strengthened application and enforcement of updated legislative and regulatory frameworks

Participating countries: See Table 5.

This output will focus on strengthening the capacity and capabilities of enforcement agencies, trade and industry groups and civil society to understand and apply the legislative and regulatory measures relating to POPs, mercury and its compounds and their management as wastes in the participating countries. This will involve establishing or scaling up a wide range of national environmental guidance and control functions across all relevant ministries and their agencies. Key stakeholders include customs trainers and officers, police trainers; national and local environmental permit and inspectors; industrial permissions officers and inspectors; waste management inspectors; and private sector institutions and enterprises working in waste management and chemicals trade.

Similar to Output 1.1, but with the exception of Outputs 1.2d and 1.2c, all of the 11 countries will undertake the activities outlined below for this output, with amendments made to suit their national situation. Outputs 1.2d and 1.2c will only be conducted in countries participating in Out 3.2 (pesticides) and 3.3 (PCB), respectively.

As part of the comprehensive assessment of the national legal framework and national institutional framework conducted under Output1.1, the procedures in place for enforcement of chemicals and waste legislation/regulation will be mapped, and challenges in the enforcement work will be identified. This will feed into the design of all training and capacity building activities in Output 1, as well in other training and awareness raising activities under this project. The assessment will influence the precise design of the trainings conducted under this Output 1.2, however, the following training activities are

anticipated. Any general challenges in the enforcement will also be captured in the below described training activities.

1.2a Based on legal and institutional assessments made in Output 1.1, **key national guidelines and procedures** for enforcement will be identified and updated to properly include the legislation implementing the Stockholm and Minamata Conventions. The revised guidelines and procedures will be presented and trained in the training sessions mentioned below, to the respective target groups.

1.2c One or more training workshops will be held for at least 30 national and local **environmental permit and control officers and waste management inspectors** in each participating country. This will include all relevant aspects relating to the enforcement of the conventions? provisions on POP pesticides, uPOPs, industrial POPs, and mercury and its compounds and specifically how these provisions can be addressed in permit, control, and inspection activities, using the revised guidelines and procedures developed under Output 1.2a. The training will include a train-the-trainers component and the training materials will be made available on-line for future training conducted by the relevant authorities themselves.

1.2d For countries participating in Output 3.2, a workshop on the **elimination of illegal uses of obsolete POPs pesticides**, taking into account the promotion of appropriate alternative approaches will be conducted for at least 20 trainers in the agricultural sector in each country. The trainers to be trained will be carefully selected to make use of existing capacity building structures and networks, in order to ensure an optimal cascade of dissemination of the knowledge acquired. The training will be based on the Integrated Pest Management (IPM) approach. IPM employs an array of methods and techniques, including cultural, biological and structural strategies to control a multitude of pest problems while minimizing undesired side-effects on health and environment.

1.2e For countries participating in Output 3.3, a workshop will be held for at least 30 participants on the **environmentally sound management of PCBs** targeting PCB holders (managers), electrical facilities workers and government counterparts in countries that implement Output 3.3 on PCB management. It will include training on inventories, sampling and analysis, storage and dismantling, accidents prevention, regulatory and administrative aspects, as well as labelling and traceability schemes and other measures to prevent cross-contamination in cases where the PCB cannot be eliminated within the project period.

1.2f One or more training of trainers workshops on **integrated waste management** will be conducted for at least 40 trainers in each country. The focus will be on national implementation of integrated management of municipal waste, including restrictions of open burning of waste in waste dumps and informally; landfill design and management procedures to minimize open waste burning on landfills; formalization and training of waste pickers to increase number of decent jobs and avoid open burning of waste; minimization of waste amounts subject to burning and dumping through increased application of circular economy principles, including the ?3 R?s?: Reduce, reuse, recycle (and beyond), for all valuable raw materials such as plastics, metals, compostable waste, glass, etc.; separate collection and environmentally safe treatment of hazardous waste, e-waste, etc.

1.2g One or more train-the-trainers workshop will be held on customs and police inspections for regulated POPs-containing and mercury-added products for at least 50 customs trainers, police trainers and environmental prosecutors in each participating country. This will include the development of

customs control guidelines on mercury and its compounds, and the use and expansion (as needed) of an existing guideline on identification of POPs-containing products[3]. The training will expand on previous training held on POPs in some of the participating countries. The workshop will include training in undertaking import and market inspections.

Output 1.3: Strengthened national methodologies to identify, assess, and manage sites contaminated by hazardous chemicals

Participating countries: See Table 5.

Contaminated sites (land) can contribute significantly to secondary emissions and releases of POPs and mercury. However, the Conventions do not require actual remediation of such sites, and therefore actual remediations will not be performed as part of this project.

This output will strengthen or establish national capacities necessary for the identification and assessment of chemically-contaminated sites and thereby facilitate the development of contaminated sites management plans in line with Article 6 of the Stockholm Convention and Article 12 of the Minamata Convention, which require Parties to develop appropriate strategies for identifying and assessing sites contaminated by POPs and mercury respectively.

The project support in this output will make use of international guidance such as the UNIDO ?Toolkit for investigating and managing POPs-contaminated sites? and the brief overview provided in the ?Guidance on the management of contaminated sites? (UNEP/MC/COP.3/8/Rev.1), adopted by COP3 of the Minamata Convention, taking into account the national and local contexts of the participating countries.

Output 1.4: Integrated regional and national strategies and approaches to implement environmentally sound management of chemicals and waste

Participating countries: See Table 5.

1.4a **A series of regional workshops held to share experiences and lessons learned** at the national level in implementing the chemicals and waste conventions. The workshops will be held back-to-back with regional PSC meetings for at least four persons per country, namely the project focal points (Stockholm and Minamata focal points of each country; each time) and two technical officers working with the topics on the agenda for the specific workshop, see below (these two persons will likely change for each workshop). The trainers on these workshops will include top experts in the topics covered, with a preference for African top experts, or secondarily experts of other origin with good knowledge of the African situation.

At each of these regional workshops, one or more of the measures implemented within the project will be scrutinized, and the countries implementing the specific measures will have the opportunity to exchange on challenges met and lessons learned in their implementation of the measures, to the benefit of all participants. This will allow for an effective cross-pollination amongst the countries implementing the specific measures but will also give insight in these topics for countries that have selected other Component 3 measures. These workshops will be supported by the establishment of an

online forum for each of the Component 3 measures, in which challenges and lessons can be exchanged and discussed in-between workshop sessions.

This training and sharing of experience will include the following subjects (among others):

? The hazards for the environment and human health of the POPs and mercury. Update, on a detailed level, of the requirements of the Stockholm and Minamata Convention requirements, and how these can be implemented in the national legislation and strategies in the context of the participating countries. Regional work for establishments/enhancement of a roadmap for the environmentally sound management of chemicals and waste. (Held back-to-back with the inception workshop).

? Environmentally sound management of PCBs, POP pesticides and mercury and their waste (linked to Outputs 3.1, 3.2, 3.3, 3.4 and 3.5).

? Reduction in the availability of mercury-added products and industrial POPs through promotion of alternatives and improved enforcement of legislation (linked to Outputs 1.1, 1.2, 2.4 and 3.5).

? Reduction of uPOPs emissions from open waste burning through increased use of the 3R?s (reduce, reuse, recycle), and other circular economy initiatives (linked to Output 3.4).

? Development of national methodologies and guidance for the identification, assessment, and remediation of sites contaminated by (hazardous) chemicals, with POPs and/or mercury as examples (linked to Outputs 1.3, 3.2, 3.3, among others).

? Sharing of experiences on the design/establishment of sustainable financing mechanisms that support the implementation of BAT/BEP for the ESM of POP and Hg.

1.4b **A regional industry conference held**. The project will organize a regional conference to highlight private sector responsibilities and promote industry engagement, and showcasing of opportunities for national financial mechanisms relevant to in the implementation of the chemicals and waste conventions.

The conference will target, in particular, participation from those industry sectors listed in Annex C Part II of the Stockholm Convention and in Annex D of the Minamata Convention, notably the non-ferrous metal and cement clinker production sectors, and the public officials engaged in regulating these sectors in the project countries (and beyond, as feasible).

Topics addressed at the conference will include, but will not be limited to:

? Industry-related obligations of the Stockholm, Minamata, Basel and Bamako Conventions: how these requirements are being implemented in the national regulations in the region;

? Origin and typical fate of mercury and uPOPs in the industries in question;

? Requirements to implement BAT/BEP for existing and new facilities under these conventions;

? Current state of BAT/BEP implementation in the project countries and the African region;

? Dealing with POPs- and mercury-wastes;

? Current and future possibilities for public/private interaction and exchanges on BAT/BEP and future development perspectives in the industries.

1.4c **A regional plastics circular economy forum, fair and conference established**.

In the African context many stakeholders in the value chain of plastics recycling lack capital, technical knowledge and capacity, and the commercial networks to increase business opportunities and develop sustainable enterprises. This activity will increase the business to business networking in the region through enabling meetings with potential downstream customers, and at the same time inform the participants of the latest technology advances and business opportunities within the large scope of circular economy for plastics and related materials.

Target participants include:

? national and any regional companies and community-based organisations engaged in or supporting the collection and re-processing of plastics and other activities promoting circular economy approaches in the plastics sector;

? large producers and importers of single-use plastics as well as reusable/recyclable plastics;

? national and regional companies and organisations engaged in the production of compostable bio-plastics and traditionally-used materials;

? national, regional and international traders/buyers of recycled plastics raw materials;

? national, regional and international companies and experts engaged in sustainable development of the plastics industry, including aspects related to biodegradable plastics, avoidance of additives preventing recycling, substitution, labelling to enhance recycling, etc.

? international and national financial institutions with mandates and interests to support SME development

The project will also support the participation of representatives of recyclable waste collection communities and recycling companies in the relevant project countries.

The event will form the basis for the creation of a business-to-business forum for continued networking, exchange and interaction in the plastics supply and recycling chain. The event and forum will also showcase the potential opportunities and incentives that are available for entities interested in investing in this sector.

Partners in the international plastics industry will be engaged as co-hosts and co-funders of the event and forum, as feasible.

Competitions can be issued to increase interest regionally , for example for regional best design based on circular economy principles, and for best regional circular economy value chain enhancement concept implemented.

The forum will be established and designed with a view for continuation beyond the current project and possible co-hosting by future projects in the field.

1.4d **Project represented at meetings of Regional Cooperation Bodies and other cooperative information exchange**. Presentation of the project will be made by representatives of the project at governing body meetings of at least two of the relevant regional cooperation for a: the African Union, ECOWAS, SADC and COMESA. The presentation will be made either as an official intervention or as a side-event, perhaps in collaboration with similar GEF-funded projects within the region.

Stockholm Convention mechanisms such as the PCB Elimination Network (PEN) and participation in collective information events such as webinars organised by for example, the BRS Secretariat will also be utilised to share knowledge gained through the proposed project.

Component 2: Communicating the environmentally sound management of chemicals and wastes

Outcome: The environmentally sound management of chemicals and waste mainstreamed into development decision making and into consumer choices.

This outcome will promote wider understanding of the environmentally sound management of chemicals and waste amongst national and regional decision makers and private sector stakeholders in order to mainstream its objectives into development planning, policy building and investment programming. It will raise the awareness of chemical risks - particularly from POPs and mercury, amongst consumers in order to reduce demand for these chemicals and products containing them.

The planned awareness raising activities will address, as relevant for the individual target groups:

- ? Why hazardous chemicals and waste need to be addressed: Risks to human health and the environment; current exposure levels.
- ? Where such hazardous chemicals can be found in products, processes and emissions/releases.
- ? What the updated regulation requires of members of the target groups in order to reduce these risks.
- ? How the risks can concretely be reduced through implementation of specific measures for environmentally sound management of chemicals and waste, such as substitution to alternatives, promotion of hazard warnings to work places and consumers (for example GHS[4]), and proper waste management through separate collection and treatment and avoidance of open burning and dumping of waste.
- ? How such measures can contribute to increased sustainability through reduced health problems locally and nationally, through improved resource efficiency by gradual introduction/improvement of circular economy approaches and increased industrial symbiosis including through business-to-business, EPR[5] and PPP[6] approaches, and through improvement or creation of decent jobs (waste picking, waste sorting, re-processing etc.).

The awareness raising activities conducted will be closely coordinated with the Component 3 investment outputs implemented in the country which will demonstrate the relevance and efficacy of the available mitigation measures.

An overview of the outputs of Component 2 is given in in Table 6 below.

Table 6 Component 2 outputs

Component 2 outputs	Participating countries and expected focus of work
Output 2.1:Increased awareness amongst national and regional development planners of the role of ESM of chemicals and waste within Sustainable Development policies and strategies	All/most aspects needed: Angola, Ethiopia, Liberia, Mauritania, Togo, Zambia Regulation and guidelines to support and supplement legislation: The Gambia, Guinea, Sierra Leone, Uganda Updating/refreshing: Senegal
Output 2.2: Increased capacity and knowledge of public officials to incorporate ESM of chemicals and waste in public policies and programmes	All countries
Output 2.3: Increased engagement of key stakeholders in agriculture and industry in efforts to reduce POPs use and release	
Output 2.3a: Increased awareness and engagement of farmers, farming associations and cooperatives, and farm suppliers in stopping or limiting POPs pesticide use and reducing uPOPs releases from the burning of agricultural wastes	Angola, Ethiopia, Guinea, Liberia, Togo, Zambia
Output 2.3b: Increased awareness and engagement of electrical engineers and power sector managers in the environmentally sound management of PCBs	Liberia (other countries implementing Output 3.3 had such activities in previous projects)
Output 2.3c: Increased awareness and engagement of industry and the waste management sector in reducing uPOPs and mercury emissions and releases from MSW	All countries
2.3d: Outreach to other sectors	All countries
Output 2.4: Increased engagement of civil society organisations, communities and consumers in designing, promoting and implementing ESM for chemicals and wastes	All countries (with nationally adapted communication strategy and topics focus)

Output 2.1: Increased awareness amongst national and regional development planners of the role of ESM of chemicals and waste within Sustainable Development policies and strategies

This sub-output combines awareness raising and discussions among key stakeholders and supports the efforts in output 1.1 of convening a committee comprising representatives of appropriate sectors of government, industry and civil society, to consider proposals for legal and regulatory text, and proposals for the revision or refinement of institutional responsibilities to facilitate effective implementation. The outreach activities below will secure that the participants are adequately informed of the convention requirements and root problems, and provided a platform for discussions of these aspects and how they can best be implemented in national regulations, strategies and institutional infrastructure.

Participating countries: See Table 6.

National high-level workshops will be held in each country to highlight the role of the environmentally sound management of chemicals and waste in the Sustainable Development Goals and in the regional and national development policies developed to deliver them. The objective of these workshops is to pave the way formulation and adoption of legislation needed to implement the conventions.

An introductory workshop, to be held at the start of Component 1 for the established committee (and other key stakeholders), will set out the goals of the chemicals and waste conventions to which the country is Party, their interlinkages with the Sustainable Development Goals, the actions necessary to implement the conventions, opportunities to integrate actions with development plans and projects, including those directly linked as baseline co-funding, and the supportive actions planned within the AFLDC2 project.

A workshop to consider preliminary findings for the established committee (and other key stakeholders) will be held to coincide with consideration of the findings and recommendations of assessments carried out in outputs 1.1 and 1.2. The aim of the workshop will be building widespread support for strengthening legal and regulatory frameworks and institutional arrangements and capacities for managing chemicals and wastes; as well as building consensus to promote the mainstreaming of the ESM of chemicals and waste within a broad range of national and regional development strategies.

The workshops will be presented by the national project secretariat together with representatives of selected parliamentary committees and international technical experts and will target participants amongst national policy makers, regulators, and national delegates to regional cooperation fora, including government and parliamentary representatives, senior civil servants from key ministries, as well as industry leaders and senior representatives of civil society.

The workshops will include the development of a plan among the national key stakeholder groups for steps in the process mentioned to reduce POPs and mercury emissions and releases through the measures of the project and beyond.

Output 2.2: Increased capacity and knowledge of public officials to incorporate ESM of chemicals and waste in public policies and programmes

***Participating countries*:** See Table 6.

Public officials directly engaged in national efforts to implement the Stockholm and Minamata Conventions, particularly those with responsibilities for public health and environment, are generally well aware of the need to manage these prioritised hazard substances through the actions set out in those treaties. This was shown in the response to country questionnaires as part of the consultation process performed. However, many implementation actions can only be achieved in collaboration with a wider group of officials from other ministries, departments and agencies with direct responsibilities in key fields.

For this reason, one or more ***national workshops*** will be hosted by Environment and Health officials to communicate convention objectives and project actions to that wider audience of officials.

The target audience will include those public institutions with responsibilities for agriculture, mining and natural resources, trade and industry, energy, waste and urban development, local government, education and social affairs, finance and economic development, customs, gender and equality, labour and justice. Representatives of major municipalities and associations of municipalities will also be invited.

The agenda will include the following topics, among others:

- ? The environment and health risks associated with improper management of chemicals and wastes - with particular reference to POPs and mercury;
- ? The actions necessary at national level for Parties to the chemicals and waste convention - the Basel, Bamako, Rotterdam, Stockholm and Minamata Conventions (as well as the Strategic Approach to International Chemicals Management beyond 2020, as relevant), taking account of available national information on POPs and mercury use and release;
- ? Opportunities and positive impacts arising from the successful implementation of the conventions and the take up of Best Available Technologies and Best Environmental Practices;
- ? Opportunities for co-benefits from linking chemicals and waste actions into development strategies and policies addressing the Sustainable Development Goals;
- ? Identification of key actors to cooperate in highly-ranked actions;
- ? Formation of topic-oriented contact groups across ministries and relevant agencies and institutions.

Output 2.3: Increased engagement of key stakeholders in agriculture and industry in efforts to reduce POPs use and release

The implementation of convention obligations can be an onerous burden on countries that lack the capacity and capabilities to introduce and enforce appropriate regulations. Industry participation is critical if key initiatives are to be successful.

2.3a ***Increased awareness and engagement of farmers, farming associations and cooperatives, and farm suppliers in stopping or limiting POPs pesticide use and reducing uPOPs releases from the burning of agricultural wastes.***

Participating countries: See Table 6.

Tasks will include:

? Identification of target farming sector groups and the means to gain their attention and engagement;

? Preparation and delivery of appropriate communications materials relating to, but not necessarily limited to:

  ? hazards to human health and the environment from use of POP pesticides and from uPOPs generated by open burning of agricultural wastes;

  ? applicable obligations of the chemicals and waste conventions as reflected in national legislative and regulatory frameworks;

  ? locating obsolete POPs pesticides for disposal;

  ? alternative less hazardous options for plant protection (IPM);

  ? safe handling of pesticides;

  ? opportunities for alternative uses for agricultural waste through circular economy/recycling approaches.

In the countries that have AfDB baseline projects in the rural/agricultural sectors, the infrastructure and activities of the baseline projects will be used as platforms for the dissemination of the above messages. In all countries, existing agricultural outreach channels will also be used in collaboration with the responsible operating agencies.

2.3b ***Increased awareness and engagement of electrical engineers and power sector managers*** **i*n the environmentally sound management of PCBs***

Participating countries: See Table 6.

Tasks will include:

? Identification of target companies and organisations, managers and professionals responsible for power sector equipment supply, operation, maintenance and disposal

? Identification of the appropriate means, key channels and opportunities to gain their attention and engagement;

? Preparation and delivery of appropriate communications materials relating to, but not necessarily limited to:

  ? hazards to human health and the environment from improper management and handing of PCBs;

  ? applicable obligations of the chemicals and waste conventions as reflected in national legislative and regulatory frameworks;

  ? locating, inspecting and maintaining equipment containing PCBs, avoiding cross-contamination with oil-filled equipment, storing PCBs and avoiding their discharge to the environment;

  ? preparing replacement schedules for PCB-containing equipment.

2.3c ***Increased awareness and engagement of industry and the waste management sector in reducing uPOPs emissions and releases from MSW and in ESM of POPs and mercury waste***

Participating countries: See Table 6.

Tasks will include:

? Identification of target companies, SMEs and informal traders whose activities in manufacture, import, packaging and sale result in significant quantities of plastic waste;

? Identification of target companies, informal SMEs, and community-based and informal groups engaged in the management of wastes likely to be burnt in open air;

? Identification of the appropriate means, key channels and opportunities to gain their attention and engagement

? Preparation and delivery, as appropriate, of communications relating to, but not limited to:

  ? hazards to human health and the environment from improper management and open burning of wastes;

  ? applicable obligations of the chemicals and waste conventions as reflected in national legislative and regulatory frameworks;

  ? opportunities to reduce plastic packaging materials through substitution, reuse and recycling;

  ? opportunities and good practices in recycling plastic wastes

? other measures to reduce open burning of waste, such as formalisation and training of waste pickers and landfill management practices minimizing open burning

? ESM of hazardous waste including POPs and mercury.

2.3d Outreach to other sectors

This output relates to sectors not specifically targeted by awareness raising activities in Outputs 2.3a-d above. Meetings with officials from other institutions recognised as key actors with respect to project activities will be conducted to boost their engagement and implementation of the conventions. Outreach, tailored to national needs, will likely include, but is not limited to:

? Outreach to the agricultural sector with regards to enhanced plant protection without Highly Hazardous Pesticides including those chemicals listed in the Stockholm Convention (in countries that do not participate in Outputs 2.3a and 3.2);

? Outreach to the health sector, both public and private and including pharmacies, customs, importers and suppliers with regard to phasing out mercury instruments and handling mercury waste.

? Outreach to dental practitioners in relation to the phase-down plan for dental amalgam in output 1.1

? Outreach to other public sector procurement officers, importers and suppliers concerning the need to specify mercury-free products in contracts to replace mercury-added products listed in Annex A of the Minamata Convention;

Output 2.4: Increased engagement of civil society organisations, communities and consumers in designing, promoting and implementing ESM for chemicals and wastes

***Participating Countries*:** See Table 6.

This output will support outputs 3.4 (on uPOP reductions) and 3.5 (on mercury-added products), and beyond, by reaching out to those project beneficiaries in smaller and informal enterprises, civil society organisations and community groups in order to raise awareness of health risks pertaining to the use and improper disposal of domestic products that may consist of or contain POPs and mercury; to examine and address the demand drivers for such products and thus to reduce demand; and to drive public opinion towards improved waste management.

Particular topics for attention would include, but not be limited to:

? mercury-containing products such as thermometers and batteries that give rise to exposure risks when items are broken or dismantled at home,

? skin-lightening creams and soaps, used particularly by women;

? schemes to separate wastes facilitating the collection of hazardous wastes for environmentally sound disposal and of materials such as plastics of recycling value but typically burnt with other MSW fractions creating emissions of uPOPs.

These messages will be disseminated through nationally and regionally appropriate channels identified through a regional communications strategy (with national annexes, as needed) to be developed in the project. It is anticipated that the following communication channels may be among the selected means for communication:

? Training materials for school-age children (and via them to their parents). Sets of training materials customized for key educational stages will be developed centrally under the project and be adapted to the national situations (including translation) in cooperation with relevant representatives of the national ministries of education and representatives of relevant teacher?s organisations/groups (for example nature/biology teachers). The training materials could make use of a range of modern and more traditional media and include materials for teachers with ideas for incorporating learning into the wider curriculum.

? Educational materials for university level and similar advanced education. For these higher education institutions, training materials will be developed in cooperation with representatives of selected national universities that already offer education in subjects appropriate to the environmentally safe management of chemicals and waste management. The primary target will be the introductory course level for environmental studies. Additionally, opportunities for survey, assessment and research activities of national and international value will be identified and encouraged. The material will consist of electronically available material that will be promoted to all major universities in each country, available through download from the project website. Language versions will be provided (English, French, Portuguese; others if feasible).

? Engagement of key national NGOs/CSOs in the field of chemicals/waste/environmental protection in order for them to use their communication channels and other awareness raising means to communicate to the public, with special focus on women and young people.

? Through existing networks involving local leaders/chiefs; if possible directly via existing digital contact groups or social media, otherwise indirectly via municipalities or the ministry of local government, as relevant and feasible in the individual country.

? Through national TV and radio to the general population, with an emphasis on young people and women. Materials will address social and cultural drivers for the domestic use of hazardous substances and seek to overcome barriers to reducing demand for hazardous products; and to improving waste management practices.

? Regional social media outreach through engagement of carefully selected regional influencers, working as necessary with specialised advertising bureau(s), to design and deliver dynamically adaptive social media campaigns. The campaign will be adopted to each of the language/culture sub-regions (probably Francophone West Africa and an Anglophone countries? versions).

Component 3: Scaling up of actions to reduce and wherever possible, eliminate manufacture, trade, use, emission and release of POPs and mercury and its compounds

Outcome: POPs and mercury reduced or phased out from processes and products through substitution, environmentally sound management and the application of BAT/BEP

This component comprises a range of actions that advance the implementation of the Stockholm and Minamata conventions. Table 6 shows those countries participating in each of the outputs within this component. The participation is based on priorities of the countries? in their NIPs and any MIA?s, incrementality to AfDB baseline projects, prioritisation provided by country participants at the 1st regional consultation workshop (held in Abidjan, 21-22 January 2020; see Annex AA), complementarity to other projects, the results of national consultations as described in the country annexes (annexes P-Z), GEB outputs and budget constraints.

Table 7 Component 3 outputs and participating countries

Component 3 outputs (for countries where respective outputs are selected)	**Participating countries (per output)**
Output 3.1: **National facility established for interim storage of mercury and POPs waste awaiting final disposal**	***Ethiopia***
Identification and preliminary characterisation of existing sites used for the storage and treatment of hazardous wastes	
Selection of a short-list and ranking of potential permanent sites for the interim storage of hazardous waste	
Improvement / development of a permanent interim storage facility for hazardous waste	
Output 3.2: **POPs pesticides wastes destroyed**	***Angola, Ethiopia, Liberia, Sierra Leone, Togo, Zambia***
National inventories	
Risk assessment of identified stores	
Repackaging and removal to interim storage	
Evaluation of disposal options	

Final disposal operations	
Output 3.3: **Environmentally sound management of PCBs**	***Guinea, Liberia, Mauritania, Sierra Leone, Togo***
Revised and updated national inventory of PCB-containing equipment	
Preparation of maintenance and servicing schemes for equipment	
Risk assessment and ranking of equipment for treatment, disposal and replacement and evaluation of disposal options	
Final disposal operations	
Output 3.4: **Reduced uPOPs emissions and releases from municipal waste management through reduction of open burning of waste**	***3.4a: Angola, The Gambia, Guinea*** ***3.4a+b: Uganda, Zambia, Senegal***
3.4a1: Promoting sustainable manufacturing from recovered plastics and tyres waste	
3.4a2: Demonstrating or scaling-up sustainable and efficient approaches to the separation and collection of plastics and tyres for recycling	
3.4b Energy recovery of otherwise un-recyclable tyres and sorted plastics in cement kilns	
Output 3.5: **Reduced availability and use of mercury-containing products and models for their proper disposal demonstrated**	***The Gambia, Mauritania***
Investigating the availability and flows of mercury-added products	
Providing the capacity and capability to analyse certain products suspected to contain mercury	
Providing model systems for the collection and disposal of mercury-added products while promoting alternatives	

Output 3.1: National facility established for interim storage of mercury and POPs waste awaiting final disposal

***Participating countries*:** See Table 7.

This Output will support and forward the implementation of the legislation/regulation amended/developed in Component 1.

According tot the Stockholm and Minamata Conventions, wastes of POPs and mercury need to be environmentally handled and treated.

In participating countries, the tonnages of POPs and mercury wastes arising significant as regards their risks but are likely too small to warrant the investments necessary to develop domestic facilities for final treatment and disposal. It follows that interim storage sites will be required to act as transfer stations, holding the hazardous wastes awaiting shipment for appropriate final destruction overseas.

This output will identify, in each participating country, a permanent facility suitable for the interim storage of POPs and mercury wastes arising from project activities as well as other hazardous priority waste awaiting final treatment and disposal. While countries may have sites where some hazardous wastes are currently handled and stored, few, if any, of these sites currently meet the standards for environmentally-sound interim storage as developed under the Basel Convention[7] and adopted by the Stockholm and Minamata conventions. Opportunities to improve and up-scale existing sites to meet those standards will be preferred, if feasible. But as sites need to be situated in safe distances to dwellings and other vulnerable infrastructure, and final disposal is likely to entail international shipment making connections to transport infrastructure an important consideration in site selection, other sites may be considered.

The output is to secure the availability of a permanent facility where prioritised hazardous waste segregated from the general waste stream can be stored in an environmentally sound manner until further treatment. Such a facility is a corner stone in a well-functioning integrated waste management system, and the requirements of the Stockholm and Minamata Conventions of environmentally safe waste management of their respective chemicals cannot be fulfilled without it.

In order to secure sustainability, that the facility will be hosted by an existing responsible company or public entity, and to secure a business plan that ensures sustainable financing of the facility beyond the project period.

Activities will include the following elements:

1. **Identification and preliminary characterisation of existing sites used for the storage and treatment of hazardous wastes**,
2. **Selection of a short-list and ranking of potential permanent sites for the interim storage of hazardous waste**.; based on an environmental impact assessment taking into consideration such factors as existing infrastructure, soil and groundwater conditions, human settlement, safety and security, access and transport infrastructure, ownership and land rights, acquisition and preparation costs.
3. Improvement/preparation of ? and commitment to ? **a business plan securing continued sustainable operation** (based on the polluter pays principle);

4. **Development of a permanent interim storage facility for hazardous waste,** in accordance with convention guidance; and in collaboration with waste management partners engaged in final collection, repackaging and disposal operations. Including, but not necessarily limited to improvement/development of storage areas and building; provision of storage, handling, safety and management equipment; development of emergency response protocols and infrastructure; recruitment and training of staff; and improvement/preparation of decommissioning plans.

In countries for which the establishment of a permanent storage facility for hazardous waste (Output 3.1) was not prioritised in the project but hazardous waste collection will be undertaken (Outputs 3.2, 3.3 and 3.5), short-term storage will be improved or established as per relevant guidelines for storage of POPs and mercury wastes collected during the project until its final treatment within the project period (at a lower cost than for permanent facilities but with adequate environmental safeguards for short term storage).

Output 3.1 will be supported by Outputs 2.3c and 2.4 as regards the awareness of the need for ESM of hazardous waste and the possibility for public entities, private sector and the public to make use of the improved facility for this purpose.

Output 3.2: POPs pesticides wastes destroyed

***Participating countries*:** See Table 7.

This output will address the elimination of obsolete POPs pesticides in the participating countries.

Key elements of this output will be:

? Undertaking detailed and updated national inventories of obsolete pesticides stocks and assessment of overall priorities

? Repackaging and removal to interim storage

? Evaluation of disposal options

? Final disposal operations.

? Developing strategies for further assessment and management of identified contaminated sites.

National inventories and assessment of obsolete pesticides stocks have been prepared through initiatives of the FAO and as part of national implementation planning for the Stockholm Convention. Available inventories will be reviewed and, where necessary, updated using FAO methodologies, so that each participating country has an accurate assessment of the quantities and condition of the obsolete pesticide accumulations in its territory. Inventory work will include, where necessary, sampling and analysis so that damaged and unlabelled materials can be correctly characterised. This information will be used to characterise the risks presented at the different sites; to determine priority

actions for clean-up and disposal; and to prepare the technical specifications for environmentally safe and feasible repackaging, shipping and disposal operations.

The national inventories will be overseen by a national inventory advisory group comprising key national stakeholders such as the ministries of agriculture and environment; industry representatives and national farming associations; farmer unions and civil society.

Inventories will be led by suitably qualified national and international experts assisted by national personnel. All will have received appropriate training and field personnel will be provided with appropriate personal protective equipment (PPE).

Based on the updated detailed inventories, a detailed risk assessment of identified obsolete pesticide stores and stocks contained and development of Environmental and Social Management Plans (ESMP) will be undertaken in accordance with the provisions of the Environment and Social Safeguarding Scoping Report (ESSSR; Annex L), and will set out mitigation measures for each risk identified.

The ESMP will include the following: All steps to be carried out by trained personnel, safeguarding to be conducted according to ADR / IMDG[8][8] using UN specified containers and appropriate personal and environmental protection measures. Selection of qualified contractors. As the POP chemicals dealt with are highly toxic, all steps need to be done by trained personnel and to be overseen by relevant experts, in order to eliminate or minimize risk of releases of the chemicals to the environment and risks of exposure of involved personnel. This will be secured in the project through procurement of these services from expert companies and personnel selected based on detailed Terms of Reference and proper documentation of their expertise and experience. Selected contractors will be required to submit detailed management plans as part of their offers including safeguarding, transport, emergency and disposal plans. In general terms such international service providers will be responsible for safeguarding of high and medium risk stores, while national teams may conduct safeguarding of lower risk stores. National teams will be given advance proper training by relevant experts as part of the project to secure adequate performance standards. Operations performance will be monitored by project staff, and the NPC, including relevant NGOs/CSOs, will oversee project performance as regards adequate and safe ESM of the chemicals in question nationally through review of the ESMP and the project reporting of collection, storage and elimination/export activities. The Regional Executing agency procuring expert company services for chemicals collection and final treatment will monitor the performance of the expert company/ies and report to the PSC, which in turn will review the ESMP and the regional project reporting of collection, storage and elimination/export activities.

Repackaging and removal to interim storage will be undertaken in order of risk priorities. In many cases, existing packaging of obsolete pesticides is likely to have degraded to the point where it cannot be handled or moved safely. In this case, the accumulated wastes, including old containers and

packaging, and, potentially, minor quantities of any highly contaminated soil beneath the stored pesticides, would need to be repackaged in new UN-approved containers, appropriately labelled and inventoried. Repackaged materials would then be transferred to interim storage established in Output 3.1, if that is implemented in the country. In countries not implementing Output 3.1, short-term storage will be improved or established, as per relevant guidelines, for storage of POPs wastes collected during the project until its final treatment within the project period.

Evaluation of disposal options: In most cases, the environmentally sound option for dealing with obsolete pesticide wastes is to destroy them, typically by complex or expensive processes such as high-temperature incineration. It is unlikely that suitable destruction facilities are available within the participating countries and the quantities of waste to be destroyed would not merit the investment in such infrastructure. It follows that options for the final disposal of the waste would most likely involve their transport to an overseas facility. Options for disposal will be evaluated by the national inventory advisory group and regionally.

Detailed terms of reference will be developed to steer the procurement of the services for international transport and disposal of the pesticide wastes. In order to secure competitive prices the procurement of these services will be conducted regionally through an international tender following the AfDB procurement procedures.

Final disposal operations to destroy the pesticide wastes will be undertaken at disposal facilities (A few examples of internationally acknowledged providers of destruction of POPs and final disposal of mercury (with associated international collection and transport service partners), are Fortum (DK), Remondis (DE), Tredi (IT), BATREC (CH), BTM (NL), Nomura Kohsan (JP)) that are licensed and monitored by competent authorities and have a proven successful track record of operating to recognized standards. Transboundary transport from interim storage to the disposal facility will be undertaken according to international regulations and protocols such as the :

- The Basel Convention on the Control of Hazardous Wastes and their Disposal
- The International Maritime Dangerous Goods (IMDG) Code.
- The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa.

Contaminated sites

Regarding identified sites contaminated with POP pesticides, environmental and social risk scoping and strategies for further assessment and management will be prepared under the project. Except for moving minor quantities of any highly contaminated soil beneath the stored pesticides, the project will not be able to include detailed assessments and comprehensive remediation of any contaminated sites.

Output 3.2 will be supported as regards training by Output 1.2c and as regards the awareness raising by Output 2.3a and Output 2.4.

Output 3.3: Environmentally sound management of PCBs

***Participating countries*:** See Table 7.

This component will support the development and implementation of PCB management plans compatible with, and necessary for the achievement of, the regulatory and institutional arrangements developed in component 1. It will be compatible with the obligations of Parties to the Stockholm Convention to take equipment containing PCBs out of service by 2025 and disposed as waste no later than 2028.

Key elements of the output are:

- ? Revised and updated national inventory of PCB-containing equipment;
- ? Preparation of maintenance and servicing schemes for equipment, avoiding cross-contamination of equipment;
- ? Risk assessment and ranking of equipment for treatment, disposal and replacement and evaluation of disposal options;
- ? Repackaging and removal to interim storage;
- ? Final disposal operations

Revised and updated national inventory of PCB-containing equipment:

A comprehensive PCB inventory will be conducted according to the best practise contained in the UNEP IPEN guidance 2016. This inventory will revise and update previous preliminary inventories undertaken during national implementation planning for the Stockholm Convention and provide the basis for the preparation of detailed plans for the remaining service and end-of-life management of PCB-containing equipment. Equipment suspected of containing PCBs will be sampled and analysed, where possible with non-destructive methods. Results will be managed in a national database permitting a risk-based ranking of equipment for replacement and disposal. This system will be actively managed to monitor progress towards the Convention objectives; to ensure that disposal is undertaken by environmentally sound means; and to label PCB-bearing equipment and monitor its servicing and replacement so that operations do not result in cross-contamination of the wider transformer population or the introduction of PCB-containing or contaminated equipment, or reuse of contaminated oils for other purposes.

The inventory will also identify and assess sites where PCB equipment is handled, maintained, serviced and stored to provide data and information for the preparation of improved maintenance and servicing schemes; and to inform decisions with regard to treatment and disposal operations.

Preparation of maintenance and servicing schemes for equipment, avoiding cross-contamination:

PCB-containing equipment in good working order may continue in service until end-of-life or 2025 whichever is the sooner. This allows time for such equipment to be identified, managed correctly and to be replaced as part of capital investment business plans. Owners of PCB-containing equipment will require equipment maintenance and servicing schemes to ensure that such equipment is managed

separately from other equipment, thereby avoiding cross-contamination, and to ensure that other equipment potentially already contaminated is identified and cleaned. Such schemes would become part of standard maintenance and servicing schedules used by equipment owners and benefit their wider operations by providing improved operational performance.

Risk assessment and ranking of equipment for treatment, disposal and replacement and evaluation of disposal options

The treatment, disposal ? as necessary ? replacement of equipment identified within the national inventory will be subject to a risk assessment, undertaken with equipment owners, to identify equipment posing high risks and thus representing a priority for retirement and disposal. Risk assessment of stocks will be conducted according to adapted FAO PSMS methodology to identify sites and stocks most in need of risk management (with respect to the budget available); it is however anticipated that all PCB stocks will be eliminated in the project.

National facilities may exist for initial treatment of some equipment - such as transformer draining, cleaning, dismantling and interim storage, or for the in-situ dechlorination of lightly-contaminated equipment. If so, these facilities will be used where such treatment can be achieved in an environmentally sound manner. Consideration will be given to limited upgrading of such facilities where this represents the most economically efficient and environmentally rational solution. Facilities for the final disposal or destruction of PCBs and PCB-contaminated wastes are not available in participating countries so that options for final disposal will need to be assessed, taking into consideration guidance adopted by the chemicals and waste conventions and international best practice.

All necessary steps to assure ESM of the handled, collected and stored PCB-containing/contaminated waste will be undertaken in accordance with the provisions given in the ESSSR (Annex L). Operations performance will be monitored by project staff, and the NPC, including relevant NGOs/CSOs, will oversee project performance as regards adequate and safe ESM of the chemicals in question nationally through review of the ESMP and the project reporting of collection, storage and elimination/export activities. The Regional Executing agency procuring expert company services for chemicals collection and final treatment will monitor the performance of the expert company/ies and report to the PSC, which in turn will review the regional project reporting of collection, storage and elimination/export activities.

Repackaging and removal to interim storage will be undertaken for PCB-containing/contaminated oils that are currently not safely stored. Repackaging suitable approved containers will be undertaken needed based on a risks assessment, appropriately labelled and inventoried. Repackaged materials will be transferred to interim storage established in Output 3.1, if that is implemented in the country. In countries not implementing Output 3.1, short-term storage will be improved or established, as per relevant guidelines, for storage of POPs wastes collected during the project until its final treatment within the project period. Environmentally sound management of PCB-containing/-contaminated electrical equipment will be carried according to the Stockholm Convention Updated technical guidelines for the environmentally sound management of wastes consisting of, containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs) 2015 and General technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with persistent organic pollutants

2019. These documents will also form the basis of disposal options assessment to determine the most optimum method of disposal.

Final disposal operations

Detailed technical specifications will be developed for the procurement of services for international transport and final treatment of the PCB wastes. The procurement of these services will be conducted regionally through an international tender following the AfDB procurement procedures. Disposal operations will be independently monitored to ensure that international standards are met and certificated throughout.

Output 3.3 will be supported as regards training by Outputs 1.2e and as regards the awareness raising by Output 2.3b and Output 2.4.

Output 3.4: Reduced uPOPs emissions and releases from municipal waste management through reduction of open burning of waste

Participating countries: See Table 6.

This output will demonstrate improved municipal waste management practices that reduce open-burning of waste and thus reduce emissions and releases of POPs produced unintentionally (?uPOPs?). This will be done by improving recycling and substitution of plastics and tyres that could otherwise be burnt in the open; a measure that is BAT/BEP under the Stockholm Convention. It operationalises or improves Circular Economy and the goals and aspirations of the regulatory and institutional arrangements developed in component 1.

The output will focus on addressing problems associated with the considerable volumes of waste plastic currently being generated. It will build on national development plans and strategies to boost efforts to prevent and minimise plastic waste, as well as government-, industry- and civil-society-led schemes collecting, sorting, reusing and recycling such wastes. Achieving positive social- and economic-impacts and encouraging private sector participation will be key to the success of this output and so be the subject of supporting communications targeting key stakeholders and beneficiaries and described in component 2.

The output will seek to complement existing national efforts; to replicate and supplement AFLDC1 pilot projects that reduced open burning of waste; and build on wider AfDB initiatives to improve municipal waste management. These initiatives seek to prevent and minimise plastic waste by:

- ? promoting sustainable manufacturing from recovered plastic wastes and/or spent tyres (3.4a1), and
- ? demonstrating or scaling-up sustainable and efficient approaches to the separation and collection of plastics for recycling (3.4a2);
- ? and ? in some countries ? energy recovery of otherwise un-recyclable tyres and sorted plastics in cement kilns (3.4b)

Output 3.4 will be supported as regards training by Outputs 1.2f and as regards the awareness raising by Outputs 2.3c and 2.4.

Sustainability and scale-up/replicability of the project element is ensured through the following measures, among others (see additional details in below sub-sections):

? Potential partners will be selected based on a pre-defined set of criteria (see below), including the existence of a sustainable business volume, commitment to a business plan and at least 50% co-financing is expected from partners, among others.

? As regards financial mechanisms that may benefit other actors in the sector in the countries (scale-up/replication enhancement), a national lessons-learned report will be developed in Output 4.3. Its primary target groups will be national stakeholders in the same sectors that were targeted in project demonstration activities in the country, and it will focus on explaining the mechanisms applied in the demonstration project and their advantages (and what can be done better, if anything): Technical, financial, etc. Among others, it will address key financing facilitating institutions for SMEs in the country.

? Further, the frameworks developed/improved in Component 1 and the awareness raised in Component 2 will contribute to ensuring clearer and sustained business opportunities in the participating countries.

While the key focus of this output is on uPOP reductions and plastic waste reductions, the Output also contributes to reduced GHG emissions. For Output 3.4a this is achieved through avoiding open burning of the plastics that are instead reused for other purposes (as plastic). For Output 3.4b the tyres and non-recyclable plastics used for energy recovery in cement production substitute for fossil fuels otherwise burned in the cement kilns. Naturally, the increased transport and processing activities associated with higher plastics recycling and recovery activities will result in increased GHG emissions, but these are by far outweighed by the GHG reductions mentioned above.

3.4a1 Promoting sustainable manufacturing from recovered plastic or tyres wastes;

This task will support the development, scaling up or technical improvement of businesses manufacturing from recycled plastics or tyres with the potential to do so. Opportunities for this will vary from country to country depending on the national manufacturing base. For example, in some countries, the focus may be on encouraging the re-processing of PET beverage bottles for use as raw materials in the production of non-food items such as textiles. Elsewhere, the focus may be on improving the re-processing of collected PE or PP from single use plastics such as drinking water bags into durable plastic construction materials or other products. In coastal countries a third opportunity may be the recovery and re-processing of waste plastics fishing equipment (nets, ropes, crates, etc.). In some countries, where used tyres are subject to dumping and burning, the focus may also be on promoting re-threading or other manufacturing based on used vehicle tyres.

Activities will work with the existing recycling sector to identify and explore opportunities to up-scale the manufacture from recovered plastics and/or tyres waste and will include:

? Assessment of opportunities to scale up existing manufacture from recovered plastics materials and/or tyres;

? Investment in capacity and technology, as relevant and feasible, to scale up manufacture from recovered plastics materials.

A key activity will be an analysis of the SODIAPLAST[9][9] pilot project that was successfully implemented in Guinea during AFLDC-1. Best practices and lessons learned will be carefully studied and sought replicated in participating countries both in the development and operation of the public-partnership, between the municipality of Conakry and SODIAPLAST, and in the recycling of plastic wastes into more durable products. The lessons.learned will be shared during he project, including through the business forum described] in Output 1.4c. Similarly, experience in manufacturing based on waste plastics from fishing equipment in Denmark[10][10] can be investigated and the potential for promoting private-private cooperation can be explored.

Potential partner recyclers will be assessed as part of the project, and the best suited partner(s) in each participating country will be selected based on the perspective for optimal GEB per investment and sustainable continuation beyond the project periode, according to the following criteria (among others):

? Placement in practical but safe distance to major city(s) and other plastics waste sources;

? Un-exploited plastics/tyres collection potential in current and prospective range of operation (based on assessment);

? Current collection setup and its quality and reach;

? Current sorting setup and its precision;

? Current production setup and its sustainability: financially, administratively, environmentally and working environment-wise;

? Perspectives for the increasing the sustainability of the production setup and reducing its emissions and releases;

? Availability of co-financing for improvements/enlargements from the facility or its other investors (time and monetary co-financing);

? Acceptance of and commitment to the business plan developed with the company under the project

? Demonstrated willingness to cooperate with the collection community/organisation(s) selected under Output 3.4a2.

3.4a2 Demonstrating or scaling-up sustainable and efficient approaches to the separation and collection of plastics for recycling;

Informal waste pickers are engaged in the separation and collection of a variety of waste materials that have value in recycling. As such, they play a key ? yet usually informal ? role in many municipal solid waste systems. Unfortunately, the work is typically inefficient and financially precarious and exposes

them to significant health risks, physical dangers and social isolation. Waste pickers in some participating countries are already receiving support from community-based organisations and this project will seek to build on or replicate such efforts by working with suitable organisations, to support and scale-up their efforts towards improved plastic waste separation and collection schemes thereby diverting such materials from municipal waste streams subject to open-burning.

In some instances, schemes to provide improved opportunities for sustainable and healthy livelihoods may benefit from the formalisation of waste-picker communities into organised cooperatives with formally recognised roles within a modified municipal waste systems.

Existing private sector entities, including SMEs, with potential to participate in recycling and manufacturing of recycled materials will be identified and encouraged to participate in order to develop ?circular? flows of material. It follows that the target waste fractions to be collected will depend on a developing synergy between the materials recovered from waste streams and the resources required by local industries; thereby seeking to closing loops into industrial symbiosis.

To stimulate research, investment, and SME participation and growth, local micro-credit financing mechanisms and other appropriate financing frameworks including incentives will be established on a pilot basis. These financing mechanisms and frameworks will administer seed funding, on a cost-recovery basis, to qualified participants in the delivery of plastic waste and marine plastic litter management services, within the project framework.

The micro-credit financing mechanism may take the form of loans in a revolving fund (administered by a local bank or other legally mandated institution), which can be accessed by qualified individuals and cooperatives to enable them to effectively participate in waste management. To access funding, the loan applicants could be assessed on their capacity to utilize, and ability to repay, the loans, and the viability of the proposed activities for investment. Selected applicants will be trained on basic financial management and business plan development, in addition to plastic waste and marine plastic litter management aspects. This will contribute to building local capacity in plastic management (collection, sorting and recycling), creation of decent work, enhancement of the local economy, and improving the potential for success and sustainability of the local financing mechanism.

Potential partner communities/organisations will be assessed as part of the project, and the best suited partner(s) in each participating country will be selected based on the perspective for GEB gain per investment and sustainable continuation beyond the project period, according to the following criteria (among others):

? Placement in practical but safe distance to major city(s) and other plastics waste sources;

? Un-exploited plastics collection potential in current and prospective range of operation (based on assessment);

? Current collection chain setup and its quality and reach;

? Current sorting fractions, sorting setup and its precision;

? Commitment and support demonstrated by the local community(/ies) covered;

? Viability of the proposed activities for investment;

? Acceptance of, and commitment to, the business plan developed with the community/organisation under the project;

? Demonstrated willingness to cooperate with the recycling facility selected under Output 3.4a1.

Selected applicants will be trained on basic financial management and business plan development, in addition to plastic waste, tyres and/or marine plastic litter management aspects, as relevant. This will contribute to building local capacity in plastic management (collection, sorting and recycling), creation of decent work, enhancement of the local economy, and improving the potential for success and sustainability of the local financing mechanism.

Direct injection of project funds to finance recycling/buy-back centres and enhancement of existing re-processing activities may also take place, based on a case-by-case needs assessment, and within budget frames for this output.

To kick-start the local financing mechanism, the project will provide initial funding which may be complemented by other funding sources from other donors. This could also be coupled with the government providing import duty waivers on equipment and tax breaks for SME?s for a fixed start-up period.

The performance of waste management systems, particularly those focused on 3Rs principles, relies in large part on the positive engagement of community members and local leaders who understand and support the ideals and community advantages being promoted by such programmes. Their participation in the design of such systems is fundamental to successful implementation and will be strongly promoted through project participation opportunities and communications efforts described more fully in component 2.

3.4b Energy recovery of otherwise un-recyclable tyres and sorted plastics in cement kilns;

In participating countries, a significant potential for proper management of spent vehicle tyres is observed. They take up dump/landfill space and are dumped informally, and are burned to recover the steel threads or to reduce volumes. But it is also used as a cheap fuel for informal heating. In the context of uPOPs under the Stockholm Convention, BAT/BEP for such tyres is the diversion from open burning through re-use/recycling or, secondarily, by improving the combustion conditions. For tyres that cannot be re-threaded or recycled for other purposes energy recovery as alternative fuels (so-called tyre-derived fuels, or TDF) can be an option for reducing uPOP emissions, provided the cement kilns in question have adequate kiln and filter configurations (generally speaking: modern dry kilns with proper dust filters operating at suitable temperatures). The use of TDF is widespread worldwide, and is also already applied in some African countries. The BAT/BEP guideline for open waste burning under the Stockholm Convention underlines, however, that TDF use in cement kilns must meet high standards: ?If shredded and whole tyres are to be combusted in cement kilns, it must be done under proper combustion conditions and operation corresponding to best available techniques as described in section V.B of the present guidelines? [see reference in footnotes]. ?Thus, kiln should meet the PCDD/PCDF performance level in air emissions associated with best available techniques (< 0.1 ng I-TEQ/Nm3). Releases of chemicals listed in Annex C via cement kiln dust and possibly clinker have been reported, however, and are currently under further investigation.?

Similarly, for suitable cement kiln and filter configurations, sorted fractions of plastics waste, for example non-PVC foils that have proven generally challenging to recycle into manufactured products, can be used as alternative fuels in cement kilns (so-called waste-derived-fuels, or WDF). PVC use as fuels should be avoided or limited due to the chlorine content that can affect uPOPs emissions adversely and reduce cement quality (when above certain thresholds).

The combination of collecting, sorting and recycling in Output 3.4a and energy recovery of un-recyclable tyres and plastics in 3.4b can be characterised as enhanced industrial symbiosis for these materials.

IFC/WB promotes an increase of prudent use of TDF/WDF in the African cement kilns and have published a report on the potential for this in Senegal , among others, indicating a reasonable investment level and a pay-back time of 3-4 years only. One company in Senegal, Sococim, reported for this project that they already use TDF but are seeking partners for increasing the amounts, because they now have to import collected tyres for the purpose. Sococim also already uses WDF. In Zambia, Lafarge-Holcim and Dangote - two of the three companies producing cement clinker in the country ? are reported by ZEMA, based on inquiries to the companies for this project, to already use moderate amounts of alternative fuels and they have expressed interest in increasing their use of TDF/WDF: Lafarge-Holcim already uses various chemicals, including hazardous chemicals and spent lubrication oils, in moderate amounts, as alternative fuels. Dangote already uses tyres, oils, waste cement bags and sawdust, all in moderate amounts. In Uganda, one cement company, Hima Cement company, one of the largest cement manufacturers in the country, reported to NEMA for this project, that they use rubber granules from tyres re-treaders as alternative fuels, and they would like to use more if it becomes available. For more details on the national situations as regards cement kilns, see the relevant country annexes.

This output will include the assessment, and as needed, the improvement/implementation, of adequate health and safety precautions to secure the safe handling of these alternative fuels in the partnering cement kiln facilities.

Besides enhancing the stabile and adequate supply of alternative fuels, pre-processed as needed and economically feasible, to the partnering cement kiln facilities, the project may support the improvement/establishment of alternative fuels feeding equipment at the cement kiln, as necessary and subject to budget availability. It is noted that some forms of alternative fuels may not require adjustments of the fuel feeding systems.

This sub-output would also include a pre-investigation of possibilities for future incineration of hazardous organic wastes in cement kilns. However, this option requires careful assessment of the ability of the cement kilns? to fully destruct the hazardous chemicals incinerated and avoid any associated emissions of uPOPs and other priority pollutants, and any such incineration must be in line with the relevant BAT/BEP guidelines for cement kilns firing hazardous waste under the Stockholm Convention. Capacity for high-quality incineration of hazardous organic waste is highly needed in Africa and incineration of hazardous organic wastes is already practiced in some African countries during recent years. However, such incineration has also been disputed earlier by some stakeholders due to the risks of inadequate pollutants management and associated potential emissions. Hence, adequate precautions are required. Actual full-scale incineration of POPs is not expected within this

project, but should it be considered, it would require adequate working environment regulation in place and a prior explicit contractual agreement stating that the country in question takes full responsibility for such incineration.

Similarly, this sub-output will investigate the current mercury inputs to participating cement kilns, and mercury's fate in ? and emissions from ? these kilns. The mercury inputs with considered alternative fuels will also be investigated. Data for mercury inputs to the cement sector specific, for the African context, are so far absent, so such data obtained during the project will be valuable to future inventory and emissions reductions work in the continent, for example through the use of the UNEP mercury inventory Toolkit recommended under the Minamata Convention?s guidance.

Potential partner cement kiln facilities will be assessed as part of the project, and the best suited partner(s) in each participating country will be selected based on the perspective for GEB achieved per investment and sustainable continuation beyond the project period, according to the following criteria (among others):

? Current kiln and filter configurations and their ability to reduce uPOPs emissions;

? Current mix of fuels, including waste-derived-fuels (WDF/TDF, etc.);

? Availability of the required knowhow in the company,

? Whether required environmental permits from the relevant national authorities can be achieved;

? Current and achievable (within project periode) production setup and its sustainability: financially, administratively, environmentally and working environment-wise;

? Availability of co-financing for the activities from the facility or its other investors (time and monetary co-financing)- at least 50% co-financing is expected to secure sustainability;

? Acceptance of and commitment to the business plan developed with the company under the project;

? Demonstrated willingness to cooperate with the recyclers and collection community/organisation(s) selected under Output 3.4a.

Output 3.5: Reduced availability and use of mercury-containing products and models for their proper disposal demonstrated

Participating countries: *See Table 7.*

This output is compatible with, and supports actions necessary for the achievement of, the regulatory and institutional arrangements developed in component 1 for Parties to the Minamata Convention on mercury. It provides first actions towards their obligations, under Article 4 of that treaty, not to allow the manufacture, import or export of listed mercury-added products after 2020[12][11], and it addresses Article 11 to manage mercury waste in an environmentally sound manner.

Actions towards compliance involve the communications campaigns with importers, and where relevant manufacturers[13][12], set out in component 2. Typically, such efforts are more successful when undertaken in parallel with efforts to influence consumer demand away from such products; these are also planned as part of component 2.

This output will assist those efforts by:

- investigating further the availability and flows of mercury-added products;
- providing the capacity and capability to analyse certain products that typically to contain mercury;
- providing model systems for the collection and disposal of common mercury-added products from consumers as well as as the health sector and government institutions

3.5a Investigating the availability and flows of mercury-added products:

Activities will build on the results of the preliminary investigation of mercury-added products undertaken during the Minamata initial assessment in each country, as data on several mercury-added products were not easily available during their mercury inventory development. Typically, data on product types and local manufacturing, that were not available through international import statistics, have been hard to access in the MIA inventory work. Examples are:

- Skin-lightening creams and soaps with mercury compounds.
- Fraction of liquid-filled glass thermometers imported that contain mercury vs. alcohol. This can make a significant difference in a national inventory.
- Mercury-filled blood-pressure gauges and other manometers.
- Switches and relays with mercury.
- Paints and polyurethane with mercury compounds.
- National production of any product that can contain mercury.

An inventory of wholesalers, importers, any manufacturers, retailers and major consumers will be developed in consultation with customs officials, import trade groups and civil society groups, as a basis for targeted awareness and communications efforts under component 2 and targeted collection activities. The goals of this inventory will be:

- to identify the principal categories of mercury-added products available to local consumers;
- to determine the key elements of their trade flows; and
- to examine societal drivers of product use and opportunities to divert demand to alternative safer approaches or mercury-free and non-hazardous products.

Sampling and analysis of potentially mercury-added products will be undertaken to highlight the availability and risks posed by such products. The product types to be selected for sampled will be selected based on international and regional expertise to increase ?hit rates?. The MIA mercury inventories as well as experience with other products containing heavy metals, such as lead in paint,

highlights the common difficulty of distinguishing products that contain the metal from those that do not. The analysis of readily-available or on the shelf products purchased at retailers and markets has proved an effective tool in highlighting the availability of such products both to national officials and consumers[14][13].

A survey of the mercury content of certain readily-available products will be conducted in cooperation with local civil society consumer groups. Samples of products potentially containing mercury will be purchased and analysed for their mercury content. The survey will focus on products such as cosmetics that give rise to risks of direct contact. Screening will be done with an XRF device, see below, and chemical analyses will be conducted as necessary to verify results at an independent, accredited laboratory. The results will be published to add to information from similar NGO-led studies in other countries and contribute to wider awareness raising efforts amongst all the countries participating in the project.

3.5b Providing the capacity and capability to analyse certain products suspected to contain mercury:

Hand-held XRF analysers will be provided to participating countries for their use in continuing investigation and enforcement work. Analysers will be selected among the types that can measure mercury and other heavy metals quantitatively at the ppm level in materials where the chemical of interest is present in (or near) the surface of the material. Training of environment, trade and customs officials under Output 1.2d will (for countries participating in Output 3.5) include XRF testing of the product samples collected above, where selected results can be compared with the laboratory data, as necessary (XRFs generally have adequate detection limits for mercury-added products today, but laboratory analysis will be conducted for selected samples for cross-checking) Training of environment, trade and customs officials will include XRF testing of the product samples collected above, where results can be compared with the laboratory data.

3.5c Providing model systems for the collection and disposal of mercury-added products while promoting alternatives

Systems for the separate collection, interim storage and disposal of mercury-containing products are lacking in participating countries (as in all project countries). The project will build on successful experiences in other GEF-financed projects, in particular with the health sector, to provide specific collection schemes for mercury-added products particularly for major consumers such as hospitals and health clinics, public works and for the general public.

For the health sector, significant amounts of mercury are found in fever thermometers, blood pressure gauges and dental amalgam fillings (and a few other specialised applications), where this has not been removed previously in dedicated projects. For public works, mercury from thermometers, manometers/pressure valves and from school/educational laboratories may represent significant mercury amounts (Lamps with mercury is a widely applied mercury usage, but the concentrations per lamp are low and lamps are therefore not a key focus in the project, unless it can be accomodated within the national budgets for Output 3.5.) The health sector and departments responsible for schools

and public buildings maintenance will be encouraged to separate mercury-added waste products from other wastes and to secure them awaiting periodic collection and transfer to interim storage.

For families, a most obvious mercury-added product would be a mercury-filled thermometer. In order to reduce risks from breakage and mercury spills at home, the project will seek to advance the retirement of such thermometers by offering to replace such items with digital thermometers. The project will seek to engage pharmacies to cooperate in creating a network for a safe collection and replacement system. Families will also be allowed to hand in other mercury-added products selected later, based on the improved inventory. This activity shall be coordinated closely with component 2 measures to secure maximum outreach to the public.

This is a setup that has been tried out with some success in developed countries earlier, to support their general collection systems. The collection system will consist of appropriate buckets (or barrels) to be placed at the collection points under surveyed conditions (behind counters) in major cities, and periodically collected by trained personnel, securing ESM of the waste, to a central national storage site, see below. To eliminate risk of breakage inside the buckets/barrels, each product handed in will be wrapped by trained personnel, and the personnel will place it in the bucket/barrel.

The mercury-added products collected in this way will be gathered into a central interim storage established in output 3.1secured for the purpose, where they will be safely repackaged, as needed, and stored prior to final disposal as part of the project. The storage established in Output 3.1 will be used, if that is implemented in the country. In countries not implementing Output 3.1, short-term storage will be improved or established, as per relevant guidelines.

ESM of the mercury-added waste products will be secured during collection, re-packaging and interim storage in accordance with the provision outlined in the ESSSR (Annex L). Operations performance will be monitored by project staff, and the NPC, including relevant NGOs/CSOs, will oversee project performance as regards adequate and safe ESM of the chemicals in question nationally through review of the ESMP and the project reporting of collection, storage and elimination/export activities. The Regional Executing agency procuring expert company services for chemicals collection and final treatment will monitor the performance of the expert company/ies and report to the PSC, which in turn will review the regional project reporting of collection, storage and elimination/export activities.

Component 4: Monitoring and evaluation, learning and adaptive feedback

Outcome: Effective and efficient project delivery involving informed decision making at regional and national levels

An overview of the outputs of Component 4 is given in Table 7 below.

Table 8 Component 4 outputs

Component 4 outputs

Output 4.1: Project virtual knowledge hub (website) created and maintained
Output 4.2: Project Steering Committees established, meetings held
Output 4.3: Yearly lessons-learned report/publication prepared and disseminated
Output 4.4: Measuring increasing awareness and understanding of the requirements for the environmentally sound management of chemicals and waste
Output 4.5: End of project publication prepared and disseminated
Output 4.6: Mid-term and terminal project evaluations

Output 4.1: Project virtual knowledge hub (website) created and maintained

All publishable deliverables of the project will be posted on the project website, available for all project partners as well as the public. Any recorded online trainings/webinars will be made available to project countries for later reference (publicly or in a restricted sub-site, as per agreement and relevance). The website will be established in the first year of the project and will be maintained regularly with new materials produced, including annual and final reports, as well as nationally produced materials of general relevance (in public or restricted parts of the site, depending on the considered audience for the contents uploaded).

In the light of the COVID-19 pandemic, and in order to save fuels and emissions from travelling, it is likely that parts of the trainings and meetings planned will be held online. Online events have their limitations, but also allow for more frequent events, and for recording the events so that stakeholders that could not attend the event when scheduled, can see/hear the recordings later. Also, most stakeholders have become more used to online interactions during 2020 and 2021. While the budget has been made to allow for physical workshops and meetings, some of the money currently allocated for travelling can potentially be re-allocated to create stronger online training and interaction on the knowledge hub, should the conditions prevailing make this necessary or desired.

The knowledge hub will be designed to include a forum for country-to-country exchanges to increase knowledge-sharing and cross-pollination among the participating countries.

User-friendly summaries and multimedia materials based on the project activities will be uploaded on the public part of the website periodically and proposed for partners? websites. Electronic newsletters will be regularly issued, and feedback surveys will be conducted. A feedback mechanism on the usefulness of the data and information will be included for the enhancement of the website.

Output 4.2: Regional Project Steering Committee established, meetings held

A Regional Project Steering Committee (RPSC) will be formed and will include the following organizations: a) The Regional Executing Agencies (Africa Institute and the Dakar Regional Centre); b) The African Development Bank, as the Implementing Agency; c) the National Project Coordinators

and the National AfDB offices as co-executers of national projects; and d) international experts and organizations working in related initiatives (UNEP, WHO, UNDP, WB) and the GEF secretariat. The Regional Executing Agencies will act as the Secretariat for the Project Steering Committee. The role of the Project Steering Committee will assess progress made. Furthermore, the RPSC will adopt measures to facilitate implementation in countries and to adapt to changing situations. It will also review the project workplan, targets and indicators and will propose adequate changes if needed. The RSPSC meeting will take place once a year.

A national Project Steering Committee (NPSC) will also be established in each participating country making full use of existing structures dealing with chemicals management (e.g. national coordination groups for POPs, mercury, SAICM, etc.). Each NPSC will comprise a group of experts from different sectors (e.g. government, private sector, academia, and NGOs) whose roles will be coordination, oversight, and advisory regarding project activities. The NPSC will seek synergies and joint activities with relevant existing and planned chemicals-related activities. The NPSC will meet and communicate as required, a meeting will be held at least once or twice a year.

Output 4.3: Yearly lessons-learned report/publication prepared and disseminated

An annual lessons-learned session will take place as part of the PSC meetings and the report from it will be disseminated through the project website, the AfDB and EAs networks, as well as through regional and global international events (COPs, International Conferences, etc).

In addition, a national lessons-learned document will be produced for each participating country by the end of the project, highlighting the mechanisms applied in the project implementation to reach the observed goals. This document will be posted on the project website and will be shared with the relevant sectors in the country to enhance possibilities for replication by other actors in the sector nationally, thus enabling scale-up of the demonstrated solutions in the country. The document shall feature decisive technical solutions implemented, financial arrangements adopted and stakeholder engagement efforts undertaken.

Output 4.4: Measuring increasing awareness and understanding of the requirements for the environmentally sound management of chemicals and waste

Outputs in components 1 and 2 have as their goal the increased awareness and understanding of a wide range of stakeholders and beneficiaries of the need to take up the sound management of chemicals and wastes, in particular with regard to POPs and mercury, in order to protect human health and the environment.

It will be important to monitor awareness and understanding of the beneficiaries and stakeholders as project activities proceed. For this reason, actions in those outputs will be monitored at their start, periodically during relevant activities and at their conclusion. Interim results will be considered by output managers in order to respond appropriately through adaptive management of the outputs to ensure that planned targets are achieved. Final surveys will be included in assessments of the success of project actions and will provide important lessons for further implementation projects in the chemicals and waste portfolio of the GEF and AFDB.

Output 4.5: End of project publication prepared and disseminated

The project will produce a final report to be sent to GEF. The outcomes of the project will be published and distributed at different international events and presented in a ceremony with the participation of high level political representatives. The final publication will serve as a way to communicate the impacts of the project and to demonstrate how this project contributes to the achievement of the SDGs in each participating country and in the region.

Output 4.6: Mid-term and terminal project evaluations

Independent Mid-term Review: An independent mid-term review process (MTR) will take place at the mid-point of the project and the report will be submitted to the GEF. The MTR will include all parameters recommended by the GEF for such evaluations and will verify information gathered through the GEF core indicator worksheets, as relevant. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project?s duration. The consultants 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. The GEF Operational Focal Points and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the EA and AfDB. The final MTR report will be available in English and will be cleared by EA and AfDB and approved by the PSC.

Terminal Evaluation: An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The TE process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Regional Project Manager will remain on contract until the TE report and management response have been finalized. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. The terms of reference, evaluation process, and final TE report will follow the standard templates and guidance prepared by AfDB, based on the GEF guidance. The consultants 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. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the TE process. Formal comments on the report will be shared in an open and transparent manner. Additional quality assurance support is available from EA and AfDB. The final TE report will be reviewed and cleared by AI and AfDB, and will be approved by the PSC. A review of the quality of the evaluation report will be submitted along with the TE report to the GEF Evaluation Office not later than six months after the completion of the evaluation. The TE report will be publicly disclosed.

An overview of the tasks to be performed by the national and international consultants per output is given below.

Outputs	National experts	International experts
Component 1: Strengthening the enabling environment and national enforcement capacities for the management and phase-out of POPs/Mercury and its compounds		

Output 1.1: Up-to-date legislative and regulatory frameworks	? national environmental law and chemicals/waste management, and supporting legal gap assessment and coordinating and supporting policy development, including draft legal/regulatory texts	? To support legal gap assessment and policy development framework and process
Output 1.2: Strengthened application and enforcement of updated legislative and regulatory frameworks	Supporting guideline development/improvement Preparation of relevant workshop materials (from national perspective) and participation in workshop; expertise on pesticides and IPM, PCB management, inspections, waste management	Leading guideline development/improvement Supporting preparation of relevant workshop materials and participation in workshop; expertise on pesticides and IPM, PCB management, inspections, waste management
Output 1.3 Strengthened national methodologies to identify, assess, and manage sites contaminated by hazardous chemicals	Contaminated sites, supporting assessment and development/improvement of methodologies/strategies	Contaminated sites, leading assessment, and development/improvement of methodologies/strategies
Output 1.4: Integrated regional and national strategies to implement environmentally sound management of chemicals and waste Integration of regional and national strategies	? Preparation of relevant conference/workshop materials (from national perspective) and participation in workshop.	? Preparation of relevant conference/workshop materials (from international perspective) and participation in workshop.
Component 2: Communicating the environmentally sound management of chemicals and wastes		
Output 2.1: Increased awareness amongst regional and national development planners of the role of ESM of chemicals and waste within Sustainable Development policies and strategies	3 workshops per country Convention experts to undertake preparation of relevant conference/workshop materials (from national perspective) and participation in workshop.	? Convention experts to lead the preparation of relevant conference/workshop materials (from international perspective) and participation in workshop.
Output 2.2: Increased capacity and knowledge of public officials to incorporate ESM of chemicals and waste in public policies and programmes	4 workshops (by sectors) per country. Convention experts to undertake preparation of relevant conference/workshop materials (from national perspective) and participation in workshop.	? Convention experts to lead the preparation of relevant conference/workshop materials (from international perspective) and participation in workshop.
Output 2.3: Increased engagement of key stakeholders in agriculture and industry in efforts to reduce POPs use and release	Lead the preparation of materials and communication and taking part in meetings for various topics Includes national pedagogical experts, academics; adaptation of training materials to primary school and university curriculum	Support the preparation of materials and communication and taking part in meetings for various topics

Output 2.4: Increased engagement of civil society organisations, communities, and consumers in designing, promoting, and implementing ESM for chemicals and wastes	Development of background materials, and adaptation for target groups in cooperation with international experts	Development of background materials, and adaptation for target groups in cooperation with national experts
Component 3: Scaling up of actions to reduce and wherever possible, eliminate manufacture, trade, use, emission and release of POPs and mercury and its compounds:		
Output 3.1 National facility established for interim storage of mercury and POPs waste awaiting final disposal	Assisting EIA, facility design, construction coordination/supervision, etc; training in facility-specific ESM and HSE	Designing facility and supervising other aspects
Output 3.2 POPs pesticides wastes destroyed (including project duration storage)	lead pesticide inventory, etc. support regional collection and destruction activities	Support pesticide inventory, etc. Support execution of regional collection and destruction activities
Output 3.3 PCB management	Support PCB Regional collection and destruction/cleaning service provider Support PCB test kits and chemical analysis Support PCB inventory, risk assessment, supervision, etc.	Support PCB Regional collection and destruction/cleaning service provider Support PCB test kits and chemical analysis Lead PCB inventory, risk assessment, supervision, etc.
Output 3.4 Reduced uPOPs emissions and releases from municipal waste management through reduction of open burning of waste	Assisting assessment of potential partners and intervention options (data collection, etc.) Assisting intervention design (data collection etc.), oversight/supervision, etc.	Input in assessments, design, and technical follow-up
Output 3.5 Reduced availability and use of mercury-containing products and models for their proper disposal		? Leading Hg inventory, and other assessment
Component 4: Monitoring and evaluation, learning and adaptive feedback		
Monitoring and evaluation activities	Support for specific M&E assistance, data collection etc.	Project website set-up Preparation of learning and knowledge management materials Independent evaluation consultant for MTR & TE Oversee and supervise gender topic regionally

A summary of the relative total GEF project funding directed to each country is given below.

Country	Total project cost

Angola	1.749.104
Ethiopia	3.822.759
The Gambia	1.485.213
Guinea	1.598.464
Liberia	1.972.954
Mauritania	1.900.403
Senegal	1.113.174
Sierra Leone	1.547.574
Togo	3.134.241
Uganda	1.137.388
Zambia	1.838.725
Sub-total	21.300.000

4) Alignment with GEF focal area and/or Impact Program strategies

The project addresses three key objectives of the Chemicals and Waste focal area:

? CW11: Strengthening the sound management of industrial chemicals and their waste through better control, and reduction and/or elimination;

? CW12: Strengthening the sound management of agricultural chemicals and their waste through better control, and reduction and/or elimination;

? CW23: Strengthening the enabling environments in LDCs and SIDs to manage harmful chemicals and waste.

Through these actions, and through the planned updated inventories for mercury, POP pesticides and PCB?s (each in some countries), it will also contribute to the better understanding of POPs and mercury issues in the participating countries and thus indirectly contribute to the fourth chemicals and waste objective:

? CW-EA: Strengthen the capacity of countries to report to the Minamata and Stockholm Conventions

All the participating countries are LDCs. The project seeks to deepen and broaden their capacity and knowledge to manage chemicals and wastes, extending awareness beyond those directly responsible for the implementation of legal and regulatory regimes to facilitate the mainstreaming of chemicals and waste objectives into policies and strategies towards the achievement of the sustainable development goals, the African Union Agenda 2063 goals and African Development Bank ?High 5s? goals.

Activities in the project are designed to **engage industry**, including through public private partnerships, in actions that either avoid POPs and mercury use or reduce and where possible eliminate their emissions.

The project outputs address remaining issues of **agricultural POPs**, including accumulations of obsolete POPs pesticides, and emissions of unintentional POPs from open-burning. It will seek to boost rural livelihoods by increasing the capacity of farmers to improve plant protection without POPs

chemicals and to boost income diversification, including, where practical, the use of local materials as substitutes for short-lived and single-use plastics.

The project will contribute to the **sustainable cities impact programme** by addressing POPs and mercury issues both in products and in **waste management and recycling**, including of **PCBs and mercury**. In completing and adopting appropriate and up-to-date legal and regulatory frameworks, there will be opportunities to extend their scope to include **SAICM emerging policy issues** such as lead in paint.

The project will build the capacity of public-sector officials, and their trade partners in industry, to avoid procurement of mercury-added products and to engage beneficiary stakeholders in order to boost behavioural change amongst those principally urban consumers of POPs and mercury-added products. Communications using, for example, social media on mobile devices, that provide direct links to consumers that might otherwise not engage are seen as an important tool in this regard and can help to **overcome gender-based discrimination** in decision making in relation to, for example, mercury-added cosmetics and other products thus gaining access for a wider range of actions relating to improving chemicals management.

It will seek to engage extractive industries, including cement industry and non/ferrous metal industry, in improving the understanding of the POPs and mercury emissions and releases they generate and the BAT/BEP required under the Minamata Convention.

5) Incremental/ additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

All the countries participating in this project have been active participants in negotiations and meetings leading to the agreement and adoption of the chemicals and waste MEAs and SAICM. All are Parties to the Basel[15][14] and Stockholm Conventions and have become, or declared their intentions to become, Parties to the Rotterdam and Minamata Conventions. They have benefitted from GEF enabling activities to develop national implementation plans for POPs and have carried out, or are planning for carrying out, Minamata initial assessments (MIAs) for mercury.

As a result of these activities, they have ? as far as their resources and capabilities have allowed ? amended or drafted legislation compatible with their obligations under the chemicals and waste MEAs. They have established, and in some cases updated, national plans that include the actions necessary to bring them into compliance with their obligations under the conventions. Furthermore, they have established basic infrastructure and defined direct responsibilities for the enforcement of the legal and regulatory regime and to lead implementation efforts. This infrastructure and the cadre of responsible officials taking forward implementation represent the in-kind contribution of the participants to the baseline of the project.

Also, within the baseline is the considerable financial assistance made available to participating countries through a series of thematic ?windows? of the African Development Bank for key regional

and national development initiatives. This assistance represents the cash co-financing being made available to the project.

Despite the baseline contributions being made, it is clear that African LDCs have not yet succeeded in building the broader awareness and capacity necessary across government to ensure that initiatives to address priority chemicals and waste issues are mainstreamed within national sustainable development planning and implementation. Furthermore, current efforts to engage industry and civil society stakeholders have to date been inadequate to change their behaviour towards the avoidance of risks to human health and the environment from chemical and waste. Further efforts are necessary to engage a wide variety of stakeholder groups, to demonstrate alternative approaches and to replicate appropriate and successful actions demonstrated elsewhere.

The cost of these necessary additional efforts, that constitute the activities to be undertaken in the project, represent the incremental cost of the alternative scenario presented above. This incremental cost is efficient because it establishes direct links between chemicals and waste activities and broader, and typically much larger, initiatives directed at key stakeholder groups or priority national issues; in this way it serves effectively to mainstream the chemicals and waste actions and to safeguard development from chemicals and waste risks. The project seeks this incremental cost from the GEFTF.

The incrementality of the AFLDC2 project vis-?-vis the AfDB co-financing baseline projects is summarised for each participating country in the tables below (see the description of the baseline projects in the baseline projects section above).

Co-financing baseline project: Fall Armyworm Program in Angola

The Government of Angola has made the official request to the AfDB for assistance for effectively mitigating the potentially devastating impacts of the Fall Armyworm pest. The objective of the baseline project will be to mitigate the impacts and spread of the FAW, following reports of outbreaks in the country, as well as, to provide technical solutions and practices to be deployed to farmers. This method will involve cultural methods like Good agricultural practices (GAP), Push and pull technologies, the use of maize seed treatment, Foliar sprays and biocontrol methods. The project will also undertake: i) training of farmers, extension agents and support to research and extension; ii) support to the use and training to the provincial technicians of agriculture and Field Schools; iii) awareness raising and information campaigns, iv) establish a good M&E and fall armyworm surveillance system.

The project can benefit from awareness raising and training related to 1) the use of least environmentally harmful pest controls and 2) the reduction of uPOPs formation from burning of waste through utilization and recycling approaches. The baseline project can serve as a platform for such training and awareness raising. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 9 links to the Angola baseline project

Baseline project	*Fall Armyworm (FAW) Program in Angola under the regional TAAT programme. Assistance and resources to control the FAW pest.* The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits is **USD849,246.**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted

1 ..Enabling environment and national enforcement..	Training of the agricultural sector, including trainers and farmers, in the combatting of the FAW Institutional capacity building, dissemination of good practices in plant protection	A wide set of techniques are required to control the FAW pest. The legislative and infrastructural assistance and capacity building of the AFLDC2 can secure that POP pesticides use is reduced or eliminated and that integrated pest management (IPM) approaches, securing maximum effect and least environmental and health impacts, are well known and available to the sector. The inclusion of non-conventional chemical pesticide sprays in the toolkit of FAW IPM technologies is a major objective of the TAAT program. Included in this toolkit are non-broad spectrum, low-toxicity conventional chemical insecticides, seed dressings, biorationals (botanicals, fungal entomopathogens, bacteria, viruses, plant oils), and semiochemicals (e.g. mating disruptor pheromones). However, the lack of clear guidelines on the testing and registration of non-chemical plant protection products (PPPs) is currently hindering their widespread use in FAW management. The TAAT FAW Compact is currently working with the TAAT Policy Enabler Compact to remove policy bottlenecks which hinder the registration of such PPPs. A key deliverable of the TAAT FAW Compact in this regard was the production and circulation within national programs of a draft document detailing harmonised protocols for the efficacy evaluation of PPPs. If adopted regionally, this will shorten the length of time needed to take a new PPP through trials up to registration and ultimately see many non-conventional chemical pesticide sprays being included in the toolkit of FAW IPM technologies. Lobbying by the Policy Enabler Compact is starting to pay off in East Africa as several biorationals have been registered for FAW control within the East African Community. Training of Trainers (ToT) programs currently used by the TAAT FAW Compact will be adapted for the training of pesticide registration officers, agricultural extension agents, research technicians, seed company agronomists, agrochemical company technical and sales representatives, and local authority representatives in charge of solid waste disposal. These will in turn cascade training to farmers, including those involved in urban agriculture. The training curricula will include FAW IPM technologies, FAW identification, field scouting and action threshold determination, calibration of pesticide application equipment, and safe use and disposal of pesticides.	POP pesticides and other POPs and mercury

2 Communicating ..	Awareness of the agricultural sector on combatting the FAW Information, education and communication.	The AFLDC2 can improve the knowledge of policy makers and all other relevant stakeholders and thereby support the efforts nationally to eliminate POP pesticides and use less harmful alternatives for controlling the FAW and other pests. The FAW Programme can support the dissemination of these messages in the sector and increase motivation among the stakeholders. Communication channels currently used by the TAAT FAW Compact (e.g., social media platforms, print media, TV, newsletters, factsheets, brochures, etc.) will inform how best to communicate activities, events and deliverables of the AFLDC2 project. Other technical results will be communicated through journal articles. Outreach materials produced by the TAAT FAW Compact will also be repurposed for use in awareness-raising and capacity building activities in the AFLDC2 project. Examples of outreach materials from the TAAT FAW Compact include IPM Guides (e.g., Identification of FAW and Confounding Pests in Maize Agroecosystems: An Illustrated Guide; FAW Management: General Principles & Scouting; Calibration of Pesticide Application Equipment; Chemical Control in FAW IPM: Foliar Sprays), posters and training videos.	POP pesticides and other POPs and mercury

3.2 POPs pesticides wastes destroyed	Selection and purchasing of pesticides for combatting the FAW Validations of effectiveness of low risk pesticides, seed dressings and biorationals for FAW management, and Training in the safe use and disposal of synthetic pesticides.	AFLDC-2 secures the environmentally safe collection and treatment of POP pesticides identified in the country. The TAAT FAW Compact is currently collaborating with several agrochemical companies (e.g., Syngenta, BASF, Bayer, Corteva Agriscience) which take product stewardship very seriously. These companies have also on their own voluntarily withdrawn from use several pesticides due to persistence in the environment, toxicity to non-targets (e.g., honeybees) and downward revisions of residue limits especially in the EU. Despite having their seed treatment insecticide FortenzaTM Duo registered in Zambia, Zimbabwe and Kenya, Syngenta is still continuing with on-farm validations of the seed treatment chemical. AgBiTech, through local distributors in Zambia, is also collaborating with the FAW Compact in the validation of a commercial virus formulation for FAW control. Since most national programs lack the capacity to conduct trials of biorationals and other PPPs, the FAW Compact is using on-station and on-farm trials as platforms to train national program personnel. In addition, the data generated from these trials is being shared with the national programs to assist in speeding up the registration of such products.	POP pesticides
3.4 uPOPs reductions	Technical Assistance in Plant Protection, Agroecological Practices and Agrarian Policy	The FAW project has a broad rural contact and can ? with the assistance of AFLDC2 ? promote avoidance of open waste burning which is particularly prevalent in rural areas, and recycling of agricultural plastics. [any other reasonable incremental reasoning?]	uPOPs and mercury
4 Monitoring and evaluation..	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback.	NA

Co-financing baseline project:: Integrated Agro-Industrial Parks - Support Project In Ethiopia

The intervention of the Bank has been requested by the Government of Ethiopia and is justified in view of the need to support the main objective of Ethiopia?s Growth and Transformation Plan (GTP) II (2015/16-2019/20), to: (i) maintaining an annual average real GDP growth rate of at least 11% within a stable macroeconomic environment, and (ii) pursuing aggressive measures towards rapid industrialisation and agricultural transformation while ensuring competitiveness of the domestic productive sectors. Agriculture and food processing offer an opportunity for the creation of sustainable livelihoods and economic development for rural communities in Ethiopia. With a vast land and resource availability, Ethiopia can aim to become one of the leading food suppliers to the world while at the same time serving the vast growing domestic market.

The Project development goal is to contribute to inclusive and sustainable agro-industrial development in Ethiopia, towards a structural transformation of the economy, creation of jobs and reduction of property. The project development objectives are to i) create a better environment for increased

investment in agro-food and allied sectors, ii) reform a fragmented and supply driven agricultural production system into one that is organised and demand driven, through the integration of small holder farms, small scale processing enterprises and allied industry into commercial value chains and, iii) improve human capacities and skills of rural populations to benefit from new agribusiness employment opportunities.

The project is structured around three related components: i) Enabling infrastructure for Agro-industrial development; ii) Capacity building for sustainable Agro-industrialisation and, iii) Project coordination and management.

The project includes the establishment of four agro-industrial processing parks as well as 28 transformation centres, where initial processing is done. The project will therefore a have a very substantial reach in rural parts of the country, and can provide a platform for awareness raising and training, in among others, 1) the use of least environmentally harmful pest controls and 2), the proper sorting, collection and treatment of obsolete POP pesticides and their containers, and 3) the reduction of uPOPs formation from burning of waste on agriculture and processing steps through recycling and other circular economy approaches. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 10 links to the Ethiopia baseline project

Baseline project	*Integrated Agro-Industrial Parks (IAIPs) - Support Project in **Ethiopia**.* Assistance and resources for the implementation of agro-industrial parks to support annual growth, industrialization and agricultural transformation with resulting creation of jobs and reduction of property. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **43.935.600 USD.**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted

1.Enabling environment and national enforcement.	Ensuring long-term sustainability of agro-industrial activities promoted by the project, including through training and awareness of the agricultural sector, their trainers, industry partners and farmers, in possibilities for increased productivity and domestic processing, while promoting a strategical and sustainable market approach. The baselines project includes a component on Capacity Building for Sustainable Agro-Industrialization, which entails: Enhanced management of IAIPs and RTCs[1], Improved capacity along the target value chains, and Development of quality and relevant skills for agro-industrialization.	To sustainably increase the productivity and domestic industrial processing, it is of key importance to secure adequate and environmentally safe management of chemicals and waste in the agricultural sector. AFLDC-2 can enhance this through the supporting national enabling structures for the purpose (legislation and infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising in the sector and among its partners and consumers.	POP pesticides and other POPs and mercury
2 Communicating.	See Component 1 above	See Component 1 above	POP pesticides and other POPs and mercury
3.1 Hazardous waste storage facility	Establishing infrastructure and creating the operational frameworks of the agro-industrial parks and associated transformation centres The relevant baseline project includes Development of Waste (liquid and solid) Management Plants on the 4 IAIPs (processing centres).	AFLDC-2 can contribute to designing ESM frameworks for chemicals and waste in the baseline project, including proper management of wastes of agricultural and agro-industrial chemicals such as pesticides used in crop protection and mercury potentially used in temperature and pressure control in meat and dairy processing. ESM of such chemical waste include the safe separate collection, storage and treatment, of which a national facility for interim storage of such hazardous waste awaiting final treatment is a key component.	POP pesticides and other POPs and mercury

3.2 POPs pesticides elimination	Establishing infrastructure and creating the operational frameworks of the agro-industrial parks and associated transformation centres	Avoiding and eliminating POP pesticides in agriculture and rural living is a key requirement in reducing the exposure of farmers and their families to these hazardous chemicals. This is also an important factor in increasing the national agricultural production in a sustainable manner.	POP pesticides
4 M&E	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Port and Greater Banjul Area Digital Masterplan and Capacity Building Program in Gambia

The Government of The Gambia (both local and national) has requested the Bank to finance a digital masterplan and capacity building program for the Greater Banjul Area. The Gambia has one of the fastest urbanization rates in sub-Saharan Africa with the Greater Banjul Area (GBA) already accounting for 68% of the total population of the country. This rapid increase in urban population is occurring with several environmental and socio-economic issues including deforestation; soil erosion; pollution and waste generation; and stress on health, education, and employment services. Further, the investment climate in the Gambia is growing in attractiveness to investors and with accelerating investments including via the next prospective flagship project of the 4th Port Expansion Project (located in Banjul) and the current opening of the new Sene-Gambia bridge. It will be imperative for the GBA to have the proper instruments in place to prepare for increased urbanization, traffic flows and vulnerability to climatic changes. As the port sits in the capital city and municipality of Banjul, it causes a major strain on the current urban fabric and neighbouring municipalities and merits a collaborative urban planning design approach with all stakeholders.

A detailed urban masterplan for the Banjul peninsular is therefore urgently required to: (i) establish land cadastral and registration; (ii) document land protection and development opportunities; (iii) integrate with the port masterplan and serve as a guide to the Municipality in its decisions to allocate plots of land for developments that are currently infringing into the RAMSAR protected wetlands; (iv) prepare tax collection mechanisms (v) prepare zoning guides to urban development (vi) propose activities and investment strategy to create a more liveable and sustainable port and capital city (vii) Improve waste management coming from urban areas and ship barges in the port (in the form of clean

up and capacity building). To achieve its objectives, the project requires the following activities: i) digital masterplan; ii) technical assistance, and iii) capacity building. The AfDB is also supporting a Budget Support Operation to the country that includes the implementation of a Land Use Plan, zoning and Waste Bill. These reforms will also play a major role in the way that waste and development will be addressed in the coming decades.

The project includes the three municipalities Banjul (capital and harbour), Kanifing (tourist spearhead) and Birkama (rural). The project creates streets and addresses and thereby create the foundation of key elements in managing for example waste collection and billing for such services. Kanifing, the largest of the municipalities and host of the landfill common for the three municipalities, has improved waste management as a top priority and there is substantial potential in the AFLDC-2 project for incrementing the training efforts needed in this respect. The high density of tourist services in the area could potentially create a strong base for introduction/improvement of recycling of plastics and other materials. This high density enhances the possibilities for collecting clean materials fractions and is thus a promising place for start-up and SME companies in the private recycling sector. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 11 links to the Gambia baseline project

Baseline project (BLP)	*Port and Greater Banjul Area Digital Masterplan and Capacity Building Program in **Gambia**.* The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **1.713.857 USD.**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted
1..Enabling environment and national enforcement.. And 2 Communicating..	Improve waste management coming from urban areas and ship barges in the port (in the form of clean up and capacity building). The BLP has resources for capacity building of municipalities and the port authority, and technical assistance to support municipalities develop.	AFLDC-2 can enhance environmentally safe management (ESM) of waste in the municipalities involved and the country at large through supporting national enabling structures for the purpose (legislation and institutional infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising among key stakeholders and to the public.	All POPs and mercury

3.4 uPOPs reductions	The BLP includes a component to prepare a digital Masterplan for the 3 Municipalities including GIS mapping plus Data Centre, including a property and commercial tax improvements component, and development of a 5 year Urban Development Investment Plan.	AFLDC-2 can enhance environmentally safe management (ESM) of waste in the municipalities involved through promoting separate collection and recycling of plastics.	uPOPs
3.5 Mercury products	The BLP includes a component to prepare a digital Masterplan for the 3 Municipalities including GIS mapping plus Data Centre, including a property and commercial tax improvements component, and development of a 5 year Urban Development Investment Plan.	To reduce the input of the toxic chemical mercury to municipal solid waste, AFLDC can promote the use of environmentally safer alternatives to mercury-added products in the baseline project and ensure collection and ESM of waste mercury-added products used by families, industry and the health sector. This can serve as an example in the country of the need for separate collection and treatment of hazardous waste.	Mercury
4 M&E	Monitoring and evaluation activities	The AfDB BLP staff will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Emergency Assistance For The Fight Against The Fall Armyworm In Guinea

Guinea has significant agricultural potential, including abundant land and water resources, a continental shelf of 43,000 km2, and enjoys mild temperatures, offering significant opportunities for development a wide range of agro-silvo-pastoral products and significant potential for the development of the blue economy. The various strategies put in place aim to correct this situation, through the development of Guinea's agricultural potential, by long-term infrastructures, in terms of transport, energy, agricultural production, marketing and processing, with the involvement of the private sector in the sector.

The Government of Guinea made an official declaration to AfDB and FAO regarding the presence of the Fall Armyworm and requested emergency assistance for the fight against the devastating pest. This emergency assistance proposal is in line with the Bank's Revised Emergency Assistance Guidelines and

the General Regulations of the Special Relief Fund. This invasion is an unpredictable event that has caused significant damage and loss of production, social and economic disruption, and risks of food and nutrition insecurity. In particular, it has resulted in loss of income and a deterioration in the living conditions of vulnerable populations. The main objective of this operation is to contribute to the fight against the invasion of the autumn armyworm, newly introduced in Guinea. Specifically, these are: (i) enhancing the resilience of farmers to FAW attacks; (ii) promote the integrated and sustainable management of FAW in Guinea; (iii) provide plant protection and agricultural research services with technical and material capabilities for the identification, monitoring and control of the armyworm.

The planned activities will make it possible to control the pest and limit production losses, but also to better understand the pest's bio-ecology and to identify pests and natural aids in Guinea. It will also strengthen the appropriate technical capacities of the regional plant protection services for the monitoring and control of the pest and the control of the integrated and rational control against the pest.

Thus, the project will provide producers with equipment and treatment products, in order to limit the damage, save the harvest and limit the spread of the pest. A rapid and targeted campaign of struggle and awareness is essential to reduce losses of maize production and preserve other host crops. It will contribute to the implementation of an integrated and reasoned control strategy taking into account the Guinean context combining biological control through the use of natural products of plant species available in the country (leaf extract and neem seeds (Azadirachta indica)) and agro-technical methods of prevention and mitigation.

The project will initially, train, sensitize the actors and limit the damage caused by the fall armyworm and production losses. Training will be conducted through Farmer Field Schools (PFC) using the "Guide to integrated management of army fall legion larvae" developed by FAO and currently widely used in Africa. Organic products with low impact on the fragile Guinean environment will be promoted and used on infested corn plots and other host crops of the fall armyworm. The project will target 10,000 ha for the functional and integrated control of FAW, of which 4,000 ha will be owned or managed by women.

As described for the Zambia FAW project below, the project can benefit from awareness raising and training related to 1) the use of least environmentally harmful pest controls and 2) the reduction of uPOPs formation from burning of waste through utilization and recycling approaches. The baseline project can serve as a platform for such training and awareness raising and ensure implementation of the AFLDC2 project in a developmental framework. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 12 links to the guinea Fall Armyworm (FAW) baseline project

Baseline project	*Fall Armyworm (FAW) Program in **Guinea***. Assistance and resources to control the FAW pest. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **750.000 USD.**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted

1 ..Enabling environment and national enforcement..	Training of the agricultural sector, including trainers and farmers, in the combatting of the FAW Institutional capacity building, dissemination of good practices in plant protection	A wide set of techniques are required to control the FAW pest. The legislative and infrastructural assistance and capacity building of the AFLDC2 can secure that POP pesticides use is reduced or eliminated and that integrated pest management (IPM) approaches, securing maximum effect and least environmental and health impacts, are well known and available to the sector. The TAAT FAW Compact is currently working with the TAAT Policy Enabler Compact to remove policy bottlenecks which hinder the registration of biorationals (botanicals, fungal entomopathogens, bacteria, viruses, plant oils), and semiochemicals for which there are currently no clear guidelines on their testing and registration for control of agricultural pests. A key deliverable of the TAAT FAW Compact in this regard was the production and circulation within national programs of a draft document detailing harmonised protocols for the efficacy evaluation of all categories of plant protection products (PPPs). If adopted regionally, this will shorten the length of time needed to take a new PPP through trials up to registration and ultimately see many non-conventional chemical pesticide sprays being included in the toolkit of FAW IPM technologies. Lobbying by the Policy Enabler Compact is starting to pay off in East Africa as several biorationals have been registered for FAW control within the East African Community. ToT programs currently used by the TAAT FAW Compact will be adapted for the training of pesticide registration officers, agricultural extension agents, research technicians, seed company agronomists, agrochemical company technical and sales representatives, and local authority representatives in charge of solid waste disposal. These will in turn cascade training to farmers, including those involved in urban agriculture. The training curricula will include FAW IPM technologies, FAW identification, field scouting and action threshold determination, calibration of pesticide application equipment, and safe use and disposal of pesticides.	All POPs and mercury

2 Communicating ..	Awareness of the agricultural sector on combatting the FAW Information, education and communication.	The AFLDC2 can improve the knowledge of policy makers and all other relevant stakeholders and thereby support the efforts nationally to eliminate POP pesticides and use less harmful alternatives for controlling the FAW and other pests. The FAW Programme can support the dissemination of these messages in the sector and increase motivation among the stakeholders. Communication channels currently used by the TAAT FAW Compact (e.g., social media platforms, print media, TV, newsletters, factsheets, brochures, etc.) will inform how best to communicate activities, events and deliverables of the AFLDC2 project. Other technical results will be communicated through journal articles. Outreach materials (e.g. FAW IPM Guides, posters and training videos) produced by the TAAT FAW Compact will also be repurposed for use in awareness-raising and capacity building activities in the AFLDC2 project.	All POPs and mercury
3.4 uPOPs reductions	Technical Assistance in Plant Protection, Agroecological Practices and Agrarian Policy	The FAW project has a broad rural contact and can ? with the assistance of AFLDC2 ? promote avoidance of open waste burning which is particularly prevalent in rural areas, and recycling of agricultural plastics. Another important objective of the FAW project is to assist the national program in building the capacity of urban dwellers in FAW IPM and safe use and disposal of pesticides and empty containers in much the same way as smallholder farmers in rural areas. The proliferation of urban agriculture has seen an upsurge in the use of all types of agricultural pesticides, including herbicides and conventional chemical insecticides. The empty containers are generally unsafely disposed of, with most of them ending up in waterways. This category of farmers is currently not catered for in training programs provided by extension agents and agronomists from seed and agrochemical companies despite Governments sometimes issuing them with seed, fertilisers and chemical pesticides.	uPOPs and mercury

4 Monitoring and evaluation..	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project:: Staple Crops Processing Zones Project In Liberia

The Bank is financing the implementation of the Smallholder Agriculture Productivity and Commercialization Project (SAPEC) in Liberia, the only Agriculture project supported in the country in recent time. The project was envisaged to address the needs for improving food security, reducing poverty, and fostering national economic growth, with core components including sustainable crop production/ intensification and value addition. The proposed Staple Crops Processing Zones project is well aligned with the Bank Group?s Ten-Year Strategy (TYS) 2013-22, as it relates to inclusivity, food security and private sector development and will help Liberia address the major challenges to agriculture and the heavy dependence on food importation, including poor yields staples Rice and Cassava and other selected priority value chains, including Fisheries, Oil Palm, Fruits, Vegetables and Livestock (poultry and small and large animals). The project is also directly aligned with three of the Bank?s High 5 strategic priorities, namely: Feed Africa, Industrialise Africa and Improve the Quality of Life for Africans.

The Project development goal is to contribute to inclusive and sustainable agro-industrial development in Liberia, and in the process reduce staple food imports, create jobs and reduce poverty. The project objectives are to i) create a better business environment for increased investment in agro industrial sectors, ii) create opportunities for investments at the industrial level and coordinate the integration of small holder farms, and agro processing industry into sustained agro value chains and, iii) improve capacities and skills to benefit from new agribusiness employment and value chain opportunities. The project is structured around four related components; including: a) Strengthening policy, regulatory, institutional and business environment, b) Support the development of agro industry and farm enabling infrastructure, c) enable skills and agricultural value chain development and strengthen farmer coordination and, d) Project coordination and management.

With the observed challenges in management of POP pesticides and need for improved waste management in Liberia, the project can provide a platform for awareness raising, training and waste recycling activities related to 1) the use of integrated pest management, 2) the reduction of uPOPs formation from burning of waste on agriculture and processing steps through circular economy approaches, and 3) securing sustainable and environmentally improved infrastructure to enhance business conditions and private investments. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 13 links to the Liberia baseline project

Baseline project	*Staple Crops Processing Zones Project in **Liberia**.* The Project development goal is to contribute to inclusive and sustainable agro-industrial development in Liberia, and in the process reduce staple food imports, create jobs and reduce poverty. The project objectives are to i) create a better business environment for increased investment in agro-industrial sectors, ii) create opportunities for investments at the industrial level and coordinate the integration of small holder farms, and agro processing industry into sustained agro value chains and, iii) improve capacities and skills to benefit from new agribusiness employment and value chain opportunities. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **14.120.000 USD.**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted
1..Enabling environment and national enforcement..	Ensuring improved enabling business environment and governance, and long-term sustainability of agro-industrial activities promoted by the project, including through training and awareness of the agricultural sector, their trainers, industry partners and farmers, in possibilities for increased productivity and domestic processing, while promoting a strategical and sustainable market approach. The relevant BLP sub-components include: Support to the PDU and the Inter-ministerial Committee for the development of a strategy and a roadmap for the operationalization of the SEZ Authority; Capacity building in negotiation and contract management of the SEZ and promoting targeted investments towards SEZ; Support for the implementation of an enabling policy related to local transformation; Support for the implementation of the standards system; Support and strengthen trade regulations to create enabling environment for exports; Support for business environment reforms and investor incentives.	To sustainably increase the productivity and domestic industrial processing, it is of key importance to secure adequate and environmentally safe management of chemicals and waste in the agricultural sector. AFLDC-2 can enhance this through the supporting national enabling structures for the purpose (governance, legislation and infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising in the sector and among its partners and consumers.	POP pesticides and other POPs and mercury
2 Communicating.	See Component 1 above Support investment promotion events to enable the private sector occupation of the SCPZ in Buchanan The interpreted co-financing from this sub-component is USD200,000	See Component 1 above	See above

3.2 POPs pesticides	Ensuring long-term sustainability of agro-industrial activities promoted by the project. Several BLP sub-components are relevant to the project including: Support the development of external infrastructure in the SEZ, Develop Master Plans and Full Feasibility Studies for the SCPZ, Provide support to infrastructure development in the industrial park (fencing, internal road and drainage network, water supply, wastewater/effluent plant and management, power connectivity/electricity Supply, lighting, telecommunication connectivity, Administrative Building, Ware Houses, One Stop shop Services, parking lot, etc), Support investment promotion events to enable the private sector occupation of the SCPZ in Buchanan, Provide support for rural based infrastructure, Development of 2 Rural Transformation centers and 4 Aggregation centers, Enhance farmer production and productivity, Skills Development, in line with agro industrial demand/requirements, and Entrepreneurship development	AFLDC-2 secures the environmentally safe collection and treatment of POP pesticides identified in the country and promotes Integrated Pests Management.	POP pesticides
3.3 PCBs	Ensuring long-term functioning and sustainability of agro-industrial activities promoted by the project Several BLP sub-components are relevant to the project including: Support the development of external infrastructure in the SEZ, Develop Master Plans and Full Feasibility Studies for the SCPZ, Provide support to infrastructure development in the industrial park (fencing, internal road and drainage network, water supply, wastewater/effluent plant and management, power connectivity/electricity Supply, lighting, telecommunication connectivity, Administrative Building, Ware Houses, One Stop shop Services, parking lot, etc), Support investment promotion events to enable the private sector occupation of the SCPZ in Buchanan, Provide support for rural based infrastructure, Development of 2 Rural Transformation centers and 4 Aggregation centers, Enhance farmer production and productivity, Skills Development, in line with agro industrial demand/requirements, and Entrepreneurship development	Access to the power grid is an important part of the infrastructure of agro-industrial development and in general for rural growth. AFLDC2 can secure that toxic PCB is removed from the power grid and introduce and thereby eliminating exposure to the local population and ensure a well functioning and long-term sustainable power supply. Additionally, a depot of old transformers potentially containing PCB is situated within the BLP project area itself, and this depot will be checked for PCB presence and PCB will be eliminated from the site.	PCBs

4 M&E	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Agricultural Transformation Support Project (Patam) In Mauritania

The PATAM project will support the upstream and downstream agricultural production subsectors in the Brakna-Ouest region. It will contribute to the improvement of food security and the living conditions of target communities. More specifically, it will support agricultural transformation in Mauritania by increasing the output and value of agricultural products. The baseline project will focus on the Brakna-Ouest region, and will affect Trarza and Nouakchott regions when it is scaled up to promote: (a) value chains (support for the establishment of agro-industrial processing zones); (b) youth and women's entrepreneurship and; (c) the establishment of guarantee funds for agricultural sector financing.

The project was initiated based on the conclusions of the high-level ?Feed Africa? conference held in Dakar in October 2015, which recommended that particular attention be paid to supporting agricultural transformation in African countries. The needs stem from the logic of consolidating and building on the significant achievements recorded by the West Brakna Irrigation Scheme Project (PAHABO) and strengthening the transformative dimension (promotion of value chains by focusing on two key sectors: rice cultivation and market gardening). It was designed through a concerted systemic method that involves stakeholders and emphasises a participatory and integrated approach (PIA).

The project will help to modernise irrigation systems, promote agricultural transformation and value chains, develop youth and women's entrepreneurship, set up innovative and inclusive financing, and disseminate the requisite technical and organisational knowledge (use of the various information systems to be set up, agricultural advisory, etc.) to its stakeholders. The dissemination of smart agricultural technologies and practices to adapt to climate change and the guidance of farmers to improve market access will equally be relevant. These operations will build the capacity of institutional stakeholders such as administrative entities as well as inter-professional and beneficiary organisations (water users' associations, rice cooperatives, women's vegetable farming cooperatives, EIGs, etc.).

The Patam project can benefit from awareness raising and training related to the use of least environmentally harmful pest control techniques (bio-treatments, etc.) and pesticides; in other words: integrated pest management (IPM) approaches. Similarly, agricultural production and crop processing involves the management of both crop wastes, plastics waste and other bio-wastes, which are all significant sources to uPOPs formation if burnt. Instead, utilization and recycled in circular approaches can be promoted through awareness raising and training, as well as waste management activities and elimination of hazardous chemicals planned for the AFLDC-2 project. The baseline project can serve as a platform for such training and awareness raising, and strengthen the implementation of waste minimisation/ management activities and elimination of hazardous chemicals. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their

strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 14 links to the Mauritania baseline project

<table>
<tr><td>Baseline project</td><td colspan="3">Agricultural Transformation Support Project (Patam) in Mauritania.

Promote: (a) value chains (support for the establishment of agro-industrial processing zones); (b) youth and women's entrepreneurship and; (c) the establishment of guarantee funds for agricultural sector financing. The project will help to modernise irrigation systems, promote agricultural transformation and value chains, develop youth and women's entrepreneurship, set up innovative and inclusive financing, and disseminate the requisite technical and organisational knowledge (use of the various information systems to be set up, agricultural advisory, etc.) to its stakeholders.

The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is 5.100.000 USD</td></tr>
<tr><td>AFLDC-2 comp. /output</td><td>Relevant baseline project activities (linkages)</td><td>Incremental GEF activities</td><td>GEBs targeted</td></tr>
</table>

1..Enabling environment and national enforcement.And 2 Communicating..	Ensuring long-term sustainability of agro-industrial activities promoted by the project, including through training and awareness of the agricultural sector, their trainers, partners and farmers, in possibilities for increased productivity and domestic processing. The BLP includes promotion of value chains, youth and women?s entrepreneurship (notably technical support, support for IPM, promotion on youth and women?s entrepreneurship, and inclusive financing. There is a capacity building and project coordination sub-component in the BLP.	To sustainably increase the productivity and domestic industrial processing, it is of key importance to secure adequate and environmentally safe management of chemicals and waste in the agricultural sector. AFLDC-2 can enhance this through the supporting national enabling structures for the purpose (legislation and infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising in the sector and among its partners and consumers.	All POPs and mercury

3.3 PCBs	Ensuring good investment conditions for private sector and long-term sustainability of agro-industrial activities promoted by the project The BLP contains a component on Transformative irrigation infrastructure, notably with environmental and social measures, and control of the construction	Access to the power grid is an important part of the infrastructure of agro-industrial development and in general for rural growth. AFLDC2 can secure that toxic PCB is removed from the power grid and thereby eliminate exposure to the local population and ensure a well functioning and long-term sustainable power supply.	PCBs
3.5 Mercury products	Establishing infrastructure and creating the operational frameworks of the agro-industrial parks and associated agricultural production areas The BLP contains a component on Transformative irrigation infrastructure, notably with environmental and social measures, and control of the construction	AFLDC can promote the use of environmentally safer alternatives to mercury-added products in the baseline project and ensure collection and ESM of waste mercury-added products used on agricultural processing and veterinarian practices.	Mercury
4 M&E	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Premier Programme De Modernisation Des Villes (Promovilles-1) in Senegal

The 2030 projections show that 60% of the population will live in cities. Pending the resolution of the problem of financing local communities, the Government of Senegal intends to support cities to provide adequate infrastructure, through the Program of Modernization of Cities (PROMO-VILLES). The Bank's support to Senegal for the period 2016-2020 is articulated around 2 Pillars (i) Pillar 1: Support to Agricultural Transformation; (ii) Pillar 2: Strengthening production and competitiveness support infrastructure (energy and transport). This program is based on Pillar 2, the main objective of which is, inter alia, to respond to the population's demand for accessibility and mobility which is an essential element of the Le Plan S?n?gal Emergent, given its importance in supporting activities.

At the strategic level, the aim of the project is to contribute to the strengthening decentralization to promote the economic and social development of the country. At the sectoral level, the project aims to increase the rate of community facilities and the financial resources of local communities. At the specific level, the project will consist of providing Municipalities with infrastructure by: (i) constructing and / or rehabilitating approximately 77.46 km of roads with a structure covered with bituminous concrete (BB) and / or paved ; (ii) the construction of concrete ditches for the rehabilitation of roads; (iii) the installation of candelabras for public lighting; and (iv) landscaping. Related facilities consisting of socio-economic infrastructure and support for women and young people are also planned as well as support for municipal technical services and training of young people in road maintenance trades through training yards.

The safety and lifetime expectancy for the roads in the region are very sensitive to the correct functioning of the road drainage ditches. Due to the lack of awareness in the population and insufficient waste management capacity, waste is dumped illegally in the road drainage ditches and thus preventing their correct functioning. The AFLDC-2 project can contribute to the awareness raising in the population and training in integrated waste management and circular economy approaches to municipal professionals and associated private sector partners. The baseline project provides a platform for this training, making use of already planned infrastructure for conducting training activities. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 15 links to the Senegal baseline project

Baseline project	*Premier Programme De Modernisation Des Villes (Promovilles-1) in **Senegal**.* At the specific level, the project will be providing involved municipalities with infrastructure by: (i) constructing and / or rehabilitating approximately 77.46 km of roads; (ii) the construction of concrete ditches for the rehabilitation of roads; (iii) the installation of candelabras for public lighting; and (iv) landscaping. Related facilities consisting of socio-economic infrastructure and support for women and young people are also planned as well as support for municipal technical services and training of young people in road maintenance trades through training yards. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **44.134.493 USD**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted

1..Enabling environment and national enforcement.. And 2 Communicating..	Ensuring long-term durability and safety of the improved road through training, awareness raising and maintenance procedures to avoid improper waste disposal in road ditches, resulting in road deterioration and disruption of traffic safety. The baseline project includes training and urban planning studies. The budget is: USD4.15 million	Enhancing environmentally safe management (ESM) of waste in the city is of key importance to the sustainable and long-term durability of the improved road system. AFLDC-2 can enhance this through supporting national enabling structures for the purpose (legislation and institutional infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising among key stakeholders and to the public.	All POPs and mercury

3.4 uPOPs reductions	As above.	Enhancing environmentally safe management (ESM) of waste in the city is of key importance to the sustainable and long-term durability of the improved road system. AFLDC-2 can enhance this through the enabling framework improvements and outreach measures mentioned above, in combination with scale-up and improvements in the recycling sector, with a special focus on waste plastic and tyres, as well as up-scaling existing energy-recovery of otherwise un-recyclable non-PVC plastic foils (etc.) and tyres in cement kilns, which will in turn result in reductions of uPOP formation from open burning of these wastes. The output will also support adequate health and safety measures in the partner facilities, and include investigation of mercury emissions from cement sector partners, with a view to promote BAT/BEP. AFLDC2 can thus also help make more sustainable cement available for the extensive construction work in the BLP. AFLDC2 can thus help make more sustainable cement available for the extensive construction work in the BLP, while the BLP can increase incentives among all cement suppliers by demanding enhanced sustainability in their procurement of cement, thereby promoting scale-up.	uPOPs (and mercury)
4 M&E	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Agro-Industry And Rice Value Chain Support Project (Slaris) In Sierra Leone

The aim of the SLARiS Project is to raise rural incomes, improve food and nutrition security and permit the transition of subsistent farming system towards a commercialized market-driven system and standardized product supply lines. An important goal of the project is, therefore, to increase local production with emphasis on commercialized production and value-added processing. While rice will be an important focus of the project, other key value chains with high potential such as maize, cassava and horticulture will also be supported by the project in order to promote nutrition and private sector investment. The specific objective of the project is the promotion of priority agricultural value chains (including rice, maize and horticulture) as a viable and inclusive business opportunity through enhanced production, productivity and value addition. This will be addressed through three components: (1) Support to Agricultural Production, Productivity and Agro-Industrial Development; (2) Agribusiness Youth Empowerment and Capacity Development, and (3) Institutional Capacity Development and Project Management.

At the sector level, the project is in accordance the National Strategic Agriculture Development Plan (NSADP) (2010-2030). It is also consistent with the recently launched National Agricultural Transformation Strategy (NATS) (2018- 2025) which focuses on developing agricultural value chains, making available improved inputs (seeds and fertilizers), increasing productivity and production, and establishing crops and livestock processing zones across the country. The project is also firmly rooted in the Bank?s main agriculture flagship programs focused on improving agricultural productivity

through technology dissemination and scaling (TAAT and PHAP), enhancing resilience to climate change through climate-smart agriculture and promoting youth empowerment (ENABLE Youth).

The project can provide a platform for awareness raising and training activities related to 1) the use of integrated pest management and 2) the reduction of uPOPs formation from burning of waste on agriculture and processing steps through circular economy approaches. The project partners include the Njala University, the key university on agriculture in Sierra Leone, which can also serve as a conduit of the training and awareness raising related to the above topics. Additionally, the baseline project is dependant on a well-functioning and sustainable power supply system that improves rural livelihood and enhances agro-industrial activity and private sector investments. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 16 links to the Sierra Leone baseline project

Baseline project	*Agro-Industry And Rice Value Chain Support Project (Slaris) in **Sierra Leone**.* The specific objective of the project is the promotion of priority agricultural value chains (including rice, maize and horticulture) as a viable and inclusive business opportunity through enhanced production, productivity and value addition. This will be addressed through three components: (1) Support to Agricultural Production, Productivity and Agro-Industrial Development; (2) Agribusiness Youth Empowerment and Capacity Development, and (3) Institutional Capacity Development and Project Management. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **17.372.000 USD**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted
1..Enabling environment and national enforcement..	Ensuring long-term sustainability of agro-industrial activities promoted by the project, including through training and awareness of the agricultural sector, their trainers, partners and farmers, in possibilities for increased productivity and domestic processing.	To sustainably increase the productivity and domestic industrial processing, it is of key importance to secure adequate and environmentally safe management of chemicals and waste in the agricultural sector. AFLDC-2 can enhance this through the supporting national enabling structures for the purpose (legislation and infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising in the sector and among its partners and consumers.	All POPs and mercury

2 Communicating..	The BLP includes outreach, specifically the ENABLE NJALA Youth Empowerment Program and a Farmer Outgrowers Scheme.	See text 1 above	See above
3.2 POPs pesticides	Ensuring long-term sustainability of agro-industrial activities promoted by the project The BLP project includes a component on support to agricultural input production & distribution systems, with: Research, Development and Multiplication; Seed Testing, Inspection and Certification; and Agricultural Input Distribution Systems.	AFLDC-2 will ensure the environmentally safe collection and treatment of POP pesticides identified in the country.	POP pesticides
3.3 PCBs	Ensuring good investment conditions for private sector and long-term sustainability of agro-industrial activities promoted by the project The BLP project includes a component on support to agricultural input production & distribution systems, with: Research, Development and Multiplication; Seed Testing, Inspection and Certification; and Agricultural Input Distribution Systems.	Access to the power grid is an important part of the infrastructure of agro-industrial development and in general for rural growth. AFLDC2 can secure that toxic PCB is removed from the power grid and help promote modern PCB-free equipment.	PCBs
4 M&E	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Agro-Food Processing Zone Project in Togo

The Togo Agro-Food Processing Zone Project (PTA-Togo) is a pilot project implemented as part of the Togo Agropoles Strategic Development Plan 2017-2030 and the Feed Africa Initiative 2016-2025. The aim of the project is to create conditions conducive to private investment, notably in the processing of

agricultural products, the supply of inputs and marketing, in the Kara region. The main outcomes expected from the Project are as follows: (i) increase in the productivity and agricultural production of import substitutes (rice, maize, soybean, broiler meat) and exports (cashew nuts and sesame); (ii) increase in the share of agricultural products processed in situ through private investment in the Agro-park; (iii) Strengthening of the people?s food and nutritional security; (iv) creation of wealth and employment, including for young people and women.

The main impacts expected from the project for the direct beneficiaries are as follows: improved food and nutritional security and incomes thanks particularly to better access to markets, agricultural inputs, agricultural services and financing. To that end, it is expected that the project would lead to: (i) an increase in private investments thanks to a more favourable business environment for the establishment of infrastructure in the Agro-park (roads and sundry networks, single window, training room, maintenance centre, incubation centre, etc.); (ii) increase in agricultural production capacities thanks to expected rural infrastructure (dams, irrigated areas, roads, power, etc.); (iii) capacity building for operators in the 10 multipurpose agricultural transformation centres (ATCs) (inputs, farm equipment, technologies, financing, harvest aggregation, etc.). The project will be implemented following the value chain approach through a partnership between the State (facilitator and regulator), the private sector (promoter) and professional farmers? organisations (FOs). In addition to capacity building for FOs (technical and organisational management), the project will support the operation of consultation frameworks for priority chains, to ensure the inclusion of farmers and agreements with the private sector.

Awareness raising and training input from the AFLDC-2 project will be valuable additions to the above mentioned, increasing awareness and capacity in 1) the use of integrated pest management and 2) the reduction of uPOPs formation from burning of waste on agriculture and processing steps through circular economy approaches. Additionally, the baseline project is dependant on a well-functioning and sustainable power supply system that improves rural livelihood and enhances agro-industrial activity and private sector investments. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 17 links to the Togo baseline project

Baseline project	*Integrated Agro-Industrial Parks - Support Project In **Togo**.* Assistance and resources for the implementation of agro-industrial parks to support annual growth, industrialization and agricultural transformation with resulting creation of jobs and reduction of property. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **27.110.000 USD**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted

1..Enabling environment and national enforcement.. 2 Communicating..	Ensuring long-term sustainability of agro-industrial activities promoted by the project, including through training and awareness of the agricultural sector, their trainers, industry partners and farmers, in possibilities for increased productivity and domestic processing, while promoting a strategical and sustainable market approach. The identified activities from the BLP include: Support policy, governance and incentive measures, and Capacity building for actors in priority agricultural sectors. The relevant budget is USD6.66 million	To sustainably increase the productivity and domestic industrial processing, it is of key importance to secure adequate and environmentally safe management of chemicals and waste in the agricultural sector. AFLDC-2 can enhance this through the supporting national enabling structures for the purpose (legislation and infrastructure), capacity building of national and local government officials and other key stakeholders, and awareness raising in the sector and among its partners and consumers.	All POPs and mercury
3.2 POPs pesticides	Ensuring long-term sustainability of agro-industrial activities promoted by the project. The BLP?s development of processing and access infrastructure relates to the AfLDCs-2 project, components 3.2 and 3.3. The budget (split equally across Component 3 outputs is: USD20.73 million	AFLDC-2 secures the environmentally safe collection and treatment of POP pesticides identified in the country, thereby preventing exposure to the farmers and rural population and fauna to these highly toxic chemicals..	POP pesticides
3.3 PCBs	Ensuring good investment conditions for private sector and long-term sustainability of agro-industrial activities promoted by the project. The BLP?s development of processing and access infrastructure relates to the AfLDCs-2 project, and can be considered relevant to components 3.2 and 3.3. The budget (split equally across Component 3 outputs is: USD20.73 million	Access to the power grid is an important part of the infrastructure of agro-industrial development and in general for rural growth. AFLDC2 can secure that toxic PCB is removed from the power grid and promote modern PCB-free equipment.	

4 M&E	Monitoring and evaluation activities	The AfDB FAW Programme staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Kampala City Roads Rehabilitation Project in Uganda

The Government of Uganda has requested the Bank to finance the rehabilitation of road network in the city of Kampala. The project is aligned with Bank?s Regional Integration Policy and Strategy (RIPS) 2014-2023?emphasizing regional infrastructure development, trade and industrialization. The main objectives of the proposed Rehabilitation of Kampala City Roads Project are two-fold:

? Enhance transport efficiency thereby enabling the City of Kampala to maximize agglomerative benefits of access resulting from reduced traffic congestion through upgrade and expansion of road network; and

? Improve air quality in the city through implementation of Scheduled Eco-Bus Transit Services and broadening travel choices for non-vehicular movements within Kampala by expanding networks of walkways and cycling tracks.

The proposed project involves extensive roadworks construction within the city of Kampala including expanded storm drainage structures, expected to disrupt traffic operations. However, the proposed project doesn?t sufficiently integrate the principles of sound management of toxic chemicals and wastes. The AFLDC-2 project will address this deficiency by strengthening a coordinated and efficient system of proper waste management within the framework of circular economy.

Solid waste management in Kampala City entails the involvement of private companies contracted by KCCA to manage solid waste collection, transportation and disposal. Roughly, about 1500 tons of waste is generated in Kampala per day, and only about 40-50% of it is disposed properly. Integration of solid waste management strategies along the proposed road construction projects will tremendously contribute towards improved cleanliness of the city. Illegal dumping of waste in road drainage ditches is widespread in Uganda. The safety and lifetime expectancy for the roads in the region are very sensitive to the correct functioning of these road drainage ditches. Due to the lack of awareness in the population and insufficient waste management capacity, waste is dumped illegally in the road drainage ditches and thus preventing them to function correctly. To ease this challenge, the following components will be important:

a) Facilitate innovative solid waste management system; development of an App through which waste generators can reach out to waste handlers;

b) Provision of waste collection kits at bus bays: Waste collection/disposal kits at bus bays would improve cleanliness and responsiveness of the road users and most especially, public transport system.

The kits should be designed in such a way that they allow waste separation at source, that is, separation of plastics, glass, paper and biodegradable with clearly visible markings;

c) Public sensitization on waste management

The AFLDC-2 project can contribute to the awareness raising in the population, and training in integrated waste management and circular economy approaches to municipal professionals and associated private sector partners. The baseline project provides a platform for this training, making use of already planned infrastructure for conducting training activities. AFLDC2 will also enhance the recycling of plastics and tyres that would otherwise be dumped and burned with resulting uPOPs emissions. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 18 links to the Uganda baseline project

Baseline project	*Kampala City Roads Rehabilitation Project in **Uganda**.* The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **99.750.000 USD**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted
1..Enabling environment and national enforcement..	Ensuring long-term durability and safety of the improved road through training, awareness raising and maintenance procedures to avoid improper waste disposal in road ditches, resulting in road deterioration and disruption of traffic safety. The road construction works component has multiple elements: 5km of storm water drainage works, signalization of 11 junctions, smart street lighting, tree planting, 6 roadside markets for women vendors, 30 public toilets, parking areas for trucks and bike taxis, and construction of bus depot.	Enhancing environmentally safe management (ESM) of waste in the city is of key importance to the sustainable and long-term durability of the improved road system. AFLDC-2 can enhance this through supporting national enabling structures for the purpose (legislation and institutional infrastructure), capacity building of national and local government officials and other key stakeholders, promotion of best practices (integrated waste management, etc.) and awareness raising among key stakeholders and to the public. The improved road system will also enhance possibilities for effective waste collection.	All POPs and mercury

2 Communicating	Communications in the baseline project comes mainly through women and youth skills development, including basic construction and entrepreneurship development, business skills and facilitation of reimbursable financing, and institutional capacity building.	As for Component 1 above	See above
3.4 uPOPs reductions	The BLP provides infrastructure for solid waste management. Solid waste management services is contained within Project Management:	Enhancing environmentally safe management (ESM) of waste in the city is of key importance to the sustainable and long-term durability of the improved road system. AFLDC-2 can enhance this through supporting local enabling structures for the purpose (legislation and institutional infrastructure), capacity building of local government officials and other key stakeholders, promotion of best practices (integrated waste management, etc.) and awareness raising among key stakeholders and to the public. The improved road system will also enhance possibilities for effective waste collection. Additionally, through implementing proper ESM and circular economy approaches for plastics and tyres waste, AFLDC2 can increase optimal re-use of valuable materials and reduce open burning resulting in uPOPs emissions. The output will also support adequate health and safety measures in the partner facilities, and include investigation of mercury emissions from cement sector partners, with a view to promote BAT/BEP. AFLDC2 can thus also help make more sustainable cement available for the extensive construction work in the BLP.	uPOPs

4 M&E	Monitoring and evaluation activities. A budget for M&E is included in component 1.	The AfDB BLP staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

Co-financing baseline project: Fall Armyworm Program In Zambia

The Government of Zambia requested the AfDB to implement the Fall Army Work Program. In its National Performance Framework, Zambia?s identified improved Agricultural production as a priority sector for enhancing food security, income generation and overall poverty alleviation among its citizens. Th project is also in line with national development plans as outlined in the Seventh National Development Plan and Vision 2030, which has identified agriculture as the engine for economic growth. The objective of this project will focus on improving the productivity of the crop sector among small-scale farmers. Key components of the project are to: i) conduct socio-economic and environmental impact of the FAW incursion on production; ii) create public awareness about identification and management options; iii) strengthen the community-based FAW early warning system; iv) build technical capacity on cultural, seed-dressing and foliar spray management options for the FAW; v) identify and fast track testing registration of low risk pesticides with special focus on bio-pesticides and botanical pesticide and seed ? dressing, and vi) policy advocacy. The primary beneficiaries of this project are small-scale and commercial farmers whose livelihoods and income are likely to be greatly affected by the presence of the FAW. Furthermore, these interventions will not only improve their income but also provide the much-needed nutrition for the rural population of Zambia.

Fall army work is a migratory insect, it target 80 crops and can destroy 70% of the crop in the fields attacked: Maize, sorghum, vegetables, etc. are attacked. The grown up insect feed on greenery and they leave larvae and eggs that can hide in the plant stems, and seeds need to be treated or certified as FAW-free to avoid its spreading. All kinds of pesticides have been observed used to fight the FAW, including obsolete pesticides and mercury-containing pesticides. Cross-border movements of pesticides waste have also been observed and require coordinated efforts for their prevention. Through awareness raising and training, the AFLDC-2 project can help prevent obsolete pesticides use and movements, and enhance promotion of alternatives. Similarly, agricultural production and crop processing involves the management of both crop wastes, plastics waste and bio-waste, which are all significant sources to uPOPs formation if burnt. Instead utilization and recycled in circular approaches can be promoted through awareness raising and training planned for the AFLDC-2 project. The baseline project can serve a s a platform for such training and awareness raising. Last but not least, the baseline project provides a strong basis for implementation of the AFLDC2 in Liberia. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.

Table 19 links to the Zambia baseline project

Baseline project	*Fall Armyworm (FAW) Program in **Zambia***. Assistance and resources to control the FAW pest. The relevant AfDB baseline investments providing incremental support (with national benefits) to the AFLDC-2 project activities (to achieve global benefits) is **3.650.000 USD**		
AFLDC-2 comp. /output	Relevant baseline project activities (linkages)	Incremental GEF activities	GEBs targeted

1. Enabling environment and national enforcement.	Training of the agricultural sector, including trainers and farmers, in the combatting of the FAW Training takes place across multiple outputs and activities. The combined training budget is: USD 298,000	A wide set of techniques are required to control the FAW pest. The legislative and infrastructural assistance and capacity building of the AFLDC2 can secure that POP pesticides use is reduced or eliminated and that integrated pest management (IPM) approaches, securing maximum effect and least environmental and health impacts, are well known and available to the sector. The TAAT FAW Compact is currently working with the TAAT Policy Enabler Compact to remove policy bottlenecks which hinder the registration of biorationals (botanicals, fungal entomopathogens, bacteria, viruses, plant oils), and semiochemicals for which there are currently no clear guidelines on their testing and registration for control of agricultural pests. A key deliverable of the TAAT FAW Compact in this regard was the production and circulation within national programs of a draft document detailing harmonised protocols for the efficacy evaluation of all categories of plant protection products (PPPs). If adopted regionally, this will shorten the length of time needed to take a new PPP through trials up to registration and ultimately see many non-conventional chemical pesticide sprays being included in the toolkit of FAW IPM technologies. Lobbying by the Policy Enabler Compact is starting to pay off in East Africa as several biorationals have been registered for FAW control within the East African Community. ToT programs currently used by the TAAT FAW Compact will be adapted for the training of pesticide registration officers, agricultural extension agents, research technicians, seed company agronomists, agrochemical company technical and sales representatives, and local authority representatives in charge of solid waste disposal. These will in turn cascade training to farmers, including those involved in urban agriculture. The training curricula will include FAW IPM technologies, FAW identification, field scouting and action threshold	POP pesticides and other POPs and mercury

2 Communicating .	Awareness of the agricultural sector on combatting the FAW Communications and awareness raising takes place across multiple outputs and activities. The combined budget is: USD 148,000	The AFLDC2 can improve the knowledge of policy makers and all other relevant stakeholders and thereby support the efforts nationally to eliminate POP pesticides and use less harmful alternatives for controlling the FAW and other pests. The FAW Programme can support the dissemination of these messages in the sector and increase motivation among the stakeholders. Communication channels currently used by the TAAT FAW Compact (e.g., social media platforms, print media, TV, newsletters, factsheets, brochures, etc.) will inform how best to communicate activities, events and deliverables of the AFLDC2 project. Other technical results will be communicated through journal articles. Outreach materials (e.g. FAW IPM Guides, posters and training videos) produced by the TAAT FAW Compact will also be repurposed for use in awareness-raising and capacity building activities in the AFLDC2 project.	POP pesticides and other POPs and mercury
3.2 POPs pesticides	Selection and purchasing of pesticides for combatting the FAW The relevant budget is: 303,246 Notable activities include: ? Procurement and validating effectiveness of low risk synthetic pesticides, seed dressings and biorationals for FAW management ? Training of camp extension officers in pesticide risk reduction ? Training of farmers in pesticide risk reduction	AFLDC-2 supports inventory development for POP pesticides and secures the environmentally safe collection and treatment of POP pesticides identified in the country. The training curricula by the FAW Compact includes calibration of pesticide application equipment, classification of pesticides, active ingredients and trade/brand names, consequences of pesticide use (e.g. hazard to users, effects on non-target organisms, selection for resistance development, environmental contamination, personal protective equipment, etc.).	POP pesticides

3.4 uPOPs reductions	? Technical Assistance in Plant Protection, Agroecological Practices and Agrarian Policy, with a budget of USD380,000	The FAW project has a broad rural and urban contact and can ? with the assistance of AFLDC2 ? promote avoidance of open waste burning which is particularly prevalent in rural areas, and recycling of agricultural plastics and rubber tyres. The output will also support adequate health and safety measures in the partner facilities, and include investigation of mercury emissions from cement sector partners, with a view to promote BAT/BEP. AFLDC2 can thus also help make more sustainable cement available for the extensive construction work in the BLP. Another important objective of the FAW project is to assist the national program in building the capacity of urban dwellers in FAW IPM and safe use and disposal of pesticides and empty containers in much the same way as smallholder farmers in rural areas. The proliferation of urban agriculture has seen an upsurge in the use of all types of agricultural pesticides, including herbicides and conventional chemical insecticides. The empty containers are generally unsafely disposed of, with most of them ending up in waterways. This category of farmers is currently not catered for in training programs provided by extension agents and agronomists from seed and agrochemical companies despite Governments sometimes issuing them with seed, fertilisers and chemical pesticides.	uPOPs
4 M&E	Monitoring and evaluation activities	The AfDB BLP staff in the country will monitor the AFLDC-2 project execution and ensure adequate progress and adaptive feedback. Beyond their strong project management skills, AfDB has power of leverage being a regional financing institute and having long-term cooperation history in the country.	NA

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

Local emissions and releases of POP and mercury contribute directly to the global environmental pressure from these hazardous chemicals through their atmospheric transport over global distances. The activities of the project are designed to contribute the following global environmental benefits:

? Reduction, and wherever possible, elimination of trade and use of mercury-added products through their replacement with appropriate mercury-free alternatives. The reduction of inputs of mercury with products and materials to the 11 project countries is estimated at 38 tonnes based on MIA inventory results, and where MIA?s are still not developed, derived from the Global Mercury Assessment (GMA) 2018 (using GMA methodology). Considering that a successful implementation of the project will reduce the input of mercury with products over many years, the impact will however be considerably larger.

? Reduction of risks from accumulations of 742 tonnes of obsolete POPs pesticides through their environmentally sound management and destructions. Based on national consultations the POPs pesticides most expected to be addressed through this project are DDT, Aldrin, Lindane, Endosulfan and Chlordane, across the relevant countries.

? Reduction of emissions and releases of 540 tonnes of PCBs from electrical equipment through improved environmentally sound management and destruction;

? Establishment of a permanent interim storage facility for safe storage and safeguarding of highly hazardous wastes will limit exposure and minimise the health and environmental risks associated with POPs and mercury.

? Reduced emissions of uPOPs. (356 gTEQ), primarily from an objective of 20% reduction in the open burning of municipal solid waste, including medical waste. Reductions of open burning of waste will also reduce emissions of mercury from the burning of mercury-added products and from trace levels in other waste materials.

? Improved understanding, through convening an industry conference on the project topics, of mercury emissions from industrial point sources, such as cement clinker production and non-ferrous metal smelters, and any BAT/BEP investment needs in such sector. The contributions to global mercury emissions from industry in Sub-Saharan Africa was estimated at about 42 tonnes/y in the 2018 Global Mercury Assessment, of which a part comes from the project countries;

? The project is estimated to contribute to the avoidance of 63,000 tonnes of marine litter in coastal countries (Angola, The Gambia, Guinea) due to the implantation of BAT/BEP for uPOPs/plastics management and recycling in coastal regions.

? The project will contribute to the reduction of 38 tonnes of mercury reduced (within project period).

? 3,775 tonnes of Quantity of Mercury containing materials and products directly avoided (within the project period).

The project addresses GEF7 Core Indicators 9, 10 and 11 and their constituent indicators as set out in Annex F.

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

? Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)

? Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

For a description of the estimation methods applied, see the Core Indicator Worksheet (Annex F).

The budget is based on the below described, expected unit costs for procurement of international services for collection, re-packing, transport and final treatment of POPs and mercury.

The procurement of an international service provider will be undertaken for the disposal services of PCBs and pesticides. An average costs of 2,000 USD/MT has been used. This cost of disposal is based on the current average cost of incineration at most European disposal facilities. For Mercury, the cost is based on USD 10,000 per tonne (smaller total amounts anticipated than for POPs).

The following two tables provide further details on the budget allocated for disposal as well as other supporting activities such as inventory development, training and capacity building, packaging, transport, and interim storage.

Costs of disposal for Output 3.2 POPs pesticides wastes destroyed

	Total output budget	Updating National Obsolete Pesticides inventory and assessment of overall priorities. Includes training and capacity building in the development of pesticide inventories and for strengthening capacity for the sound management of pesticides	Pesticide re-packaging, local transporting, and interim storage: Prioritised obsolete pesticides will be re-packaged as needed in new UN containers under high security precautions and transported to an interim storage that will be established or improved to meet international standards, based on careful assessment	International shipping	Obsolete Pesticides disposal: Disposal options will be evaluated nationally and regionally. In most cases, the environmentally sound option is high-temperature incineration abroad. Procurement of these services will be conducted regionally through an international tender following the AfDB procurement procedures.	MT
Angola	712.900	287.900	125.000	150.000	150.000	75
Ethiopia	2.092.000	100.000	400.000	796.000	796.000	398
The Gambia						
Guinea						
Liberia	631.025	155.025	100.000	188.000	188.000	94
Mauritania						
Senegal						
Sierra Leone	367.000	200.000	35.000	66.000	66.000	33
Togo	766.450	295.450	135.000	168.000	168.000	84
Uganda						
Zambia	605.800	293.800	80.000	116.000	116.000	58
Total	**5.175.175**	**1.332.175**	**875.000**	**1.484.000**	**1.484.000**	**742**

Costs of disposal for Output 3.3 PCB management

	Total output budget	Updating National PCB inventory and assessment of overall priorities. Includes training and capacity building on PCB management.	Pesticide re-packaging, local transporting and interim storage	International shipping	PCB disposal	MT
Angola						
Ethiopia						
The Gambia						
Guinea	573.619	232.619	85.000	128.000	128.000	64
Liberia	484.006	159.006	85.000	120.000	120.000	60
Mauritania	552.506	212.506	100.000	120.000	120.000	60
Senegal						
Sierra Leone	521.247	175.247	50.000	148.000	148.000	74
Togo	1.665.048	312.048	225.000	564.000	564.000	282
Uganda						
Zambia						
Total	**3.796.426**	**1.091.426**	**545.000**	**1.080.000**	**1.080.000**	**540**

Typically, the procurement of international disposal services involves the contracting of a specialized international company that assumes all the responsibilities and risks associated with the transportation of such hazardous materials. The contracted company will be responsible for accident insurance, notifications to responsible authorities, bank guarantees, etc. The contracted company will also be responsible for transportation and delivery to the incinerator for final disposal including payment of the associated fees. Based on the gathered data and consultations with countries and disposal companies, the ratio between transportation/shipping costs versus the direct disposal cost is 2:1. However, due to some variables, such one stated below, we have taken a more conservative approach and averaged this

ratio to 1:1. This is mainly due to the fact that we anticipate the PCBs and obsolete POPs Pesticides to be already packed in UN approved drums and will not require further repackaging by the contractor.

Transportation costs typically include the following elements:

Local costs:

1. Staff costs for the transporting company and profits.
2. Procurement of PPE and other resources such as first aid kits, etc to facilitate the disposal operations
3. Hotel accommodation and local transportation for the international disposal team of experts
4. Hiring and training local support stuff in the safe handling of the POPs waste
5. Organizing media briefings
6. Selecting the national central transfer station
7. Collection of the POPs wastes from different temporary storage facilities across the country
8. Hiring of licensed hazardous material transporters for in country transportation
9. Training the drivers in hazwaste transportation techniques
10. Conducting risk assessments for potential transportation routes
11. Organizing security escort for inland transportation
12. Procurement of UN approved drums and repackaging the materials into these drums
13. Decontaminating the temporary storage facilities
14. Logistics such as securing the maritime containers
15. Etc

International costs:

1. Insurance and bank guarantees
2. Shipping costs
3. In land transportation from port to the final
4. Etc.

Further, the costs vary from country to country. However, the current high fuel costs make it difficult to accurately predict based on past experiences since the cost of most of the activities will be impacted. Therefore, we have tried to be a bit more conservative with our estimates.

7) Innovation, sustainability and potential for scaling up

Innovation

This project is innovative in its promotion of Circular Economy approaches[1]. Circular Economy is a change of the mindset of consumers, private sector and public actors, that is partly already prevalent in the African setting[2], and partly depend on major long-term changes in perception and outlook. Promotion of Circular Economy requires economy, awareness and frameworks; this project supports all of these:

- Economy: In this project, investments will be made that will 1) increase the collection and recovery of valuable waste materials[3], and 2) help remove hazardous chemicals from circulation that would otherwise hamper sustainable circulation. It will also promote awareness and establishment of frameworks that contribute to making circulated/recycled materials economically competitive against new materials (the latter currently still dominate the market). For example, it will increase business-to-business networking national through involvement of private sector in the project implementation, and regionally through the planned conference and fair on recycling/Circular Economy in the plastics sector, and thereby help pave the way for better prices for recovered materials through increased competition.
- Awareness: A slowly growing consciousness among consumers and other stakeholders is emerging, that we are globally moving into an era where new materials are gradually becoming more scarce. As long as virgin materials are less costly than the circulated materials, the crucial tool for increasing Circular Economy is awareness amongst consumers and other stakeholders to reverse the trend. This project has a strong awareness raising component where Circular Economy and environmentally safe management of waste are key elements.
- Frameworks: Effective Circular Economy requires a higher level of organisation in society. This project will promote adoption and implementation of regulation and practical frameworks that may include incentives that are key elements in promoting/establishing Circular Economy.
- Enhanced industrial symbiosis: The combination of collecting, sorting and recycling of tyres and plastics in Output 3.4a and energy recovery of un-recyclable tyres (parts) and plastics in 3.4b can be characterised as enhanced industrial symbiosis for these materials.

As mentioned, enabling elements to be considered promoting Circular Economy include, among others:

- EPR (Extended Producer Responsibility) as a financing instrument for circular economy promoting activities.
- Mapping of options for deposit-based systems for financing collection and recycling activities (inspired by systems on for example. bottles, batteries and PVC plastic in European countries).
- The Waste Hierarchy as a guiding principle in product and material design, in ESM of waste, in strategies and planning.
- Labelling of recyclable materials with type, such as plastics, to enhance high-value recycling/upcycling and avoid downcycling, where possible.
- Exploration of interest for establishing industrial symbiosis networks in private sectors.

This project is innovative in directly linking national action plans defined for POPs and mercury to broader development strategies and programmes with development financing. This approach will serve to demonstrate the benefits of mainstreaming in driving forward the implementation of chemicals and waste objectives and, at the same time, significantly increasing the cadre responsible for development actions considering and integrating chemicals and waste actions and ensuring their sustainability.

The project is also innovative in its emphasis on communication as a basis for engaging stakeholders, including beneficiaries, to drive demand-led changes in market behaviour towards the avoidance of products containing POPs or mercury. This extends the ?community of practitioners? implementing chemicals and waste objectives beyond those directly responsible for policy implementation to a much larger group of actors including procurement officials, suppliers and consumers.

The project will promote innovation through exchange of technologies, practices, and approaches that have been applied elsewhere in the region and which have proven successful and considered to be fitting for local or national circumstances. Other approaches that have not yet been tested in the region, but which are deemed to be technically and financially feasible and sustainable will also be investigated especially in the area of plastic recycling.

Sustainability and scale-up

There are several aspects that will be addressed and supported by the project which will contribute towards sustaining the project?s results beyond the project?s duration:

? The permanent interim storage facility for safe storage and safeguarding of highly hazardous wastes established under the project be sustained through the application of ?polluter pays principle?. The owners of hazardous waste will be required to pay an agreed fee during the storage period. Further, th government through the Ministry of Environment will assume ownership of the storage facilities. Therefore, the maintenance and operational costs will be provided by the government to supplement the revenue generated from the application of the ?Polluter Pays Principle.? .

? Creating an enabling framework for a circular economy approach in plastic waste management through reformed national legislative and institutional frameworks and establishing PPPs ventures, EPR schemes, and other long-term arrangements. This will contribute to ensuring clearer and sustained business opportunities for the future.

? Involving key private sector partners that have a financial interest in sustainable investment in the countries. The private sector business approach is crucial to ensure that the initiatives such as plastic collection, sorting and plastic initiated under this project will be sustained beyond the lifespan because of the profitability guarantee. Key financing facilitators for SME have been added among stakeholders to be consulted in each country when implementing Output 3.4.

? Developing guidance and providing training that can be regularly replicated to a wide range of stakeholders. The training will be designed and implemented with the support of national training institutions, National Project Steering Committees (NPC), Executing Agencies, and others. All guidance and training materials will continue to be accessible on the project website beyond the project?s duration.

? Implementing targeted awareness raising of all those involved in and/or impacted by plastic waste management.

Plastic waste management approaches that are relatively new to the region will be tested in the countries and will further facilitate scale-up and replication. The project will document all interventions applied, through the project website, the yearly lessons-learned reports and other publications, and this will enable other stakeholders to replicate such approaches and select the BAT/BEP most fitting to their needs and circumstances.

The national legal framework, enforcement measures, implementation plans, and pilot demonstration activities that will be developed/strengthened as part of the project will also support the scale-up/replication of project interventions among entities/partners which did not significantly participate in the project or pilots. The approaches learned in establishing and strengthening such frameworks can also be applied to other areas of chemicals management and waste management in the future.

Scaling up

Experience gained through the training and the pilot projects in the AFLDC1 project and in related GEF-supported programmes enhances the ability of this project to replicate and scale up alternative, environmentally sound, approaches to avoid POPs and mercury emissions and releases. Some of the countries participating in this project continue their work from AFLDC1 and others have not previously benefitted. This mixture provides opportunities for mentoring and experience-sharing with the intention of accelerating implementation.

The useful elements of the AFLDC-1 pilot project on manufacture from recovered plastics (Sodiaplast pilot project) will be studied and replicated as appropriate in the AFLDC-2 project implementation.

The AFLDC-2 project will scale up existing facilities storing and treating hazardous waste to enable ESM of highly toxic waste like POP pesticides, PCB and mercury. This also increases the potential for implementing circular economy because it helps remove hazardous chemicals from circulation that can otherwise hamper sustainable reuse of valuable materials, such as for example Stockholm Convention POP chemicals in plastics (PBDE, etc.) and in otherwise reusable oils (PCBs).

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[1] Including industrial symbiosis: The use of one industry?s waste (etc.) as a raw material in another industry.

[2] Due to poverty, waste picking of the most valuable waste materials is widespread in Africa, including the participating countries.

[3] Today, only the most valuable materials are collected for recycling. For example, recycling of PET bottles can be increased by such a simple measure as enabling the wasting of dirty bottles in the recovery companies, which is already done in e.g. South Asia.

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[1] Rural Transformation Centre

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[1] It is noted that the participating LDCs have all or most of the challenges described in the root causes and baseline sections, and that this project can target some of theses challenges meaningfully within the budget available, while other challenges can be targeted in future initiatives.

[2] For the participating countries that have made MIAs.

[3] Draft guidance on sampling, screening and analysis of persistent organic pollutants in products and articles: http://chm.pops.int/Implementation/NIPs/Guidance/guidanceonsampling,screeningetcofPOPs/tabid/5333/Default.aspx

[4] Global Harmonized System for classification and labelling.

[5] EPR: Extended producer responsibility regulation where companies introducing products on the market are required to pay for the setup and running of collection and recycling schemes.

[6] Public Private Partnerships; for example a mutual contracted partnership where private companies employ business models for solving a societal problem(such as waste management) of priority for public entities and the population as such.

[7] Other relevant guidance may also be considered.

[8] IMDG ? International Maritime and Dangerous Goods Code

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

[9] https://www.sodiaplast.com/WEB/ACCUEIL

[10] https://plastixglobal.com/howwedoit/

[11] Such as for example the use of water weeds for manufacturing of shopping bags done in Uganda.

[12] None of the participating countries that are currently Parties to the Convention have requested Article 6 exemptions/extensions so the 2020 phase-out date applies.

[13] Mercure is reported used in battery manufacture in Senegal (ref: MIA), but other informal manufacture may take place, for example of skin-lightening creams with mercury compounds.

[14] See for example ?Lead in enamel decorative paints: National paint testing results: A nine country study? UNEP/IPEN, Published UNEP 2013.

[15] Participating countries in West Africa are also Parties to the Bamako Convention

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[1]Rotterdam Convention on the Prior Informed Consent Procedure for certain hazardous chemicals and pesticides in international trade; Stockholm Convention on Persistent Organic Pollutants (POPs);

Minamata Convention on mercury; the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal. The Bamako Convention on prohibiting the import into Africa of any hazardous waste.

[2] Bioavailable means that it can be absorbed in the metabolism of living organisms (contrary to for example mercury being tightly chemically bound inside glass or stone material).

[3] National Implementation Plan

[4] DDT: dichloro-diphenyl-trichloroethane

[5] Ethiopia, Senegal, Uganda, Zambia

[6] Artisanal and small-scale gold mining, present in many African LDCs including some of the project countries, is a major mercury source category, but is not targeted in this project because it is dealt with in other GEF projects.

[7] Stolen or sold illegally and used by farmers.

1b. Project Map and Coordinates

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

Participating countries: ***Angola, Ethiopia, The Gambia, Guinea, Liberia, Mauritania, Senegal, Sierra Leone, Togo, Uganda, Zambia.***

Location in countries: The status as regards location of project interventions is listed below:

? Output 3.1 in Addis Ababa region in Ethiopia, see map and coordinates below;

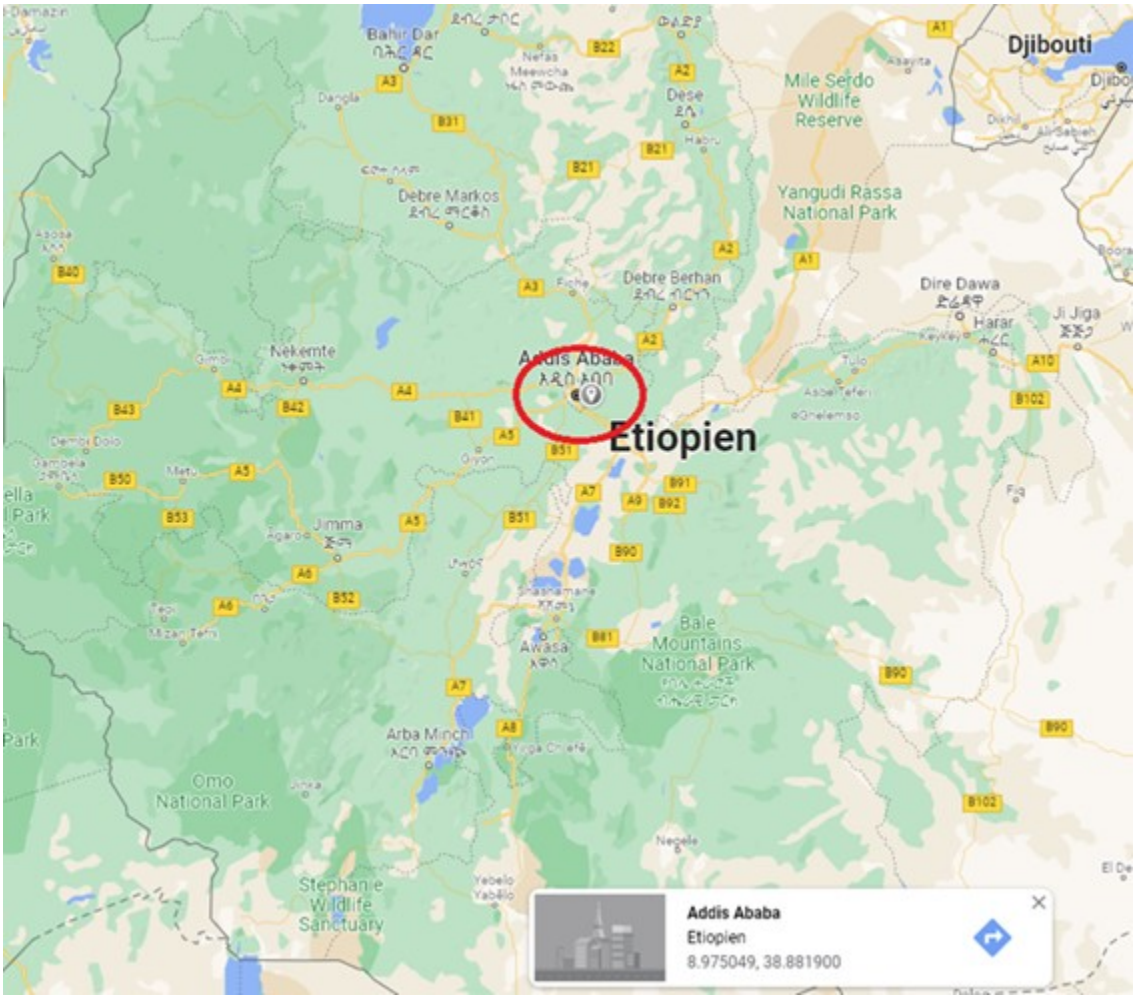
? Output 3.2 POP pesticides elimination nation-wide (within project budgets) in Angola, Ethiopia, Liberia, Sierra Leone, Togo, Zambia; see map and coordinates above;

? Output 3.3 PCB management nation-wide in Guinea, Liberia, Mauritania, Sierra Leone, Togo; see map and coordinates above.

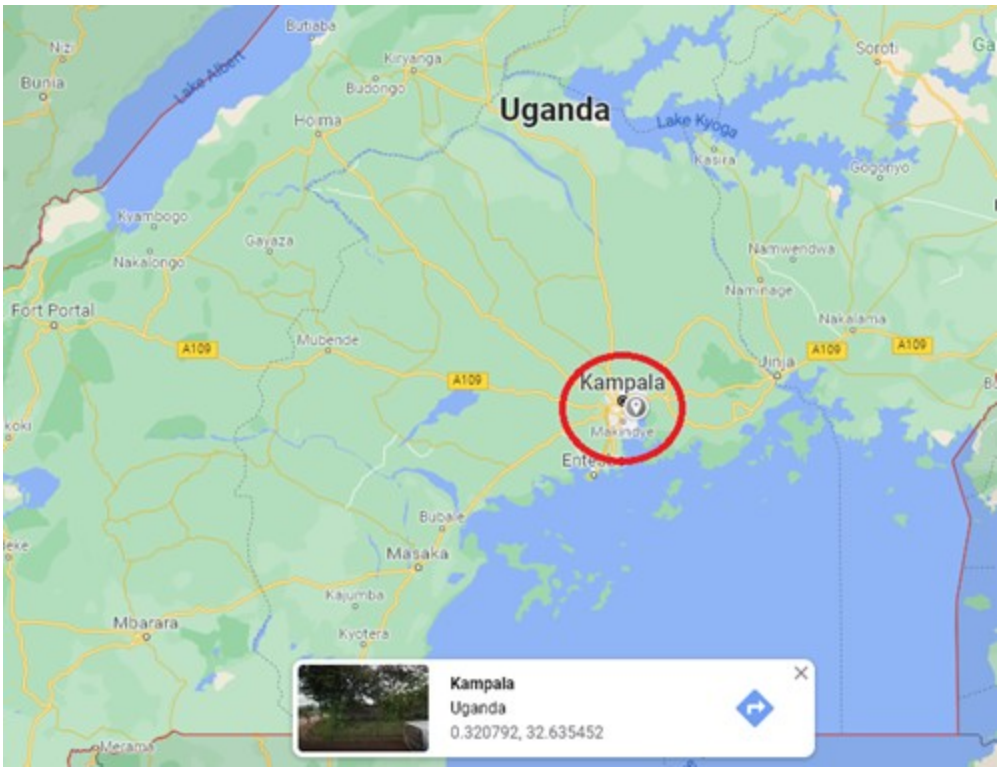
? Output 3.4a in the Kampala region in Uganda, see map and coordinates below;

For other intervention areas, these will be established based on detailed assessment made in the project implementation; see Outputs 3.4 and 3.5 on assessment and selection process planned.

Output 3.1 in Addis Ababa region in Ethiopia:



Output 3.4a in the Kampala region in Uganda



	Country	Coordinates
1	**Angola**	12 30 S, 18 30 E
2	**Ethiopia**	8 00 N, 38 00 E
3	**Gambia**	13 28 N, 16 34 W
4	**Guinea**	11 00 N, 10 00 W
5	**Liberia**	6 30 N, 9 30 W
6	**Mauritania**	20 00 N, 12 00 W
7	**Senegal**	14 00 N, 14 00 W
8	**Sierra Leone**	8 30 N, 11 30 W
9	**Togo**	8 00 N, 1 10 E
10	**Uganda**	0 19 N, 32 33 E
11	**Zambia**	15 00 S, 30 00 E

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Detailed stakeholder engagement plans are shown by country in the Country annexes (annexes P-Z).

During the PPG phase, the following consultations have taken place:

? A regional consultation workshop (in person) took place in Abidjan, 21-22 January 2020.

? National consultations were undertaken in September ? December 2020, including an online consultation workshop and meetings in November 2020. The November 2020 workshop gathered stakeholders from relevant sectors, government, academia, etc. The workshop was supplemented by consultations in writing with some stakeholders, for which additional information exchange was needed.

? A 2nd regional consultation workshop took place on-line 24-25 November 2020 where validation of the project CEO document.

? A second round of national consultations with the national project focal points, selected NGOs/CSOs and company stakeholders was undertaken in March - May 2021 as a mix of online meetings and written exchange of information.

? A third round of national consultations with national project focal points and AfDB baseline project task managers was undertaken in October 2021. Additional written outreach to selected stakeholders was also undertaken in October - November 2021.

The project will engage a wide range of international, regional, national and local actors in promoting, demonstrating and replicating environmentally sound chemicals management approaches; see the stakeholder involvement plan in Table 21. Stakeholders will include those shown in table 22 below. For details on stakeholders in individual countries, see the country annexes (annexes P-Z). The stakeholder engagement activities will be documented as meeting reports and as parts of the regular project reporting from regional and national executing agencies.

Table 21 Overview of Key Stakeholder Involvement Activities

Topic	Stakeholder types involved	Forum/Activity	Timing

Regional coordination of the project implementation	**AfDB, Regional Executing Agencies, National project focal points**	**Output 4.2: Regional project Kick-off and PSC meetings**	**Y0 and thereafter once yearly**
Regional orientation/consultation about the project	**Representatives of ECOWAS, SADC, COMESA Representatives of other on-going related regional projects (IAs + regional EAs)**	**On-line meetings**	**Y0, y2 and y4**
Presentation of project results in regional fora	**High-level political representatives**	**Output 1.4d: Governing body meetings of at least two of the relevant regional cooperation fora: the African Union, ECOWAS, SADC and COMESA**	**Y5**
National coordination of the project implementation	**Representatives of all key stakeholders in the country (see country annexes): Government/public, demonstration project municipalities, public and private sectors partners and associations, NGOs/CSOs, academia, etc.**	**Output 4.2: National project Kick-off and NSC meetings. To be conducted in conjunction with Outputs 1.1 and 2.1 events as far as possible to reduce costs.**	**Meetings: Y0 and thereafter once yearly.** **Other exchange: As needed.**
Consultations and awareness raising for developing/improving legislative framework	**Committee comprising representatives of appropriate sectors of government, industry and civil society**	**Outputs 1.1 and 2.1 events.**	**Y1-3**
Coordination of Component 3 activities with private and public partners	**Considered and selected specific project partners**	**Component 3**	**Y1-5**
Coordination and implementation of outreach to private sector/industry	**Relevant ministries and sector organisations**	**Output 2.3**	**Y1-5**

Coordination of outreach activities to the public, including the young and women	**Engaged specific NGOs/CSOs; academia, ministries of education and agriculture, primary school associations/representatives, etc.**	**Output 2.4**	**Y3-5**

Table 22 Stakeholders and their roles

Stakeholders	Mandates	Role in the project
Governments represented by National Focal Points for the chemicals and waste conventions, the ministries responsible for sustainable development planning and execution as well as for environmental management and land-use development, agriculture, health, energy and industrial development, customs, communities and women?s affairs, information and communication	Custodians of government policy, norms, and standards and key regulators in environment and other issues related to chemicals and wastes.	? Coordinates the project ? Chairs the PSC ? Hosts the Project Secretariat ? Supports the regulatory aspects of the project ? Ensures quality execution of project activities ? Supports national training conducted under the project
Regional counterparts to government within ECOWAS, COMESA and SADC	Serves their member States with the implementation of the regional integration agenda, where the concept of good faith and the resultant observance of treaty obligations are the basis on which member States must make regional integration decisions as well as ensuring their performance and implementation.	? Supports regional coordination and information exchange
Municipalities	Responsibilities for municipal waste management and disposal	? Supports and provides advice on the implementation of the municipal-level waste management activities including awareness raising ? Receives training and awareness materials on selected topics

Regional entities of the chemicals and waste MEAs such as the Basel Convention Regional Centres	Focuses on training and technology transfer regarding the management of hazardous and other wastes and the minimization of their generation	? Supports and provides advice on project approaches including BAT/BEP and compliance with the BRS and Minamata Conventions ? Supports regional cooperation and information exchange ? Specifically, Africa Institute and BCRC Dakar serve as regional executing agencies ; See section on Institutional Arrangements.
Parastatal and private sector enterprises and their trade associations, including electrical utilities, extractive industries, manufacturers and traders, SMEs, etc.	Involved in, among others, chemicals and waste management addressing import, production, transport, use, export, recycling, and disposal; municipal and hazardous waste management and agriculture	? National recycling companies, electricity companies, cement clinker facilities and pharmacies will be partners in implementation of Component ? Advises on and supports implementation of suitable BAT/BEP, financing mechanism, etc. ? Receives training and awareness materials on selected topics ? Supports awareness raising activities
Expert international and national contractors in the fields of BAT/BEP, environmentally sound management and disposal of POPs and mercury-containing products; recycling companies and municipal solid waste, and communications.	Expert advisors in specific topics within chemicals and waste management	? Advises on and supports implementation of suitable BAT/BEP, financing mechanism, etc. ? Supports training and awareness raising activities
Academia and research institutions	Engaged in agricultural research and identification and development of BAT/BEP Laboratories accredited to test for POPs, mercury and other hazardous chemicals	? Participates in awareness raising raising aspects of the project ? Participates in the pesticides management activities in the project ? Advises on suitable BAT/BEP, financing mechanism, and PPP framework ? Support laboratory analysis

Civil society organisations Informal sector groups, community groups and influencers	Active in the areas of waste management, environmental protection, health, and education	? Member of the PSC (NGOs will be proposed to designate one of their entities to represent them on the PSC; this should be determined on the occasion of the Inception Workshop for the project) ? Coordinates with partners regarding community input and awareness raising activities ? Contribute to outreach to their respective member groups and beyond
Microfinance institutions, SME financing facilitators, and banks	Concerned with the granting of small loans to SMEs in the context of waste management; communication services (mobile and fixed telephony), electricity, and water services; and customs and tax services	? Participates as an advisor and participant regarding microfinancing, PPPs and other financing mechanisms
Training institutions	Undertakes education, research, and training	? Advises on and supports educational and training aspects of the project

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Kindly see the detailed stakeholder engagement plans shown by country in the Country annexes (annexes P-Z).

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain) Yes

1) involved in consultations for regulation, 2) Contributor to creating awareness (Component 2).

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

For details, please see the gender assessment report in Annex M. Gender aspects are also highlighted in the Environment and social safeguards scoping report in Annex L.

A gender expert will be engaged in the project to monitor progress in the planned gender mainstreaming initiatives (see the gender assessment in Annex M).

Activities in this project are designed ultimately to reduce risks to human health and the environment from chemicals and waste. Chemical hazards present similar risk mechanisms for men and women but there are significant differences in gender exposure to these risks and in the consequences of exposure. Furthermore, evidence of severe and permanent damage to children, including the unborn, makes their protection of the highest importance. Evidence of chemical transfer between mothers and their children requires particular attention to be paid to the exposure to chemical risks of mothers and young women of child-bearing age.

While male employment remains the norm in the larger ?heavier? industries such as mining and mineral processing and utilities, the workforce of smaller enterprises and informal working such as artisanal and small-scale mining and informal waste recycling is likely to include a significant component of women and children. Furthermore, traditional gender-based roles in household activity and employment are changing as societies become increasingly urbanised. An increasing proportion of women is taking up employment, either through increased opportunities arising from better education and access or through necessity driven by poverty. It follows that the project will engage with women in such occupations to ensure that the design and execution of project activities is appropriate to their needs for risk reduction within the context of improved working conditions.

Changing the behaviour of markets with regard to such products as cosmetics that may contain mercury or to waste practices that give rise to POPs emissions, relies not only on regulatory actions but also on shifting consumer and practitioner attitudes. Modern forms of social interaction and communication are changing the access of women to information. This increasing independence and decreasing reliance on knowledge transfer through male heads of household is providing traction for the engagement and empowerment of women in making decisions about the daily lives of themselves and their children.

The emphasis on communications within this project is deliberately geared to take advantage of such communication methods to drive demand-side change; women and young people are key target groups in the awareness raising activities in this project. Regarding the women, this is partly because some mercury-added products are primarily targeted towards women (notably skin-lightening creams and fever thermometers), and partly because women are still often the primary custodians of the family health. Using innovative techniques to reach consumers and, where possible, working with ?influencers? on social media to raise awareness and change attitudes will provide a significant boost to project aims and, if successful, provide an entry point for continuing and broadening knowledge transfer with regard to chemicals and waste risks and their avoidance. The importance of such initiatives will be reflected in gender-sensitive indicators within the project logical framework and monitor and evaluation schemes.

Equal access to information (e.g. regarding risk management, BAT, BEP, and project activities) related to PCBs, open burning, uPOPs, e-waste, plastics, waste management, obsolete pesticides, mercury-added products, mercury-emitting industries, and other topics, where applicable, will be ensured. Awareness raising materials specifically designed for facilitating women?s involvement will be prepared, which will introduce the gender-differentiated impacts of chemicals and waste management exposure to human health, particularly reproductive health..

Towards the end of the project monitoring will be performed to assess any changes brought about by the project that contribute towards the achievement of SDG 5: Achieve Gender Equality and Empower all Women and Girls, and in particular Target 5.5 Ensure women?s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

Equal opportunity to participate in project activities (including as members of the National Project Coordination and regional coordination entities) and decision-making at all levels will also be ensured. In the course of the recruitment processes, the project will encourage women applicants.

Further, the gender element will be very significant in the project since several associations and other micro-enterprises in the field often include women. During the implementation, programmes to strengthen capacities and mechanisms for support to micro-enterprises will particularly target women. Homemakers are also important targets in any programme for communication and information to improve waste management practices. Collection, production and recycling and reclamation strongly involve women and will be generating revenue for these activities, which will contribute to improving their living conditions and their financial autonomy. Women will therefore play a very important role in the implementation of the project.

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

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project?s results framework or logical framework include gender-sensitive indicators?

No

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The engagement and participation of the private sector is critical to many areas of the work of the project.

Engaging the private sector in the discussions for preparations of the new/amended legislation necessary to implement the Minamata Convention and the new elements of the Stockholm Convention can be vital to achieving good results in the implementation of this legislation by avoiding pitfalls that can be prevented based on early sector feedback.

Locally-established industries engaged in the manufacture, trade, use and supply of regulated POPs- and mercury-containing products will be involved in order to bring their practices into conformity with the obligations of the conventions. In some cases, this may involve working with them to promote BAT/BEP and it?s take-up or identify national suppliers of alternative mercury-free products.

Many municipal authorities have outsourced service provision to the private sector so that procuring agencies and service providers will need to work together to ensure that services meet convention obligations as set out in national legal and regulatory frameworks. Setting environmentally sound management targets in, for example, waste management and recycling, are likely to provide opportunities for business growth and decent jobs. Avoiding the use of short-lived or single-use plastic materials could provide opportunities at all business scales to develop the use of products manufactured from locally-available materials; sometimes even agricultural wastes.

Other aspects of the project will require the engagement of regional or international private sector expertise in, for example, the handling, treatment and disposal of hazardous wastes such as POPs pesticides and mercury. Technologies and techniques from these experts can be transferred to local businesses with long-term benefits.

Increased awareness of chemical and waste hazards can also improve public and private sector procurement and safeguarding practices thus avoiding harm to human health and the environment, and this aspect is also dealt with in the project.

The AfDB recognises that sustained and well-structured engagement and participation of the private sector is crucial to many areas of the work of the project. For example, the private sector?s resources, expertise, experience, and innovation is crucial to enable the development of efficient, comprehensive, and economically viable national waste management systems for collection, sorting, and recycling/treatment of plastics, mercury and solid waste and create new, more sustainable products that

contributes to sustainable waste management approaches. This will also lead to the creation of decent jobs and reduction of the environmental burden. Under this project, the engagement and participation of the private sector will be conducted through national and regional formalised structures and mechanisms.

A number of private companies with potential for inclusion in the project are identified in the country annexes (annexes P-Z). Specifically, national recycling companies (Output 3.4), electricity companies (Output 3.3), cement clinker facilities (Output 3.4b) and pharmacies (Output 3.5) will be partners in implementation of Component; see these outputs for details of how the companies will be involved and see the country annexes for potential candidate partners. The selection of the actual companies to cooperate with in the individual outputs in the countries will be based on assessments to be performed as part of the project implementation.

Through this project, the AfDB is responding to requests from least developed African countries to leverage its convening powers at the highest levels of national governments, led by Ministry of Finance, to help build resilient and enabling national structures, policy frameworks and accelerate action toward addressing government commitments under the Chemical Conventions. The AfDB?s comparative advantage lies in its deep regional developmental insights, ability to mobilise and leverage resources, convene stakeholders around the issue and lead robust dialogue both at national and regional levels leading to concrete actions. The AfDB brings its unique convening powers, regional insights to elevate policy dialogue and pivot to shifting the allocation of resources from national budgets to meet convention obligations and facilitate establishment of national enabling frameworks to promote increased contributions from the private sector.

The AfDB approach will allow the GEF interventions to be mainstreamed in national frameworks and planning process resulting in sustainability of these interventions after this project lifespan is completed. Activities with high environmental health consequences, such as e-waste recycling, illegal mercury trade and scavenging in urban dumpsites are a reflection of poverty, fragility and vulnerability of existing systems; usually a default livelihood option for the poor and marginalized people who are often unaware of long term adverse impacts to health and the surrounding environment. These are complex social and economic issues, as well as environmental, challenges, requiring an integrated and long-term systemic approach through policy, infrastructure and health investments, training and capacity building and awareness interventions. While focusing on higher level objectives of environmental and health risks, the program is targeted to activities that bring about reduction of POPs and mercury through application of cleaner technologies and approaches for eliminating releases from waste and other sources. Other benefits include the establishment of value addition industry and creation of decent jobs for the marginalized, especially women and the youth.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Table 21 PROJECT RISKS AND MITIGATING MEASURES PLANNED

Com-ponent	Risk	Risk level	Risk reduction measure
	Risks related to Component 1 ? Regulatory framework and enforcement		
C1	Participating countries may lack the appetite for establishing a comprehensive regulatory framework, and may not allocate legal drafting resources to a perceived low priority.	M	All participating countries are Parties or Signatories to the chemicals and waste MEAs and have thus shown their willingness to meet their obligations under these accords. Awareness raising amongst regional and national decision-makers, begun in AFLDC1, and continued in AFLDC2 will continue to emphasise the benefits to human health and environmental considerations, commitments made in international law to the MEAs, as well as direct local benefits. The National Stockholm Convention focal points, Ministries of Environment, and national environmental protection agencies have confirmed their strong interest of the countries in the project, which is in line with the priorities regarding PCBs, uPOPs, mercury, agriculture, e-waste, plastics, waste management, as outlined in the respective national documents. In terms of risk mitigation measures, the National Stockholm and Basel Convention focal points are assigned as National Project Focal Points (NFPs) and will be members of the national and regional PSCs and will play key roles for coordinated actions at the national level between government and other key stakeholders. The National Coordination Mechanisms established during the NIP development processes, and which have the commitment of a wide range of governmental sectors, will be used as a basis for national coordination. In this project, the Ministers of Environment and parliamentarians from the environmental select committees will be engaged as early as possible. Specific awareness raising events will be organized and targeted at them. The project will include the review of legislation to enable the inclusion of the relevant chemicals and waste management provisions into existing legislation, where relevant. This is usually more efficient and results in a faster endorsement process compared to the drafting and adoption of new regulations.

C1	Legislative drafting takes time while political adoption is beyond the control of the project.	M	The project will apply considerable continue the approach in AFLDC1 to provide awareness raising to policy makers and parliamentarians to explain why and how ESM of waste and chemicals is crucial to overall development goals, The projectandwill provide appropriate models, negating the need for drafting legislation from scratch and instead adapting the models to their own legislative situation.
C1	Model legislation is not suited to participating countries whose legal frameworks are not based on ?common law?.	M	The project will learn from AFLDC1 in adapting or developing suitable models for these countries and will seek to involve relevant experience on other law traditions than ?common law?..
C1	Suppliers and traders may exploit weaknesses in regulation, lack of control, or its enforcement to resist attempts to switch away from POPs- and mercury-containing products.	M	Institutional awareness raising, training and capacity building amongst enforcement officials, inspectors, etc. and amongst suppliers and traders will be provided. The enforcement officials will be trained in detection of relevant products. Awareness rising and communications efforts for consumers towards changes in consumer demand are designed to further address this risk.
C1	While considerable capacity has been built within the cadres of officials directly responsible for chemicals management, the final evaluation of AFLDC1 noted that progress towards implementation of action plans and mainstreaming of chemicals and waste objectives were hampered by the lack of capacity beyond the chemicals teams.	M	This project will continue and broaden capacity building efforts at regional and national levels, combining countries that participated in AFLDC1 with LDCs that did not participate, in order to providing support and mentoring possibilities for all; extending chemicals and waste capacity building to those responsible for co-financed projects and programmes. Special training and awareness rasising activities are planned for public officials beyond the dedicated chemicals teams, as well as to industry and trade.
	Risks related to Component 2 ? Awareness raising		

C2	The awareness of consumers to the risks they face from the inappropriate use of POPs and mercury-containing products has been targeted during campaigns in AFLDC1 and other projects but remains inadequate.	M	This project will put particular emphasis on communications with consumers through effective media, including through innovative approaches such as social media and mobile, in order to reach those most at risk. In a similar way, efforts to boost awareness amongst policy-makers, begun in AFLDC1, will be continued and enhanced at regional and national levels so that consideration of chemicals and waste risks can be incorporated in sustainable development planning.
C3	Larger industries that are economically influential may resist attempts to enhance POPs and mercury inventories and management, even where such attempts provide evidence that remedial work is not required.	M	Substantial efforts are planned to involve industry in the preparation for updated regulation and related promotion of BAT/BEP. Many of these facilities are internationally owned and parent companies and their trade associations have engaged with the international processes leading to the chemicals and waste MEAs and may be willing to prompt the engagement of local subsidiaries. Through the inventory project process, industries can informed to better understand the inevitable future prospects for their business in relation to the conventions, and thereby enabling their timely transition, reducing their expenses and improving their possibilities in the new market order.
	Risks related to Component 3 ? investment measures		
C3	Smaller and informal industries may be wary of government-led approaches and unable or unwilling to adapt without initial technical and financial assistance. Some may be operating illegally and require careful encouragement to move into regulated business regimes.	M	Demonstrations of the health, environmental and financial benefits of alternative approaches, documented from AFLDC1 pilots and elsewhereprevious projects, and the prospects for financial and technical support for improvement of their production facilities will be instrumental in addressing this risk.
C3	Project resources may be insufficient to ensure the completion of activities.	L	The availability of co-financing within the thematic window of the African Development Bank will be of assistance in scaling up and rolling out successful schemes. Longer-term efforts may require further GEF support through dedicated projects.

C3	Pilot projects, demonstrations of suitable approaches to chemicals and waste management and programmes to remove and destroy POPs present health and safety risks due to the exposure to chemicals and waste, to those engaged in them,	L	The Environment and social safeguards assessment and risk assessments to be developed as part of the project implementation includes specific instructions on avoidance and minimization of risks to personnel and stakeholders involved. These elements of the project will be led by technical experts employing best practices and aware of these risks and their mitigation. Workers will receive and implement practical training on the use of personal protective equipment (PPE), risk avoidance and accident preparedness =. Contractors certificated to manage hazardous materials will be engaged as necessary. All efforts will be made to ensure that workers are not exposed to hazardous chemicals and related risks.
C3	For countries involved in improvement/establishment of hazardous waste transfer stations, hazardous waste may be accumulated that will not be finally treated according to ESM procedures	L	For POPs and mercury collected as part of the project activities, final treatment is included in the project. For any hazardous waste stored beyond the project framework, a business model will be developed as part of the project that will ensure that sufficient funds are saved up from waste acceptance fees to secure final treatment of all hazardous waste stored at the facility. Additionally, a decommissioning plan for the facility will be developed as part of the project.
C3	For countries involved in PCB or POP pesticides management under the GEF project, PCB inventory is delayed or incomplete due to the absence of coordination, technical or economic difficulties, etc. (e.g. in carrying out sampling of dielectric oil)	L	The project intends to address this risk by establishing a strong supervisory mechanism supported by TORs. A national inventory team will be formed and trained. The national inventory team will be complemented with local regional teams. The composition of the national inventory team will include representatives of the Ministries of Environment; national energy utility companies; academia; and NGOs.

C3	Chemical accidents during sampling, transport, storage, or disposal, where applicable	L	Training in best practices for each stage of the lifecycle management of applicable chemicals and waste will be conducted under the project and use of best practices enforced during the implementation phase of the project. Specifically for handling of POP pesticides, PCB and mercury waste for elimination, detailed risk/prioritisation assessments will be made, and the actual handling will be contracted to international top specialists applying strict international standards and tracking procedures (Outputs 3.2, 3.3 and 3.5, resp.). A strict and explicit protocol and custom-designed containers will be developed for receiving and short-term-storing of collected thermometers (and any other specified mercury-added products) at local partners. For handling of highly hazardous waste in Output 3.1 (permanent facility for interim storage), designing the handling and disposal procedures will be important parts of the project, and partner facilities to be improved/built out will be contracted to follow these procedures. For further details on the above and plans for its management, see the Environmental and Social Safeguards Scoping Report (ESSSR, Annex L). Avoiding chemical accidents is a top priority for the project, and considering the high level of supervision and control on this, it is considered low risk.

C3	Climate risk	M	Some of the child country projects are in coastal countries susceptible to sea-level rise and flooding. Similarly, improved/enlarged facilities may be susceptible to extreme heat and extreme rain/winds. These aspects could will be taken into account inimpact the appropriateness selection of selected implementation sites. Personal flight transport with associated GHG emissions will be reduced to a strictly needs basis, and where possible be replaced/supplemented with on-line communication. Transport and final treatment of hazardous waste will give rise to GHG emissions, but the emissions will be moderate and in most cases there are no alternatives. For PCB destruction, the possibilities for using mobile facilities will be investigated (such are not available for other POPs nor mercury). Climate related risk and mitigations are detailed in the environment and social safeguarding scoping report (Annex L) .
C3	Price differences between problematic and alternative chemicals and products	*M*	Output 3.2 includes the promotion of IPM, which may also involve choosing less toxic chemicals and non-chemical practises. Such alternative chemicals and other solutions are well known and well established on the market. While obsolete pesticides may be sold at lower prices to get rid of them, such a practise is illegal and risky for users, and awareness raising and enforcement efforts in the project and beyond will contribute to eradicate this practise. Output 3.3 will seek to eliminate all (or most) remaining PCB in the country and the project (or its co-financiers) will hereby relieve power grid owners for a substantial part of the substitution costs. Output 3.5 will promote mercury-free fever thermometers, and will provide digital thermometers to direct citizen beneficiaries (see Output description). For other citizens, the digital thermometers are marginally more expensive than mercury thermometers, but the amount is so low (1 to few USD), that it is not deemed to be a major impediment for most citizens, also considering that the legal import of mercury thermometers has ceased for Minamata Convention Parties (as of January 2021).

General	The evaluation of the AFLDC1 project in the ECOWAS region noted that project continuity in some participating countries was hampered by changes in project officers.	M	A procedure for appropriate handover will be developed as part of the project and national project officers will be trained in its use.
General	The split responsibility between regional and national executing agencies in a number of outputs/activities may result in differences in prioritisation of the projects funds and associated deficiencies in project performance in the countries.	M	A close coordination between national and regional EAs and the AfDB country offices/Task Managers will be ensured, monitored and documented. National prioritisation of AFLDC2 performance will be ensured by the IA (AfDB) through Regional PSC meetings and regular monitoring and coordination. National budgets will be detailed, and payments will be ear-marked to specific deliverables, with payment stop and other pre-planned appropriate repercussion measures in case of non-compliance.
General	Complex projects with many participants give rise to management and coordination risks that threaten project delivery and completion.	M	Dedicated project management at EA level and close coordination and cooperation between IA, EA and regional and national steering groups, and a national coordinator for each participating country, will serve to alleviate management and coordination risks.
General	Challenges with mobilizing all countries in a coordinated manner to support improved chemicals and waste management practices in the SADC, COMESA, and ECOWAS regions and ensuring active involvement of several players from both the public and private sectors at the national and regional level	M	This will be addressed through national and regional coordination mechanisms, regular communication, and the establishment of a knowledge sharing platform (project website). The project secretariat will ensure coordination in conjunction with national partners within the departments in charge of the waste sector, agriculture, health, and other areas as required. Regional harmonisation of the national policies and approaches will be strongly promoted, where appropriate. Activities lead by national executing agencies will be coordinated closely with AfDB country offices and Task managers.
General	Interference by political authorities in the project management	L	The project aims to gain the support of municipalities, local authorities, and other units by building upon their existing capacities, ensuring two-way communication, and communicating the benefits that the project activities will provide to their respective constituencies.

General	Environmental and gender related risks	L	The Measures for avoiding, or minimizing, environmental and social risks are described in the environment and social safeguarding scoping report (Annex L) and gender related risks are described in the gender assessment (Annex M).

COVID-19 related risks

Com-ponent	Risk	Risk level	Risk reduction measure
C1 and C2	COVID-19 containment measures (restrictions) inhibit physical attendance to trainings, outreach activities, negotiations and other stakeholder engagement activities.	H	Trainings and outreach activities will as far as possible be conducted on-line. Acceptance of on-line activities has increased greatly through 2020 and arrangers, facilitators and participants have gotten more used to on-line communication. However, on-line training is more demanding for both providers and participants, and effective on-line training schemes and procedures will be applied. The project already includes social media (So-Me) outreach to the public, with associated costs for involvement of So-Me communication professionals. This approach can be expanded to other target groups of the project, as needed and relevant. Where current Internet band-width sets limitations for on-line activities, the project will support band-width improvements at NFPs and other key partners on a needs basis. Where larger stakeholder groups are involved and use of private phones and Internet connections, the project will provide Internet credits to participants on a needs basis. Activities where physical presence is strictly needed, such as engagement with informal stakeholders, may be delayed as the project should maintain a no-risks policy. If such activities are deemed safe however, they will be conducted with the highest level of personal risk reduction (PPE, social distancing and other relevant measures). The project will ensure that participants are made acquainted with the necessary on-line techniques. In spite of the above, the project may encounter delays in case policy negotiations and other infrastructural activities are delayed. The project will evaluate COVID related requirements and restricutions at the start of the project and continously throughout the project. Adpative meansures will be implemented accordingly. Such measures will include planning face-to-face meetings during times when there are low or no restrictions in place. Continguency plans will be put in place for all events and activities that require some form of physical attendance.

C3	COVID-19 containment measures (restrictions) inhibit physical implementation measures and their supervision/inspection	H	GEF-induced activities will be conducted based on a no-risks policy. In case local activities are not halted or decreased due to COVID-19, and physical presence from supervisors/inspectors is deemed risky, possibilities for on-line inspections will be investigated (the supervisor/inspector will direct phone or other on-line camera movements), supplemented by exchange of supporting documents and documentation. The project will ensure that participants are made acquainted with the necessary on-line techniques. The project will frequently evaluate COVID related risks, restricutions and their implications for implementaion. Contingency plans will be put in place for all events and activities that require some form of physical attendance.
C3	Changes in conditions for beneficiaries and resulting project baseline changes	H	The physical interventions in Outputs 3.4 (waste-picking and recycling of plastics) may likely continue in spite of COVID-19, because of the poverty of these beneficiaries, and the project has a potential for improving their working environment conditions, including COVID-19-relevant PPE (masks, gloves, ventilation, etc.). For other project outputs, delays may be anticipated in case of lock-downs. Budget contingencies have been increased above normal to allow for project extension in case of delays.
G	Price increase in procurement due to COVID-19. Increased prices must be anticipated for many services and products, including for flight travel and international hazardous waste transport services. For the latter, such price increases have already been observed (May 2021), especially for low quantities of POPs for treatment.	H	The project will evaluate the least costly producst and services far in advance. Early planning and procurement of services will be undertaken to mitigate this risk as much as posislbe.

COVID-19 related opportunities

As indicated above, measures implemented to counter COVID-19-induced risks may have auxiliary benefits. For example, moving trainings and meetings to on-line communication may significantly decrease the GHG emissions from flight travel during, but also after the project duration through improved Internet infrastructure and Internet acceptance and abilities at NFPs and other key partners.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

This project will be implemented by **AfDB as Implementing Agency** in close coordination with the national executing agencies via the AfDB national offices and baseline project teams, and regional trainings and meetings will be executed by the following **Regional Executing Agencies**:

? The African Institute based in Pretoria, South Africa, which will be regional executing agency for participating Anglophone countries, and

? The Basel Regional Center for Francophone Africa based in Dakar, Senegal (Regional Executing Agencies (EAs), which will be regional executing agency for participating Francophone countries.

The Regional EAs will supervise the regional trainings and meetings during the implementation of the project, and they will present regular reports to AfDB.

National Executing Agencies: In participating countries the national aspects will be executed by Lead Ministries/Agencies working on Chemicals and Waste Management issues supported by the Task Managers from the AfDB baseline project in the country and the AfDB Country Offices. The National Executing Agency will be in charge of national project decision making throughout the project. The National Executing Agencies are:

? Angola: Ministry of Environment

? Ethiopia: Environment, Forest and Climate Change Commission

? The Gambia: National Environment Agency (NEA)

? Guinea: Ministry of Environment, Water and Forestry

? Liberia: Environmental Protection Agency (EPA)

? Mauritania: Ministry of Environment and Sustainable Development

? Senegal: Ministry of Environment and Sustainable Development

? Sierra Leone: Environmental Protection Agency (EPA)

? Togo: Ministry of Environment and Forest Resources

? Uganda: National Environmental Management Agency (NEMA)

? Zambia: Zambia Environmental Management Agency (ZEMA)

An overall **Regional Steering Committee of the Project (PSC)** will be created and it will meet once a year. A mid term progress review will be organized. This committee will be formed by donors, executing and implementation organisms (AfDB, Dakar Center, Africa Institute, National Project Focal Points (NFPs), key Supporting Agencies and Stakeholders, and any other UN organizations participating in the project or implementing similar initiatives). This committee will evaluate the progress of the project and will take the necessary measures to meet the fulfillment of the goals and objectives.

In each participating country, a **National Project Committee (NPC)** will be established, and such will assess progress made during execution of the national component of this regional project. The National

Executing Agency will act as the Secretariat for the NPC. Members of this committee will be relevant ministries, the representatives of industry associations and trade associations, the representatives of hazardous wastes management companies and other private sector companies that are directly involved in the project, key Civil Society Organisations (NGOs) in the chemicals and waste field, and relevant academia representatives (see the stakeholder tables in the country annexes for national details). NPC will decide on the frequency of the meetings and their operating procedures. Although regular meetings will be carried out throughout the implementation, additional meetings may be set as necessary. NPC will supervise the tasks of the National Project Focal Points (NFPs) and of the implementation Project Team. Likewise, this committee will review, comment on and approve the national work plan. Every decision made by the Committee, such as the corresponding liabilities, schedules and budget, will be duly reported to the PSC and to whom it may concern. Members of the NPC will facilitate the national implementation of project activities within their corresponding organizations, they will guarantee that cooperation activities are timely executed and they will promote integration of the activities of from the project with other existing programs and practices.

The National Executing Agencies will prepare and submit budgets and expense reports, it will search and hire consultants for national activities, it will acquire equipment (unless acquired regionally for better coordination and lower prices) and evaluate the project; in addition, it will organize independent audits in order to guarantee the proper use of GEF funds. Financial transactions, audits and reports will be carried out in accordance with national regulations and AfDB procedures.

A **Project Team (PT)** will be established within the national executing organisms of each participating countries; this team will be in charge of the execution and day-to-day management of the project and it will report to the Regional Executing Agencies (Africa Institute and Dakar Centre) and to the PSC. The project team will be composed by (as a minimum) the National Project Focal Point (NFP; will be PT lead), a Technical Assistant and a Management Assistant.

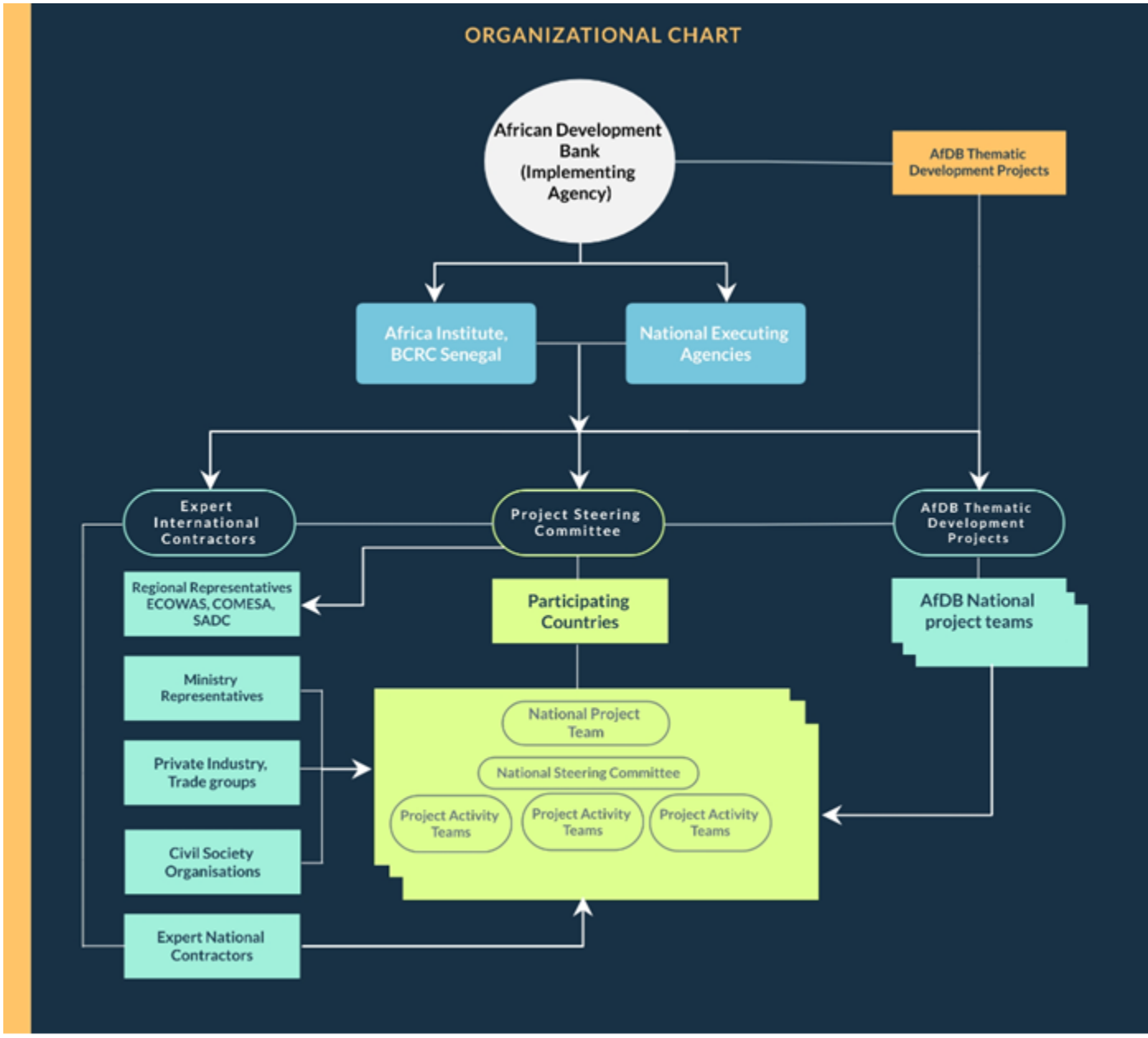
AfDB, as implementation organism, will work in strict collaboration with the Regional Executing Agencies (REA).and with the national project teams. AfDB will appoint a project coordinator and adequate assistance to oversee that optimal coordination is achieved in the project, including among the two Regional Executing Agencies. Through its baseline project Task Managers and Country Offices, AfDB will provide technical and administrative organization support to the executing organism at the national level. AfDB will report to the Secretariat of GEF on matters regarding the progress of the project. The regional centres will be responsible for regional procurement of chemicals collection and treatment from international service providers, the national executing agencies will be responsible for the recruitment of international experts who shall work with regional aspects.

The regional Executing Agency will be in charge of executing the regional activities among its assigned countries, including among others: (organization of regional trainings, convening Project Steering Committees meetings, and provide related technical support for the participating countries. The Regional Executing Agencies will coordinate closely among each other on a monthly basis, and will be held responsible by AfDB that optimal coordination is achieved among the two Regional Executing Agencies.

Each Regional Executing Agency will appoint a Regional Coordinator (RC) that will report to AfDB and the Project Steering Committee (PSC).

The two RCs will guarantee the fulfilment of the work plan for their respective activities. The RC will work in strict coordination with the National Project Focal Points (NFPs) and the Officer(s) assigned nationally and regionally by the AfDB.

1. Project Implementation and Execution Arrangements



Coordination with other ongoing projects and programmes:

The project will avoid duplication and seek to find synergies with other ongoing projects and programmes, particularly the initiatives listed below which are not included as baseline activities but nonetheless have strong linkages with the proposed project activities. Collaboration will be done via communications with the responsible agencies (Africa Institute, BCRC in Dakar, COMESA, ECOWAS, and SADC sub-regions) and they will be invited to participate in stakeholder consultation meetings and be consulted in all project phases.

Coordination with the following initiatives is envisaged through direct contact to the agencies listed:

? UNIDO/UNEP: Capacity Strengthening and Technical Assistance for the Implementation of Stockholm and Minamata Conventions in African LDCs and SIDS of the COMESA, ECOWAS and SADC sub-regions (AFLDC 1 Project);

? UNEP/WHO/African Institute: Integrated Health and Environment Observatories and Legal and Institutional Strengthening for the Sound Management of Chemicals in Africa (African ChemObs);

? AfDB: Urban sanitation, drainage and solid waste management in Chimoio & Inhambane, Mozambique;

? African Institute/UNEP/DTIE: Disposal of PCB Oils Contained in Transformers and Disposal of Capacitors Containing PCB in Southern Africa;

? World Bank: Environmental Health and Pollution Management Program (EHPMP) and other projects, see Table 3

? UNITAR/UNIDO/WHO: Minamata Initial Assessment and National Action Plan on ASGM in African countries ; and

? UNIDO: Promotion of BAT and BEP to Reduce uPOPs Releases from Waste Open Burning in the Participating African Countries of COMESA-SADC Subregions.

All the above projects have addressed some aspects of chemicals and waste management. They have not been developed to establish a comprehensive system of sustainable management of harmful chemicals and waste. However, the results can be further explored to achieve synergy and/or complementarity with the present regional project.

For information about the individual GEF (and other) projects with relevance for AFLDC2 in individual project countries, please see the country annexes (annexes P-Z). For on-going related projects, online coordination meetings will be made with their IAs and/or EAs at AFLDC2 inception and thereafter regularly as needed.

At the onset of the implementation, the PMU will determine the opportunities for cooperation with all active projects project in the region related to POPs and Hg, that are relevant and will determine and ensure that there is no overlap, that relevant activities are coordinated and that lessons are shared.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The project draws on international conventions to which beneficiary countries are parties. These include, among others, the: (i) Stockholm Convention on Persistent Organic Pollutants (POPs), whose main objective is to protect human health and the environment against POPs, by reducing or eliminating their emissions into the environment, (ii) Minamata Convention on Mercury whose objective is to protect human health and the environment from emissions and anthropogenic mercury and mercury components; (iii) Rotterdam Convention, which is intended to encourage the sharing of responsibility and cooperation between parties in the field of international trade of certain hazardous chemicals in order to protect health and environment against possible damage; and (iv) Basel Convention on the control of transboundary movements of hazardous wastes and their disposal.

The project is also consistent with the environmental management policy, the strategic document on poverty reduction and promotion of employment, the strategies and plans on climate change, and the national legal texts regulating the waste sector. The project is consistent with the NIPs, MIAs, and ASGM NAPs. A summary of the consistency of the project with national priorities for each country is given below.

Angola

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Angola has commenced its NAP in 2020 to establish an ASGM overview as a baseline for the situation and develop priorities and actions to address mercury use in the ASGM sector. The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Angola has signed the Minamata Convention, but it is not yet ratified. However, components 1 (regulation, etc.) and 2 (outreach) of the AFLDC-2 project will include activities that cover the Minamata Convention. For countries where a MIA has been undertaken, the AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development. For countries where a MIA has not yet been initiated, the current project will contribute to informing a later MIA development. For countries where a MIA will be in development during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

- *National Implementation Plan (NIP) under POPs:* Angola has ratified the Stockholm Convention which has been partially implemented. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development. For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.
- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.
- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2.

Ethiopia

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Ethiopia did not yet develop an ASGM NAP. The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are

taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Ethiopia has signed the Minamata Convention, and ratified it in July 2020.However, components 1 (regulation, etc.) and 2 (outreach) of the AFLDC-2 project will include activities that cover the Minamata Convention. For countries where a MIA has been undertaken, the AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development. For countries where a MIA has not yet been initiated, the current project will contribute to informing a later MIA development. For countries where a MIA will be in development during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

-*National Implementation Plan (NIP) under POPs:* Ethiopia has ratified the Stockholm Convention and it is partly implemented. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development. For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.
- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.
- *National Portfolio Formulation Exercise (NPFE) under GEFSEC:* Planned activities of this project are in line with the GEF National Portfolio Formulation documents.
- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2. See also the section above on Sustainability and scale-up of project results.

The Gambia

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Zambia did not yet develop an ASGM NAP: The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* The Gambia ratified the Minamata Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development.

- *National Implementation Plan (NIP) under POPs:* Gambia has ratified the Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development.

- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.

- *National Portfolio Formulation Exercise (NPFE) under GEFSEC.* Planned activities of this project are in line with the GEF National Portfolio Formulation documents.

- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies as described, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2.

Guinea

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Guinea has drawn up the ASGM NAP, and it is sent to UNEP for advice. The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlap.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Guinea ratified the Minamata Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development.

- *National Implementation Plan (NIP) under POPs:* Guinea has ratified the Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development.
- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.
- *National Portfolio Formulation Exercise (NPFE) under GEFSEC:* Planned activities of this project are in line with the GEF National Portfolio Formulation documents.
- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies as described above, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2.

Liberia

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Liberia did not yet develop an ASGM NAP. The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Liberia has signed the Minamata Convention, but not yet ratified it. However, components 1 (regulation, etc.) and 2 (outreach) of the AFLDC-2 project will include activities that cover the Minamata Convention. For countries where a MIA has been undertaken, the AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development. For countries where a MIA has not yet been initiated, the current project will contribute to informing a later MIA development. For countries where a MIA will be in development during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

National Implementation Plan (NIP) under POPs: Liberia has ratified the Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development. For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.

- *National Portfolio Formulation Exercise (NPFE) under GEFSEC:* Liberia does not have a profile in this exercise.

- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2. See also the section above on Sustainability and scale-up of project results.

Mauritania

- ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury: Mauritania has not yet developed an ASGM NAP. The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- Minamata Initial Assessment (MIA) under Minamata Convention: Mauritania signed the Minamata Convention and ratified it in 2016. However, components 1 (regulation, etc.) and 2 (outreach) of the AFLDC-2 project will include activities that cover the Minamata Convention. In Mauritania a MIA has not yet been initiated, the current project will contribute to informing a later MIA development.

- National Implementation Plan (NIP) under POPs: Mauritania ratified the Stockholm Convention in 2005. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development. For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.
- Poverty Reduction Strategy Paper (PRSP): The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.
- National Portfolio Formulation Exercise (NPFE) under GEFSEC: Planned activities of this project are in line with the GEF National Portfolio Formulation documents.
- National Development Plan/strategy: The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2. See also the section above on the sustainability and scaleup of project results.

Senegal

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Senegal published its finalized ASGM NAP in November 2019. : The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Senegal ratified the Minamata Convention in 2016. The AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development.

- *National Implementation Plan (NIP) under POPs:* Senegal ratified the Stockholm Convention in 2003 but has not yet implemented it. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development.

- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.

- *National Portfolio Formulation Exercise (NPFE) under GEFSEC:* Planned activities of this project are in line with the GEF National Portfolio Formulation documents

- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies as described above, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2.

Sierra Leone

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Sierra Leone did not yet complete an ASGM NAP.: The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Sierra Leone ratified the Minamata Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development.

-- *National Implementation Plan (NIP) under POPs:* Sierra Leone has ratified the Basel and Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development.
- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.
- National Portfolio Formulation Exercise (NPFE) under GEFSEC: The country does not have a profile in this exercise.
- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies as described above, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2.

Togo

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Togo ratified the Minamata Convention in 2017 and a MIA has been undertaken. The AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development.

- *National Implementation Plan (NIP) under POPs:* Togo has ratified the Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development. For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.
- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.
- National Portfolio Formulation Exercise (NPFE) under GEFSEC: Planned activities of this project are in line with the GEF National Portfolio Formulation documents.

- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2. See also the section above on Sustainability and scale-up of project results.

Uganda

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.

- *Minamata Initial Assessment (MIA) under Minamata Convention:* Uganda has ratified the Minamata Convention in 2016 and has developed a Minamata Initial Assessment. The AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development.

- *National Implementation Plan (NIP) under POPs:* Uganda has ratified the Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development.: For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.

- *National Portfolio Formulation Exercise (NPFE) under GEFSEC:* The country does not have a profile in this exercise.

- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2. See also the section above on Sustainability and scale-up of project results.

Zambia

- *ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury:* Zambia did not yet develop an ASGM NAP.: The project deals with mercury in the context of the Minamata Convention. But besides regulatory aspects, ASGM is not a part of the project activities (because ASGM is dealt with exhaustively in another GEF programme). However, in countries where ASGM NAP activities have taken place or are taking place, care will be taken in the AFDLC-2 execution to coordinate with and supplement ASGM NAP activities and avoid overlaps.
- *Minamata Initial Assessment (MIA) under Minamata Convention:* Zambia signed the Minamata Convention and ratified it in 2016. However, components 1 (regulation, etc.) and 2 (outreach) of the

AFLDC-2 project will include activities that cover the Minamata Convention. For countries where a MIA has been undertaken, the AFLDC-2 project is informed by, and in line with, country priorities identified in the MIA development. For countries where a MIA has not yet been initiated, the current project will contribute to informing a later MIA development. For countries where a MIA will be in development during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

- *National Implementation Plan (NIP) under POPs:* Zambia has ratified the Stockholm Convention. The AFLDC-2 project is informed by, and in line with, country priorities identified in the NIP development. For countries where a NIP is under updating during the implementation of the AFLDC-2, a careful coordination will take place to ensure complementarity for mutual benefit of the projects and avoidance of duplication of activities.

- *Poverty Reduction Strategy Paper (PRSP):* The project strives to increase decent jobs while implementing the Stockholm and Minamata Conventions; particularly in output 3.4 in countries where this output is implemented. No coordination is deemed warranted on this aspect.

- *National Portfolio Formulation Exercise (NPFE) under GEFSEC:* Zambia does not have a profile in this exercise.

- *National Development Plan/strategy:* The proposed activities of AFLDC-2 are in line with national development plans/strategies, and coordination to mainstream project activities optimally with these plans/strategies will be undertaken; particularly in components 1 and 2. See also the section above on Sustainability and scale-up of project results.

For further details, see the country annexes (annexes P-Z).

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

As described elsewhere, a project website will be developed for public access, where all publishable project materials will be posted. This will enable open sharing of results and avoid duplication, beyond what is often done in such projects.

While previous projects have built capacity amongst those directly responsible for chemicals management and boosted awareness amongst project stakeholders, efforts towards knowledge management have typically focused on technical mechanisms to host and provide access to information. Such mechanisms have proved difficult to build and sustain and deliver only limited access, typically most accessible to those already trained.

While capacity building amongst project actors forms an important part of this project, with the intention of broadening and deepening the understanding of chemicals and waste issues, the emphasis on

communications in the project recognises the need to engage much more widely and, where possible, directly, with a much broader range of stakeholders and beneficiaries in order to stimulate engagement and demand-side changes in attitudes and behaviour.

Communications campaigns addressing particular chemicals and waste topics and for different stakeholder groups will be designed and executed in participating countries with the assistance of local stakeholders and media experts. Communications materials directed towards women and educational materials for children will be included.

Materials for public officials and national and international managers of development projects will make clear the needs to safeguard project design and procurement from chemicals and waste risks.

The project will make efforts to ensure that communications materials are readily available both during the project and afterwards, including through existing channels of national focal points and government information services as well as local media.

Lessons learned reporting will be part of the annual reporting of the project, and a final lessons learned report will be produced as per GEF and AfDB standards. In addition, a national lessons-learned document will be produced for each participating country by the end of the project, highlighting the mechanisms applied in the project implementation to reach the observed goals. This document will be posted on the project website and will be shared with the relevant sectors in the country to enhance possibilities for replication by other actors in the sector nationally, thus enabling scale-up of the demonstrated solutions in the country. The document shall feature decisive technical solutions implemented, financial arrangements adopted and stakeholder engagement efforts undertaken, among others.

Materials developed for the project will be made available for wider use to regional entities, including the regional centres for the chemicals and waste MEAs, and the convention clearing house mechanisms. The project will seek opportunities to publicise its objectives, progress and findings at appropriate international, regional and national meetings.

An overview of key knowledge management activities and their timing is given in Table 24. Kindly see the respective annex for details on the allocated knowledge management budget.

Table 24 Overview of Key Knowledge Management Activities

Activity	As part of component /output	Timing, year(s)
Project virtual knowledge hub (website) created and maintained for outreach within and beyond the project	**Output 4.1**	**Y1-5**
Regional workshops held to share experiences and lessons learned for effective cross-pollination between participating countries	**Output 1.4a**	**Y1-5**

Awareness raising at all levels of society: Government, industry, private sector SMEs, agriculture, academia, NGOs/CSOs, the public (emphasis on women, young and local leaders)	**Component 2**	**Y1-5**
National lessons-learned documents targeting other actors in the sectors addressed in Component 3 to enhance opportunities for scale-up and replication	**Output 4.3**	**Y1-5**
Regional project lessons-learned annual reports, and end of project publication	**Outputs 4.3 and 4.5**	**Y1-5**
Presentation of the project at meetings of Regional Cooperation Bodies	**Outputs 1.4d and 4.3**	**Y1-5**

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Monitoring and evaluation, learning and adaptive feedback

Outcome: Effective and efficient project delivery involving informed decision making at regional and national levels

The project will comply with AfDB and GEF standard monitoring, reporting, and evaluation procedures. Reporting requirements and templates are an integral part of the legal instrument to be signed by the Executing Agencies and Implementing Agency. AfDB will work with the relevant project stakeholders to ensure that AfDB M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the GEF M&E policy and other relevant GEF policies.

In addition to these mandatory AfDB 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. This will include the exact role of project Executing Agencies and Participant countries in M&E activities including the GEF Operational Focal Points and national/regional institutions assigned to undertake project monitoring. The GEF Operational Focal Points will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Core indicator worksheet) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.

M&E oversight and monitoring responsibilities:

Regional Coordinator: The Regional Coordinator(s) recruited by the Executing Agency is responsible for day-to-day project management and regular monitoring of the regional project results and risks, including social and environmental risks. The Regional Coordinator will ensure that participating countries receive appropriate technical support for the project and will maintain a high level of transparency, responsibility, and accountability in M&E and reporting of project results. The Regional Coordinator will inform the

Project Steering Committee (PSC) of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

The Regional Coordinator will develop annual work plans based on the multi-year work plan (see Annex H), including annual output targets to support the efficient implementation of the project. The Regional Coordinator will ensure that the standard AfDB and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR (see a more detailed description below), and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. Gender Action Plan, ESMP) occur on a regular basis.

Project Steering Committee (PSC): The PSC will take corrective action as needed to ensure the project achieves the desired results. The PSC will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project?s final year, the PSC will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response. The PSC will be composed by the Implementing Agency, Regional Executing Agencies, Participating Countries (National Focal Points/ National Coordinators), key supporting agencies and stakeholders and GEF. The PSC will meet once a year.

Gender Equality Committee (GC): The Gender Committee will: ensure that women participate in the project; ensures that women lead certain activities and processes; and ensure that the project Gender Action Plan will be implemented. This will empower women through training and inclusion in the development of policies and other project activities The GC will meet once a year and will include representatives from the Participating Countries that are actively engaged in gender related issues.

Participating countries and National Executing Agencies: The Participating Countries **are responsible for providing any and all required information and to locally execute the activities.** They will ensure national execution of activities. They will provide timely, comprehensive, and evidence-based project reporting, including results and financial data, as necessary and appropriate. The participating countries will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems, so that the data used by and generated by the project supports national systems.

Inception Workshop and Report: A project inception workshop will be held within two months after the project has started and the agreement has been signed between the Implementing Agency and the Executing Agencies. It will serve to:

? Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation
? Discuss the roles and responsibilities of the regional and national project teams , including reporting and communication lines and conflict resolution mechanisms
? Review the results framework and finalize the indicators, means of verification, and monitoring plan
? Discuss reporting and monitoring and evaluation roles and responsibilities, and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; and discuss the role of the GEF OFP in M&E
? Update and review responsibilities for monitoring the various project plans and strategies, including the Gender Action Plan; the ESMP and other relevant plans/strategies
? Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit
? Plan and schedule PSC meetings and finalization of the first-year annual work plan

The Regional Coordinator will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the EA and AfDB and will be approved by the PSC.

Reporting:

GEF Project Implementation Report (PIR): The Regional Project Coordinators (EA), National Coordinators (national EA) and AfDB (IA) will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation.

The Project Coordinator will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Aspects highlighted in the Gender Action Plan, the environmental and social 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 PSC. The National and Regional EAs will coordinate the input to the PIR from the GEF Operational Focal Points and other stakeholders in participating countries as appropriate. The quality rating of the previous year?s PIR will be used to inform the preparation of the subsequent PIR.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums (e.g. twitter, facebook, mail lists, etc). The project will identify and participate, as relevant and appropriate, in scientific, policy-based, and/or any other networks, which may be of benefit to the project. The project will identify, analyse, and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus inthe African region, and globally. An annual lesson learned meeting will take place back to back to the PSC and will produce a report, which will be disseminated during the Chemicals related international events. The lessons learned exercise is part of component 4 of the project.

GEF Core indicator worksheet: The GEF Core indicator worksheet will be used to monitor global environmental benefit results:

The baseline/CEO Endorsement GEF Core indicator worksheet will be updated by the Regional Coordinator and shared with the mid-term review consultants and terminal evaluation consultants before the required review/evaluation missions take place. The updated GEF Core indicator worksheet will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

Mid-term Review: A mid-term review process (MTR) will take place at the mid-point of the project and the report will be submitted to the GEF. The MTR will include all parameters recommended by the GEF for such evaluations and will verify information gathered through the GEF core indicator worksheet, as relevant. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project?s duration. The consultants 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. The GEF Operational Focal Points and other stakeholders will be involved and consulted during the mid-term review process. Additional quality assurance support is available from the EA and AfDB. The final MTR report will be available in English and will be cleared by EA and AfDB and approved by the PSC.

Terminal Evaluation: An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The TE process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Regional Coordinator will remain on contract until the TE report and management response have been finalized. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. The terms of reference, evaluation process, and final TE report will follow the standard templates and guidance prepared by AfDB, based on the GEF guidance. The consultants 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. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the TE process. Formal comments on the report will be

shared in an open and transparent manner. Additional quality assurance support is available from EA and AfDB. The final TE report will be reviewed and cleared by AI and AFDB, and will be approved by the PSC. A review of the quality of the evaluation report will be submitted along with the TE report to the GEF Evaluation Office not later than six months after the completion of the evaluation. The TE report will be publicly disclosed.

Final Report: The project?s terminal PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the PSC during an end-of-project review meeting to discuss lessons learned and opportunities for scaling up.

Audit: The project will be audited in accordance with AfDB Financial Regulations and Rules and applicable audit policies.

The detailed monitoring and evaluation plan is given in Annex I. (copied below)

M&E activity	Purpose	Primary responsibility	Costs to be charged to the GEF Project Budget (US$)*	Co-financing contributions to M&E	Time frame
Inception Workshop and Report (M&E part)	Awareness raising, building stakeholder engagement, detailed work planning with key groups	PMU	33,350	154,058	Within two months of project document signature
Project review by Project Steering Committee (PSC) and Monitoring of indicators in project results framework	Assesses progress, effectiveness of operations and technical outputs; Recommends adaptation where necessary and confirms implementation plan. Monitors progress made and achievement of planned outputs and outcomes	PMU, PSC,	171,250	1,232,474	Annually
GEF Project Implementation Review (PIR)	Progress and effectiveness review for the GEF, provision of lessons learned.	PMU, Implementing Agency (AfDB)	-	231,089	Annually

M&E activity	Purpose	Primary responsibility	Costs to be charged to the GEF Project Budget (US$)*	Co-financing contributions to M&E	Time frame
Lessons learned, knowledge generation, and knowledge management	Identifies good practices and replicable elements	PMU	74,000	924,356	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Assess risk associated with project interventions and proposes mitigation and management plans	PMU	18,000	3,081,185	On-going
Supervision missions	On-site visit: verification of activities, identification of impacts from interventions and possible local challenge	PMU	274,500	2,927,126	Annually
Mid-term GEF core indicator worksheet to be updated	Reviews progress made related to outcomes and outputs as indicated in the core indicator worksheet	PMU	11,000	154,060	Before mid-term review mission takes place.
Midterm Evaluation (ME), and management response	Reviews effectiveness, efficiency and timeliness of project implementation, coordination mechanisms and outputs at mid-term point.	PMU to recruit Independent Consultants	130,000	770,296	Mid-point of project
Terminal GEF core indicator worksheet to be updated	Final review of the activities, outputs and outcomes as indicated in the core indicator worksheet	PMU	11,000	77,030	Before terminal evaluation mission takes place

M&E activity	Purpose	Primary responsibility	Costs to be charged to the GEF Project Budget (US$)*	Co-financing contributions to M&E	Time frame
Independent Terminal Evaluation (TE), Terminal Report, and management response	Reviews effectiveness, efficiency and timeliness of project implementation, coordination mechanisms and outputs Identifies lessons learned and likely remedial actions for future projects The terminal report Reviews effectiveness against implementation plan Highlights technical outputs Identifies lessons learned and likely design approaches for future projects, assesses likelihood of achieving design outcomes	PMU to recruit Independent Consultants	170,000	1,078,415	At least three months before operational closure
TOTAL COST			**893,100**	**10,630,089**	

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project will bring direct and indirect socioeconomic benefits. The direct and immediate benefits are those related to the implementation of the project itself, including employment of project staff, operators, and others; possible establishment of public-private partnerships for the management of the PCB-contaminated equipment/waste and uPOPs/municipal and agricultural waste; and financial incentives for

the PCB owners for the sampling, analysis, and treatment of their PCB-contaminated equipment, and for waste managers.

The project will also bring obvious indirect benefits. The removal of PCB and POP pesticide sources (equipment, waste) from the environment and reduction of uPOPs emissions will prevent the contamination of the environment by these substances. This will translate into reduced exposure to the population, reduced mortality and morbidity of the population in the long-term, with specific reference to the pathologies associated with exposure to the toxic chemicals in question, resulting in the reduction of social and economic costs.

In addition, the technical capacity developed by the project partners (project and institutional staff, consultants, and stakeholders) in the management of chemicals and waste will result in the creation of skills and capabilities for the management of hazardous substances and waste in general, which will result in the creation of specialized jobs in the country.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Enhancement/Mitigation Measures

This section describes how the potentially negative impacts of the project will be handled to avoid or minimize the effects. The section also includes timing of these measures, and planned indicators and reporting of monitoring of the performance of the measures.

General risk ? covid-19

The general risk of covid-19 infections and related damages must be managed in project, considering that general vaccination may not have been achieved in advance of the individual project activities.

Potential impact	Measures	Timing	Indicator
Risk of covid-19 infection	All national restrictions to avoid covid-19 infection must be always respected and in all project activities.	Throughout project until general vaccination is reported finalised by the main authority in charge nationally and restrictions are completely lifted in the country in question and by the institutions engaged in the project	See below
	A checklist will be developed based on international standards for avoidance of covid-19 infections. The checklist should be strictly followed in all project work where the assemblance of people is required. The checklist should include as a minimum: ? Physical assembling must only take place for project activities where allowed under national covid-19 restrictions, and no physical assembling shall take place in the project unless sanctioned by the National project Focal Point (NFP) and the management of the participating institutions. ? Measures taken to insure safe social distancing (in meeting rooms, in the planning of physical work, in flights and other transport, etc.) ? Face masks should be used in all assemblies, unless other more protective equipment is used (such as specific filters to protect against hazardous chemicals) ? Hand disinfectant must be available to all project workers under all project work circumstances ? All other national covid-19 restrictions must be observed		Check list filled for each physical assembly and physical work activity

Component 1 ? Enabling environment and capacity

Improving the enabling environment and increasing capacity in the public institutions and beyond has the potential for reducing greatly the environmental impacts of POPs, mercury, and other hazardous chemicals in the project countries, also beyond the project period. The necessary regulation and strategies developed or enhanced in the project will reflect the multilateral chemicals conventions in

question, which have themselves been designed to minimize adverse environmental and social impacts[1].

Hence, the potentially negative impacts of the activities of Components 1 and 2 to be dealt with here are those described below.

Table 6: Mitigation measures ? Component 1:

Potential impact	Measures	Timing	Indicator
Climate gas emissions and fossil fuel depletion from international and regional flights	Face-to-face training and other project activities will be pooled in the missions to minimize the number of flights.	Throughout project	Mission reports showing that project activities were pooled optimally
	As far as possible, on-line meetings and workshops will be applied, to minimize number of flight trips. Initial face-to-face meetings may be required to establish personal contacts.	Throughout project	Meeting reports
	In the project, the Internet connections of the National Project Focal Points will be checked, and if needed and feasible, improved with minimal measures.	Within first ? year	Completion notice of upgrade
Stakeholder involvement	Consultation workshops and awareness raising activities are integral elements in the project, including in Components 1 and 2. See the CEO Endorsement Request document for details (Components 1 and 2 and section on stakeholder management).	Throughout project	MTR and FT reports
Equal opportunities in training activities	A gender expert will review all planned trainings, expert ToRs, and contracts for the training activities, to secure equal opportunities across genders through explicit invitation policy and participants selection. See also the gender assessment in Annex M to the Request for CEO Endorsement document.	Throughout project	Draft invitations and training statistics
	Secure physical access or adequate assistance to enable participation of any disabled participants.	Throughout project	Mission /meeting reports

Component 2 ? Awareness raising

Table 7: Mitigation measures ? Component 2:

Potential impact	Measures	Timing	Indicator

Selection of target groups and communication means	Outreach to citizen groups closely affected by the project, such as for example waste pickers to be trained and neighbours to waste storage facilities will be engaged actively through the stakeholder engagement process of the relevant activities. See description of Component 3 measures below.	See Component 3 measures below.	See Component 3 measures below.
	General population: Getting a high impact in awareness raising to the public is very expensive if all groups, including the poorest and disadvantaged shall be reached. Poor and marginalized groups are often the hardest groups to get in contact with. Besides, their attention span regarding chemicals management may generally be smaller because they have more acute and tangible concerns in their lives. In the project it is therefore planned to focus outreach to the public to the primary target groups women and youth. Women are often the main caretakers in families and are known to generally be more attentive to risks that can affect their families, such as hazardous products. Besides, women are more frequent users of such products as skin lightening creams and mercury thermometers that can pose health risks. Youth are tomorrows decision makers and family caretakers and can be reached through their education; basic as well as advanced. Social media are a relatively low cost means to affect large parts of the population. Social media will therefore be a major element in the outreach to the general population, but traditional means like radio, television and printed medias will also be used, as feasible, and possibilities for low-cost use of these broadcasting medias will be explored.	Throughout project	Outreach activities completed (MTR and FT)
	Outreach to decision-makers, public officials and selected private sector groups will be done through direct written and electronic communication, and ? primarily ? through meetings and workshops, for which the measures described for Component 1 above apply in the project.	Throughout project	Outreach activities completed, event statistics
	Outreach to labour forces will primarily take place in private sectors directly engaged in project activities, such as customs officers, waste pickers, official waste workers, recycling industry workers, and pharmacists engaged in mercury product collection. Such workers will be reached through direct oral training and communication, and if feasible through written or electronic communication and instructions.	See Component 3 measures below.	Outreach activities completed, event statistics

	Outreach to local communities directly affected by Component 3 activities such as build-out or establishment of waste storage facilities will be done through community meetings (with local chiefs and if needed public meetings) and written and electronic communication, as relevant and feasible.	See Component 3 measures below.	Meeting reports, communication materials
Equal opportunities in training participation and hiring of experts	A gender expert will review all planned trainings, expert ToRs and contracts for the awareness raising activities to secure equal opportunities across genders through explicit invitation policy and participants selection. See also the gender assessment in Annex M to the Request for CEO Endorsement document.	See component 3 measures below	Meeting reports, ToRs, contracts, communication materials
Culturally sensitive outreach	The outreach activities will need to be culturally adapted to assure positive reception. This also means that certain national outreach elements may need to be adapted to cultural particularities in each country, for example such as main religions present. This will be secured by the national project secretariats.	Throughout project	Outreach material

Component 3, Output 3.1 ? Permanent facilities for interim storage of hazardous waste awaiting final disposal

Table 8: Mitigation measures ? Output 3.1:

Potential impact	Measures	Timing	Indicator

Selection of facility/location	The facilities for interim storage of hazardous waste will preferably be selected among existing facilities for the same purpose, but where the installations need upgrading to secure environmentally safe storage of highly toxic chemical waste such as pesticides, PCB, and mercury. In case an existing facility is selected, the goal of the project will be to make the facility safer than it already is and perhaps increase the storage capacity is needed and feasible. If no suitable facilities exist in advance, it will be considered to construct a new facility, provided there is sufficient national ownership and a suitable institution that can run the facility sustainably. Whether an existing or a new facility will be used, it will be selected/located based on a specific and detailed environment and social assessment to be made for this purpose that considers all the risks and potentially adverse effects types dealt with in this report, including but not limited to: ? Safe distance to: o human dwellings and related issues (disadvantaged groups, indigenous groups, etc.), o protected nature and other sensitive nature types (including relevant biodiversity concerns, if any), o prioritised groundwater reservoirs, and o prioritised cultural heritage sites/interests (proximity is not very likely, but it should be checked). ? Adequate precautions against climate disasters (flooding). ? Optimal transport possibilities for incoming waste and for export of waste for treatment abroad (near major cities, main roads or train connections and harbours, as relevant). If possible and adequate, locations that are already designated in local planning for risk industries/activities will be preferred.	Selection phase Years 1-2	Specific and detailed environment and social assessment report
Climate change resilience in facility design (changed precipitation patterns).	Design the facility (changes) to make it resilient to changed precipitation patterns, notable increased intensity, and duration of rain episodes (roofs, sewage systems, sewage chemicals safety traps, compartmentalisation).	Design phase: Year 1-2	Designs elaborated

Stakeholder involvement	Securing adequate stakeholder involvement in the selection process and locally adapted safety measures is a priority in the project. The process should involve all relevant potentially affected local population groups, including but not limited to relevant local authorities, any proximate neighbours to the facility, relevant local citizens groups, the local chief(s), any affected disadvantaged groups (including and any squatters on the facility grounds). The contact point in this process will for all stakeholders, including the local communities affected, be the National project Focal Points (NFPs).	Selection: Year 1-2, Construction: Year 3-4	Selection: Environment and social assessment report Construction: FT report
Measures to avoid /reduce pollutant exposure from facility and during project operations	The improvements of existing facilities or construction of new facilities should be designed according to the requirements for safe hazardous waste handling of the Stockholm, Minamata and Basel Conventions, and according to good international design standards, adapted as necessary to make them secure and sustainable under the prevailing conditions (chemicals spills, explosion risks, temperatures, monsoon precipitation, draught, safety against theft and terror, etc.). Instruction manuals for operations and maintenance will be developed, and training in the use of the instructions will be performed during the project phase. Within the project period, all relevant measures will be taken to secure an optimal handing over of the upgraded/constructed facility to the entity responsible for its continued sustainable and safe operation.	Design phase: Years 2-3 Instructions and training: Year 4-5 Handing over: Year 4-5	Design descriptions Instructions and training statistics Handing over documents
Ensure safe and healthy working conditions in facility (working instructions, facility design, PPE, ToRs)	The facility upgrade/construction and the site operations will be designed to inherently minimize all relevant risks in the working environment; the use of personal protection equipment (PPE) should only be a second measure to include when other options are not available. Instruction manuals for secure and safe operations and maintenance will be developed, and training in the use of the instructions will be performed during the project phase. The instructions will include, but not be limited to detailed work instructions, check lists, use of PPE. ToRs for all job positions will include explicit descriptions of responsibilities for ensuring a safe working environment (management on all levels and workers).	Design phase: Years 2-3 Instructions and training: Year 4-5	Design descriptions Instructions and training report

Gender: Ensure equal opportunities in any hiring of employees (ToRs)	The facility will have/get several job functions, both administrative and practical, and Terms of Reference (ToR) for its job positions shall explicitly enhance equal opportunities for genders. A gender expert will review the ToRs and human resources policy of the facility to guarantee equal opportunities. See also the gender assessment in Annex M to the Request for CEO Endorsement document.	Years 4-5	ToRs

Outputs 3.2 and 3.3 ? POPs pesticides wastes destroyed and environmentally sound management of

PCBs

This section deals with both Output 3.2 and 3.3 as their potential negative impact and mitigation plans are similar in character.

Obsolete pesticides and PCB represent an acute environmental threat where they are located, notably if they are contained in inadequate or damaged containers. Elimination of these pollutants from their current sites require the following key operations of physical character that may pose a risk: 1) Re-packaging into UN approved containers, 2) loading of the containers onto trucks for transport 3) centralisation of containers to intermediate storage site, 4) off-loading of containers s at the storage site, 5) loading and stowage of containers into ISO shipping containers suitable for shipping/export (if not done previously), 6) overseeing and securing containers? and barrels? conditions during interim storage, 7) road and/or rail transport of containers to a suitable export harbour (for land-locked countries this needs to go through neighbouring countries), 8) loading of containers on ship, 9) overseeing and securing containers? conditions during shipping, 10) off-loading and transport of containers to final treatment site, 11) final treatment/disposal.

It should be emphasized that the project also includes training and promotion of integrated pest management practices (in Components 1 and 2) and training in proper labelling and maintenance of any PCB-containing electrical equipment that is identified but not eliminated within the project period, as relevant. See the CEO Endorsement Request document for details.

In line with BAT/BEP this project will be using a risk management framework in common with other GEF programmes focussing on chemicals and waste (such as the FAO Environmental Management Tool Kit series which is an established series of documents dealing with the safeguarding and disposal of obsolete pesticides). In general terms, the CEO Endorsement Request document sets out higher level risks that give bearing to risk assessment and risk mitigation activities carried out later during the project. During the early implementation phase, detailed data collection activities, such as inventory, will inform in-depth risk assessment (environmental impact assessment) and development of specific risk mitigation measures as part of environmental and social management planning. This Environmental and social scoping report sets out a frame structuring risk assessment and risk mitigation activities that will give rise to final risk management activities conducted as part of the implementation phase of the project.

Table 9: Mitigation measures ? Outputs 3.2 and 3.3:

Potential impact	Measures	Timing	Indicator
Measures to avoid /minimize pollutant exposure during project operations (pollution, biodiversity, land use, indigenous, Community HSS)	Based on detailed inventories to be conducted as part of the project, undertaking of detailed risk assessment of obsolete pesticide stores and stocks contained and development of Environmental and Social Management Plans (ESMP) which will set out mitigation measures for each risk identified. The same applies for equipment confirmed to contain PCB concentrations that require action. The ESMP will include the following: All steps to be carried out by trained personnel, safeguarding to be conducted according to ADR / IMDG[2] using UN specified containers and appropriate personal and environmental protection measures. Selection of qualified contractors will be secured in the project through procurement of these services from expert companies and personnel selected based on detailed Terms of Reference and proper documentation of their expertise and experience. Selected contractors will be required to submit detailed management plans as part of their offers including safeguarding, transport, emergency, and disposal plans. In general terms international service providers will be responsible for safeguarding of high and medium risk stores, while national teams will conduct safeguarding of lower risk stores. They will be given advance proper training by relevant experts as part of the project to secure adequate performance standards. Operations performance will be monitored by project staff. For project countries where a permanent facility for interim storage of hazardous waste will be upgraded/established, these facilities will be used for Steps 4-6. For other countries, a short-term interim storage place will be used, preferably selected among existing major storage sites for the same chemicals (such as pesticide storage stocks at major public users [or transformer maintenance/storage sites for PCB-containing electrical devices]). Such short-term storage sites will be selected according to the principles described for Output 3.1 above, however taking into consideration that the storage will only take place within the short project period. The storage sites selected will be upgraded as needed with minimum efforts that secure the short-term storage, such as a perimeter fence, an open roof above the containers, and similar measures as per international standards for such operations. Export of the wastes requires advance permits in accordance with the Basel and Bamako Conventions, as relevant, to be obtained by the company procured for export and final treatment.	Inventories year 1-2 Risk assessment year 2-4 Packaging, transport, and disposal year 4-5	Procurements ToRs Any trainings: Instructions and training statistics Inspection reports Short-term storage: Upgrade design descriptions and ToRs

Measures to avoid /minimize pollutant exposure during project operations (labour)	Proper protection of the personnel involved in the operations 1-11 listed above is a high priority in the project and will be secured either by procurement terms stipulating the needed training and protection equipment, or by providing such training and equipment as part of the project, as relevant and appropriate.	As above, but always prior to actual physical steps	As above

Output 3.4 ? Reduced uPOPs emissions and releases from municipal waste management through reduction of open burning of waste

The scope of Output 3.4 is to minimize uPOPs (and other hazardous pollutant) emissions through reduction of open burning of waste. The methods applied include increased/improved collection of valuable waste fractions (focusing on plastics), increased/improved manufacturing of useful products from recovered plastics by existing companies, [promotion of replacement of single-use plastics with manufacturing of sustainable packaging from local materials], and promotion of proper waste management practices.

Table 10: Mitigation measures ? Output 3.4

Potential impact	Measures	Timing	Indicator
Measures to minimize pollutant releases from recycling operations and production of sustainable packaging materials	Reductions of pollutant releases from manufacturing of recovered plastics will be achieved through the following measures in the project: ? Training in plastics collection and sorting to increase recycling while avoiding plastic types that are not optimal for the production due to chemical composition (for example thermo-set plastics) or plastics that may likely contain undesired additives (for example brominated flame retardants and phthalate plasticizers). ? Proper disposal at approved landfills (or other safe solutions) of any collected plastics that are sorted out and not used for manufacturing, as well as for other solids removed from the plastics. ? Optimization of manufacturing conditions (on a minimal need basis), as feasible. ? Improvement/establishment of any needed wastewater treatment or any needed emission reduction equipment (on a minimal need basis), as feasible. Similarly, reductions of pollutant releases from production of sustainable packaging from local materials will be promoted through securing proper waste management and proper (low-tech) treatment of any effluents and emissions (it is expected that any such production selected for support in the project will be handy craft dominated with minimal adverse environmental impacts).	Years 3-5	Training report Instructions /ToRs for operations and upgrades Inspection reports

Gender: involvement of women and children planned training activities	A gender expert will review all planned trainings to ensure that women and children in the waste pickers groups are aware of potential health risks and how they can act to lower these risks. See also the gender assessment in Annex M to the Request for CEO Endorsement document.	Throughout project	Training reports
Promote safe working conditions for waste pickers, recycling workers and production workers	Waste picking is generally dirty work with fume and dust exposure, risks of contact with sharp objects and vermin, and heavy lifts. The waste pickers involved in the project will be trained in avoiding open waste burning (which they may otherwise do to isolate metals) and safer working conditions, and they will be provided with basic personal protection equipment such as safety boots/shoes, gloves, and dust masks during the project period. Similarly, supported manufactures of recovered plastics and producers of sustainable packaging materials will be trained in securing proper work environment and safety, and be supported in increasing safety in the operations and providing basic personal protection to their employees, as needed and feasible.	Years 3-4	Training reports PPE purchase receipts

Output 3.5 ? Reduced availability and use of mercury-containing products and models for their proper disposal

This output includes two elements: 1) Promoting the use of alternatives to mercury-added products, and 2) demonstrating models for collection and disposal of mercury-added products waste in a situation where general national systems for separate environmentally safe hazardous waste collection is absent.

In many products uses of mercury, the mercury is encapsulated in the intact product; some of the product types are however fragile, such as for example mercury thermometers and mercury-added lamps, and therefore care is required for the safe management of such products during collection and handling. Common to all mercury-added products is however that the mercury is likely to be released to the environment during improper waste treatment, either quickly through waste burning or through product breakage and gradual release. This is the reason why mercury usage in products is restricted, and environmentally safe disposal is required, in the Minamata Convention.

Mercury-added products become waste when they are broken or taken out of use and disposed of or handed in for disposal/treatment. This section focuses on the environmentally safe handling of waste mercury-added products. In the general absence of separate collection of waste mercury-added products in the project countries, the project will promote substitution of mercury-added thermometers and simultaneously free households for the risk from having a mercury-added thermometer in the house. For every mercury-added thermometer handed in to participating pharmacists by a household, the household will get a free (or at a symbolic price) digital fever thermometer (maximum one per household). The mercury-added thermometers handed in will be collected by the pharmacist in a dedicated project bucket, collected by a national contractor procured for the purpose, and brought to the

national facility for interim storage of hazardous waste. Public works will also be offered collection of selected self-stocked mercury-added products waste [and so will hospitals and major health clinics].

Table 11: Mitigation measures ? Output 3.5:

Potential impact	Measures	Timing	Indicator
Measures to avoid /reduce mercury exposure during project operations	The pharmacies, public works (and hospitals/clinics, as applicable) included in the project will receive written instructions on how to handle and package the mercury-added products waste safely prior to collection, in accordance with national law and international standards. Instructions for and ? if not previously given ? training in the environmentally safe collection and transport of mercury-added products waste will be given to all workers involved in the collection and transport of the waste. The instructions will be in in accordance with national law and international standards and will be part of the procurement Terms of Reference. Similarly, it will be required in the Terms that only personnel having received appropriate training can carry out the work. This will be overseen by announced and un-announced inspections by project staff. Safe working conditions and any need for personal protection equipment will be part of the instructions and training.	Years 1-3	Instructions and ToRs Training reports

[1] While changing regulation and strategies will have physical impacts, these have the inherent goal of reducing environmental impacts as per requirements of the environment conventions concerned. The conventions are designed for reducing environmental impacts and any other effects of their design are not discussed here.

[2] IMDG ? International Maritime and Dangerous Goods Code

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex L - Environmental and Social Safeguards Scoping Report - Revised	**CEO Endorsement ESS**	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project results framework

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Project Objective: To promote circular economy approaches within national development frameworks to achieve economic development while scaling-up investments and BAT/BEP to eliminate, reduce and control POPs and Mercury pollution sources in African LDCs.]	Improved environment and health through elimination of POPs pesticides and PCBs and reduced emissions and releases of uPOPs and mercury. Total numbers of beneficiaries are females 58,079 (117,877,000) and males 26,079 (115,617,000), where persons trained directly (50% F) plus receivers of Hg-free thermometers in Output 3.5 (70% F), and ? in brackets - the total population benefiting from exposure reductions.	Currently the implementation of the Stockholm and Minamata Conventions is weak in the 11 participating LDCs as the majority of the objectives of the Convention are largely un-implemented. Despite efforts made by countries, POPs and mercury are still present due to the lack of appropriate human and financial resources, as well as the lack of understanding of the Chemical related MEAs	As further specified below, establishing of project implementation bodies, project assessment activities, initial outreach to involve stakeholders in update/establishment of national legislation and strategies, and development of said legislation/strategies will be accomplished by mid-term of the project.	Relevant legislation and strategies developed and endorsed; capacity building and outreach finalised; investment projects established. Resulting in a significantly increased implementation of the Minamata and Stockholm Conventions. including targeted POPs eliminated; foundation for significant uPOPs and mercury emission /releases reductions established and beginning reductions observed; increased knowledge among involved stakeholders of the need for ESM of chemicals and waste and general.	All project participants: governments, project team members and involved stakeholders are dedicated to achieving actual increased knowledge and awareness and reduced current and future emissions and releases of targeted POPs and mercury. National executing agencies work goal-oriented at forwarding project objectives and spend the national project budgets effectively and efficiently with this sole purpose in view. The implementing agency and the executing entities/ governments are dedicated to reaching the project objectives and work rigorously, continuously, effectively and efficiently throughout the project period to engage government and other project participants and to meet project objectives in a timely manner with high quality deliverables and within the project budget.

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Component/Outcome 1 Conducive enabling environments based on strengthened legal and regulatory regimes provide a sustainable basis for the environmentally sound management and disposal of chemicals and waste, in particular POPs and mercury and its compounds	Output 1.1: Legal framework for POPs drafted/updated with recent elements, legal framework for mercury drafted. This component contributes to all GEBs, and while GEBs are mentioned under Component 3 Outputs, Components 1 and 2 are expected to make significant contributions to GEB goals (for example UPOPs emissions reduced with 356g in conjunction with Component 2 and Output 3.4, and Hg reductions of 38t in conjunction with Component 2 and Output 3.5). Indicators: Core indicator 9.4: Number of countries with legislation and policy implemented to control chemicals and waste Core indicator 10.1: Number of countries with legislation and policy implemented to control emissions of POPs to air	POPs and mercury management legislation, regulations, or strategies for sound management unavailable or inadequate **Baseline values:** **0 to control waste and chemicals** **0 to control emissions to air**	11 comprehensive assessments of the national legal and institutional framework completed New/upgraded national regulations to implement POPs and mercury conventions drafted **Mid-term targets:** **6 to control waste and chemicals** **6 to control emissions to air**	New or amended legislation and regulations which include specific POPs and mercury provisions adopted by 11 project country governments and disseminated to key national stakeholders Advisory support and required technical assistance in the implementation of the national legislation and regulations and strategies on POPs and mercury delivered through continuous project support At least one financial mechanism established in every country **End of project targets: 11 to control waste and chemicals** **11 to control emissions to air**	Governments are willing and ready to adopt regulations, etc. that target the conventions? requirements. A fruitful cooperation among project staff, government, and key stakeholders on technical, legal, and financial matters is ensured so that the new or amended regulatory package is implementable, enforceable, and sustainable.

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 1.2: Strengthened application and enforcement of updated legislative and regulatory frameworks enhanced through capacity building and sharing of lessons learned. Number of participants trained on and confident in the prioritised training topics. This component contributes to all GEBs, and while GEBs are mentioned under Component 3 Outputs, Components 1 and 2 are expected to make significant contributions to GEB goals (for example UPOPs emissions reduced with 356g in conjunction with Component 1 and Output 3.4, and Hg reductions of 38t in conjunction with Component 1 and Output 3.5). Indicators: # of people trained (disaggregated by gender)	While some capacity exists among government officers in charge, there is a need to widen the knowledge of the two convention s? requiremen ts and how these can be enforced in the countries. The infrastructu re for enforceme nt is generally weak among participatin g LDCs. **Baseline value: 0**	Technical assistance to the environmental authorities on the enforcement of the new or amended legislation and technical regulations related to POPs and mercury delivered through seven specialized trainings in each country and a total of 100 stakeholders trained and joint participation of project staff, government representatives and relevant private sector through online and face-to-face trainings **Mid-term target: 100 trained persons in each country**	250 national officers trained in each participating country representatives and relevant private sector and POPs and mercury enforcement plans developed **End of project target: 2.750 people trained**	The national project focal points and other lead stakeholders ensure an effective, efficient and participative execution of national training sessions, and committed engagement among the training participants

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 1.3: Strengthened national methodologies established to identify, assess, and manage sites contaminated by hazardous chemicals Indicators: # of strategies/methodologies adopted	There is a need for establishing national strategies for identification, assessment and management of sites contaminated with hazardous chemicals, exemplified by POPs and mercury **Baseline value: 0**	11 national strategies on contaminated sites drafted that meet Stockholm and Minamata Convention requirements **Mid-term target: 11 draft strategies**	11 national strategies adopted by governments that meet Stockholm and Minamata Convention requirements, and disseminated to relevant stakeholders **End of project target: 11 adoptions**	Governments prioritize the development of national strategies to manage POPs and Hg contaminated sites
	Output 1.4: Integrated regional and national strategies and approaches to implement environmentally sound management of chemicals and waste. Number of participants trained on and confident in the prioritised training topics. Indicators: # of regional training workshops held	Participating countries do not have an integrated and consolidated multi-sectorial approach to Sound Management of Chemicals that is coordinated with countries in the region. **Baseline value: 0**	Three annual regional sharing and training workshops held on specified subjects (e.g. illegal traffic of chemicals, hazardous chemicals and risk to human health and the environment, women and chemicals and waste, etc), including with cross-pollination among project countries with similar challenges and priorities. **Mid-term target: 3**	Five annual regional sharing and training workshops held. **End of project target: 5**	Project countries are willing to share their experience and ensure participation of both top officers and relevant technical personnel in the regional workshops. Countries are willing to work nationally and regionally to address risks of chemicals and wastes.

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Component/Outcome 2 The environmentally sound management of chemicals and waste mainstreamed into development decision making and into consumer choices	Output 2.1: Increased awareness amongst regional and national development planners of the role of ESM of chemicals and waste within Sustainable Development policies and strategies. Number of participants trained on and aware of the need for ESM of chemicals and waste in policies, plans and programmes. This component contributes to all GEBs, and while GEBs are mentioned under Component 3 Outputs, Components 1 and 2 are expected to make significant contributions to GEB goals. Indicators: # of workshops held # of plans developed # of agreements implemented	The knowledge of and priority given to ESM of chemicals and waste among policy makers is still weak in the participating LDCs **Baseline value: 0**	Two national awareness raising workshops held on building widespread support for strengthening legal and regulatory frameworks and institutional arrangements and capacities for ESM of chemicals and waste. Key stakeholder groups developed a plan to reduce POPs and Hg emissions through the measures provided through the project. Cooperation agreement between the national project coordinator and the ministers of agriculture and industry drafted. **Mid-term target: 2 national workshops per country; 1 multistakeholder plan and 1 cooperation agreement per country**	Three national awareness raising workshops held on building widespread support for strengthening legal and regulatory frameworks and institutional arrangements and capacities for ESM of chemicals and waste. Agreements implemented and resulting in actions to be included as part of the annual workplan for agriculture and industry groups **End of project target: 3 workshops; 11 agreements implemented**	The national project focal points ensure an effective, efficient and participative execution of national awareness raising sessions, and committed engagement among the workshop participants. The government lead institutions are willing to consider measures to reduces POPs and mercury.

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 2.2: Increased capacity and knowledge of public officials to incorporate ESM of chemicals and waste in public policies and programmes. Number of participants trained on and aware of the need for ESM. Number of additional meetings held with stakeholder groups. Indicators: # of workshop reports # of training programmes established # of people trained	The implement ation of ESM for hazardous chemicals requires that a wider group of public officials from other ministries, department s, agencies than those directly responsible for the convention s, are aware of the need, which is currently not the case. **Baseline value: 0**	Development of training programmes for national public officials and private sector developed **Mid-term target: 11 training programmes**	Two workshop held in each country. Five meetings held with key stakeholder groups. At least 200 officers in each country are trained and at least 8 countries adopt chemicals and waste programmes in their next National Development Plans **End of project target: 22 workshops (2 in each country; 2,200 officers trained; 8 chemicals and waste programmes**	The national project focal points ensure an effective, efficient and participative execution of national awareness raising sessions. Government and other stakeholders are willing to take part in workshop and meetings.

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 2.3: Increased engagement of key stakeholders in agriculture and industry in efforts to reduce POPs use and release. Materials prepared and disseminated. Indicators: # of meeting/multi-stakeholder consultation events # of targeted communication materials	The general awareness of the need for ESM of chemicals and waste is low among key stakeholder groups in relevant sectors such as: Agriculture, power supply sector, waste management sector and SME?s etc. **Baseline value: 0**		Seven sets of communication materials prepared and delivered to specified target stakeholder groups in the participating countries **End of project target: 7 sets of communication material**	The government lead institutions are willing to disseminate the communication materials developed.

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 2.4: Increased engagement of civil society organisations, communities and consumers in designing, promoting and implementing ESM for chemicals and wastes. Awareness material developed. Access and download counts from project webpage and social media platforms. Indicators: # of awareness raising strategies # of curricula adopted # of project website/social media platform visits # of topic addressed	The public at large has very low awareness of the hazards of the targeted chemicals. Mercury-added and POPs-containing products are traded and used with no restrictions . **Baseline value: 0**	Awareness strategy developed and accepted by the national project focal points and involve NGOs and civil society representatives and ministries and institutions responsible for school and higher education curriculums. Curricula developed for primary schools on Chemicals and Waste Management. A social information exchange platform for the region with national sections is designed. **Mid-term target: 1 awareness strategy per country; 1 curricula adopted per country; 1 social exchange platform**	National awareness raising strategy implemented involving NGOs and national ministries involved on Chemicals management; one national curricula (per country) developed and one social information exchange platform operational and delivering training and resources on POPs and mercury issues. **End of project target: 11 national awareness raising strategies implemented; social information exchange platform delivering at least 1 training and relevant resources on at least 10 topics**	The ministries and institutions responsible for school and higher education curriculums are willing and able to promote positive cooperation and a wide use of the outreach material in the relevant educational institutions

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Component/Outcome 3 POPs and mercury reduced or phased out from processes and products through substitution, environmentally sound management and the application of BAT/BEP	Output 3.1: National facilities established for interim storage of mercury and POPs waste awaiting final disposal. Number of facilities improved/established. Indicators: Core Indicator 10.2: Number of emission control technologies/practices implemented	The infrastructure for ESM of hazardous waste is very limited in participating LDCs; facilities for treatment are few and environmentally inadequate and they treat only few hazardous waste types, not POPs nor mercury. **Baseline value: 0**	Suitable sites for improvement/establishment of haz waste storage assessed and selected in the country participating in this output. **Mid-term target: 0**	Facilities improved/established for haz waste storage in the country participating in this output (other countries that undertake Outputs 3.2, 3.3 and/or 3.5 will have short term storage sites only). **End of project target: 1**	Suitable sites are selected and approved/accepted by all relevant stakeholders. Government and private owners of existing facilities cooperate actively and takes ownership for improvement/establishment process and the finalised facilities.

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 3.2: POPs pesticides wastes destroyed. 742 tonnes of POPs pesticides waste destroyed. Indicator: Core indicator 9.1: Solid and liquid POPs removed or disposed (by POPs Pesticide type)	The 5 of the 6 countries prioritising this output has identified obsolete pesticides, of which some are confirmed as POPs, that need ESM and the national capacity and resources for ESM are inadequate. Zambia has no identified stocks but need a detailed inventory. **Baseline value: 0**	Detailed inventory and risk assessment/prioritisation conducted in the countries undertaking this output. **Mid-term target: 400 tonnes of POPs pesticides waste destroyed.**	Re-packaging, removal and destruction of identified pesticides conducted in at least 5 of the 6 countries undertaking this output. Environmental and social risk scoping and strategies prepared for any remaining site contamination performed. **End of project target: 742 tonnes of POPs pesticides waste destroyed.**	Pesticide owners cooperate in data collection and removal operations. All team members and entities involved are carefully instructed in adequate and safe handling of the waste. Experienced contractor assuring safe transport and treatment available.

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
-	Output 3.3: Environmentally sound management of PCB. 540 tonnes of PCB waste treated. Indicators: Core indicator 9.1: Solid and liquid POPs removed or disposed (PCBs)	The 6 countries prioritising this output has identified (preliminarily) PCB waste that need ESM and the national capacity and resources for ESM are inadequate **Baseline value: 0**	Revised/updated national inventory of PCB-containing equipment and risk assessment/ranking performed in the 6 countries undertaking this output **Mid-term target: 300 tonnes of PCB waste treated.**	Maintenance and servicing schemes for PCB equipment performed. Final disposal operations conducted. **End of project target: 540 tonnes of PCB waste treated.**	PCB owners cooperate in data collection, development of servicing schemes, and removal operations. All team members and entities involved are carefully instructed in adequate and safe handling of the waste. Experienced contractor assuring safe transport and treatment is available.

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 3.4: Reduced uPOPs emissions and releases from municipal waste management through reduction of open burning of waste. UPOPs emissions reduced with 356 **gTEQ** in conjunction with Components 1 and 2. Indicators: Core indicator 10: Reduction, avoidance of emissions of POPs to air from point and non-point sources (within project period) - gTEQ Core indicator 5.3: Amount of Marine Litter Avoided Core Indicator 10.2: Number of emission control technologies/practices implemented	Open burning of waste informally and on landfills is common in the participating LDCs and the general waste management capacity is weak. While certain valuable waste types are collected to some degree and some facilities are already engaged in recycling of plastics, the amounts collected and recycled are deemed minimal and a substantial additional potential for diverting plastics waste from burning to recycling exists. The sector is largely informal, poorly paid and uneducated, and open burning of waste is often used as a means	For the 5 countries participating in this output: 3.a1) Opportunities for potential up-scaling of manufacturing from recovered plastics (and tyres) identified and assessed/prioritised. 3.a2) Communities/opportunities for potential demonstration or up-scaling of separate collection of recoverable plastics identified and assessed/prioritised. 3.b) (2 countries) Cement kiln facilities for energy recovery of otherwise non-recyclable tyres and plastics identified and assessed/prioritised. **Mid-term targets:** **150 gTEQ** **20,000 metric tons of marine litter** **0 emission control technologies**	3a1) Measures for scaling up manufacture from recovered plastics implemented. 3.a2) Measures for demonstrating or scaling up separate collection of recoverable plastics implemented. 3.b) (2 countries) Measures for energy recovery from un-recyclable tyres and plastics implemented. **End of project targets: 356 gTEQ** **63,000 metric tons of marine litter** **1 emission control technologies**	National and local government is positively encouraging and supporting engagement and training of public and private sector, including waste pickers. 3a1) Manufacturers from recovered plastics (and tyres) are investing own time and means, as feasible, in taking ownership of implementing and running the improved production capacity. 3a2) Local organisations and community leaders support the formalisation and other measures to demonstrate or scale up separate collection activities, and the participating waste pickers cooperate and receive training towards achieving project objectives. 3b) Cement kiln facilities are investing own time and means in implementing and running the energy-recovery from plastics and tyres, while sharing specified data and meeting the performance requirements specified in the project.

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 3.5: Reduced availability and use of mercury-containing products and models for their proper disposal demonstrated. Mercury-added product input to society reduced with 38 t in conjunction with Components 1 and 2. Indicators: Core indicator 9.2: Quantity of mercury reduced (within project period) Core indicator 9.6: Quantity of POPs/Mercury containing materials and products directly avoided (within project period)	There are currently no restrictions on mercury-added products import and trade in the participating LDCs and the sales of such products continue. While alternatives are available, they are generally more expensive, and as consumers are unaware of the danger of mercury, they do not give incentives for avoiding mercury. Separate collection and ESM of mercury containing waste is absent in the participating LDCs, meaning that mercury is co-mingled with municipal waste and dumped, burnt and landfilled with resulting	For the 2 countries participating in this output: a) Detailed inventory of availability, flows of, and societal drivers for, mercury-added products performed. b) Capacity and capability to analyse certain products suspected to contain mercury provided (XRF analysers provided and training in its use performed). c) Possibilities for model systems for collection and disposal of mercury-added products assessed and planned. **Mid-term targets:** **20 t reduced** **1,500 t avoided**	c) Model systems for collection and disposal of mercury-added products implemented and collected mercury-added waste products disposed safely. **End of project targets: 38 t reduced** **3,775 t avoided**	a) Trades and importers (and the any producers present) are willing to share data on products for which data cannot be extracted from trade statistics. b) Project staff and environmental inspectors are adequately trained in the performance of market inspections (under Component 1) and use of guidelines and the handheld XRF analyser to identify mercury-added products targeted. c) Pharmacists are willing, adequately instructed for the collection of specified mercury-added products. Experienced contractor assuring safe transport and final disposal is available.

Component/outcome	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Component/Outcome 4 Effective and efficient project delivery involving informed decision making at regional and national levels	Output 4.1: Project website created and maintained with publishable materials Indicators: # of websites created # of materials published	**Baseline value: 0**	Project website created (during 1st project year) and maintained with publishable materials available at the time **Mid-term target: 1 project website created**	Project website maintained with all publishable project materials available including annual and final reports. **End of project target: 11 instances of published materials on project website**	Project materials finalised in a timely manner
	Output 4.2: Project Steering Committees established; meetings held Indicators: # of meeting summary reports and other supporting documents	**Baseline value: 1 PSC established**	Project Steering Committees established nationally (NPSC) and regionally (RPSC); meetings held **Mid-term target: 5 PSC meetings held**	Project Steering Committees established nationally and regionally; all meetings held (one per year) **End of project target: 10 PSC meetings held**	All the relevant stakeholders well aware of GEF/AfDB rules, and willing to cooperate in the timely establishment of project management structures
	Output 4.3: Yearly lessons-learned report/publication prepared and disseminated Indicators: # of reports # of dissemination activities undertaken	**Baseline value: 0**	Yearly lessons-learned reports/publications prepared and disseminated **Mid-term target: 2 reports**	All yearly lessons-learned reports/publications prepared and disseminated at international fora like COPs for POPs and Hg **End of project target: 5 reports**	Project reporting and planning mechanisms and templates communicated in a timely manner and agreed with project management staff at all levels

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 4.4: Measuring increasing awareness and understanding of the requirements for the environmentally sound management of chemicals and waste Indicators: # of monitoring and adaptive management plans Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	**Baseline value: 0** **0 female beneficiaries** **0 male beneficiaries**	Monitoring plan established on awareness and understanding of the beneficiaries and stakeholders. Interim monitoring performed and adaptive measures undertaken. **Mid-term target: 1 monitoring plan; 2 interim monitoring and adaptive measures if necessary** **20,000 female beneficiaries** **12,000 male beneficiaries**	Continued monitoring and adaption throughout the project. Final surveys will be included in assessments of the success of project actions **End of project target: 11 implemented monitoring and adaptive management plans** **58,079 female beneficiaries** **26,079 male beneficiaries**	Clear monitoring plan established and known and committed to by output managers.
	Output 4.5: End of project publication prepared and disseminated Indicators: # of publications prepared # of dissemination activities undertaken	**Baseline value: 0**	**Mid-term target: 0**	End of project publication prepared, posted on project website and disseminated **End of project target: 1**	Goals of the project are well known and committed to by project staff at all levels

Component/out come	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
	Output 4.6: Mid-term and terminal project evaluations Indicators: # of evaluation reports and supporting materials	**Baseline value: 0**	Mid-term evaluation and auditing activities carried out **Mid-term target: 1**	Terminal and auditing activities carried out; terminal reporting completed and submitted to project countries, AfDB and GEF **End of project target: 1**	Project stakeholders actively cooperating in all evaluation and auditing activities Evaluation and auditing are carried out in an independent and professional way, with the purpose to enhance project activities and generate recommendations for project success and sustainability after project closure

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

1. STAP Review Comments ? 1 June 2019

	Part I: Project Information		Response	AfDB
	GEF ID		10218	
	Project Title		AFLDC-2 Scaling-up Investment and Technology Transfer to Facilitate Capacity Strengthening and Technical Assistance for the Implementation of Stockholm and Minamata Conventions in African LDCs	
	Date of Screening		26-May-19	04-June-19
	STAP member Screener		Jamidu Katima	
	STAP secretariat screener		Sunday Leonard	
	STAP Overall Assessment		Major issues to be considered during project design	

			The project proposes to scale-up investment and technology transfer to facilitate capacity building and technical assistance for the implementation of the Stockholm and Minamata Conventions in some African LDCs through improvement of the legislative and regulatory framework; promotion of enforcement and administrative capacity; implementation of BAT/BEP pilot demonstrations; and coordinated information dissemination and awareness raising in the region.	

				The current project will build on the experience in AFLDC-1, for example, coordination and legislative enforcement abilities, the model legislation and BAT/BEP piloted on plastic waste management including the reuse of waste plastic bags as raw material for various articles and formulating and facilitating field testing of bio-botanical pesticides.
		1	The project will build on a prior project in the same countries (AFLDC-1). The PIF listed some of the shortcomings of AFLDC-1 but did not adequately present those shortcomings or show how AFLDC-2 (the current project) will address them and ensure success. It is important to provide specific lessons learned from AFLDC-1 which had almost the same components: (i) legislative and regulatory framework development; (ii) sustainable enforcement and administrative capacity; (iii) coordinated information dissemination and awareness raising; (iv) BAT/BEP in industrial production processes; and (v) reduction of exposure to POPs, and contaminated sites. This information should be used to inform the design of the project. For example, the reasons why some outputs /outcomes were not achieved in AFLDC-1.	Another key recommendation from the AFLDC-1 evaluation report is to improve results, effectiveness and sustainability of interventions, preference should be given to country specific interventions, or limited scale regional projects; in those cases, efforts should be made to reduce the number of targeted countries to a minimum, grouping those that are developmentally similar and linguistically identical

		2	STAP believes that this is an important project that can generate global environment benefits (GEBs). However, the current PIF needs to be significantly improved: ? Project objective: the current objective is focused on the elimination, reduction and control of POPs pollution sources in African LDCs. However, the detailed proposal suggests that the project will also address mercury pollution. The project objective needs to be revised to reflect this.	Mercury pollution has been added to the objective.

		3	? The circular economy is included in the project objective and littered across several sections of the PIF, but there is limited information on how the approach will be implemented, how it will deliver the expected GEBs. And the project components, and their associated outcomes and outputs, do not adequately reflect circular economy principles. For more information on elements of the circular economy, please see: STAP, 2018: http://www.stapgef.org/plastics-and-circular-economy; Circle Economy: https://www.circle-economy.com/the-7-key-elements-of-the-circular-economy; and further information is available from the Ellen MacArthur Foundation at: https://www.ellenmacarthurfoundation.org/resources/read	The circular economy approach has been elaborated in section 3 (?the proposed alternative scenario with a brief description of expected outcomes and components of the project?), output 3.6, regarding plastics and e-waste. Regarding plastics, this will draw on experience from various initiatives including the Global Plastic Action Partnership (GPAP). The approach will broadly be based on the following: (i) raising the awareness of the consumers to use less single-use packaging and to shift to plastics made from alternative, renewable, and biodegradable non-fossil feedstocks; (ii) reducing the plastic waste accumulation in the environment, on land, and in water, which cause negative environmental and health impacts, through developing and or strengthening the recycling of plastic wastes;

		4	? The PIF lacks specificity about the planned interventions and which chemicals or waste are being targeted, and the expected GEBs. For example, as presented in the PIF, agro-industrial parks are a thematic window for addressing the chemicals and waste related challenges in child projects. However, the PIF contains limited information on how the establishment of an agro-industrial park will provide chemical and waste (mercury and POPs) benefits. The PIF states that ?child projects under this thematic window will promote BAT/BEP to reduce uPOPs releases, phase-out POPs and mercury used or emitted from or in processes and products and demonstrate the sound management/disposal of POPs and mercury/mercury-containing waste?. But there are no details on how this would be done, the specific chemicals concerned, how they are generated, and what will be needed to deliver the alternative scenario, including which BAT/BEP would be adopted. Instead, there is more emphasis on the developmental and economic transformation expected from integrated agro-industrial processing.	The section has been revised to provide more clarity to the objectives and relevance of the baseline projects under the thematic window: Agro-industrial parks. The child projects under this thematic window will promote BAT/BEP to reduce uPOPs releases and use of materials and / or products containing POPs or Mercury within the industrial zone operational system. The PIF has been updated to provide more information on how the how the establishment of an agro-industrial park will provide chemical and waste (mercury and POPs) benefits. This is best described through the concept of Industrial Symbiosis coupled with BAT/BEP. When the supply chain components within an industrial system are integrated to be symbiotic, rather than independent, each contributing to

		5	? Similarly, the PIF indicates that electrical and electronic equipment is a sector of interest, but there is limited information on what will be done, and what outcomes are expected.	More detail has been provided in section 3 (?the proposed alternative scenario with a brief description of expected outcomes and components of the project?).

		6	Project components/outcomes and outputs: the PIF only presents the expected outcomes and outputs for each component with minimal or no information on the actual interventions that will lead to these outcomes/outputs. Without this information, it is impossible to assess the scientific or technical quality of the interventions. This information is also essential to monitor the implementation and assess the success of the project.	The specific BAT/BEP to be employed will be developed during the PPG phase and closely monitored and potentially modified during project execution, as it depends on local conditions. BAT/BEP to be considered during the PPG phase include those piloted under the AFLDC-1 project, among others: (i) BAT/BEP on plastic waste management including the reuse of waste plastic bags as raw material for various articles (piloted in Guinea); and (ii) formulating and facilitating field testing of bio-botanical pesticides (piloted in Togo). Factors such as feasibility (related to social, economic, and technological aspects), replicability, sustainability, and alignment with the national development plans will be considered. The BAT/BEP and related technology transfer required under the project will be confirmed by

		7	? Component 2, Output 2.3 aimed at ?increased awareness amongst farming associations and cooperatives, farmers and farm suppliers of sustainable approaches to plant protection that avoid the use of POPs chemicals and mercury and mercury compounds?. What aspect of mercury and mercury compounds use in agriculture is being considered? What agricultural production uses mercury and mercury compounds? How significant and how prevalent is this in the African LDC context? What intervention is expected to curb this, and what are the benefit expected to be achieved through these interventions?	As there is little information known about mercury and mercury compounds use in pesticides, the project will investigate its potential presence and address accordingly if applicable. Language in the proposal has been adjusted to make reference to reflect this approach. It is currently not yet known, and the baseline projects are currently being developed, which is a good opportunity to address these issues at the design stage. Additional information has been added to the respective section of the PIF.

		8	? Output 3.6 under component 3 will demonstrate ?approaches to collection and recycling of short-lived and single-use plastics.? The recycling of short-lived and single-use plastics may be a step in the right direction, but the latest scientific knowledge, including about the circular economy, waste management hierarchy and current global trends, suggests that the sustainable solution is to avoid single-use plastics completely. STAP recommends that the project proponents review its paper on plastics and the circular economy (STAP, 2018: http://www.stapgef.org/plastics-and-circular-economy) as well as relevant publications on the new plastics economy (https://newplasticseconomy.org/about/publications), which would provide some guidance on what to consider for alternatives and sustainable solutions in the plastic sector.	This has been addressed in section 3 (?the proposed alternative scenario with a brief description of expected outcomes and components of the project?).
		9	? Global Environmental Benefits (GEBs): the section mainly contains a listing of expected GEBs from the project with no quantitative information. Some quantitative information is presented in the ?core indicators? section of the PIF; this is usually elaborated in the section on Global Environment Benefits, including information on how the expected GEBs were estimated. This information is lacking in the current PIF.	These estimations are based on national data and experience from previous projects and experiences. During the PPG phase these estimates will be explored further and the GEBs more quantitively assessed. The GEBs section in the PIF has been updated to provide more information.
		10	? The stakeholder section is mainly a listing of possible stakeholders without any information on how they will be engaged during project preparation and their respective roles and means of engagement as requested in the PIF.	Additional information on the tole of the respective stakeholder groups has been added to the PIF.

		11	(? Several risks may affect the project, and these have been listed. The risks, however, need to be qualified (rated) in terms of low, medium or high. This is essential to ensure risks are properly managed and monitored. . ? Some of the child projects are in coastal countries susceptible to climate change and extreme events, including sea-level rise and flooding. It is essential that these climate impacts are considered in determining which BAT/BET is adopted, and how interventions are carried out to ensure limited environmental and human exposure to pollutants. Climate change is expected to increase the remobilization and bioavailability of POPs. It is also important that project outputs, for example, waste management infrastructure is designed and built to withstand future climate change impacts and are protected against natural hazards. STAP therefore recommends that climate risk screening is carried out during the project design phase, and a management action drawn up.	Climate risk screening will be carried out during the project design phase, and a management action will subsequently be prepared. The PIF has been updated to reflect this
		12	? Coordination and information dissemination need further clarification, because LDCs have different challenges and political dynamics, which will affect the performance of the project.	The relevant section of the PIF has been revised to provide more information on coordination and information dissemination.
	Part I: Project Information	**What STAP looks for**	**Response**	
	B. Indicative Project Description Summary			
	Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	Need improvement to incorporate all targeted GEBs in the project. See STAP overall comments	See response to STAP Overall comments number 9.

	Project components	A brief description of the planned activities. Do these support the project?s objectives?	The interventions do not explicitly explain the transfer of technology. The project is talking of BAT/BET in general terms without mentioning which technologies	The specific BAT/BEP to be employed will be developed during the PPG phase and closely monitored and potentially modified during project execution, as it depends on local conditions. BAT/BEP to be considered during the PPG phase include those piloted under the AFLDC-1 project, among others: (i) BAT/BEP on plastic waste management including the reuse of waste plastic bags as raw material for various articles (piloted in Guinea); and (ii) formulating and facilitating field testing of bio-botanical pesticides (piloted in Togo). Factors such as feasibility (related to social, economic, and technological aspects), replicability, sustainability, and alignment with the national development plans will be considered. The BAT/BEP and related technology transfer required under the project will be confirmed by

	Outcomes	A description of the expected short-term and medium-term effects of an intervention.	Without elaboration on the type of BAT/BEP to be implemented it is not easy to tell whether the global environmental benefits will be generated.	See response to STAP Overall comments number 6. BAT/BEP will be selected in accordance with the BAT/BEP guidance documents and recommendations from the relevant Conventions
		Do the planned outcomes encompass important global environmental benefits/adaptation benefits?		
		Are the global environmental benefits/adaptation benefits likely to be generated?		
	Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	More elaboration is needed.	See response to STAP Overall comments number 6 and the first version of the Theory of Change. The Theory of Change will be further elaborated based on comprehensive multi-stakeholder consultants

	Part II: Project justification	A simple narrative explaining the project?s logic, i.e. a theory of change.		
	1. Project description. Briefly describe:			
	1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	Is the problem statement well-defined?	Need some improvements. See STAP overall comment	The PIF has been revised according to the STAP comments. Kindly see the response to STAP comments above
		Are the barriers and threats well described, and substantiated by data and references?	The barriers are summarized in the sentence ?insufficient capacity to introduce and enforce regulatory approaches; lack the capacity and financial resources to implement plans to address priority issues; lack viable alternative environmentally sound technologies and techniques; and struggle to engage the private sector and potential beneficiaries in the behavioural change? however no data is provided.	An elaboration on the general barriers to scaling-up investments and BAT/BEP to eliminate, reduce, and control POPs and mercury pollution sources in African LDCs has been included in the PIF. During the PPG phase a detailed barrier analysis will be undertaken in each country, as well as, at the regional level.

		For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?	n/a	
	2) the baseline scenario or any associated baseline projects	Is the baseline identified clearly?	Yes	
		Does it provide a feasible basis for quantifying the project?s benefits?	It lacks data as such cannot provide basis for quantifying benefits	The current baseline is preliminary and will be detailed and further clarified during the PPG phase, when it is expected that detailed in country consultations will take place.

		Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	It is not robust enough. The shortcomings of AFLDC1 projects are listed without explanation	See response to STAP Overall comments number 1. One of the major shortcomings of the AFLDC-1 relates to a week coordination between national and regional project partners. The baseline projects have a national coordinator for each project. The project will make a provision for a human resource to be dedicated to the project full-time. This person will be based within the project management team of the baseline project. Additionally, the BRC regional Centres will strengthen the regional coordination through regular interaction with national project coordinators.
		For multiple focal area projects:	n/a	

		are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators;		
		are the lessons learned from similar or related past GEF and non-GEF interventions described; and		
		how did these lessons inform the design of this project?		
	3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	What is the theory of change?	The project intends to strengthen the enabling environment and national enforcement capacities for the management and phase-out of POPs/Mercury and its compounds; promote the environmentally sound management of chemicals and wastes; replicating and scaling up of efforts to reduce POPs and mercury trade, use, emission and release	
		What is the sequence of events (required or expected) that will lead to the desired outcomes?		
		? What is the set of linked activities, outputs, and outcomes to address the project?s objectives?		

		? Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?	Yes, however, assumptions are not explicitly stated	Building on the identified shortcomings of AFLDC1 which found that a ?one size fits all? approach is not effective across the participating countries, detailed assumptions will be outlines during the PPG phase as an outcome of national consultations.
		? Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?		
	5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing	GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?		
		LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?		

	6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF)	Are the benefits truly global environmental benefits, and are they measurable?	See further comments on GEBs in STAP?s overall comments above	
		Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	See further comments on GEBs in STAP?s overall comments above	
		Are the global environmental benefits explicitly defined?	See further comments on GEBs in STAP?s overall comments above	
		Are indicators, or methodologies, provided to demonstrate how the global environmental benefits will be measured and monitored during project implementation?	Methodology for monitoring not apparent	Component 4 has been elaborated in response to this comment and a detailed monitoring and evaluation approach will be prepared during the PPG phase with specific indicators and methodologies.
		What activities will be implemented to increase the project?s resilience to climate change?	n/a	
	7) innovative, sustainability and potential for scaling-up	Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	More elaboration is needed	The PIF has provided an elaboration of section 7. Innovation, sustainability and potential for scaling-up.

		Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?	Not clearly articulated	This section of the PIF has been elaborated Kindly see section 7. Innovation, sustainability and potential for scaling-up.
		Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?		
	1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.			

	2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities.If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.	Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?	Yes but roles are not yet defined	The stakeholder section was revised in the PIF to include roles of the key stakeholder groups. A detailed project stakeholder analysis will be done during the PPG phase.
		What are the stakeholders? roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?	See above	

	3. Gender Equality and Women?s Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/ tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project?s results framework or logical framework include gender-sensitive indicators? yes/no /tbd	Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?	Yes but needs more elaboration	The PIF has been revised to include the statement: Gender differentiated risks and mainstreaming opportunities and measures will be identified during the PPG phase in line with the GEF policy on gender equality and AfDB?s gender strategy and policy. Additionally, a gender action plan will be developed during the PPG phase.
		Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?		

	5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design	Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project?s control?	More thinking on risks is needed. Besides the level of risk, whether low, medium or high is not shown. Furthermore, climate risk on project output and outcome need to be considered. See STAP overall comment for more information	The risks section of the PIF has been revised to include environmental and social risks, as well as, climate risks. Risk and mitigation measures will be identified during the PPG phase in accordance with the AfDB Integrated Safeguards Policy, which covers Environmental and Social Safeguards as well.
		Are there social and environmental risks which could affect the project?		
		For climate risk, and climate resilience measures:		
		? How will the project?s objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately?		
		? Has the sensitivity to climate change, and its impacts, been assessed?		

		? Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with?		
		? What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?		
	6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives	Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?	More elaboration on coordination is needed	The PIF has been updated in section on coordination and in component 2.
		Is there adequate recognition of previous projects and the learning derived from them?		
		Have specific lessons learned from previous projects been cited?		
		How have these lessons informed the project?s formulation?		

		Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?		

	8. Knowledge management. Outline the ?Knowledge Management Approach? for the project, and how it will contribute to the project?s overall impact, including plans to learn from relevant projects, initiatives and evaluations.	What overall approach will be taken, and what knowledge management indicators and metrics will be used?	More elaboration is needed	The PIF has been revised to include the following information: At the national level, during project implementation, a website for sharing relevant project information will be designed and launched. Public access will be granted to all resources which are of public relevance, such as project performance and guidance on POPs/Mercury material management for easy retrieval by all potential users including industry, NGOs, academia, and other project partners. User-friendly summaries and multimedia materials based on the project activities will be uploaded on the website periodically and proposed for partners? websites. Electronic newsletters will be regularly issued, and feedback surveys will be conducted. All major types of media will be used to disseminate information about project objectives and activities

		What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?		
	STAP advisory response	**Brief explanation of advisory response and action proposed**		
	1. Concur	STAP acknowledges that on scientific or technical grounds the concept has merit. The proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.		

		* In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that ***?STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design.?***		
	2. Minor issues to be considered during project design	STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:		
		(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised;		

		(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.		
		The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.		
	3. Major issues to be considered during project design	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:		

		(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.		

2. AfLDC-2: Council Comments 2019

CHEMICALS AND WASTE

13. Regional ? (Angola, Ethiopia, Gambia, Guinea, Liberia, Mauritania, Senegal, Sierra Leone, Togo, Uganda, Zambia): AFLDC-2 Scaling-up Investment and Technology Transfer to Facilitate Capacity Strengthening and Technical Assistance for the Implementation of Stockholm and Minamata Conventions in African LDCs (AfDB) (GEF Project Financing: $21,300,000) GEF ID = 10218

Council Member comments	AfDB Response
Canada Comments	
? Canada can be supportive of this project, from Minamata perspective, if the recommendations and lessons learned from AFLDC-1 (mainly institutional in nature) are taken into consideration. Canada looks forward to reviewing the full project proposal.	Thank you for the comment. Based on information from the countries, as well as the evaluation of the AFLDC-1 project, the level to which AFLDC-2 project countries benefited from AFLDC-1 varied. Also, the Minamata Convention was not a part of AFLDC1, and the Stockholm Convention has been amended further since the undertaking of AFLDC1. The recommendations and lessons learnt from AFLDC-1 have been captured and taken into consideration during the project design and will be considered during project implementation. Further follow-up activities are needed during the project implementation. For a summary on AFLDC1 activities and how recommendations and lessons learnt will be replicated and scaled-up on AFLDC-2, kindly see Annex O.
? This project is in line with previously adopted Stockholm COP decisions and proposed actions to the GEF in the 2018-2022 priority areas.	
Germany Comments	
Germany commends this proposal and welcomes the continuation of AFLDC-1. At the same time, Germany has the following comments that it suggests be addressed in the next phase of finalizing the project proposal: Suggestions for improvements to be made during the drafting of the final project proposal:	

? Coordinating the number and enormous amount of Co-financings is very important to make sure that they support project goals and outcomes. Germany highly recommends to clearly outline the mechanisms and steering structure to guide this process in the final project document.	Thank you for the comment. The co-financing for this project has been revised and adjusted to include only relevant co-financing that supports the project goals and outcomes. Regarding the mechanisms and steering structures, there will be appropriate inter-ministerial coordinating committees in each country that will be responsible for coordinating the activities related to the co-financing in relation to the GEF project activities. Kindly see the implementation arrangements in the CEO Endorsement document for more details. Additionally, the co-financing will be managed according to AfDB rules and regulations.
The knowledge management section speaks mostly about communication (materials), but not on knowledge management and sharing, best practices and peer learning among countries /stakeholders. Germany suggests to include such measures in the project design to create synergies and long-term sustainability of the project.	Thank you for the comment. The knowledge management section has been further developed and improved to include knowledge management tools and integrated activities for knowledge sharing, best practices and peer to peer learning among countries and stakeholders. It is strongly agreed that these measures in project design will contribute to the creation of synergies and long-term sustainability of the project results. Kindly see the knowledge management section for further details on the key knowledge management activities
? Additionally, Germany suggests that special attention should be given to mainstream the importance and benefits of ESM of chemicals and waste into the relevant sectors and government ministries, and be integrated into relevant components of the final proposal.	Thank you for the comment. The importance and benefits of ESM of chemicals and waste is a central theme throughout the project. Accordingly. The mainstreaming of ESM will be ensured, and it is particularly captured under component 1, which has linkages to all the other components as well. Its relevance features throughout the four components
? Finally, Germany advises to include the potential lack of control and enforcement into account in the risk section of the proposal and devise associated risk mitigation measures.	Thank you for the comment. The following risk has been highlighted in the project design: *Suppliers and traders may exploit weaknesses in regulation, lack of control, or its enforcement to resist attempts to switch away from POPs- and mercury-containing products.* The abovementioned risk will be mitigated in the following way: *Institutional awareness raising, training and capacity building amongst enforcement officials, inspectors, etc. and amongst suppliers and traders will be provided. The enforcement officials will be trained in detection of relevant products.* *Awareness rising and communications efforts for consumers towards changes in consumer demand are designed to further address this risk.*
United States Comments	

? We believe that the overall goals of the AFLDC-2 project are positive, and address important chemical and waste priorities related to the implementation of Stockholm and Minamata Convention obligations. However, we do not support the inclusion of project activities directed at the reduced manufacture, trade, and use of short-lived and single-use plastics, and incorporation of extended producer responsibility (EPR) measures. A project implementing these activities is not consistent with the GEF mandate, which is to achieve global environmental benefits. Single-use plastic bans do not yet have a demonstrated net environmental benefit, as analyses of the full economic and environmental impacts, including life-cycle analysis of the impact of plastic alternatives, are lacking. Unless activities related to the reduction in manufacture, trade, and use, and a ban of short-lived and single-use plastics; and incorporation of Extended Producer Responsibility are removed during further project development, the United States will not be in a position to support this project at the CEO endorsement stage. The below comments from the United States were provided prior to the Council meeting. An initial agency response was provided and can be found in the list of documents specific to the project in the GEF Portal. ? Can the GEF please provide a breakdown of the relative funding directed to each country?	Thank you for the comment. The project is not considering the inclusion of project activities directed at the reduced manufacture, trade, and use of short-lived and single-use plastics, and incorporation of extended producer responsibility (EPR) measures in this regard. The project will promote the development of national circular economy frameworks that will lead to the environmentally responsible and sustainable production and management of POPs containing plastics and plastic waste. A breakdown of the relevant funding directed to each country can now be found within the project package, specifically the CEO Endorsement document and the country annexes. 16 April 2022 The below breakdown of the relative funding directed to each country has been added to the CEO Endorsement document

Country	Total project cost
Angola	1.749.104
Ethiopia	3.822.759
The Gambia	1.485.213
Guinea	1.598.464
Liberia	1.972.954
Mauritania	1.900.403
Senegal	1.113.174
Sierra Leone	1.547.574
Togo	3.134.241
Uganda	1.137.388
Zambia	1.838.725
Total	21.300.000

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: ?????	
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***

	Budgeted Amount	*Amount Spent To_date*	*Amount Committed*
AfDB			
Regional and national consultation workshops	100,000	56,000	13,910
UNITAR			
Preparation of the AfDB project document and GEF CEO endorsement project submission:	160.000	190,090	0
Consultants? missions and travel	40.000	40,000	0
TOTAL	**300,000**	**286,090**	**13,910**

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

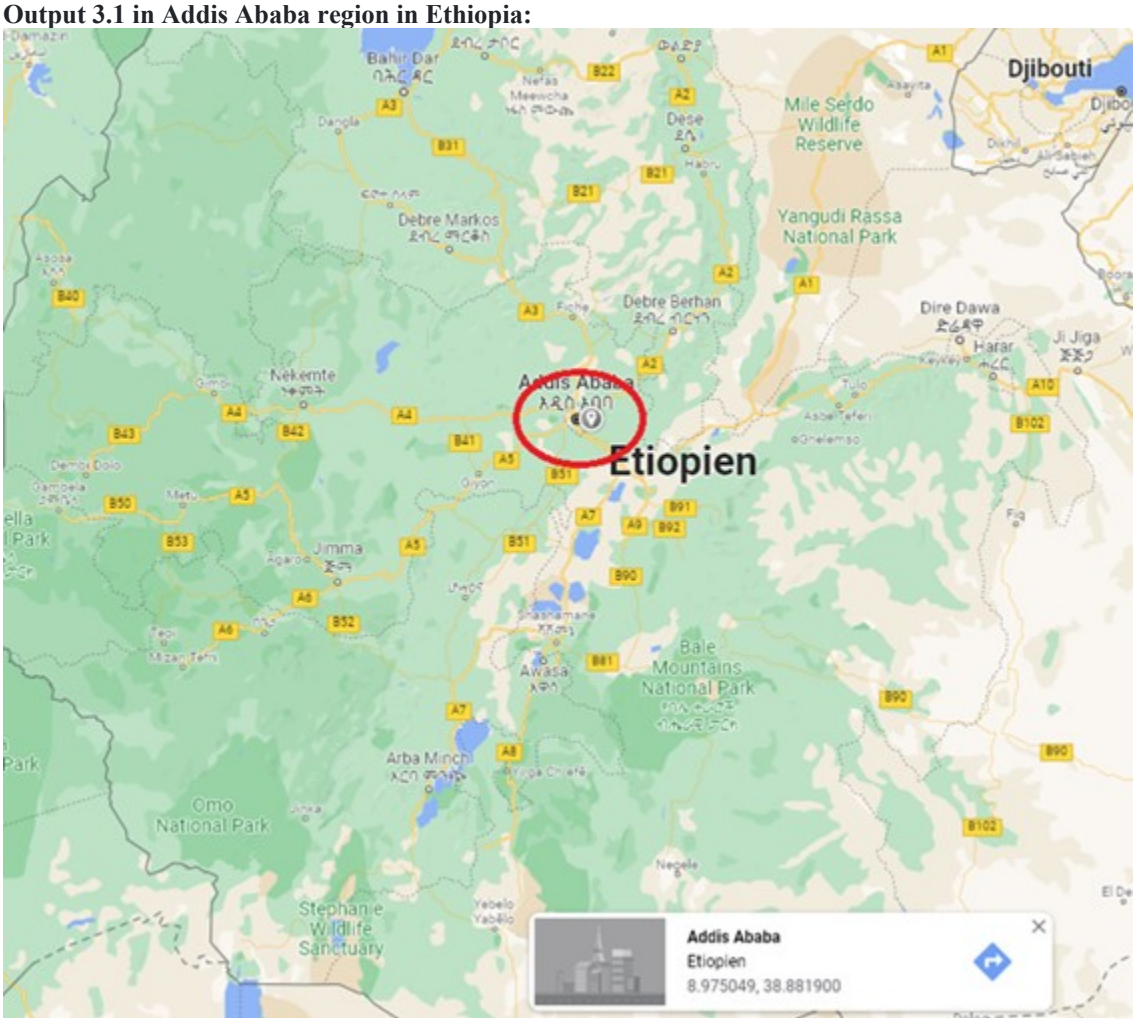
Participating countries: ***Angola, Ethiopia, The Gambia, Guinea, Liberia, Mauritania, Senegal, Sierra Leone, Togo, Uganda, Zambia.***

	Country	Coordinates
1	**Angola**	12 30 S, 18 30 E
2	**Ethiopia**	8 00 N, 38 00 E
3	**Gambia**	13 28 N, 16 34 W
4	**Guinea**	11 00 N, 10 00 W
5	**Liberia**	6 30 N, 9 30 W
6	**Mauritania**	20 00 N, 12 00 W
7	**Senegal**	14 00 N, 14 00 W
8	**Sierra Leone**	8 30 N, 11 30 W
9	**Togo**	8 00 N, 1 10 E
10	**Uganda**	0 19 N, 32 33 E
11	**Zambia**	15 00 S, 30 00 E

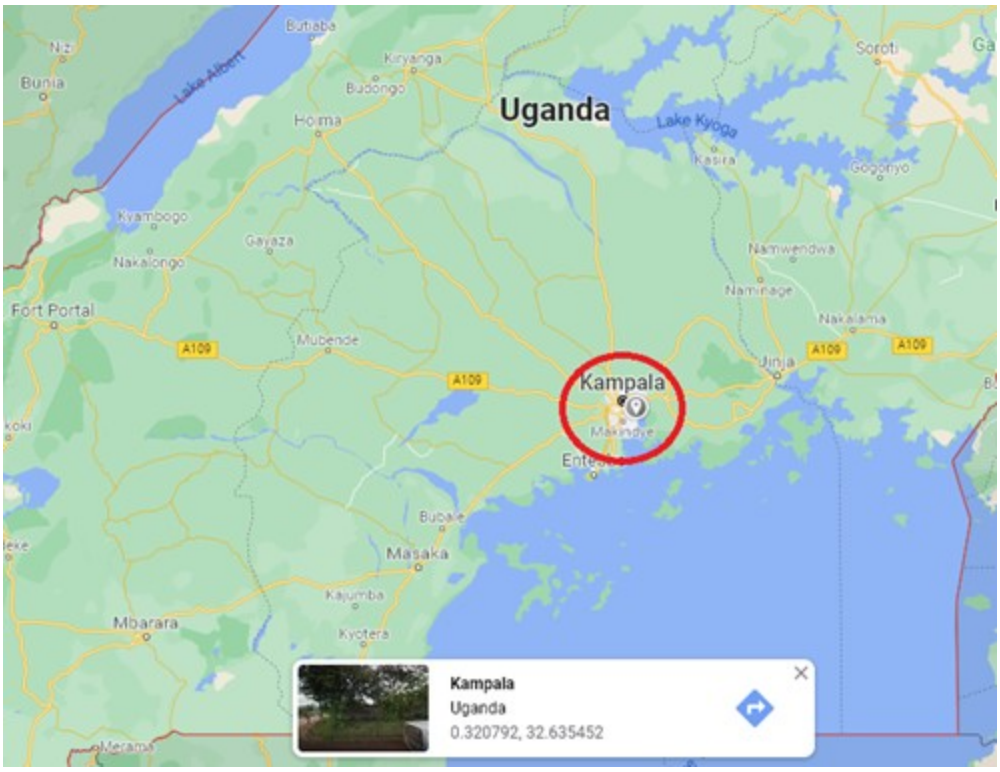
Location in countries: The status as regards location of project interventions is listed below:
•Output 3.1 in Addis Ababa region in Ethiopia, see map and coordinates below;
•Output 3.2 POP pesticides elimination nation-wide (within project budgets) in Angola, Ethiopia, Liberia, Sierra Leone, Togo, Zambia; see map and coordinates above;
•Output 3.3 PCB management nation-wide in Guinea, Liberia, Mauritania, Sierra Leone, Togo; see map and coordinates above.
•Output 3.4a in the Kampala region in Uganda, see map and coordinates below;

For other intervention areas, these will be established based on detailed assessment made in the project implementation; see Outputs 3.4 and 3.5 on assessment and selection process planned.

Output 3.1 in Addis Ababa region in Ethiopia:



Output 3.4a in the Kampala region in Uganda:



ANNEX E: Project Budget Table

Please attach a project budget table.

Table 1 Project budget breakdown

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Sub-total	M&E	PMC		
		Outcome 1	Outcome 2	Outcome 3					
Works	International chemicals collection and elimination service			6.683.654	**6.683.654**			**6.683.654**	NEAs and REAs*
	Construction of hazardous waste transfer station			384.000	**384.000**			**384.000**	NEA

	Implementation of production improvements at recyclers in Output 3.a2 (and cement kilns for countries w. Output 3.b); incl. local data collection, overseeing, etc. to assist design and construction. For 3.4b also chemical analysis of raw materials for mercury concentrations			2.116.230	**2.116.230**			**2.116.230**	NEAs
Goods	Purchase of digital thermometers, collection buckets, info posters, service fee for partner pharmacies and products to be sampled (administered nationally; for Gambia and Mauritania)			384.340	**384.340**			384.340	NEAs
	Purchase of XRF analysers			70.000	**70.000**			**70.000**	REAs

Personnel and Professional Services	National consultancies (technical expertise)**	1,262,703	1.905.177	2.436.590	**5.604.470**	387.411		**5.991.880**	NEAs
Personnel and Professional Services	National consultancies (administrative)***				**-**		954.286	**954.286**	NEAs
Contractual Services ? Company	Social media advertising bureaus (administered and supervised by regional centres)		356.313		**356.313**			**356.313**	NEAs
Contractual Services ? Company	Chemical test kits and laboratory analysis; nationally administered			675.360	**675.360**			**675.360**	NEAs and REAs
Contractual Services ? Company	National collection of mercury waste (nat. admin.)			212.500	**212.500**			**212.500**	NEAs
International Consultants	International Experts**	1.081.120	730.938	1.093.690	**2.905.748**	226.947		**3.132.695**	NEAs
Other operating costs	M&E, learning and adaptive feedback costs				-	278.742		**278.742**	REAs
	Financial audits						60.000	**60.000**	NEAs
Subtotal per component		**2.343.822**	**2.992.428**	**14.056.364**	**19.392.614**	**893.100**	**1.014.286**	**21.300.000**	

*National Executing Agencies (NEAs) and Regional Executing Agencies (REAs)

**As the costs for national and international experts was considered relatively high, additional information on the nature of the tasks to be undertaken by the national and international experts per

output, is provided in the table below. It is also important to note that the budget table provided above is the total covering 11 participating countries.

***It is confirmed that experts charged to PMC costs are also charged to the components

For more information on the tasks to be performed by the national and international consultants kindly see the table in the alternative scenario section of the CEO Endorsement document.

The below tables present a breakdown of the GEF budget per output for when the expenditure categories (from the above table) had more than one entry at the output level.

Works	Outputs	Amount
International chemicals collection and elimination service	Output 3.2	3.511.235
International chemicals collection and elimination service	Output 3.3	2.652.927
International chemicals collection and elimination service	Output 3.5	519.492
Sub-total		**6.683.654**
Construction of hazardous waste transfer station	Output 3.1	384.000
Sub-total		**384.000**
Implementation of production improvements at recyclers in Output 3.a2 (and cement kilns for countries w. Output 3.b); incl. local data collection, overseeing, etc. to assist design and construction. For 3.4b also chemical analysis of raw materials for mercury concern	Output 3.4	2.116.230
Sub-total		2.116.230
Total		**9.183.884**

Goods	Outputs	Amount
Purchase of digital thermometers, collection buckets, info posters, service fee for partner pharmacies and products to be sampled (administered nationally; for Gambia and Mauritania)	Output 3.5	384.340
Purchase of XRF analysers	Output 3.5	70.000
Total		**454.340**

Contractual Services ? Company	Outputs	Amount
Chemical test kits and laboratory analysis; nationally administered	Output 3.2	433.860
Chemical test kits and laboratory analysis; nationally administered	Output 3.3	241.500
Total		**675.360**

National consultancies (technical expertise)	
Outputs	**Total**
Output 1.1	481.016
Output 1.2	618.227
Output 1.3	126.820
Output 1.4	36.640
Output 2.1	381.230
Output 2.2	467.920
Output 2.3	323.327
Output 2.4	732.700
Output 3.1	46.000
Output 3.2	861.920
Output 3.3	548.000
Output 3.4	980.670
Output 4	387.411
Total	**5.991.880**

International Experts	
Outputs	**Total**
Output 1.1	141.728
Output 1.2	469.972
Output 1.3	53.100
Output 1.4	416.320
Output 2.1	253.410
Output 2.2	189.940
Output 2.3	114.298
Output 2.4	173.290
Output 3.1	300.640
Output 3.2	368.160
Output 3.3	354.000
Output 3.4	-
Output 3.5	70.890
Output 4	226.947
Total	**3.132.695**

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).