Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 16-Dec-2019 | Report No: PIDA26015
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
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<td>Africa</td>
<td>P167788</td>
<td>Africa Environmental Health and Pollution Management Program</td>
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#### Proposed Development Objective(s)

To reduce exposure to mercury and uPOPs pollution at pilot sites and strengthen the institutional capacity to manage and regulate mercury use in artisanal small-scale gold mining (ASGM) and e-waste in selected countries in Africa

#### Components

- Institutional Strengthening, Knowledge and Capacity Building
- Policy Dialogue and Regulatory Enhancements
- Demonstrating Application of Technological Tools and Economic Approaches
- Program Implementation and Coordination

### PROJECT FINANCING DATA (US$, Millions)
SUMMARY

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DETAILS

Non-World Bank Group Financing

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<td>Global Environment Facility (GEF)</td>
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Environmental and Social Risk Classification
Substantial

Decision
The review did authorize the team to appraise and negotiate

B. Introduction and Context

1. **Africa’s economic growth is forecast to rise to 4.1 percent in 2019**\(^1\). The upward growth trend is likely to sustain if the African economy succeeds in reviving national and regional industrialization. The industrial sector is progressively gaining ground in many African countries and represents 4 to 32 percent of the national GDPs in most African countries\(^2\). Undoubtedly, the pace of industrialization will be influenced by changes in international demand and prices, but ultimately industrial growth will lead to increased production and consumption, and higher exploitation and processing of Africa’s mineral and natural resources. This, in turn, will lead to more environmental pollution and degradation.

2. **Africa is heavily dependent on import of chemicals due to its limited chemical production.** African countries import chemicals for industrial, domestic, and agricultural use. Africa has witnessed a significant increase in trade of hazardous materials. The transboundary trade of hazardous chemicals has become a public health concern due to lack of adequate legislation, proper quality control and lack of knowledge of environmentally sustainable alternatives. The Environment, Natural Resources and Blue Economy GP conducted a mercury trade diagnostic study measuring mercury consumption and trade-flows in eight African countries. It is estimated that gold production from large and small-scale mining accounts for

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\(^1\) AfDB: African Economic outlook 2018.
\(^2\) Ibid.
about 45% of total mercury emissions on the continent. An estimated 90 to 95% of mercury used is smuggled from neighboring nations. ASGM has been consistently listed as a major source of water and soil pollution with serious impacts on human and environmental health. However, there is limited data and knowledge about the amount of mercury used or the extent of mercury contamination and its health, environmental, and social impacts.

3. **The generation of hazardous waste and release of toxic chemicals can have serious environmental and human health impacts.** The global generation of e-waste reached an estimated 50 million tons in 2018. The issue of e-waste has been migrating, with about 80 percent being shipped to developing countries in both Asia and Africa which typically do not have the resources or infrastructure to manage the high volume of hazardous wastes. An assessment supported by the Basel Action Network (BAN) found that around one-third of the e-waste tracked in the US ended up in developing countries. The improper recycling and disposal of heavy metals associated with the burning of e-waste is particularly acute in Africa where environmental monitoring and regulatory enforcement are relatively weak. Recognizing that the e-waste challenge is on the rise and current policies and practices are insufficient, there is a growing need for improved policies, knowledge management and adopting environmentally friendly processing and recycling techniques to address this challenge. The mismanagement of chemicals, releases of unintentionally produced POPs (UPOPS) from open-burning and other sources present serious threats to human and environmental health in many parts of Africa.

4. **The chemical waste challenge experienced by many sub-Saharan African countries is on par with global trends with more than 200 million people around the world are at risk of exposure to toxic waste.** Pollution is the leading cause of death in low- and middle-income countries with an estimated 23% of total deaths in the developing world attributable to environmental factors (World Bank, WHO 2015). Among the most critical pollution management issues in Sub-Saharan Africa are those related to mercury use in ASGM sector and management of e-waste. Globally, an estimated 3.5 million people are at risk of exposure to toxic chemicals in artisanal and small-scale gold mining (ASGM) of which 2.5 million are in Africa. Most Sub-Saharan African countries have experienced environmental-health challenges related to inadequate capacity to effectively chemicals and associated wastes where nearly 35% of the deaths are linked to environmental hazards from toxic chemicals. Major health concerns associated with heavy metal poisoning from metals like cadmium and mercury are disproportionately affecting poor and vulnerable people. A study commissioned by the World Bank indicates that Ghana, Kenya, and Nigeria have the highest levels of e-waste in the region due to their growing involvement in ICT imports, recycling, and refurbishing. Countries such as Senegal and Uganda can expect e-waste flows from computers alone to increase four- to eight folds by 2020.

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4 The World Bank Report on Mercury Trade and Use in Artisanal and Small-scale Mining in Sub-Saharan Africa (2016)
6 UPOPS are persistent organic pollutants that are formed and released unintentionally from anthropogenic sources and include the following chemicals: Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF), Hexachlorobenzene (HCB), and Polychlorinated biphenyls (PCB), and Pentachlorobenzene (PeCB). See Stockholm Convention Annex Parts I-III for details.
7 Blacksmith Institute and Green Cross 2013.
5. Institutions in Sub-Saharan Africa lack effective regulations and enforcement, users lack adequate waste management strategies and technologies, and the public has limited information on environmental-health risks. The complexity of unresolved chemical waste management issues in the region necessitates the proposed Bank assistance to strengthen the institutional interface and capacity of sub-Saharan countries to coordinate and synergize efforts to improve chemical and related waste management and reduce associated risks. A regional effort is needed to build capacity to manage and regulate chemical trade and use; strengthen the enforcement of existing laws and regulations; and facilitate access to cleaner production technologies.

B. Sectoral and Institutional Context

6. Mercury use in the Artisanal and Small-scale Gold Mining (ASGM) sector and management of electronic waste (e-waste) have been identified as among the most critical pollution management issues in sub-Saharan Africa. Rising international gold prices are pushing more people into ASGM that is becoming an attractive employment alternative for struggling farmers, poor rural communities, and migrant laborers. The ASGM workforce in Ghana and Tanzania is estimated at more than 1 million people in each country. In Tanzania, the ASGM sector contributes approximately 10% of its gold production. Over the past 20 years, the market for Information and Communication Technologies (ICT) has grown exponentially and estimated to be the fastest growing waste stream in the world at 20-50 million tons per year. The quantities of e-waste accumulating in sub-Saharan countries have been increasing exponentially in recent years. It is critical to address the weak policy environment for both mercury and e-waste management in the region, as well as improve knowledge on the economic and health impact of pollution and facilitate access to cleaner technologies.

7. Mercury is used as an amalgamation agent in ASGM operations with significant health and economic consequences to miners and their families. The informal, illegal, and unregulated nature of mercury use in such operations creates a legacy of severe adverse and irreversible environmental and health damage. Mercury contamination could have serious economic consequences to the lucrative local and regional fisheries due to the potential health risks associated with its bio-accumulation in the food chains. It is therefore a priority to reduce, and where feasible, eliminate mercury use in artisanal and small-scale gold mining. Institutional capacity to monitor use of mercury as well as its health and environmental consequences is limited. There are ongoing global efforts by donors, multilateral organizations, industrial associations, academia, as well as civil society organizations to advance the formalization of ASGM, considering that such an approach will reinforce inclusive growth and sustainable development, and promote sound management of mercury in affected countries.

8. Improper e-waste management significantly contributes to increasing human and environmental health risks in sub-Saharan Africa. The global generation of e-waste reached an estimated 50 million tons in 2018. E-waste is shipped, often illegally, to developing countries for recycling. E-waste is expensive to treat in an environmentally sound manner and many developing countries lack the specific regulations and adequate infrastructure and technologies to implement ‘win-win’ solutions to this growing challenge.

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E-waste is a valuable commodity with more than 92% recoverable and reusable materials ranging from precious metals (i.e., gold, silver, copper, platinum, and palladium) to recyclable metals and plastics, with a potential value of €55 Billion\(^\text{14}\). The widespread and unregulated dumping of municipal solid waste (MSW), comingle with hazardous, industrial, and medical waste in urban areas is posing serious challenges in Africa where many cities are getting rapidly urbanized. Open burning of non-segregated urban wastes and other toxic wastes result in incomplete combustion and release of unintentionally produced POPs (UPOPS) posing a public health risk. The process generates harmful emissions that pollute the air, heavy metals, and toxic chemicals that accumulate in soil and water causing food poisoning and serious health risks to workers and neighboring communities. Poor women and children in developing countries are especially vulnerable to these health risks as they are often forced to work in recycling of these materials or live in proximity of recycling facilities. Open-burning is a significant source of UPOPS releases in the participating countries, and a priority for the Stockholm Convention. Reducing open-burning practices and improving solid waste management leads directly to the reduction UPOPS releases.

9. **Multiple and fragmented approaches to address specific chemicals have not yielded the expected results.** Past experience has shown that isolated policy and regulatory reform interventions in one country may not necessarily produce significant results, but rather run the risk of shifting the problem toward other countries where regulations and enforcement are weak. Many programs have been implemented in the region by various development agencies, funded under GEF, and by bilateral donors. Although the coverage of GEF POPs activities is broad, most of programs have been site-specific and uncoordinated, which has prevented a sustained and comprehensive impact on the management of hazardous chemicals, resulting in minimal improvement on environmental health and pollution impacts. Lack of up-to-date data and information systems has impaired informed decision. Overlaps and incompatibilities in existing national legislations, conflicting institutional functions and interests, competing sector priorities, and low level of public awareness are often referred to as main challenges for policy reform. Except for a few countries like Ghana, there are no policies in place to manage mercury and e-waste related pollution. While each country faces a unique challenge regarding mercury and e-waste policies, regulation, and institutional capacity, there are common root causes in the region that would benefit from consistency across national borders and a coordinated regional response\(^\text{15}\). At the national level, specific factors that undermine national efforts to address human health risks associated with mercury and e-waste include: illegal trade; informal recycling of e-waste; inadequate infrastructure for proper treatment and disposal of hazardous waste; weak institutions; lack of monitoring and awareness of health risks; and weak coordination and shared objectives among key stakeholders on addressing harmful impacts from chemicals.

10. **Effective regulations combined with incentives would help governments to deliver on commitments under key international Agreements.** Many African countries have shown increasing interest in adopting comprehensive and integrated approaches to address the challenges associated with mercury and e-waste pollution. Extensive consultations with African governments and partners indicate that there is a common understanding and demand for a more harmonized approach towards reducing environmental

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\(^{14}\) UNU Global E-waste Monitor 2017.

and health risks resulting from mercury and POPs emissions from wastes. Emerging recommendations from analytical studies support a need to harmonize efforts and to understand institutional capacity constraints and their economic, environmental, and social implications at the national and regional levels. Sub-Saharan African countries are at various stages of putting in place relevant policies and environmental legislation to support implementation of their commitments under the international conventions, including multiple initiatives under the framework of Multilateral Environment Conventions, particularly the Minamata, Stockholm, and Basel Conventions. The proposed Program consists of a knowledge platform (ASA) and a regional project with country specific activities in Tanzania, Ghana, Zambia, Kenya and Senegal. The choice of countries was based on client demand and ownership, strength of baseline activities, and National Implementation Plan (NIP) readiness to allow for future projects in the sub-regions. The program will consider scaling up to additional countries as they meet readiness requirements. Countries being considered in the pipeline are Mauritania, Malawi, Mali, Niger and Burkina Faso for ASGM and Benin, Togo and Tanzania for e-waste.

11. **The need for a regional approach is predicated not only on the physical transboundary nature of mercury and POPs emissions and impacts, but also on regional opportunities for solutions and regional causes for mismanagement.** The World Bank responded to requests from interested countries to leverage its convening power at the highest levels of national governments to help accelerate action toward addressing commitments under the relevant Conventions. The preparatory studies and assessments carried out through the GEF-funded MSP and under the World Bank’s Pollution Management and Environmental Health (PMEH) Program emphasized the need for a regional approach to address these issues. The studies on mercury and e-waste trade revealed that there is a major illegal trade across African countries. Unless there are regionally harmonized policies on mercury and e-waste trade and their respective uses, country-level interventions may not have the desired outcomes. The Program will leverage existing regional entities to further enhance the national level interventions, including the Regional Economic Communities (REC) such as ECOWAS, WAEMU, COMESA, and SADC to support such regional harmonization, thereby strengthening national and regional systems to enforce regulations and manage illegal trade flows. The Program will work closely with local communities and community-based organizations who are invested in and benefit from current practices in ASGM sector or from solid and electronic waste management, including opportunities for income generation and green jobs.

**C. Proposed Development Objective(s)**

**Development Objective(s) (From PAD)**

To strengthen the institutional capacity to manage and regulate mercury use in ASGM and POPs/UPOPS in e-waste in selected countries in Africa

The following PDO indicators are proposed, disaggregated by country:

1. Regional platform for knowledge sharing is functional (Yes/No)
2. Policy interventions on e-waste and mercury designed and consulted (Number)
3. Improved institutional capacity with expertise on management of e-waste and/or mercury at national and regional levels (Number trained, % of participants women)

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D. Project Description

12. Regional coordination and cooperation in addressing chemicals-related issues, under relevant multilateral environmental agreements, and interventions that cross-national borders have the potential to stimulate better solutions to address the gaps and challenges of chemicals and waste management. The geographic coverage of EHPMP includes the five participating countries: Zambia, Ghana, Kenya, Senegal and Tanzania. The Program’s focus is on policy and strategy formulation and implementation; knowledge and experience sharing; institutional and human capacity building; research on chemicals and hazardous waste management; and coordination and collaboration, determines the technical assistance nature of the Program. The Program supports demonstration projects for low-cost technologies reducing and eliminating human health hazards from chemicals in ASGM and recycling of e-waste. Program activities are grouped under three main components which will be implemented at national level adapted to the national conditions.

13. **Component 1: Institutional strengthening, capacity building and knowledge sharing.** The component aims to enhance the capabilities of participating countries to obtain and share the information needed for their national decision-making, in particular, the sound management of chemicals. It will create a framework for exchange of information to support related national, regional and international policy development and activities related to reducing environmental health risks from poor management of chemicals in ASGM and waste recycling sectors. Poor coordination between sectors and ministries can also be an obstacle for effective monitoring, surveillance and enforcement on chemicals and waste management, which results in their becoming a significant risk to environmental health. The component aims to help eliminate the barriers to information exchange and enhance the communication among national and regional stakeholders. The capacity building interventions will be further detailed based on country-specific institutional diagnosis, stakeholder engagement, and best international practices in pollution prevention, monitoring, enforcement and compliance:

1.1. Tanzania: The component will support strengthening of the institutions related to environmental monitoring in the artisanal gold mining sector, where there is significant use of mercury. It will focus on authorities regulating mercury trade (environmental regulators, mining policy makers). These may include the Ministry of Mines (including Zonal Mines Offices, Resident Mines Offices, Inspections office), the National Environmental Management Council (NEMC), and customs/border control tax offices, artisanal gold miners, and mining communities. Activities will support the State Mining Corporation (STAMICO) to put in place systems for regulating the mercury trade, in line with the country commitment to implement the Minamata Convention. This component will also support development of guidelines and monitoring systems, procurement of monitoring equipment, laboratories (list all major items that will be procured). The component will promote enhanced transparency along the whole value chain, which will offer greater opportunity for miners to have direct access to the market and strengthen their negotiating skills for better prices, leading to greater economic and social stability.
1.2. Zambia: This component will strengthen the institutional and legislative framework for managing risks from POP releases. It will promote an area-based approach for sustainable waste management in line with Government’s National Solid Waste Management Strategy (NSWMS) by supporting the development of national guidelines. It will support training for strengthening the capacity of municipalities for collection, transportation and disposal waste; will facilitate partnerships with private sector for recovery and recycling of waste, leading to reduced UPOPs releases. Training will target entities and regulators aiming that POPs containing mining waste is treated separately. This component will also support measures for improving the effectiveness of monitoring systems and for building awareness on sound management of waste and its impact on human health and the environment. In addition, the component will engage stakeholders and facilitate coordination and participation in the regional learning on the chemicals management agenda.

1.3. Ghana: The activities in Ghana focus on artisanal gold mining (AGM) and e-waste.

a. AGM: The component will support activities for strengthening of institutional systems and capacity building for the Environmental Protection Agency (EPA) and the Minerals Commission (MC) for managing the AGM sector, through training at the national and local levels. It will support the development of guidelines and monitoring systems for the management of mercury usage and waste in ASGM. In addition, the component will support workshops and other fora to engage national level stakeholders for coordination and participation in the regional learning and knowledge sharing activities on chemicals management. This component will also include assistance to facilitate the formalization of artisanal and small-scale gold mining sector; studies for baseline assessment of the quantities of mercury used and the practices employed in artisanal and small-scale gold mining and processing within the country. The component will assist in the development of a strategy promoting reduction of emissions and exposure to mercury in artisanal and small-scale gold mining and processing, including application of mercury-free methods. The strategy will propose measures for managing trade and preventing diversion of mercury and mercury compounds from both foreign and domestic sources to use in artisanal and small-scale gold mining and processing. Preparation of the strategy will involve stakeholders in the implementation of a national action plan through continued dialogue and engagement. The component will support preparation of a public health strategy to prevent exposure of artisanal and small-scale gold miners and their communities to mercury.

b. e-Waste: This component will support capacity building activities which include (a) benchmarking of key EPA staff to acquire best practices on waste management and ensure appropriate skills transfer; (b) Awareness raising/sensitization workshops on e-waste management along with stakeholders in the value chain country-wide; (c) support to waste management unit in EPA; and (d) streamlining Customs coding with appropriate training of the Customs Officers and borders inspectorate to curtail entry of illicit e-waste in the first place. It will support strengthening of E-waste Management Regulations and Guidelines and development of systems for monitoring and enforcement, relevant to waste management with a focus on e-waste. The component will also review existing documentation and undertake a country-wise situation analysis on waste, including an inventory of major toxic pollutants; assessment of environmental health implications of harmful chemicals and waste and options for risk management; and an economic sector analysis. The component will ensure both national level stakeholders’ coordination and participation in the regional learning and knowledge sharing activities on the harmful chemicals
1.4. Kenya: The component will support capacity building of NEMA staff on best practices on waste management and Environmentally Sound Technologies for reduction of releases of POP’s e-waste management practices and ensure appropriate skills and knowledge transfer. NEMA will also receive project support for development of the national e-waste inventory of products and IT vendors and training on sustainable product life cycle practices. The component will support the Ministry of environment, NEMA and customs officers in implementation and enforcement of e-waste management regulations and laws including at the port of entry. Activities will include streamlining customs codes with appropriate training of customs and borders inspectorate to curtail entry of e-waste dumping as provided in the Basel Convention on Transboundary movement of hazardous waste and other waste. The component will support a country-wise situation analysis on waste, including an inventory of major toxic pollutants emanating from the sector; assessment of environmental health implications of harmful chemicals and waste and options for risk management; and economic analysis of the waste management sector for the national economy. The component will ensure both national level stakeholders’ coordination and participation in the regional learning and knowledge sharing activities on the harmful chemicals agenda.

1.5. Senegal: The component will support measures for institutional enhancement to improve the performance of solid waste management in large cities including designing results-based financing mechanisms such as innovative financing through public-private joint ventures for waste management services and enhanced cost efficiency. The component will provide support for institutional capacity for monitoring and enforcement. The capacity building assistance will target stakeholders from the Ministry of Environment and Sustainable Development, National Commission for Chemicals Management, Ministry of Industry, Ministry of Planning, selected municipal authorities and private companies as well as other departments involved. Civil society and NGOs would be involved in delivery of training, awareness and education and communication programs. The component also aims to the improve the process of redefinition and clarified roles and responsibilities and associated administrative rules and directives to improve overall waste management sector performance and develop a sectoral database for SWM and user feedback management system.

14. Component 2: Support to policy dialogue and regulatory enhancements. This component is designed to provide support to participating countries for policy development in sound management of chemicals recognizing that most African countries lack sound polices and effective management tools to control the use of chemicals and reduce human health risk. The component will support policies focusing on measures for strengthening current financial incentives; regulations regarding management of hot spots near sensitive habitat; safety and contamination of public resources; institutional capacity for pollution prevention and control; health and environmental assessments, monitoring and reporting. While many of these are national level activities, the component will support harmonization of national approaches for addressing illegal transboundary movements of chemicals (mercury) and e-waste. Country specific activities include:

2.1. Tanzania: This component will support the development of a strategy for promoting reduction of harmful emissions and releases of, and exposure to mercury in artisanal and small-scale gold mining and processing, including application of mercury-free methods. One of the activities under the component will include devising regulatory solutions for managing the trade illegal diversions of mercury and mercury compounds. Development and improvement of the regulatory framework will be in a participatory
manner which will increase the receptibility of enforcement measures by stakeholders from the mining, health, Customs and Environment departments and the ASGM associations and communities. The component will explore developing a public health strategy on the exposure of artisanal and small-scale gold miners and their communities to mercury; and provide more localized training of artisanal miners and stakeholders.

2.2. Zambia: This component will support the Government’s efforts in strengthening the current environmental policies and regulations and capacity to monitor; screen and evaluate health and environmental risks associated with POPs and hazardous chemicals through the development of guidelines. This component will support Government’s efforts in strengthening the current environmental policies and regulations and capacity to monitor; screen and evaluate health and environmental risks associated with POPs and hazardous waste. The component will support the development of a strategy for reduction of emissions and releases of, and exposure to, harmful chemicals and hazardous waste. As a background for the strategy the component will finance studies for gathering of health data, training for health-care workers and awareness-raising through health facilities.

2.3. Ghana: The component activities in Ghana focus on artisanal gold mining (AGM) and e-waste:

   a. AGM - The component will support the EPA in strengthening the policy requirements targeted at the ASGM sector. This will include support for amending the Mining Act to include provisions for small-scale miners to prepare Environment Plans for rehabilitating mines after closure with prior environmental and social due diligence. The component will support enhancement of monitoring and evaluation (M&E) framework to ensure the achievement of the project outcomes in accordance with WB and GEF requirements.

   b. e-Waste - This component will support Government’s efforts in strengthening the current environmental policies and regulations and capacity to monitor; screen and evaluate health and environmental risks associated with e-waste. The component will assist the development of strategy for promoting the reduction of emissions and releases of, and exposure to, harmful chemicals and hazardous waste. The strategy will be backed by studies and gathering of health data, training for health-care workers and awareness-raising through health facilities.

2.4. Kenya: The component activities will support development of e-waste management regulation with provisions for national and local level implementation. This regulation will be key for strengthening current waste management policies. Training will be provided to enhance agencies’ capacity to monitor the flow of e-waste throughout its life cycle. The component will assist the national government in development of a strategy for promoting the reduction of emissions and releases of, and exposure to, harmful chemicals and hazardous waste. The strategy will cover a number of themes, including: (a) mechanisms to prevent human exposure, particularly most vulnerable such as children and women, to harmful chemicals; (b) modalities for dissemination of information to stakeholders and affected communities; (c) assessment of requirements for healthcare staff to screen and evaluate health and environmental risks associated with e-waste; and (d) development of a national framework for monitoring and evaluation of e-waste and safe management.

2.5. Senegal: The component will help augment the effectiveness of activities financed under an ongoing Bank funded project Senegal Municipal Solid Waste Management Project (P161477) which focus on
improved solid waste management services in selected cities in Senegal. The component will specifically, finance technical assistance for assessment and update of the existing regulations and guidelines needed to fill the legal gap for a sound management of municipal solid waste and hazardous waste. The component will support the a) development of the National plan for treatment and disposal of special waste (biomedical, e-waste, C&D and industrial waste); and b) a value chain and market analysis for recyclable wastes.

15. Component 3: Demonstrating application of technological tools and economic approaches. The component will finance specific demonstration projects for cleaner technology in areas contaminated by chemical waste. These investments will be based on a standard set of (social, environment and economic) criteria, without impacting the livelihood and employment opportunities and tailored to country specific implementation conditions. Recognizing that the risks of exposure, scope of regulations, institutional approaches and enforcement may vary among countries, country specific initiatives are outlined for the participating countries as follows below:

3.1. Tanzania: The component will support the drive of the Government of Tanzania to formalize the ASGM sector. Specific activities which be designed to create incentives for artisanal miners to access relevant knowledge, financing and institutional support in line with Government’s obligations under the Minamata Convention. Technical assistance under the program will help improve working condition for local mining community by providing better equipment. The measures aim to facilitate the collaboration with Small Enterprise Development Corporation (SEDCO) or local manufacturers, to manufacture/replicate low cost centralized mercury management equipment allowing miners to move away from individual retorts. Such environmental improvements will act as demonstration pilots for the primary license holders who are mandated to rehabilitate their mines based on the Mine closure policy in the Mining Act. The demonstration investments will be linked with Industrial Competitiveness for Jobs Project (P160164) and will aim to enhance the Government’s policy towards appropriate land usage for pastoral and agricultural activities and strengthen community level monitoring, through involvement of communities in land use shifts.

3.2. Zambia: The component support will focus on improving the waste value chain and measures that will reduce UPOPs releases from solid waste by strongly limiting the quantities of waste subject to uncontrolled burning: invest into improving the management of waste collection; transportation; treatment and disposal and improved recycling of waste. The current dumpsite at Kabwe will be upgraded into a sanitary landfill (through IDA financing), and feasibility study of short- and long-term BAT/BEP actions will be supported to determine the volumes and types of waste and the economic viability for private sector collaboration. This will be carried out by improving the segregation between hazardous contaminated wastes from the other non-hazardous waste streams. The component will support training for the existing rag-pickers. Ragpickers will benefits from occupational health and safety training and equipment supported by the component. Support will be provided to explore ways to reduce the impact of chemical pollution emanating from unregulated landfills in economic and socially acceptable manner and support the development of communication tools to raise awareness about the health costs and benefits of pollution management, including community outreach to increase public understanding and visibility of the scale and environmental health impacts.

3.3. Ghana: The component activities in Ghana focus on artisanal gold mining (AGM) and e-waste:
a. AGM. Support under this component is linked to Component 1. It aims to demonstrate the environmental improvement of 2-3 pilot abandoned mines, based on cost-effective and environmentally sound technologies. The component will also enhance Government’s policy towards shifting to appropriate land use for agricultural activities. This component will also support the improvement of environmental and social work conditions to promote mercury abatement techniques.

b. e-Waste - This component will support the initiation of a pilot project related to Agbobloshie on implementation of integrated and environmentally sound management approach to improve collection, transportation, and safe disposal/recycling of e-waste, following Article 6 of the Stockholm Convention on wastes, and relevant guidance. This will include investment in infrastructure and technologies by looking at the entire e-waste management cycle from collection, transportation, setting up of collection centres or transfer stations and sorting stations and treatment (recycling) facility. It includes formalizing recycling systems, providing protective equipment for the collectors and recyclers, training and capacity building and developing protocols and methodologies for assessment of environmental health risks associated with e-waste.

3.4. Kenya: This component will support a pilot project in a selected county in Kenya in support of the Kenya Urban Support Program on implementation of integrated waste management approach to reduce releases of POPs from e-waste through improving source reduction/reuse, collection, transportation, and disposal/recycling. The pilot project will be identified based on review of priorities and institutional capacity (including private sector) for the selected location. Such pilot project may target either (a) Strengthening of the financing system for e-waste recycling and disposal; or (b) Infrastructure investments for selected elements of the e-waste management cycle from generation, to collection, transportation, establishing collection centres or transfer stations. Based on the technologies and approaches identified for the pilot, the component will provide support for capacity building for all relevant stakeholders in the county (including government, CSOs, and private sector), and identify opportunities for leveraging and eventually mainstreaming the existing good practices.

3.5. Senegal: This component will focus on improving the waste value chain and measures that will reduce UPOPs releases from solid waste by introducing new technologies and behavioral change methods for waste minimization and disposal. A demonstration project will invest in improving the management of waste cycle and improved recycling in a pilot site. A waste management unit will be strengthened in the identified municipalities to coordinate waste management efforts. This component will also look into the ways to reduce the impact of chemical pollution emanating from unregulated landfills and support the development of communication tools to raise awareness about the health costs and benefits of pollution management.

16. **Component 4: Project Coordination and Management.** This component will provide support for project coordination and management; monitoring and evaluation at the national, and local levels. This component will cover the cost for project management, implementation and supervision of project activities, administration of procurement and financial management, implementation & supervision of environmental and social safeguards and monitoring and evaluation. The project will strengthen existing PCUs with additional staff to cover activities specific to this project and assist in preparing, implementing and monitoring approved activities in participating countries.
Legal Operational Policies

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<td>Projects in Disputed Areas OP 7.60</td>
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Summary of Assessment of Environmental and Social Risks and Impacts

17. The Program consists of the regional project and a regional platform for knowledge sharing and technology dissemination efforts (BETF - P166233). The regional knowledge platform will establish a coordination framework for the EHPMP with the participating countries, the regional partners, and other stakeholders to promote communication among Program stakeholders through consultations at the national and regional levels.

18. The key potential environmental issues associated with Component 3 activities, which can be in most cases readily avoided or managed/mitigated, are related to (i) hazardous waste management (including disposal) during preparation of pilot sites, (ii) occupational health and safety of workers, (iii) restriction of land use, and (iv) potential impacts to community health and safety. The project sites will be located in the areas that will not require physical or economic displacement or land acquisition due to the nature of proposed project activities.

19. The Bank’s review considered the implementing agencies' capacity to manage its environmental, social, safety and health performance in compliance with ESS1 and other relevant standards. The institutional capacity for managing social risks in the five countries is variable and there is currently limited experience in implementing social elements of the new Environmental and Social Framework. However, the national environmental authorities all have previous experience in implementing World Bank Projects (including supporting the existing bank operations the pilot projects will be linked to).

20. The Project will address the gaps through the preparation and implementation of an Environmental and Social Commitment Plan (ESCP). The ESCP will be based on the preparation and implementation of the ESIAs and the associated ESMPs.

21. The demonstrative investments (pilots) will introduce cleaner technologies and methodologies to phase-out mercury use in Artisanal and Small-scale mining and reduce emissions of unintentional POPs in waste management. The pilots will be selected and designed based on priority environmental health risks and the cost-effectiveness of interventions. These pilots will be directly connected to ongoing Bank operations in each participating country:
   - Ghana - Artisanal and Small-scale Mining Formalization (P168002)
   - Tanzania – Resilient Natural Resource Management for Tourism and Growth Project (P150523)
   - Kenya - Urban Support Program - (P156777)
   - Zambia – Mining and Environmental Remediation and Improvement Project (P154683)
22. Each pilot preparation is going to include review of existing E&S due diligence and prepare a relevant instrument (ESIA/ESMP/SA), which will be approved by the Bank and publicly redisclosed to reflect the requirements of relevant ESSs.

E. Implementation

Institutional and Implementation Arrangements

23. The Program consists of the regional project and a regional platform for knowledge sharing and technology dissemination efforts. The regional knowledge platform will establish a coordination framework for the EHPMP with the participating countries, the regional partners, and other stakeholders to promote communication among Program stakeholders through consultations at the national and regional levels.

24. A Program Steering Committee (PSC) with representation from key partners and stakeholders will be established as an advisory mechanism to maximize synergies and support the successful design and implementation of the overall Program. The PSC will serve as a forum for guidance and monitoring on Program implementation and provide a high-level coordination on technical alignment and synergy among the Program's components. The PSC will provide overall strategic guidance, support policy dialogue with countries for regional integration, coordinate cross-boundary interventions, facilitate resource mobilization, and assess the results and impacts of the project. The Program Steering Committee (PSC) will be chaired by the WBG and consist of other GEF Implementing Agencies (UNDP, UNEP, UNIDO, AfDB), GEF secretariat, OECD, and key partners who are leaders in the field (i.e. UNITAR, IGF, USEPA), representatives of civil society and participating Countries.

25. Participating countries will have a respective National Steering Committee (NSC), and Project Coordination Unit (PCU). The NSC will include the key stakeholders at the National level. NSC functions are to: i) provide guidance on national policy matters and strategic decisions; (ii) approve annual work plans and quarterly progress reports; and (iii) coordinate with the PSC and regional knowledge platform to facilitate knowledge sharing. The EHPMP will be implemented by the national PCU in each country, embedded within the National Focal Point Ministries (NFPM). The PCU in each participating country supports the implementation at the national level and coordination with the EHPMP and other regional entities.

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APPROVAL

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