



Additional Financing Appraisal Environmental and  
Social Review Summary  
Appraisal Stage  
**(AF ESRS Appraisal Stage)**

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**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Borrower(s)	Implementing Agency(ies)
Egypt, Arab Republic of	MIDDLE EAST AND NORTH AFRICA	Arab Republic of Egypt	Ministry of Environment
Project ID	Project Name		
P176688	Improved Management of eWaste and Healthcare Waste for Reduction of uPOPs Emissions		
Parent Project ID (if any)	Parent Project Name		
P172548	Greater Cairo Air Pollution Management and Climate Change Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Environment, Natural Resources & the Blue Economy	Investment Project Financing	6/13/2022	5/31/2022

Proposed Development Objective

To reduce air and climate emissions from critical sectors and increase resilience to air pollution in Greater Cairo.

Financing (in USD Million)	Amount
Current Financing	200.00
Proposed Additional Financing	9.13
<b>Total Proposed Financing</b>	<b>209.13</b>

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

Public Disclosure



The Parent project includes four main components, and a project management component, all together aiming at: (i) enhancing the existing air quality decision support system in Egypt; and (ii) reducing air emissions from two main sources of air pollution in Greater Cairo, which are the open burning of municipal solid waste and vehicle emissions. The cross cutting component on stakeholder engagement, awareness and communication will complement and support the other components.

The initial project components of the Parent Project remain unchanged. A new component is added to the project through the proposed Additional Financing, which will expand the Project's scope by supporting a transition towards a systems approach to improve management of eWaste and healthcare waste to reduce uPOPs emissions.

Brief description of project components:

1. **Enhancing the Air Quality Decision Support System:** This component will support enhancement of AQM decision support system in Greater Cairo / Egypt through strengthened AQM infrastructure (monitoring and analytical), capacity building activities, forecasting systems, emergency response plans and raising public awareness through information dissemination (using Air Quality Index / Air Pollution maps, etc.). It will also include evidence-based solutions for policy formulation and decision-making and develop a rapid response system and plans for emergency situations (e.g. 'black cloud' episodes and other high pollution days).

2. **Enhancement of solid waste management services in Greater Cairo:** This component is intended to support the operationalization of the Solid Waste Management Master Plans of Cairo, and the urban areas of Giza and Qualioubya Governorates (constituting all together Greater Cairo region). This comprises a mix of institutional, regulatory and physical investments, all defined in the master plans and including the construction of one integrated facility landfill, closing of a high-risk dumpsite, and support to the establishment of successful Public Private Partnerships (PPPs) for the waste collection, transportation and recycling system. Activities to assist in responding to COVID-19 have also been added to this component, through improved healthcare waste management.

3. **Vehicle emissions reduction:** This component will introduce urban transport measures that would contribute to the operationalization of the Cairo Transit Authority (CTA) plans to gradually convert part of its existing bus fleet from polluting diesel vehicles to electric buses, through the acquisition of new electric buses. This activity will be complemented by adequate support systems that will be put in place to ensure the sustainability of the operation, including the charging infrastructure, enhancement of the repair and maintenance workshops and training of the drivers and workers on the new buses and equipment, etc.

4. **Stakeholders engagement and communication:** This component aims at ensuring that all stakeholders are actively involved in the design, implementation and monitoring of all project activities and that it is implemented following a full consultative participatory approach. The success of such an approach is however very much dependent on the level of awareness and relevant information shared with the stakeholders and communicated in a transparent and continued manner. Communication plans will be developed and delivered in order to: (i) create a basic understanding of the solid waste management master plans and of the vehicle emission reduction plan; (ii) reach consensus and receive the endorsement of targeted beneficiary groups; and (iii) inducing positive behavioral changes. Partnerships with civil society organizations for monitoring the performance and the delivery of solid waste management services will be introduced.

5. A new Component 6 titled "Improved E-Waste and HCW management for Reduction of uPOPs" will be added to the "parent project." This Component will comprise three sub-components as described below:

- Sub-component 6.1: Supporting effective E-Waste management, models, and solutions. Specific activities include: (i) strategy development and guidance for used electronic equipment, particularly at the household level including batteries and electrical appliances and their integration into existing strategies for the refurbishment, recycling,



disposal and/or take back of equipment/eWaste; (ii) technical assistance, guidance, and capacity building for key public and private sector entities and agencies for the enforcement and implementation of upcoming extended producer responsibility schemes (EPR) for new electronic equipment; (iii) support to recyclers of eWaste, including: assessment and technical assistance for enhanced efficiency in recycling processes, development of strategies and support for safe and effective recycling of batteries, development of risk assessment studies and risk mitigation strategies and capacity building for recyclers to ensure safer/cleaner processing for improved human and environmental health, and establishing safe exposure limits for key uPOPs; (iv) support for alignment with the globally harmonized system on waste and eWaste, particularly with regard to developing train-the-trainer programs and other training/educational tools and products; (v) technical assistance on guidance for assessing, processing and/or exporting of printed circuit boards; (vi) support for updating and monitoring of eWaste data and utilization of the uPOPs tool kit and E-Waste calculator for E-Waste processing and needs assessment for establishing an integrated management information system (MIS); (vii) piloting collection, safe dismantling, and recycling of E-Waste, particularly older equipment and household level eWaste at strategic locations and segregation and hazardous waste disposal, particularly waste which will not be targeted through EPR; (viii) testing of 'take-back' schemes and enhancing engagement with the private sector; and (ix) testing of financing tools for start-ups and small and medium enterprises in E-Waste recycling and exploration of supporting enterprises in possible markets for recycled materials (e.g., gold, copper, silver) nationally, regionally, and internationally; and (viii) supporting further integration of informal sector players and those recently 'formalized.'

- Sub-component 6.2: Supporting effective healthcare waste management, models, and solutions. Specific activities will include: (i) undertaking an assessment of current data on HCW in a range of healthcare settings, including university and health insurance hospitals, pharmacies, etc.; (ii) providing support for key agencies in the development of an integrated management information system (MIS) to support enhanced monitoring of HCW management and disposal practices; (iii) providing technical assistance to select healthcare institutions, including on utilization of possible financial mechanisms, procurement of environmentally-sound equipment, training of staff, and integration with new protocols, including those on biological and chemical waste segregation and certification requirements; (iv) supporting the preparation of a plan to roll out proper HCW management throughout the country in line with new regulations and in collaboration with key agencies and stakeholders (including women and other vulnerable communities); (v) piloting appropriate recycling and re-sale of safely segregated HCW; and (vi) developing and modeling public/private financing and investment models for collection and treatment of HCW.

- Sub-component 6.3: Supporting the preparation of Egypt's application to Minamata Convention. The GoE has recently decided to pursue application and signing of the Minamata Convention on Mercury. In support of these efforts, and building on the results of sub-components 6.1 and 6.2, the project will provide international expertise and technical assistance activities towards the early stage development of the application and initiation of key activities for the country's compliance with the convention. These activities include the following: (i) identifying current regulatory and policy needs for meeting obligations of the convention; (ii) identifying technical needs of EEAA, MoH and other agencies to successfully undertake changes for meeting convention obligations; and (iii) identifying and filling, as possible, current gaps in data and state of knowledge for successful preparation for signing.

#### D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project will be implemented mainly in Greater Cairo. At this stage, no locations have been identified.

D. 2. Borrower's Institutional Capacity



The additional finance (AF) will follow the same implementation arrangements of the parent project, which is guided by an inter-ministerial Steering Committee (SC) co-chaired by the Minister of Environment (MoE) and the Minister of Planning and Economic Development and includes Ministers (or their representatives) of the Ministry of International Cooperation (MoIC), Ministry of Local Development (MoLD), Ministry of Transport (MoT), Ministry of Health and Population (MoHP), the Governorates of Cairo, Qalyubia, and Giza and the Cairo Transport Authority (CTA). The SC provides overall policy and strategic guidance, plays an important role in high-level decision making, facilitates the interaction and coordination between the various ministries/agencies, and ensures an enabling environment for reforms to succeed and be sustained. It also approves annual work plans and budgets, and monitors progress towards the achievement of national and project specific target indicators.

Under the parent project, technical Implementation Units (TIUs) are responsible for ensuring implementation of activities under various components are well executed in line with the approved project design, operations manual and other pertinent guidance. In the case of the component 6 (GEF), the Waste Management Regulatory Authority (WMRA) in close collaboration with the Environmental Health Department of EEAA and the Stockholm Convention Focal Point will oversee the overall implementation of the AF activities, ensure technical compliance and sound execution, alignment and integration with complementary parent project activities, and collaboration with project stakeholders, both private and public, as well as with GEF uPOPs requirements.

A project coordination unit (PCU) has been established at the MoE to be in-charge of the project's overall implementation and coordination between all stakeholders. The implementing agency, MoE, has a very long-standing experience in leading the environmental management in the County. The MoE and the Egyptian Environmental Affairs Agency - EEAA (the executive body under MoE) are the highest authority in Egypt responsible for promoting and protecting the environment and coordinating adequate responses to these issues. MoE is also the main proponent agency for the Environmental Protection Law, its executive regulations, decrees and Environmental Guidelines. With regards to air pollution, MoE and EEAA are responsible for developing policies, laws and regulations to address air pollution control measures. The protection of air from pollution is one of the main priorities of the Ministry and its Executive Agency, which is reflected on a long-term commitment to this issue as expressed in the Ministry's five-year action plan. This comes in line with ongoing efforts in the application of existing environmental legislation, where the air quality is one of the key issues in the Environmental Law No. 4 of 1994 and subsequent amendments. The Central Department of Air Quality and Noise Protection Environment Quality Sector under EEAA has highly qualified environmental staff who are dealing with several relevant air quality topics and sectors such as: air quality monitoring, health impacts of air pollution, programs addressing vehicle exhaust reduction. This department is currently engaged with the World Bank in implementing activities under the Parent Project (Greater Cairo Air Pollution Management and Climate Change).

The capacity of MoE and EEAA to manage complex large pollution abatement projects is very high given its history in working with international development agencies, including the World Bank. EEAA has implemented hundreds of national, sub-national, sectoral and other thematic pollution prevention and abatement projects. With support from many international development agencies, EEAA staff gained significant technical knowledge in the different sectors as well as in Project Management of internationally financed large scale complex projects. In the meantime, the main responsibility of healthcare waste (HCW) and electronic waste (E-waste) management in Egypt lies within the mandates of MoHP and Waste Management Regulatory Authority (WMRA). The WMRA was created by a Ministerial Decree (3005/2015) as one of the executive agencies of MoE which is mandated to oversee and coordinate efforts to tackle solid waste management (SWM) challenges nation-wide. WMRA is well staffed with highly qualified



environmental specialists who will play an important role in overseeing and ensuring that the project’s goals are being met and will develop lessons from this project to be considered in implementing other projects in other governorates. On the social side, the capacity of the MoE in relation to social risks management is relatively limited. The Environmental Law, which is currently being reviewed, has very limited substance related to social impacts assessment and social risk management. In terms of citizen engagement, the MoE has active programs of outreach and awareness raising related to different environmental topics, including SWM and air pollution. The programs engage with various groups of stakeholders, including youth, non-governmental organization (NGOs), women and children. Other Project counterparts like MoHP and WMRA capacities to manage social risks will need strengthening. However, it is worth mentioning that the environmental and social framework (ESF) application is a new area for the MoE as well as other relevant stakeholders engaged in this project. Therefore, capacity building and handholding support will be required for all stakeholders to kick start the project.

**II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS**

**A. Environmental and Social Risk Classification (ESRC)**

High

**Environmental Risk Rating**

High

The parent project environmental risk is High, therefore the AF risk remains High. More specifically, environmental risks and impacts resulting from this additional finance planned interventions, specifically under components 6.1 and 6.2 will require the borrower to conduct further assessment of the associated risks mainly related to (i) workers health and safety due to exposure to handling, storage and disposal of HCW and E-wastes, (ii) workers health and safety during operation and maintenance of project procured HCW equipment, (iii) community health and safety due to exposure to handling, disposal and/or treatment of HCW and E-Waste, (iv) environmental aspects related to release of pollutants to air, water and land due to routine, nonroutine, and accidental circumstances, and with the potential for local, regional, and transboundary, and (v) management, including storage, transportation, disposal and/or treatment, of hazardous wastes (HCW and E-Wastes) in an environmentally sound and safe manner that includes the appropriate control of emissions and residues.

**Social Risk Rating**

High

The parent project social risk is High, therefore the AF risk remains High. Specific social risks related to this additional finance include the risks of child labor and community health and safety. The activities of the additional finance, if conducted in an inclusive and transparent manner, should support further integration of informal sector players and those recently ‘formalized.’ if not. May create additional exclusion of the informal groups. Proper engagement should be conducted with the intended beneficiaries to ensure that project activities are benefiting the different stakeholders.

**Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Risk Rating**

Low

Risks and impacts to the community may arise from some of the AF activities (e.g., pilot activities), including behavior of project workers with project beneficiaries or with other project workers. The parent project SEA/SH risk is low and since the scale of the pilot activities is expected to be very limited, the SEA/SH risk is Low.

**B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

Public Disclosure



## **B.1. General Assessment**

### **ESS1 Assessment and Management of Environmental and Social Risks and Impacts**

#### ***Overview of the relevance of the Standard for the Project:***

The interventions under the additional finance may result in environmental and social impacts which need to be properly addressed. An addendum to the existing environmental and social management framework (ESMF) will need to be prepared to reflect the AF interventions and propose adequate measures to address the identified Environment and Social (E&S) risks and impacts. E&S risks and impacts resulting from this additional finance planned interventions, specifically under components 6.1 and 6.2 will require the borrower to conduct further assessment of the associated risks mainly related to (i) workers health and safety due to exposure to handling, storage and disposal of HCW and E-wastes, (ii) workers health and safety during operation and maintenance of project procured HCW equipment, (iii) community health and safety due to exposure to handling, disposal and/or treatment of HCW and E-Waste, (iv) environmental aspects related to release of pollutants to air, water and land due to routine, nonroutine, and accidental circumstances, and with the potential for local, regional, and transboundary, (v) management, including storage, transportation, disposal and/or treatment, of hazardous wastes (HCW and E-Wastes) in an environmentally sound and safe manner that includes the appropriate control of emissions and residues, (vi) exclusion of informal groups from accessing project benefits, and (vii) child labor.

### **ESS10 Stakeholder Engagement and Information Disclosure**

The project design strongly emphasized stakeholder engagement with the parent project sub-component 4.4 dedicated to engagement and communication. This sub-component is closely following the principles of ESS10 in relation to establishing a systematic approach for stakeholder engagement and information disclosure, as early as possible. This will support the Government to identify stakeholders and build and maintain a constructive relationship with them. Given the high risk of this project including the complexity of the stakeholders involved, the stakeholder engagement plan (SEP) is meant to be comprehensive and prepared by the client, then reviewed and approved by the Bank before the project appraisal.

The AF most disadvantaged and marginalized groups which may be impacted by the project are the informal sectors groups involved in the e-waste and healthcare industries, more specifically poor families, women and children (the type of impact will vary from one group to the other and the magnitude and significance of the impact is still not known for several groups. Mitigation measures to deal with the potential risk and impacts on each of the identified groups have been included in the parent ESMF and its addendum. The updated SEP also will include clear guidance on communication and information sharing with each of the identified groups. Proper engagement should be conducted with the intended beneficiaries to ensure that project activities are benefiting the different stakeholders instead of excluding them further.

## **B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

### **ESS2 Labor and Working Conditions**





This ESS will be relevant given the nature of interventions under the AF. The boundaries of the application of this ESS2 will be further determined after getting better understanding on future AF activities and what they would include in relation to labor and their working conditions. The parent project and potentially this AF will entail 3 of the 4 categories stipulated in the ESS2, namely: a) direct workers; b) contracted workers; and c) primary supply workers. The client developed written draft labor management procedures (LMP) with clear employment terms and conditions to ensure equal opportunity, prevent discrimination and protect vulnerable workers. The LMP will be updated to reflect the new interventions under the AF and will be disclosed prior to appraisal.

**ESS3 Resource Efficiency and Pollution Prevention and Management**

E&S risks and impacts resulting from the AF interventions, specifically under components 6.1 and 6.2 will require the borrower to conduct further assessment of the associated risks related to release of pollutants to air, water and land due to routine, nonroutine, and accidental circumstances when operating HCW treatment equipment, as well as risks associate with HCW and E-waste management, including storage, transportation, disposal and/or treatment, in an environmentally sound and safe manner that includes the appropriate control of emissions and residues. The potential risks will be identified in the ESMF addendum and specific instruments (e.g., HCW and E-waste management plans) will be prepared, disclosed and cleared before commencement of relevant activities (including technical assistance activities).

**ESS4 Community Health and Safety**

Since the exact interventions are not yet fully determined, further assessment will need to be conducted and Bank-cleared before commencement of relevant activities (including TA activities). Preliminary risks identified include SEA/SH risks and community health and safety due to exposure to handling, disposal and/or treatment of HCW and E-Waste.

**ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

No land is required regarding the new interventions under this AF.

**ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

No interventions are expected to have impacts on biodiversity.

**ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

No indigenous people are identified in this project.

**ESS8 Cultural Heritage**

No interventions are expected to affect any tangible or intangible cultural heritage.





**ESS9 Financial Intermediaries**

No FIs are involved in this AF.

**C. Legal Operational Policies that Apply**

**OP 7.50 Projects on International Waterways**

No

**OP 7.60 Projects in Disputed Areas**

No

**B.3. Reliance on Borrower’s policy, legal and institutional framework, relevant to the Project risks and impacts**

**Is this project being prepared for use of Borrower Framework?**

No

**Areas where “Use of Borrower Framework” is being considered:**

None

**IV. CONTACT POINTS**

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**Borrower/Client/Recipient**

Borrower: Arab Republic of Egypt

**Implementing Agency(ies)**

Implementing Agency: Ministry of Environment

**V. FOR MORE INFORMATION CONTACT**

Public Disclosure



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## VI. APPROVAL

Task Team Leader(s):	Harinath Sesha Appalarajugari, Dahlia Lotayef
Practice Manager (ENR/Social)	Pia Peeters Cleared on 17-May-2022 at 16:39:31 GMT-04:00