Concept Environmental and Social Review Summary
Concept Stage
(ESRS Concept Stage)

Date Prepared/Updated: 05/28/2020 | Report No: ESRSC01371
## BASIC INFORMATION
### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt, Arab Republic of</td>
<td>MIDDLE EAST AND NORTH AFRICA</td>
<td>P172548</td>
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<table>
<thead>
<tr>
<th>Project Name</th>
<th>Egypt: Greater Cairo Air Pollution Management and Climate Change Project</th>
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<tbody>
<tr>
<td>Practice Area (Lead)</td>
<td>Financing Instrument, Environment, Natural Resources &amp; the Blue Economy</td>
</tr>
<tr>
<td>Borrower(s)</td>
<td>Implementing Agency(ies), Ministry of Environment</td>
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<td>Arab Republic of Egypt</td>
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### Proposed Development Objective(s)

To improve air quality management systems and to reduce air and climate pollutants from critical sectors in Greater Cairo.

### Financing (in USD Million)

<table>
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<th>Amount</th>
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<td>200.00</td>
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### 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]

The proposed project

### 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 proposed project is composed of 5 components which aim at reducing air pollution from two main sources of air pollution in Greater Cairo Region: i) open burning of municipal solid waste; and ii) vehicle emissions. Geographically the project covers Greater Cairo Region which is composed of Cairo Governorate, the urban areas of Giza Governorate and the urban areas of Qualyoubia Governorate. Components 1, 4 and 5 will provide analytical studies to support the air quality decision-support system in the geographical scope of the project (component 1); develop/strengthen stakeholder engagements, public awareness and communication (component 4) and overall project management (component 5).

Under component 2, the project will finance the construction of two integrated waste management facilities, one located in 10th of Ramadan City, about 46 kilometers, East of Cairo and the second will be in a desert area within Atfih District, near Al-Kuraimat Village in Giza Governorate (about 50 Kilometers South of Cairo, to serve waste management in Greater Cairo Region. Each waste integrated facility will include waste recycling facilities, sanitary landfill and hazardous waste treatment facilities within its boundaries. This component will also include the closure and decontamination of exhausted priority high-risk dumpsites within the boundaries of Greater Cairo. It will also support the establishment of a number of environmentally-controlled waste transfer stations (locations are not yet determined).

Also, under component 2, private sector might be engaged, through PPP different modalities to construct and/or operate waste treatment facilities within the two integrated waste management facilities and/or construct and operate waste transfer stations. The possibility of engaging the private sector may require triggering the World Bank Performance Standards for Private Sector (OP 4.03).

Component 3 is focused on reducing air and climate change pollutants from vehicle emissions from the public busses operating in Greater Cairo by Launching of a structured e-bus pilot which includes purchasing (around 12 new electric buses), charging infrastructure, scrapping of old diesel buses and retrofitting of diesel buses from being diesel-powered to being CNG powered. The charging infrastructure and scrapping locations for the diesel buses have not been determined yet.

D. 2. Borrower’s Institutional Capacity

The implementing agency, Ministry of Environment (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.

With regards to SWM, the MoE is engaged in the development of national solid waste management strategies and implementation of national campaigns and communication strategies that aims to raise the awareness of the citizens and other stakeholders. 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 and as well as Project Management of internationally financed large scale complex projects. In the meantime, the main responsibility of SWM in Egypt lies within the mandates of the local authorities (governorates and city councils), which are under Ministry of Local Development - MoLD. However, due to the significant challenges facing solid waste management in Egypt, the weak capacity of the governorates, the Waste Management Regulatory Authority (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 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.

According to the project design, there are other line ministries and governmental agencies / authorities taking part in project’s implementation: MoLD and Qalyubia Governorate in Phase 1 (parts of Component 2) Cairo Transport Authority and Ministry of Transport (parts of Component 3). A Project Management Unit (PMU) will be established at the MoE in order to coordinate the implementation of the different project components among all relevant parties. The PMU will be staffed by highly qualified specialists from the different ministries as well as highly competent consultants who are widely available in the country with all necessary expertise needed to steer and manage the project. On the social side, the capacity of the MoE in relation to social risks management is very limited. The Environmental Law, which is currently being reviewed, has very limited substance related to social impacts assessment and social risk management.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)  High

Environmental Risk Rating  High

The project, under Component 2, will finance the construction of 2 integrated waste management facilities (IWMF) to serve greater Cairo. These facilities will include construction of sanitary landfills, developing the infrastructure needed for different hazardous/non-hazardous waste streams recycling (e.g. domestic, organic, electric/electronic, medical...etc.). The operation of such facilities is not going to be financed by the project since there are plans to engage the private sector in the operation phase especially in the landfill operation. In addition, Component 2 will also include the closure of high-risk priority dumpsites in Greater Cairo. While the objective of the project is to improve the overall environmental conditions in Greater Cairo through reduction of air emissions from burning solid wastes and vehicle emissions, the construction and operation activities to achieve the desired objectives will, themselves, have significant negative environmental and social impacts which need significant, costly and highly technical mitigation measures.

In Component 2, construction and operation of the integrated waste management facilities including their access roads, buffer zones and utilities will result in wide range of significant adverse environmental, occupational and community health and safety risks and impacts. Typical associated risks and impacts during construction and operation include contamination of soil and groundwater by leachate, generation of landfill gas and odors form the degradation process, in addition to occupational exposure to chemicals, pathogens and vectors. Also, Transfer stations construction and operation entails typical construction impacts in addition to operation phase impacts which...
are mainly related to management of waste, leachate management, littering and visual impacts, disposal of some hazardous materials, and air quality impacts. Additionally, closing of dumpsites and removing of historical and current accumulation will entail significant occupational health and safety risks due to occupational exposure to pathogens, victors and chemicals. Given the large scale of the project, those subcomponents of complex nature will result in wide range of significant long term adverse environmental impacts.

Under Component 3, the project will finance the procurement of electric busses and switching diesel-fuel public busses to operate on natural gas. While the overall outcome of this component is environmentally positive aiming at reducing air emissions from the old diesel-operated public busses, there are still some negative environmental impacts associated with the operation and maintenance of the new buses. These impacts are associated with the disposal of batteries of the e-busses and the scrapping of the retrofitted busses which may also result in negative environmental impacts related to disposal of solid and hazardous wastes resulting (e.g. disposal of engine oils, batteries, electronic wastes…. Etc.).

Activities under the TA sub-components (under components 2 and 3) include assisting in preparing future infrastructure investments in Solid waste management and transport sector, drafting policies and regulations, and various capacity building activities. The outcomes of the TA sub components may result in high risk physical interventions or activities that are associated with significant environmental and social implications.

Social Risk Rating

The Project will bring positive outcomes however it may potentially have significant social risks and impacts which will be driven from the components which includes physical interventions or TA (e.g. the waste collection and transportation). Currently, identified expected impacts are as follows:

1-Risk of the exclusion of the informal sector: The Project will support interventions and contractual agreements that will make the SWM value chain more efficient and financially sustainable. Those formal operational layers would disturb the informal sector entry points in the value chain. This is specifically applicable to:

A) Traditional groups of garbage collectors (Zabbaleen) who have been running their family businesses related door-to-door collection, sorting, recycling and manufacturing for many decades in Greater Cairo region and have been offering to the citizens what is widely perceived as an efficient service. They are estimated to be numbered around 200,000 individuals living in the heart of Greater Cairo. If the SWM chain is being upgraded through integrating private contractors that will not engage the Zabbaleen, there is a social risk of exclusion, loss of livelihoods and conflict.

B) Group of informal waste pickers who are operating on full time basis in the dumpsites that will be closed and will no longer be able to continue their activities in the project areas. Such groups are usually largely engaged in sorting and selling recyclables. Once more information is obtained, more consultation will be undertaken with these groups.

C) During the course of project implementation and when collection and transportation is better controlled, streets of Cairo are expected to become cleaner, street containers are more frequently removed and street garbage piles are expected to be removed, the street waste pickers who recover recyclables from street containers and illegal waste collection points to sell them, will not find much recyclables left for them to collect. This is a less organized group and the impact on them is expected to be less sever because of their causal and part time working mode (recyclable picking is as a supplementary source of livelihoods) which make it also very difficult to track and quantify them.

2-Land related negative impacts: The project will support the establishment of landfills and transfer stations. The locations of both integrative facilities have been determined on state-owned land plots that are free of any illegal uses. However, The locations of the transfer stations have not been identified yet, but are expected to be either on state-owned land or mobile transfer stations. The risk here is that the selected locations will be used by squatters or encroachers. Additionally, when screening for land impacts, the buffer zones/right-of-way and access roads for
landfills will also be included in the exercise. Retroactive review for the land that has been already acquired will be also conducted. This intervention may also have impacts on land use plan in the area.

3-Risks of financial burden on poor and middle-income families: In case the service fees will be increased which is likely to be the case.

4- Labor related risks

5-Risk of inadequate site selection of landfill and transfer stations: Due to the nature of SWM facilities, the site of landfills and transfer stations may encounter “Not in my backyard” situation. Residents/communities who are close to these proposed sites are likely to oppose the project. Meaningful consultations on location selections have vital importance for the project development.

6-Risk related to closure of dumpsites and potential temporary usage of existing landfills until construction of the integrated waste management facility of 10th Ramadan.

Given the type and sensitively of the above identified risks and impacts, together with weak capacity of MoE to manage the anticipated potential social impacts, the social risk of this project is classified as high.

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

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:
As part of the scoping phase, the Bank team conducted number of stakeholder meetings and reviewed large number of documents.

On the environmental side, as the project will finance different types of infrastructure and TA activities, in addition to the institutional support, the environmental, community and OHS impacts and risks will vary accordingly. In Component 2, two IWMFs and Transfer Stations: All phases of the large scale landfills, which are located within the (IWMFs) and other infrastructure needed for waste treatment will have wide range of long term irreversible environmental impacts with high magnitude. Improper design of the landfills may lead to irreversible negative environmental impacts on all environmental parameters (air, groundwater, etc.). Typical construction-related environmental impacts such as air and noise emissions, soil pollution, change of landscapes and land uses, generation of wastes, potential negative impacts on fauna and flora at the proposed sites, pollution of groundwater, occupational and community health and safety risks as well as traffic impacts due to the movement of heavy construction equipment to/from the site. The operation of the landfill sites may result in significant pollution to ground water, contamination of soils, change in primary use of land, emissions of green-house gases, bad odors, spread of harmful insects and increase in scavenging animals in addition to significant risks to public health and surrounding communities. The design, construction and operation of landfills, if not properly undertaken, may have high significant, irreversible, non-localized environmental impacts.

Closure of dumpsite: This sub-activity (component 2) has an overall positive environmental impact. Yet, the land-use after the dumpsite closure is not determined. However, the activities associated with the closure of the dumpsite will include negative environmental impacts similar to those associated with typical construction activities in addition to highly significant OHS risk exposure to the project workers (e.g. exposures to toxic emissions etc.). After dumpsite closure, there is still potential for emissions of green-house gases, explosions due to increase temperature and pressure, odors, emissions of toxic chemicals, and contamination of ground water from leachate. Additionally, as a transitory phase a possible other dumpsite would be used, which will need to be assessed beforehand.
Under Component 3, procurement of e-busses and switching diesel-fuel busses to operate on natural gas: the anticipated environmental impacts during the construction of the infrastructure needed for the new e-buses including charging station, and installation of warehouses, are typical construction related impacts such as air and noise emissions, OHS and community health and safety. During the operation phase, operation and maintenance of the new buses will result into adverse environmental impacts that are associated with disposal of hazardous waste and scrap resulting from batteries of the e-busses and scrapping of the retrofitted busses.

The three categories of TA are foreseen under the TA subcomponents of the project including Type 1, 2 and 3. TA sub-components (under components 2 and 3) include overseeing engineering designs, feasibility studies, environmental and social studies/activities, procurement, preparing tender documents, institutional strengthening, policy measures/actions, developing of regulations and other “soft” interventions. All these activities may lead to physical interventions, especially related to the collection/transportation of solid wastes and investments in treatment of other waste streams (e.g. medical and hazardous wastes). Therefore, there are potential negative environmental impacts (e.g. air, ground-water, community and OHS, etc.) which may result from such interventions. Other TA activities related to investments in infrastructure needed for upscaling the e-busses pilot phase may result in potential negative environmental impacts which need to be mitigated through proper measures to be determined in the context of the relevant ES instruments to be prepared.

The Project is anticipated to bring positive social outcomes to the residents of Greater Cairo. Improving the waste management will contribute to a better organized solid waste management cycle. This will then contribute to a cleaner neighborhood, less random dumping, more efficient waste collection and transportation, and consequently a higher level of satisfaction from the citizens. The project will include a Stakeholders Engagement Plan (SEP), which is planned to be systematic and will help in enhancing trust and in establishing a constructive relationship between different stakeholders. The SEP will assist the client in understanding the complexity of the relationships, interests, influence and dynamics among the stakeholders. The SEP will follow an inclusive and culturally appropriate approach, which, will provide a space for different stakeholders to engage and to provide design related input. Economic opportunities will also likely benefit the vulnerable groups, including the most marginalized groups who are currently informally engaged in the waste managed related sector. This could be only attained if specific carefully tailored measures for the inclusion of those groups is incorporated in the project design.

The most critical risks under the project is the exclusion of the vulnerable group from the informal sector by affecting the supply chain and accordingly the economic conditions of informal groups. Given that large spectrum of those groups is from the poor, particularly those whose livelihoods are fully reliant on the waste-related business, their exclusion can lead to very serious impacts on their families and can lead to serious reputational risks to the project. This is particularly valid in light of all the historical background including the introduction of international collection and transportation companies that affected those groups negatively and how this whole case has been negatively perceived and severely criticized by the public and internationally.

Risks related to land acquisition is also relevant. The locations of the transfer stations is not yet known and there is a possibility that the selected locations are on public land with private uses. For those facilities with unidentified locations, ESMF and RF will be prepared prior to Appraisal. With regards to both landfills, the sites have been determined on state-owned land. ESIA and if needed RAP will be prepared before Appraisal and will assess if any land users have been or could be impacted. Moreover, the project will be conducting assessment of adequate fees for waste collection and disposal services and design of new/improved system for fee collection for ensuring overall system improvements. With those additional services and the issuance of the new Law, service fees increase is quite probable, and it associates with risk related to affordability of and low levels of willingness to pay.
The most disadvantaged and marginalized groups which may be impacted by the project are: a) informal sectors groups, of poor families, women and children; b) Individuals/groups who could be affected from land acquisition particularly poor, acquiring livelihoods from the land without legal title; c) groups near waste facilities; d) poor who might be affected by tariff increase. As part of the ESMF and RF for the whole project and the conceptual ESIA for 10th Ramadan, the social risks and impacts will be assessed in relation to the respective components and in light of the available information. The Bank (as part of due diligence) will also conduct a social inclusion study (focusing on the SWM informal sector) that will inform the design of the components that will be designed at a later stage. Please check section III – B for ES instruments

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

At this stage, using Borrower framework is not considered, but it will be further investigated during preparation.

ESS10 Stakeholder Engagement and Information Disclosure

The project design strongly emphasized the stakeholder engagement with sub-component (4.4) is dedicated for stakeholder 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 Stakeholders Engagement Plan (SEP) is meant to be comprehensive and to be prepared by the client, and reviewed and approved by the Bank before the project appraisal. An independent consultant may be required to support client in stakeholder mapping and SEP preparation as needed.

The initially identified groups as per the ESS10 classifications are: 1) stakeholders who will be or likely to be affected by the project. This will most importantly include but will not be limited to: a) the informal sector of the traditional Zabbaleen groups, waste pickers at dumpsites, other less organized waste pickers, recyclables traders, informal manufacturer...etc.; b) local residents in Greater Cairo area disaggregated by the socioeconomic category, gender, type and class of neighborhood...etc.; c) formal waste workers at different parts of the SWM cycle; d) land owners or users who will be affected by land acquisition. 2) Other interested parties of those who might have interest in the project and might be also positively affected by the project. This will most importantly include: a) Government entities related to this project (e.g. MoE, EEEAA, MoLD...etc.); b) Local firms/private sector which might be interested to get engaged in the system. Those should be disaggregated by their scale, market power and affiliation (formed by the Zabbaleen or non-Zabbaleen); c) syndicates and labor unions, including the garbage collectors syndicate; d) NGOs; e) media ...etc. The comprehensive elaboration of the stakeholders will require further consultation and assessment that the Client should be conducting between now and the appraisal with support from the Bank. The SEP that will be prepared will allow for an early identification of stakeholders and for assessing the level of stakeholder interest and support for the project and to enable stakeholders’ views to be taken into account in project design and environmental and social performance. It will also promote and provide means for effective and inclusive engagement with project-affected parties (particularly the informal sector) throughout the project life. It will also help in ensuring that appropriate project information (including on impacts) is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format. An effective grievance redress mechanism (GRM) should be established and the SEP that will be prepared should provide more details about the GRM including different uptake locations, feedback cycle and litigation process. Meanwhile, the SEP will look at ways to maximize the benefit for different stakeholders by the project (e.g. local communities in Greater Cairo area, tourists, newly hired workers, private companies, etc.). Some potential affected groups identified under group 1 above could
possibly benefit from the project and become interested group if the design is considering their interests (e.g. informal sector). Equally important, the SEP should also help the Government in formulating awareness and behaviors changes message and set instruments to measure behavior change. Behaviors related to waste reduction, reuse and recycling need to be tackled in the awareness and behavior change campaign. “What It Costs” campaign need to be launched to educate stakeholders about the cost of an improved and effective solid waste management. This, accompanied by improved service, will also stimulate better willingness to pay.

It is worth mentioning that the MoE has recently developed A Communication and Feasibility Plan which can work generally as a potential tool for communities’ awareness raising with wide range of environmental topics. This Plan cannot replace the SEP because the elements of each is quite different. However, the parts related to information disclosure and dissemination modalities could be utilized.

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 size and the nature of interventions under the project. Major construction work will take place (including but not limited to the hygienic landfills and transfer stations). The boundaries of the application of this ESS2 will be determined during preparation after getting better understanding on what activities/facilities will be defined as associated. The project will likely entail 3 of the 4 categories stipulated in the ESS2, namely: a) direct workers; b) contracted workers; and c) primary supply workers. This will be further confirmed when a clearer design for the project is reached. The client will establish written labor management procedures (LMP) with clear employment terms and conditions to ensure equal opportunity, prevent discrimination and protect vulnerable workers.

The project activities during construction and operation will entail different types of health and safety risks including exposure to physical hazards, chemical hazardous, biological hazardous and special hazard environment such as confined space. Coupled with the week safety culture in the country, health and safety risks will have high potential to occur. To ensure health and safety of workers during the project life time, the LMP shall include OHS policies, procedure and training and monitoring requirements for the different project’s components. The (LMP) will also include assessment of other potential labor related risks, including GBV/sexual exploitation and abuse, overview of labor regulation, staff responsibility, working age and contract terms and conditions. The LMP should be drafted, reviewed and approved by the Bank before the project appraisal.

ESS3 Resource Efficiency and Pollution Prevention and Management

The main development objective of the project is to reduce air and climate pollutants through reduction of open burning of waste and air emissions from transport sector, which is totally aligned with ESS3. Also, the project is aiming at increasing the percentage of recycled waste in Greater Cairo which will promote efficiency of raw material use. During implementation, the construction activities of the project interventions will include a wide range of air pollutants, solid wastes and hazardous wastes depending on the scale and type of the intervention and the
construction and operation phase. Air pollutants during construction phase will be mainly associated with equipment and vehicle emissions, fugitive dust emissions, moving of excavated soil. Those air pollutants, including gases and noise, are expected from all the physical interventions of the project, however there will be variations depending on the locations, scale of each intervention and proximity to sensitive receptors. Therefore, adequate measures need to be considered, during the preparation of each E&S instrument, in accordance with the world bank EHSGs and proportionate to the associated risk. Also, during closure of dump sites, great attention should be made to prevent waste from self-ignition during closure processes and potential emission of methane gas post-closure of dump sites. In order to prevent air pollutants and to avoid also associated health and safety risks, the E&S instrument shall detail mitigation measures to mitigate those impacts. Air pollutants during operation phase will be mainly generated from the waste management infrastructure including integrated waste management facilities and transfer station. Air pollutants include mainly green-house gases associated with operation of landfills, movement of vehicles and equipment, that are serving landfills and transfer stations, and bad odors. Significance and likelihood of the impacts shall be assessed during the preparation of each the E&S instrument. Also, the instrument shall consider the closure and post-closure phases of the landfills and potential methane emissions. For Waste and hazardous materials generation during construction, construction activities of the new infrastructure will be associated with generation of typical construction wastes including municipal waste, hazardous waste and wastewater. The amount of the generated waste will vary depending on the scale of the new infrastructure and type. Proportionate to the significance of the impacts associated with the waste generation, the E&S instrument shall detail required mitigation measures in accordance with the national requirements and the WB EHSGs. Also, great attention should be made to the management of excavated soil generated from construction of new landfill cells.

For the closure of dumpsites, considerable amount of wastes varying in types will be collected to be properly disposed. It is anticipated that most of the waste will be of non-hazardous nature, however in most cases hazardous waste or waste contaminated with hazardous materials will be there too. Therefore, the E&S instrument shall assess the types of wastes in each dumpsite and propose particular management and disposal measures to deal with different waste typologies in accordance with the national requirements and the WB EHSGs. Waste and hazardous materials generation during operation, will vary according to the type of the infrastructure. Leachate generated from landfill sites shall be managed in accordance with GIIP to prevent groundwater and soil contamination. Consequently, specific measures shall be designed as part of the E&S instrument to detail leachate management plan. Moreover, Transfer stations at local level may cause the development of uncontrolled dumping of waste resulting in substantial impacts to the communities. Therefore, the E&S instrument shall include specific measures to prevent such impacts during the operation. Also, the impact associated with hazardous and nonhazardous waste transportation from/to both integrated waste management facilities, transfer stations, and closure of dump sites shall be considered in the E&S instruments. Transportation of waste may entail different impacts that shall be assessed and mitigated including, but not limited to, traffic impacts, littering, spills and accidental release of hazardous wastes. E-buses operation will result in generation of batteries, which is considered hazardous waste, that shall be considered during preparation of the E&S instrument using a cradle to grave approach. Additionally, the instrument shall consider also the generation of hazardous and nonhazardous waste from scrapping of retrofitted buses.

Finally, Efficiency of water use during construction of civil infrastructures shall be addressed in the E&S instruments for all the physical interventions of the project as well as the TA subcomponents that may lead to physical interventions. During construction activities in desert areas, water demand will be mainly due to dust control, sanitation, concreting and human consumption. Therefore, the E&S instrument shall assess and identify the
availability of water resources in the projects’ areas, given the scale of the project and the expected workforce. Also, the project will investigate the possibility to introduce energy efficiency measures including utilization of bio gas produced from the landfills, use more energy efficiency equipment and promote solar energy for different infrastructures. Therefore, the E&S instruments that will be prepared accordingly should consider the relevancy of ESS3.

**ESS4 Community Health and Safety**

The main risks associated with community health and safety are attributed to Component 2 and 3 activities. The proposed sites for the integrated waste management facilities will be in desert areas remote from communities. The exact distances to nearest communities are not yet known. However, the impacts of construction and operation of the waste treatment facilities, if poorly designed or operated, may result in health and safety risks to the nearest communities. The sphere of influence of the construction and operation of such facilities may extend even to relatively far communities due to bad odors, increase in rodents and insects, increased road traffic accidents during construction and/or operation, impacting surface and ground water bodies...etc.

The establishment of transfer station may take place within or nearby existing communities. These stations, if poorly sited or managed, will pose significant public health risks. Additionally, as the number of cars collecting garbage daily is high (e.g. around 145 truck enter Zamalek neighborhood), trucks waiting to enter the transfer station could cause traffic disturbance to neighboring communities. This will require the preparation of a traffic management plan to address any negative impacts on the environment or social receptors.

The closure of existing dumpsites which are close to communities, if not done properly, the disintegration of organic materials will result in emissions of toxic air emissions, green-house-gases and bad odors. Risks of gas explosions due to high pressure and temperature may also occur. Scrapping sites for retrofitted busses, if close to communities, may have community health and safety concerns.

As part of the potential risks related to labor influx and labor behavior, the gender based violence (GBV) risk needs to be carefully assessed. GBV assessment will be conducted and, if applicable, GBV plan will be included in the ESRS.

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

As mentioned above under ESS1 and the ESRC section, this ESS is considered relevant. At this stage, it is anticipated that the construction of different Project facilities will necessitate the need for land. Land has been allocated to certain facilities (the two integrated waste management facilities in the 10th of Ramdan City and in Al-Kuraimat), while the location of some other facilities like the transfer stations are unidentified yet. The land acquisition and any land related impacts will need to be dealt with based on the principles of ESS5 and the relevant resettlement instrument should be prepared. When screening land impacts, buffer zones and access roads for waste management facilities will be also included in the exercise. This intervention may also have impacts on land use plan in the area.

The ESCP should stipulate the instruments that will be prepared and when each will be prepared. In general, for the facilities with unidentified locations prior to appraisal, Resettlement Framework (RF) should be prepared before appraisal. As applicable, Resettlement Plans (RPs) should be prepared, approved, disclosed and compensation should be paid prior to the commencement of construction of any related infrastructure.
ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources
The project will be implemented in urban areas of Greater Cairo. The integrated waste management facility will be established in desert areas on the outskirts of Greater Cairo close to industrialized areas. According to the available information, no natural habitats or biodiversity concerns are expected in the project areas. However, this ESS will be further investigated during the project preparation.
This ESS 6 is not currently relevant yet to be confirmed.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
As no indigenous communities present in the targeted geographic area of Greater Cairo, according to ESS7, the ESS7 is not considered relevant to the project.

ESS8 Cultural Heritage
Egypt is well known of un-discovered archeological sites. Since the project activities, especially under component 2, include construction activities requiring deep excavations, there are chances to find tangible physical cultural resources. In addition, the environmental and social assessments for the activities which have physical interventions will confirm the existence of tangible or intangible cultural heritage resources which may be impacted by any of the project activities. As part of the TA activities in this project, all construction contracts will include a “Chance Find” clause which will require contractors to stop construction in the event that cultural property sites are encountered during construction. Also, any sites of tangible or intangible cultural heritage importance will be identified and measures for dealing with such sites/practices will be addressed as part of the TA activities.

ESS9 Financial Intermediaries
Currently the project modality does not include financial intermediaries.

C. Legal Operational Policies that Apply

| OP 7.50 Projects on International Waterways | No |
| OP 7.60 Projects in Disputed Areas | No |

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?
Financing Partners
Not yet determined.
B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

Based on the initial assessment at this stage, the following are the main ESA instruments needed for this project:

By Appraisal:
- ESMF for the overall project and covering all project activities, including the transfer stations and the dumpsite closure
- Update ESIA of El-Kuraimat in accordance with the action plan provided in the gap analysis
- ESIA for 10th of Ramadan integrated waste facility management in accordance with ESF requirements.
- Resettlement Framework (RF) and retroactive review for the acquired land.
- Labor Management Procedures (LMP)
- Stakeholders Engagement Plans (SEP)

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

The ESCP shall reflect the following instruments to be prepared during implementation:
- ESMPs for each of the transfer stations once locations are identified and designs prepared (ESMP covering both construction and operation phases)
- ESIA/ESMPs for the dumpsites to be closed.
- Before closure of exiting dump sites and operation of the new Waste integrated facility, an Environmental and Social due diligence audit for the temporary waste receiving facility/ies.
- ESMP for e-buss demonstration project including the required infrastructure (e.g. electricity supply network, new or upgrade of bus terminals, creation of bus corridors...etc.)
- Road Safety Plan for procurement of e-busses.
- Resettlement Plan (RP)
- As needed a Livelihoods Rehabilitation Plan (To be confirmed on the basis of the results of the Social Assessment)
- TORs to cover Environment and social aspects of relevant policy measures and E&S instrument for the TA outcomes that may lead to high or substantial risk physical infrastructure or investments.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS 15-May-2020

IV. CONTACT POINTS

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VI. APPROVAL
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Practice Manager (ENR/Social) Pia Peeters Recommended on 04-May-2020 at 08:25:28 EDT
Safeguards Advisor ESSA Nina Chee (SAESSA) Cleared on 28-May-2020 at 10:29:5 EDT