TÜRKİYE

MINISTRY OF ENVIRONMENT, URBANIZATION AND CLIMATE CHANGE

TÜRKIYE SECOND ENERGY EFFICIENCY IN PUBLIC BUILDINGS PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FEBRUARY 2024

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Abbreviations and Acronyms

Bank	World Bank
CTF	Clean Technology Fund
CSTMP	Community Safety and Traffic Management Plan
EE	Energy Efficiency
EEPB2	Türkiye Second Energy Efficiency in Public Buildings Project
EHSG	Environmental Health and Safety Guidelines
EIA	Environmental Impact Assessment
EPC	Energy Performance Class
E&S	Environmental and Social
ESF	Environmental and Social Framework
ESCP	Environmental and Social Commitment Plan
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Risk Summary
ESS	Environmental and Social Standards
EU	European Union
GDCA	General Directorate of Construction Affairs
GEF	Global Environment Facility
GHG	Greenhouse Gas
GM	Grievance Mechanism
IBRD	International Bank for Reconstruction and Development
LMP	Labor Management Procedures
MER	Monitoring, Evaluation and Reporting
MENR	Ministry of Energy and Natural Resources
MoEUCC	Ministry of Environment, Urbanization and Climate Change
NZEB	Nearly Zero Energy Building
OHS	Occupational Health and Safety
OHSP	Occupational Health and Safety Plan
PAD	Project Appraisal Document
PDO	Project Development Objective
PDoEUCC	Provincial Directorate of Environment, Urbanization and Climate Change
PIU	Project Implementation Unit
Project	Türkiye Second Energy Efficiency in Public Buildings Project
PIF	Project Information File
PPP	Pollution Prevention Plan
PV	Photovoltaic
RE	Renewable Energy
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SEP	Stakeholder Engagement Plan
TA	Technical Assistance
WB	World Bank
WMP	Waste Management Plan

Executive Summary

The World Bank will be supporting Ministry of Environment, Urbanization and Climate Change in implementing the **Türkiye Second Energy Efficiency in Public Buildings Project**. The objective of the project is to reduce energy use in central government buildings and inform the development of sustainable financing mechanisms to support a scaled-up, national program for energy efficiency in public buildings. The project will support the following activities: (i) energy efficiency investments in central government buildings in which MoEUCC will finance the preparation and implementation of renovations of central government and central-government affiliated buildings in order to save energy and increase renewable energy (RE) use, and (ii) technical assistance and project implementation support including screening of subproject candidates, review of energy audits/technical designs; technical support to develop and assess approaches for deeper renovations, comprehensive electrification of buildings, and improvements in water efficiency; day-to-day project management (preparation and management of procurements, contract management, supervision of renovation works); implementing financing requirements in compliance with World Bank's (WB) fiduciary policies and guidelines; ensuring satisfactory implementation of the Bank's ESF; energy and water savings monitoring; Project monitoring and evaluation; training, capacity building, and knowledge sharing for the PIU staff, service providers such as energy auditors and designers, construction firms, building administrators, women in the EE field, and any other relevant Project stakeholders; and Project communications and dissemination of results. EEPB2 Project aims to renovate 400 buildings approximately, in which, each building will receive a Turkish Energy Performance Class (EPC). Building renovations will result in minimum energy savings of 30 percent and seek to achieve a Turkish Class B EPC or higher. Upgrades of building envelope (facade insulation, windows and doors), space and water heating, cooling, ventilation, air-conditioning, pumps/fans, lighting and installation of on-site RE systems that primarily aim to offset the facility's energy consumption should be included in investment measures.

The project activities will take place in Türkiye (whole country). Specific locations of subproject activities are not known at this stage, because the buildings eligible for energy efficiency renovations will be determined based on eligibility criteria and buildings from variety of regions might be fulfilling the requirements. The subproject locations will be known when environmental/social and technical screening studies are completed.

This Environmental and Social Management Framework (ESMF) has been prepared to identify the potential environmental and social risks and impacts of proposed Project activities and propose suitable mitigation measures to manage these risks and impacts. It maps out the Türkiye laws and regulations and the World Bank policies applicable to the Project, and describes the principles, approaches, implementation arrangements, and environmental and social mitigation measures to be followed.

The Project objectives are in line with European Union's Green Deal and World Banks Green Growth and will promote green energy investments helping to reduce the effects of climate change, use of resources efficiently and help Türkiye's shift to low-carbon infrastructure development. The positive impacts of the Project can be summarized as: (i) savings in energy and emissions, (ii) reduction in energy prices, (iii) reductions in energy supply interruptions and (iv) additional benefits to public resources and budget through decreased energy expenses. However, in addition to the positive effects of the Project, due to the construction, operation, commissioning and final disposal taking place in subprojects, there will be some adverse environmental and social impacts. But the environmental impacts of the Project are temporary and of local nature.

The potential environmental and social adverse impacts/risks are identified to be including:

- Noise, dust, air, soil and water pollution generation
- Solid waste and construction/demolition waste generation
- Community health and safety risks (traffic management-related risks, sexual exploitation and abuse/sexual harassment risks, etc.)
- Occupational Health and Safety (OHS) risks
- Temporary interruption of livelihoods of some workers and business owners if car park areas are operated by individual businesses and/or there are small enterprises such as buffets in the parking area.
- Temporary disruption and impacts on the amenity of users and employees of the public buildings.

This Project will be implemented by the Department of External Investments under the GDCA. The existing Project Implementation Unit (PIU) established for the implementation of another WB-financed Project (i.e., the EEPB Project) will also be responsible for the implementation of this Project. The PIU will be responsible for the supervision of the Project implementation, monitor the utilization of funds and follow the Project progress and report to World Bank bi-annually. During implementation, the PIU will conduct regular monitoring visits. PIU will carry out regular supervision of sub-projects during construction to ensure that the ESMP, SEP, and LMP are being duly implemented and that Grievance Mechanisms (GM) are accessible and functional.

The potential environmental and social risks/impacts of the subprojects will be assessed, identified and provided in the subproject specific Environmental and Social Management Plan (ESMP) before commencement of any construction activities. The subproject specific ESMPs will be prepared in line with the guidance (and annexes) provided in this ESMF. Besides, the Community Safety and Traffic Management Plans will also be prepared to manage the potential community related risks and impacts. The PIU will be responsible for the preparation and submission of Biannual Project Progress Reports and Quarterly E&S Progress Reports to the Bank. At a minimum, the reporting will include (i) the overall implementation of environmental and social risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational and Community Health and Safety performance (including incidents and accidents), (iv) stakeholder engagement updates, in line with the Stakeholder Engagement Plan (SEP), (v) public notification and communications, (vi) progress on the implementation and completion of project works, and (vii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP.

The Supervision Consultants and the Provincial Directorates of Environment, Urbanization and Climate Change (PDoEuCC) will be responsible for the initial assessment of the Project site, customization of the project level ESMP (including OHS measures) (please see **Hata! Başvuru kaynağı bulunamadı.**) to the sub-project in accordance with its potential environmental and social risks/impacts, monitoring and supervision of the subproject activities ,a preparation of the monthly progress reports and their submission to the PIU, and the management/operation of the subproject specific GM. The Supervision Consultants and PDoEUCC will ensure that monitoring practices include the environmental and social risks/impacts identified in the ESMF (and also subproject specific ESMP) and will monitor the implementation of environmental and social risk management mitigation plans as part of regular project monitoring. During the project implementation, the Environmental and Social Monitoring Reports, those will be prepared by the Supervision Consultants on monthly basis and submitted to the PIU, will be one of the most important tools to record the monitoring activities.

The awarded contractors will prepare a contractor level/site-specific ESMP and Occupational Health and Safety Plan (C-ESMP/C-OHSP) and will be required to comply with the Project's E&S risk management plans (C-ESMP, C-OHSP, Labor Management Procedures [LMP], Stakeholder Engagement Plan [SEP], etc.) prepared/to be prepared in compliance with the WB requirements and national legislation. Contractors will be responsible for disseminating information and raising awareness among their employees about environmental and social (E&S) risk management compliance and effective implementation. The Contractors will be required to develop and apply their own Code of Conducts following the principles provided in the Code of Conduct included in the Annex 3 of the Project LMP. The Contractors will be responsible for preparation and submission of monthly progress reports to the Supervision Consultants.

A separate **Stakeholder Engagement Plan** and **Labor Management Procedures** have been prepared for the Project, based on the requirements of the national legislation and the World Bank's Environmental and Social Standard (ESS) 10 on Stakeholder Engagement and Information Disclosure and ESS 2 on Labor and Working Conditions; respectively.

During Project implementation, the Bank will review and approve at least the first 10 customized ESMPs, prepared by the PIU with the support of the Supervision Consultants for the subprojects and then the Bank can mutually agree with MoEUCC that MoEUCC conducts prior review of the Environmental and Social Assessment (ESA) documents and the World Bank conducts post review.

The Bank will review, clear and then disclose the final (i.e. consulted) version of the ESMF, SEP and LMP following the disclosure of these documents on the MoEUCC's webpage.

The MoEUCC has disclosed the ESMF, SEP, LMP and ESCP on the Project's webpage1, for 10 days on 15th of January, 2024 and conducted a stakeholder consultation meeting on 25th of January, 2024 with the participation of 170 people to inform stakeholders about the scope of the project, its potential E&S risks and impacts, mitigation measures to be taken to manage the potential risks and impacts, and the roles and responsibilities of each party involved in project implementation.

The ESMF, SEP and LMP will also be disclosed on the World Bank's external webpage2, following the project Appraisal.

[1] https://www.kabev.org/kabev2-cevresel-sosyal/

[2] https://projects.worldbank.org/en/projects-operations/project-detail/P500777

1. Introduction

This Environmental and Social Management Framework (ESMF) is developed to support the environmental and social due diligence provisions for activities financed by the World Bank in the Türkiye Second Energy Efficiency in Public Buildings Project (EEPB2 Project). The Project will support the reduction of energy use in central government buildings in a cost-effective manner and develop and pilot a sustainable financing mechanism for energy efficiency investments in central government buildings among Türkiye. The General Directorate of Construction Affairs (GDCA) of Ministry of Environment, Urbanization and Climate Change (MoEUCC) will be implementing the Project activities.

This ESMF follows the World Bank (WB) Environmental and Social Framework (ESF) as well as the national laws (Turkish Environmental Law, No: 2872, date of ratification: 1982) and national regulations of Türkiye. The objective of this ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements. More specifically, the ESMF aims to (a) assess the potential environmental and social risks and impacts of the proposed Project and propose mitigation measures; (b) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social issues related to the activities; (d) identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF; I address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF.

This ESMF should be read together with other plans prepared for the project, including the Stakeholder Engagement Plan (SEP), the Labor Management Procedures (LMP) and the Environmental and Social Commitment Plan (ESCP).

2. Project Description

The project[3] will be financed by the International Bank for Reconstruction and Development (IBRD) loan, at an amount of 300 million USD, and in parallel, the Bank team is seeking opportunities for some concessional financing, e.g., Clean Technology Fund (CTF) and Global Environment Facility (GEF). The proposed Project Development Objectives (PDOs) are: (i) cost-effectively reduce energy use in central government buildings and (ii) develop and pilot a sustainable financing mechanism for energy efficiency (EE) investments in central government buildings.

The proposed Project has two components: (i) energy efficiency investments in central government buildings and (ii) technical assistance and project implementation support. The summary of each component is given below; and details of the Project and its components are available in the Project Appraisal Document[4] (PAD).

Component 1: Energy efficiency investments in central government buildings

Under this component, MoEUCC will finance the preparation and implementation of renovations of central government and central-government affiliated buildings (i.e., public buildings under central line ministries) to save energy and increase renewable energy (RE) use. The Project aims to renovate about 400 buildings, each of which will receive a Turkish Energy Performance Certificate (EPC). Building renovations would result in minimum energy savings of 30 percent and seek to achieve a Turkish Class B EPC or higher. Investment measures would include upgrades of the building envelope (insulation, windows, and doors), space and water heating, cooling, ventilation, air conditioning, pumps/fans, lighting, and installation of on-site RE systems that primarily aim to offset the facility's energy consumption. A limited amount of funds could be allocated to ancillary measures (e.g., rewiring, minor structural repairs, painting, seismic safety, fire safety, improving access, etc.). In order to ensure further decarbonization and deeper renovations, the Project will (i) maximize the replacement of fossil fuel-based boilers by electric heat pumps or RE-based heating to the extent that is technically and financially feasible ; (ii) introduce a standard taxonomy for building renovations that prescribes a set of mandatory EE and on-site RE measures; (iii) finance rooftop or ground-mounted (e.g., parking lot canopy) solar photovoltaic (PV) installations; and (iv) seek to reach NZEB standard for at least 20 percent of the buildings renovated under the Project. It is expected that these investments will demonstrate technical approaches and help further build industry capacity for deeper EE renovations, which would be expanded to cover municipal buildings as proposed under the national-level program for EE renovations of public buildings. The pilots can also help inform current and future investments and phases of MoEUCC's renovation programs.

Component 2: Technical assistance and project implementation support

This component will include subproject development costs such as marketing and outreach, screening of subproject candidates, and review of energy audits and technical designs; technical support to develop and assess approaches for deeper renovations, comprehensive electrification of buildings, and improvements in water efficiency; day-to-day project management such as preparation and management of procurements, contract management, and supervision of renovation works; implementing financing requirements in compliance with the Bank's fiduciary policies and guidelines; ensuring satisfactory implementation of the Bank's Environmental and Social Framework (ESF); energy and water savings monitoring; Project monitoring and evaluation; training, capacity building, and knowledge sharing for the Project Implementation Unit (PIU) staff, service providers such as energy auditors and designers, construction firms, building administrators,

[3] For details please see: https://projects.worldbank.org/en/projects-operations/document-detail/P500777?type=projects

[4] https://projects.worldbank.org/en/projects-operations/document-detail/P500777?type=projects

women in the EE field, and any other relevant project stakeholders; Project communications and dissemination of results; equipment needed for day-to-day Project implementation; and incremental operational costs. This component will also include technical assistance (TA) including: (i) Assessment of EE measures and costs for renovation of existing and construction of new public buildings to exceed current requirements for EE , and (ii) Identification of a financing scheme that would allow MoEUCC to maintain a public building renovation program over a longer term, beyond the Project period; and (iii) development of the documentation required to register the Project, and Measurement, Reporting and Verification (MRV) for certification of emission reductions.

The MoEUCC will coordinate project activities, including day-to-day implementation, coordination, supervision and overall management of Project activities. The Project will be implemented in all eligible buildings under scope among Türkiye.

The EEPB2 Project will not only save the public budget by reducing energy consumption but will also contribute to raising public awareness and development through its positive environmental and social impacts.

3. Environmental and Social Policies, Regulations, and Laws

3.1. Legal Framework of Türkiye

Turkish environmental regulations were developed in line with national and international initiatives and standards, and some of them have been revised to be harmonized with the EU Directives in the scope of Türkiye's pre-accession efforts. The Turkish Environmental Law, which came into force in 1983, addresses environmental issues on a broad scope. Complementary to the Environmental Law and its regulations, other laws also govern the protection and conservation of the environment, resources, and also renewable energy, and measures for the prevention of pollution, health, and safety and labor issues as listed in Table 1.

Table 1. Relevant Legal Framework of Türkiye

Law	Description and Relevance to Project Activities
The Turkish Environmental Law (Law No: 2872; Date of Ratification: 1983)	This law addresses all environmental issues on a broad scope and forms the foundation of many other regulations related to environmental pollution, protection and impact assessment.
Groundwater Law (Law No: 167, Date of Ratification: 1960)	In cases where groundwater pollution is a risk during the construction activities of subprojects, the mitigation measures and penalties underlined in this regulation must be considered.
Forestry Law (Law No: 6831, Date of Ratification: 1956)	If the subproject site activities have impacts on natural habitats, forests and/or protected areas, and soil, these two laws will come into force. Environmental protection has been an element of forestry through emphasizing forest conservation and accounting for environmental impacts on soil and water. The Law on Soil Protection and Land Use amends Law No. 5403 on Soil Preservation and Land Utilization with several minor changes. This Law adds Articles 8A to 8K regarding agricultural land sizes and transfer of inherited agricultural lands.
Law on Soil Protection and Land Use (Law No: 6537; Date of Ratification 2014)	
Energy Efficiency Law (Law No: 5627, Date of Ratification: 2007)	This law is directly related to the objectives of EEPB2 Project since the purpose of this law is to increase efficiency in using energy sources and energy in order to use energy effectively, avoid waste, ease the burden of energy costs on the economy and protect environment.
Labor Law (Law No: 4857, Date of Ratification: 2003)	Under the construction works in subproject sites, there will be civil workers and since the aim of this law is to regulate the working conditions and work-related rights and obligations of employers and employees working under an employment contract, it is relevant.
Occupational Health and Safety Law (Law No: 6331, Date of Ratification: 2012)	This law governs the necessary standards and operational principles that shall be pursued in any kind of activities taking place in subproject site. Occupational health and safety is not only related to workplaces and employees but also to the community as a whole and it is also a priority at national and international levels
Public Health Law (Law No: 1593, Date of Ratification: 1930)	Among the workers employed in subproject sites, contagious diseases might be a problem. The fundamental principles regarding the human health and medical care services are discussed under this law.

In line with the Environmental Law and other supplementary laws, several regulations, communiqués and ordinances have been published since 1983. A comprehensive (though non-exhaustive) list of these regulations, communiqués and ordinances is given below:

Air Quality Control and Management

- Regulation Concerning Follow up of Greenhouse Gas Emissions (Date: May 31, 2017, No: 30082)
- Regulation on the Control of Air Pollution from Heating (Date: January 13, 2005, No: 25699)
- Regulation on the Control of Exhaust Emissions (Date: March 11, 2017, No: 30004)
- Regulation on the Control of Odor Causing Emissions (Date: July 19, 2013, No:2871)
- Industrial Air Pollution Control Regulation (Date: December 20, 2014, No: 29211)
- Regulation on Assessment and Management of Air Quality (Date: June 6, 2008, No: 26898)

Environmental Management, Permitting and Planning

- Environmental Auditing Regulation (Date: November 21, 2008 and No: 27061)
- Environmental Impact Assessment Regulation (Date: July 29, 2022, and No: 31907)
- Regulation Concerning Environmental Land Use Plans (Date: November 11, 2008 and No: 27051)
- Regulation on Environmental Permit and Licenses (Date: September 10, 2014, No: 29115)

Soil Quality Control and Management

- Implementation Regulation on Soil Protection and Land Use (Date: December 15, 2005, No: 26024)
- Regulation on the Control of Soil Pollution and Polluted Areas by Point Sources (Date: June 8, 2010, No: 27605)

Waste Management

- Regulation of Waste Management (Date: April 2, 2015, No: 29314)
- Regulation Concerning the Landfill of Wastes (Date: March 26, 2010, No: 27533)
- Regulation on the Control of Excavation Materials, Construction and Demolition Wastes (Date: March 18, 2004, No: 25406)
- Regulation on the Control of Packaging Wastes (Date: December 27, 2017, No: 30283)
- Regulation on the Control of Waste Batteries and Accumulators (Date: August 31, 2004, No: 25569)
- Regulation on the Control of Waste Oils (Date: July 30, 2008, No: 26952)
- Regulation on the Control of Waste Tires (Date: March 11, 2015, No: 29292)
- Communique on Recycling and Recovery of Certain Non-Hazardous Wastes (Date: June 17, 2011, No: 27967)

Water Quality Control and Management

- Regulation Concerning Protection of Ground Waters against Pollution and Deterioration (Date: May 22, 2015, No: 29363)
- Regulation on the Control of Pollution Caused by Dangerous Substances in Water Environment (Date: November 26, 2005, No: 26005)
- Surface Water Quality Management Regulation (Date: April 15, 2015, No: 29327)
- Urban Wastewater Treatment Regulation (Date: January 8, 2006, No: 26047)

- Regulation Concerning Wastewater Collection and Disposal Systems (Date: January 6, 2017, No: 29940)
- Water Pollution Control Regulation (Date: December 31, 2004, No: 25687)

Noise Control and Management

- Regulation on the Environmental Noise Control (Date: November 30, 2022, No: 32029)

General/Other Related Regulations

- Presidential Decree (Date: May 10, 2019, No: 30770)
- Presidential Decree No:1-Regulating the Duties and Responsibilities of MoEUCC (Date: July 10, 2018, No: 30474)
- Law on the Use of Renewable Energy Resources for the Production of Electrical Energy (Law No: 5346, Date of Ratification: 2005)
- Regulation on Amending the Unlicensed Electricity Generation Regulation in the Electricity Marketing (Date: August 11, 2022, No: 31920)
- Regulation on Solar Energy Based Electricity Generation Facilities (Date: June 16, 2011, No:27969)

3.2. National Environmental and Social Assessment and Permitting

MoEUCC is responsible for managing environmental assessments and permitting, labor & occupational health and safety (OHS) and social issues. The responsibility of The MoEUCC is as follows:

- Prepare the legislation on the environment, public works, and housing development and monitor and audit the related implementations;
- Identify the principles and policies on environmental protection, rehabilitation of the environment, and prevention of environmental pollution, develop standards, criteria, and programs in this context; outline the principles for implementing and monitoring these standards and criteria; undertake the works related to climate change;
- Assess the impacts of all facilities/activities that pollute the environment due to their activities resulting in solid, liquid, or gaseous waste disposal/discharge into receiving environments; monitor, audit and issue the permits of such facilities/activities;
- Perform the measurements/analyses and monitoring studies concerning receiving environments;
- Establish the plans and policies regarding global climate change and measures to be taken.

Under Article 10 of Environmental Law sets out the general scope of the Environmental Impact Assessment (EIA) procedure in Türkiye, indicating that institutions, agencies, and establishments that lead to environmental problems as a result of their planned activities are obliged to prepare an EIA report or Project Information File (PIF). Based on this legal framework, the Regulation on Environmental Impact Assessment (henceforth "EIA Regulation") was put into force for the first time after being published in the Official Gazette numbered 21489 and dated February 7, 1993. Since then, there had been several amendments to the first regulation, and new EIA regulations were published in 2008, 2013, and 2014 repealing the former regulations in force. The latest EIA Regulation has been published in the Official Gazette dated July 29, 2022, and numbered 31907, which repealed the 2014 EIA Regulation.

The EIA Regulation classifies projects into two categories:

1. Annex I Projects: These are projects that have significant potential impacts and require an EIA. Annex I lists these project types, so project proponents are expected to start the EIA procedure without any other screening process.
2. Annex II Projects: Annex II covers projects that may/may not have significant effects on the environment. Proponents of Annex II projects are required to submit a PIF to MoEUCC which will be prepared according to Annex IV of the same EIA Regulation. The Provincial Directorate gives its "EIA is necessary" or "EIA is not necessary" decision regarding the project. The decision of the Provincial Directorate is communicated to public via appropriate means.

There would be no subprojects within the scope of EEPB2 Project that would be subjected to EIA Regulation. The social impacts within the screening are not mandatory in the national EIA regulation and generally are either very briefly mentioned or not at all. Renewable energy projects especially in solar power plants with a project area of 20 hectares or more or an installed power of 10 MWm or more will be implemented with EIA. These projects are included in the Annex-1 of the EIA Regulation. Solar power plants with a project area of 2 hectares or more or an installed power of 1 MWm or more (excluding roof and facade systems) are included in Annex-2 (Projects subject to previous assessment for environmental impacts) of the Regulation.

3.3. World Bank Standards and Key Gaps with the National Framework

The project will follow both the national legislation and the Environmental and Social Standards (ESSs) of the World Bank (WB) Environmental and Social Framework (ESF). As part of the environmental and social procedures, the Bank classifies all projects into one of four classifications: High Risk, Substantial Risk, Moderate Risk, and Low Risk. In determining the appropriate risk classification, the Bank considers relevant issues, such as the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of the Client to manage the environmental and social risks and impacts in a manner consistent with the Environmental and Social Standards (the relevant ESSs to the Project are listed in Table *2*).

The overall environmental and social (E&S) risk rating of the proposed Project is assessed as "Moderate". The main environmental risks of the Project are expected to be typical risks and impacts related to construction works; dust and noise emissions, hazardous, and non-hazardous waste generation and disposal, Occupational Health & Safety (OHS) risks, and traffic safety risks, emission of bio-aerosols, odors, and vehicle exhaust due to waste collection and transportation activities, vibration from the operation of construction processing equipment. The main social risks of the Project are expected to be labor risks related to OHS and community health and safety risks in civil works in subproject sites.

All Project activities will be carried out in existing government buildings and Project activities will not require any new land or relocation. Accordingly, ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Settlement is not relevant for this project. Activities (i) adversely affecting the known cultural heritage sites other than the building to be renovated (as in ESS8), (ii) adversely affecting the natural/critical habitats (as in ESS6), (ii) that require land acquisition or lead to economic displacement, as referred to in ESS5, will be screened out through the E&S Screening Checklist annexed to this ESMF (**Hata! Başvuru kaynağı bulunamadı.**).

Table 2. Relevant World Bank ESS and Key Gaps with the National Framework

E&S Standard	Relevance	Key Gaps
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	ESS1 is relevant for the project because construction activities are expected to generate typical construction-associated impacts such as construction waste generation and other hazardous waste generation dust formation, impacts on air quality, and noise, as well as occupational health and safety and community health and safety. The requirements of this standard will be met through preparation and implementation of this ESMF, adjusted ESMPs, C-ESMPs/C-OHSPs. The project will also implement Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) mitigation measures including a Code of Conduct for workers, a mechanism to report SEA/SH cases, and training and awareness sessions for project workers and affected communities.	The scope of E&S assessment required in ESS1 varies depending on the potential risks and impacts of the Project and, in an integrated manner, all relevant direct/indirect and cumulative risks and impacts throughout the Project life cycle are assessed. Based on this, the key differences between WB ESS1 and Turkish Environmental Impact Assessment regulation and associated requirements can be listed as follows: • possible discrepancies with regard to the level at which the project's environmental and social impacts, its alternatives, and mitigation measures for the impacts are discussed (such as lack of discussions on residual impacts, limited discussion on indirect and induced impacts, limited assessment regarding use of resources and GHG emissions under Turkish EIA), • social impact assessment is not completely integrated to the Turkish EIA and this results in the absence of proper social baseline, identification and assessment of the project induced social impacts/risks including impacts on disadvantaged or vulnerable and gender related issues, and • limited requirements of the national regulations in terms of risks and impacts related to (i) community health and safety; (ii) occupational health and safety; and (iii) labor and working conditions.
ESS2: Labor and Working Conditions	ESS2 is relevant for the project because the project will comprise civil works and various types of project workers. Main labor-related risks include inadequate terms and conditions of employment and OHS risks. The requirements of this standard will be met through the preparation and implementation of the Project LMP that complies with both the national legislation and requirements of ESS2. The LMP will be implemented throughout the life of the Project. The LMP is developed to address national and WB requirements for direct and contracted workers as well as primary supply workers. Contractors are required to monitor their primary supply chain for safety issues related to supply chain	In general, Turkish national laws and regulations regarding labor and working conditions satisfy ESS2 requirements. The **workers' grievance mechanism** is the main gap between national legislative requirements and ESS2. Per the Turkish national legislation on labor and working conditions, there is no specific requirement related to the grievance mechanism that allows workers to communicate their complaints to the employer.

E&S Standard	Relevance	Key Gaps
	workers, and where necessary to introduce procedures and mitigation measures. The project will also implement SEA/SH mitigation measures including a Code of Conduct for workers, a mechanism to report SEA/SH cases, and training and awareness sessions for project workers and affected communities.	
ESS3: Resource Efficiency and Pollution Prevention and Management	ESS3 is relevant for the project because the project activities includes construction (solar panels, insulation, etc.). Potential negative impacts associated with these activities could be attributed to dust emissions, noise, construction waste generation, equipment vibration, wastewater generation, hazardous waste generation. Since these impacts are expected and will be mitigated through actions presented in ESMPs, LMP and OHSP based on WB ESSs, this ESS is relevant. The construction impacts are considered to be temporary and reversible through the use of national regulatory requirements and the application of the WB group EHS general and sector-specific guidelines and other good international industry practices. In this respect, this ESMF addresses: i) establishing and adhering to general good housekeeping, ii) emissions (including dust, noise, etc.) control, and iii) proper waste management including hazardous, solid, and construction waste management. Measures to ensure resource efficiency (water, energy, and construction material) are also included in the ESMF and will be further detailed in the respective project-level/adjusted/contractor level ESMP and/or E&S code as well as in Waste Management Plans, Pollution Prevention Plans, as needed, to be prepared by the contractor.	Most of the relevant national legislations regarding laws and regulations are in line with EU directives. There is no major gap between ESS3 and legislative requirements in relation to pollution prevention. Local EIA regulation does not provide detailed management perspective on potential impacts, mitigation measures and residual impacts and monitoring. In other words, sub-management plans are not specifically defined in local EIA process. Additionally, with the recently published national EIA Regulation, the preparation of some sub-management plans (such as Zero Waste Plan, Greenhouse Gas Reduction Plan, etc.) has been defined. However, the content/coverage of these plans might not completely satisfy the ESSs requirements in certain areas in some cases and specific to this project; most of the activities to be carried out within the project scope is exempt from national EIA regulation (i.e. there is not any legal requirement for preparation of E&S assessment documents).
ESS4: Community Health and Safety	ESS4 is relevant for the project because project activities might pose risks to the nearby community due to construction activities. Community health and safety (CHS) risks are related to the construction phase impacts of sub-projects, such as noise and air quality, traffic management and temporary road closures, and construction waste management process cycle. Medium-scale labor influx and worker accommodation are expected. The requirements of this standard will be met through the preparation and implementation of this ESMF and subsequently by the sub-	At the policy level, there is no major gap in between. However, at the project management level, risks associated with labor influx, sexual exploitation and abuse and sexual harassment are the key gaps.

E&S Standard	Relevance	Key Gaps
	management plans to be developed as a part of sub-project specific instruments where CHS measures and traffic management issues will be detailed.	
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement		***ESS5 is not relevant to this Project.*** The proposed subprojects will be implemented in existing central government buildings. Project activities that require land acquisition or lead to economic displacement, as referred to in Environmental and Social Standard 5 (ESS5), will be screened out through the E&S screening list provided in Annex-1 of this ESMF.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural		***ESS6 is not relevant to this Project.*** Activities adversely affecting the natural/critical habitats will be screened out through the E&S screening list provided in Annex-1 of this ESMF.
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional		***This standard is not relevant*** since there are no indigenous groups in Turkiye who meet the definition of this standard.
ESS8: Cultural Heritage	ESS8 is relevant as there are chances that cultural heritage could be encountered when the proposed project activities are implemented, even though the project will not finance sub-projects that rehabilitate/ involve cultural heritage sites. The requirements of this standard will be met by the preparation and implementation of a Chance Find Procedure and will be included in the sub-project specific instruments as appropriate. Further, sub-projects that may cause impacts on tangible or intangible cultural heritage sites will be excluded from the project investments. Screening will take into consideration the significance of physical cultural heritage and intangible cultural heritage that may be materially affected or put at risk as a result of the subproject. Any activities adversely affecting known cultural heritage sites will not be supported under this project.	Turkish national legislation on protection of cultural assets mainly satisfies the ESS 8 requirements for physical cultural heritage, but fails to cover intangible cultural heritage.
ESS9: Financial Intermediaries	This standard is not relevant as there is no Financial Intermediary in the Project.	

E&S Standard	Relevance	Key Gaps
ESS10:	ESS10 is relevant for all projects given the need to engage with beneficiaries and stakeholders on development activities that affect their lives. The requirements of this standard will be met by the preparation and implementation of the Project level Stakeholder Engagement Plan (SEP) which includes different modalities for engagement with different stakeholders.	Effective and transparent stakeholder engagement is the main gap in terms of ESS10 requirement. Within this scope, a Stakeholder Engagement Plan required to identify the different stakeholders (project-affected parties and other interested parties including disadvantaged or vulnerable). Stakeholder engagement should be a continuous documented process.

4. Potential Environmental and Social Risks and Impacts

Global warming due to GHGs and deterioration of the environment due to the discharge of harmful pollutants are the main environmental problems being faced globally today. Using RE technologies, such as solar energy, is one way to mitigate harmful environmental impacts of current energy technologies. In line with the objectives of the European Union's (EU) Green Deal, and WB's Green Growth, this project will promote green energy investments contributing to climate change mitigation, use of resources efficiently and Türkiye's shift to low-carbon infrastructure development. Subprojects to be implemented under EEPB2 Project are expected to generate both direct and indirect positive effects on the environment and community in long-term, which are listed as below:

- **Access to energy:** Energy efficiency can increase the services delivered by each kilowatt of electricity and improve energy access.
- **Air quality improvement:** Energy efficiency can reduce both indoor and outdoor concentrations of air pollutants.
- **Asset values:** Energy efficiency can increase asset values for utilities.
- **Economic benefits:** Cost-effective energy efficiency improvements can have positive macroeconomic impacts, boosting economic activity.
- **Emissions savings:** Energy efficiency reduces GHG emissions, both direct emissions from fossil fuel, and indirect emissions from electricity generation.
- **Employment:** Energy efficiency can induce job creation, improve productivity, and decreases employee absenteeism.
- **Energy prices:** Energy efficiency can lower energy prices by reducing the need to add new power generation or transmission capacity and by reducing pressure on energy resources.
- **Energy savings:** Energy efficiency reduces the amount of energy used to provide a service.
- **Energy security:** Energy efficiency can reduce the reliance on energy imports and reduce the risks of supply interruptions.
- **Health and wellbeing:** Energy efficiency supports physical and mental health with healthy temperatures, humidity, noise, and air quality.
- **Public resources savings:** Energy efficiency can enable higher disposable income by lowering energy bills and other households' costs.
- **Productivity:** Energy efficiency leads to productivity gains by lowering maintenance issues and optimizing processes.
- **Public budgets:** Energy efficiency delivers financial benefits to public budgets through increased income and decreased expenses.

In addition to the positive effects of EEPB2 Project, due to the construction, operation, commissioning and final disposal taking place in subprojects, there will be some adverse environmental and social impacts. But both the environmental and social impacts of the Project will be temporary and of local nature. The environmental impacts described at this stage are preliminary and will need to be further elaborated specific to subproject and the potential for occurrence must be ascertained in the coming stages of subproject design and implementation. Due to the nature and magnitude of potential environmental and social risks and impacts, during project implementation no significant adverse impacts on the environment and humans are expected.

The potential environmental and social adverse impacts/risks of the Project are identified to be including:

- Noise, dust, air, soil and water pollution generation,
- Solid waste generation,

- Construction/demolition waste generation (including end of life and not in use solar panels),
- Community health and safety risks (traffic management-related risks, SEA/SH risks, etc.),
- OHS risks,
- Temporary interruption of livelihoods of some workers and business owners if car park areas are operated by individual businesses and/or there are small enterprises such as buffets in the parking area and buildings, and
- Temporary disruption and impacts on the amenity of users and employees of the public buildings.

These risks are expected to be typical during the construction of solar panels in public buildings, temporary by nature and site-specific and can be mitigated by applying the best construction practices and relevant measures.

Below Table 3 summarizes the identified potential environmental and social risks/impacts of the subprojects to be implemented within the scope of the Project. The mitigation measures to be taken to manage and minimize these risks and impacts are presented in **Hata! Başvuru kaynağı bulunamadı.**).

Table 3. Environmental and Social Risks Relevant to the Project

Subcomponent Activity	Risks and Impacts
Labor force allocated for construction at the sub-project site	The introduction of the new labor force to communities surrounding the construction sites and building users (students & patients and their families, personnel, workers and visitors) may increase the risk of SEA/SH in these communities.
High risk activities carried out during construction activities on site	The potential OHS risks include physical hazards such as rotating and moving equipment, noise, vibration, electrical hazards, welding/hot work, eye hazards, site traffic, ergonomics, repetitive motion, manual handling, working environment temperature, working at height, illumination, and chemical hazards such as air quality, fire, and explosions, asbestos containing materials (ACM), corrosive, oxidizing, and reactive chemicals, and biological hazards. There may be temporary disruptions for residents along with a potential risk for injuries or adverse impacts (air pollution due to dust, noise pollution, etc.) during the construction activities of the sub-projects.

Subcomponent Activity	Risks and Impacts
Construction equipment and vehicles used in sub-project site	Contamination of soil might be possible from vehicles/machines' load, exhaust and leakage oil. The activities might cause oil degradation, accidental spills of fuel/chemicals, inappropriate waste disposal, hazardous and non-hazardous waste, and demolition waste. These mechanical machinery and equipment, vehicles, etc. might cause increased noise levels irritating the community nearby. The vehicles will also increase the traffic load around the construction site. Traffic congestion and temporary interruptions from the construction phases and could potentially cause annoyance, disruption, health and safety impacts. Poorly trained or inexperienced vehicle drivers have an increased risk of accidents with other vehicles, pedestrians, locals, and equipment. Delivery vehicles, as well as private vehicles on-site likely to cause increased frequency and severity of accidents.
Construction-demolition activities on site	Air Pollution may be caused by emissions from installation works, vehicles, mechanization, excavation of soil, dismantling of the old equipment and constructions (if needed), transportation of demolition/construction materials, and also during the final interior and exterior works. During the installation of panels or insulation activities, dust can be generated, and it could be inhaled by workers and people living or working around. Leakage of fuels and lubricants (fuel and lubricants) from construction activities, machinery maintenance, and improperly stored waste, can pollute the soil and may contaminate groundwater or drain into surface water bodies. Maintenance and cleaning of construction machinery and mechanisms near natural streams can lead to water pollution.
Excavation and construction activities at the sub-project site	Throughout the project implementation, different waste streams will be generated: excavation of small amounts of soil, communal waste, construction and demolition waste (concrete, glass, plastic, etc.), biodegradable waste, packaging waste, possibly hazardous waste – asbestos from roofs, paints, solvents, oils, PV panels, etc. Potential impacts may arise due to inadequate waste sorting, storage, and handling. Chemicals and hazardous materials wastes are mainly from the use of new insulation materials, and fuel filling, vehicle and machinery maintenance work. Another hazardous waste such as waste oil might be generated from various construction activities, from generators and machinery, etc.

4.1. Risks and Mitigation Measures Specific to Disadvantaged and Vulnerable Groups

"Disadvantaged and vulnerable groups" refer to persons who may be disproportionately impacted or further disadvantaged by the project(s) compared with other groups due to their vulnerable status (for example, due to age, gender identity, sexual orientation, ethnicity, disability, economic disadvantages, etc.), and may require special engagement efforts to ensure their equal representation in the consultation and decision-making process associated with the project.

During the preparation of sub-projects stakeholder identification and engagement will be carried out to understand the needs and concerns of the building occupants, including disadvantaged and vulnerable groups, and make accommodations to minimize disturbances to the extent possible

SEA and SH risks are assessed as low at this stage considering the small scale of construction works, limited labor influx, and the subproject locations being the urban and semi-urban areas which are easily accessed and easy to supervise. The size of the labor force required will depend on the nature of project activities: for the renovation work, a small-sized labor force and influx can be expected. The introduction of the new labor force to urban communities surrounding the construction sites may increase the risk of SEA/SH in these communities. A Code of Conduct included in the LMP will be used to manage these risks, along with training for all workers and the availability of a grievance mechanism.

In EEPB2 Project, the owners and workers of the commercial enterprises present (if any) in the parking areas or construction site are identified as vulnerable groups by economic means. In some buildings, especially in hospitals, parking lots are mostly operated by individual businesses or there may be small enterprises like buffets located. Construction/installation activities may result in a temporary disruption to their business activities and livelihoods. In order to prevent any kind of temporary disruption of business activities and livelihood losses, parking lot operators or small commercial enterprises such as buffets, canteens in the project area will be assisted to operate in another location, together with the workforce of the enterprise, and assisted in moving. Otherwise, if appropriate locations cannot be allocated to these enterprises, the public building administration will notify no later than three (3) months before the start of construction/installation that the contracts of the commercial enterprises operating in the parking area of the public buildings or within the buildings under renovation will be terminated. No renewed or new contracts will be signed until construction is complete. In this case, the parking lot operators or other business owners will have at least 3 months' advance notice before any disruption to livelihoods.

If public building entrances (e.g. schools, hospitals, etc.) will be diverted to other entrances of the building during the installation works, it will be ensured that appropriate structures will be established for disabled users.

4.2. Planning and Design Considerations for Avoidance of Environmental and Social Risks and Impacts

The project is considered to result in overall positive environmental and social outcomes. However, there may be adverse environmental and social impacts associated with the Project that can be prevented and/or minimized through planning and design. For instance, resource consumption will be minimized through using concrete from local licensed plants and monitoring the use of electricity, fuel and water consumption during construction activities.

An OHS Plan will be prepared (by the awarded Contractors) prior to commencement of any construction activities knowing the details of subproject site, activities, vehicles and equipment to

be used. The regular site inspection will be conducted by Project Implementation Unit (PIU) and Supervision Consultant to monitor and ensure that all construction activities to be implemented have been carried out in line with national law and regulations and requirements of WB's standards. Waste collection and disposal pathways and sites will be identified in site-specific WMP for all major waste types expected from installation activities.

5. Procedures and Implementation Arrangements

5.1. Environmental and Social Risk Management Procedures

The environmental and social risk management procedures will be implemented throughout the Project's subproject selection process. The Project Cycle and E&S Management Procedures are presented in Table 4 given below.

Table 4. Project Cycle and E&S Management Procedures

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Subproject identification	Screening	- The initial screening for the eligibility of the subprojects will be based on the Exclusion List in Table 5 given below. - For all activities, the ***Screening Form***in **Hata! Başvuru kaynağı bulunamadı.** will be used to identify and assess the risk rating of the proposed subprojects, their potential environmental and social impacts/risks, and identify the appropriate mitigation measures for the subproject. - Once it is confirmed that the sub-project is not part of the list of non-eligible types of sub-projects, the Supervision Consultant's environmental and social experts in the fields will carry out a rapid assessment of the likely environmental and social impacts/risks that will be based on the requirements of national legislation and WB ESSs.
b. Formulation and Planning: Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	- Based on ***Screening Form*** adopt and/or prepare relevant environmental and social procedures and plans, - Ensure that the contents of the ESMPs are shared with relevant stakeholders in an accessible manner and consultations are held with the affected communities in accordance with the SEP prior to initiation of the bidding process, - Train staff responsible for implementation and monitoring of plans, - Incorporate relevant environmental and social procedures and plans into contractor bidding documents, - Train contractors on relevant procedures and plans. - During Project implementation, the Bank will review and approve at least the first 10 customized ESMPs, adjusted by the Supervision Consultants for the subprojects and then the Bank can mutually agree with MoEUCC that MoEUCC conducts prior review of the Environmental and Social Assessment (ESA) documents and the World Bank conducts post review..
c. Implementation and Monitoring: Implementation support and continuous monitoring for projects	Implementation	- Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring. - Track grievances/beneficiary feedback. - Continue awareness raising and/or training for relevant staff, volunteers, contractors, communities. - Monitor the performance of the Contractor on implementation of ES requirements.

Project Stage	E&S Stage	E&S Management Procedures
d. Review and Evaluation: Qualitative, quantitative, and/or participatory data collection on a sample basis	Completion	- Assess whether plans have been effectively implemented. - Ensure that physical sites are properly restored.

The project will be implemented by MoEUCC through its GDCA. The Directorate has qualified technical staff who have experience in managing design, construction, and retrofitting contracts. Currently, PIU has one environmental specialist, one OHS specialist and one social specialist to prepare the E&S instruments for the subjects and also to monitor/supervise the Project activities throughout the life of the Project. The environmental and social management procedures that will be applied throughout the life of the Project are described in the following sections of this ESMF.

a. Subproject Assessment and Analysis – E&S Screening

As a first step, all proposed activities should be screened to ensure that they are within the boundaries of the Project's eligible activities, and they are not considered as activities listed on the E&S Exclusion List given in Table 5.

Table 5. Exclusion List

- Any construction in protected areas or priority areas.
- Facilities with a commercial character such as private, commercial and entertainment facilities (i.e., bars, dance clubs, camps, health strengthening centers, summer camps for children).
- Activities that have potential to cause any significant loss or degradation of critical natural habitats whether directly or indirectly or which would lead to adverse impacts on natural habitats.
- Activities that have potential to cause significant impact on any ecosystems of importance, especially those supporting rare, threatened or endangered species of flora and fauna.
- Buildings related to national defense and correctional facilities (prisons).
- Subprojects submitted by central government institutions when previously installed PV panels under the Project have not followed their obligations regarding maintenance and operations.
- Other types of subprojects and activities that would harm the environment, encourage the marginalization of social and ethnic groups and duplicate other projects and activities supported by other institutions are not in compliance with Turkish legislation.
- Any subproject that involves altering the quality and quantity of international waterways, reliance on existing hydroelectric dams triggering any dam safety aspects under ESS4, etc.
- Any subproject which would be classified as *High Risk* or *Substantial Risk* project according to WB ESF.
- Any activity affecting the physical cultural heritage protected by the national legislation.
- Any subproject that would involve land acquisition and resettlement including economic displacement.
- Any activity with significant environmental and social risks/impacts that require an Environmental and Social Impact Assessment (ESIA).

As a second step, the PIU/MoEUCC will use the ***E&S Screening Form (Annex 1)*** to identify and assess relevant environmental and social risks specific to the activities, and identify the appropriate mitigation measures. The *Screening process* will identify and lists the various mitigation measures and plans that may be relevant for the specific activities (such as the Environmental and Social Management Plan, the Labor Management Procedures, Chance Find Procedures, etc.). The Supervision Consultant might support the PIU in the preparation of the E&S Screening Form if needed. The Supervision Consultants will also identify the documentation, permits and clearances

required under the government's environmental regulation and PIU will be responsible for the review of these documents. All E&S Screening Forms and proposed risk ratings for the candidate subprojects will be prepared by the PIU, shared with and approved by the Bank.

b. Subproject Formulation and Planning – E&S Planning

Based on the screening process and assessment mentioned above, the project-level ESMP (including OHS measures) (Annex-3) will be adjusted by the Supervision Consultant, for each subproject categorized as "Low Risk" or "Moderate Risk". The PIU/Supervision Consultant will also adopt the necessary environmental and social management measures already included in the SEP and LMP.

During Project implementation, the Bank will review and approve at least the first 10 customized ESMPs (including OHS measures), (project level prepared by the PIU) adjusted by the Supervision Consultants for the subprojects and then the Bank can mutually agree with MoEUCC that MoEUCC conducts prior review of the Environmental and Social Assessment (ESA) documents and the World Bank conducts post review.

The customized ESMPs (including OHS measures) will be disclosed both on the MoEUCC's and the institutions' webpage (school, hospital, government institution – where the project activities will be carried out) and local government's webpage if relevant for at least 10 days. After the consultations, the tendering process will be initiated with the "final adjusted ESMP" (i.e. the ESMPs revised in accordance with the outcomes of the consultations) annexed to the bidding documents.

Once the Contractor is awarded, the Contractor will prepare the site-specific Contractor's ESMP/OHSP (C-ESMP/C-OHSP) for the subproject they will be responsible for. The C-ESMPs/C-OHSPs will be reviewed and cleared by the PIU.

The Supervision Consultant will complete the documentation, permits and clearances required under the government's Environmental Regulation before any project activities begin and PIU will be responsible for the review and approval these documents.

Before the commencement of any sub-project activities, staff who will be working on the various subproject activities, will be trained on the sub-project specific ESMPs. The PIU (with the support of the Supervision Consultants) will provide training to the awarded Contractors, to ensure that all relevant environmental and social mitigation measures are understood and incorporated into their works and respective management plans. The Contractors will provide relevant training to their field staff. The PIU (with the support of the Supervision Consultants) will ensure that all subcontractors and suppliers also understand and incorporate the environmental and social mitigation measures relevant to them as standard operating procedures for civil works.

c. Implementation and Monitoring – E&S Implementation

This Project will be implemented by the Department of External Investments under the GDCA. The existing PIU established for the implementation of another WB-financed Project (i.e., the EEPB Project) will also be responsible for the implementation of this Project.

The PIU will monitor the sites on a monthly or quarterly basis during the construction period, depending on the scope and scale of the sub-projects. More frequent monitoring may be conducted if needed to ensure compliance with the mitigation measures and resolution of any issues that are identified.

The PIU will carry out regular supervision of sub-projects during the construction period to ensure the C-ESMP, C-OHSP, SEP, and LMP are being duly implemented and GMs are accessible and functional. As a monitoring tool, the PIU will also track grievances/beneficiary feedback (as described in the Project SEP and PAD) and will use these as a tool for monitoring the implementation of the project activities and environmental and social mitigation measures.

The PIU will ensure that monitoring practices include the environmental and social risks identified in the ESMF and will monitor the implementation of E&S risk management mitigation plans as part of regular project monitoring. The PIU will also prepare quarterly E&S Progress/Monitoring Reports and biannual Project Progress Reports for submission to the Bank. At a minimum, the reporting will include (i) the overall implementation of environmental and social risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational and Community Health and Safety performance (including incidents and accidents), (iv) stakeholder engagement updates, in line with SEP, (v) public notification and communications, (vi) progress on the implementation and completion of project works, and (vii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP.

Throughout the Project implementation, the PIU will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures.

The Supervision Consultant(s) will be responsible for the initial assessment of Project site, customization of the project level ESMPs (including OHS measures) for the sub-projects in accordance with their potential identified environmental and social risks and impacts. The Supervision Consultant(s) will be on-site (daily basis) and will be responsible for monitoring, supervising, reporting and coordinating with the PIU regarding sub-project E&S implementations. The Supervision Consultant(s) will monitor the implementation of E&S risk management mitigation plans on site and report monthly on the environmental, social, health and safety (ESHS) performance of the sub-projects.

The Provincial Directorates of Environment, Urbanization and Climate Change will also support the PIU like supervision consultants and will be responsible for initial assessment of Project site and customize project level ESMPs of sub-projects. They will be also responsible for monitoring, supervising, reporting (monthly basis) and coordinating with PIU on sub-project implementations.

The Supervision Consultant(s) will ensure Contractor(s) to utilize and maintain the Project's Grievance Mechanism at the construction site during the life of the Project. The Supervision Consultant(s) will (i) inform the PIU in responding to grievances received at construction sites in timely manner, (ii) provide logistic and data collection support for communication activities (i.e. informative meetings, consultations, trainings at the project site, etc.) before commencement of any construction work, (iii) contribute to community awareness raising activities. The Supervision Consultant will ensure that the Contractor(s) record any grievance received by local community or worker and report it in monthly ESMP monitoring reports to be submitted to the PIU.

The Contractors will comply with the Project's E&S risk management plans and procedures, including contractor ESMPs /OHSPs (C-ESMPs/C-OHSPs) prepared in compliance with the national legislation and WB requirements. The Contractors will be expected to disseminate and create awareness within their workforce of environmental and social risk management and compliance for their effective implementation. Specifically, for any significant environmental or social incidents (e.g. fatalities or loss of limb, lost time incidents, environmental spills, etc.), the Contractor will inform PIU immediately and PIU will notify the World Bank within 48 hours. The incident report

including Root Cause Analysis (RCA), precautions, and compensation measures taken, will be submitted to GDCA in 30 days and GDCA will forward the incident report to the World Bank. If the PIU becomes aware of a serious incident that may have significant adverse effects on the environment, the affected communities, the public or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, or kidnappings.

d. *Review and Evaluation – E&S Completion*

Upon completion of project activities, the PIU will review and evaluate the progress and completion of project activities and implementation of environmental and social mitigation measures. Especially for civil works, the Supervision Consultant(s) will monitor activities about site restoration and landscaping in the affected areas to ensure that the activities are done to an appropriate and acceptable standard before closing the contracts, by measures identified in the relevant E&S instruments. PIU will compile the information received from the Supervision Consultant(s), PDoEUCC, and the outcomes of their own site audit (to make sure the site is restored) and report if there are any non-compliances so that the Contractor will fix before the sub-project is completed.

The sites must be restored to at least the same condition and standard that existed prior to the commencement of works. Any pending issues must be resolved before a sub-project is considered fully completed. The PIU will prepare the completion report describing the compliance of E&S risk management measures and submit it to the World Bank based on the information received from the supervision consultant, site audit and contractor.

Hata! Başvuru kaynağı bulunamadı. summarizes the roles and responsibilities regarding the implementation arrangements for environmental and social management.

Table 6. Implementation Arrangements

Responsible Party	Roles and Responsibilities
PIU	Overall management, coordination and implementation of the Project. Ensure Project activities do not fall under the Exclusion List. Provide support, oversight and quality control to field staff working on environmental and social risk management. Prepare and provide quality assurance and approval to Screening Forms and project-level ESMPs. Keep documentation of all progress. Ensure that funds are used to finance eligible expenditures following the applicable policies and procedures stipulated in the loan agreement. Maintain at least one Environment, one Social and one Occupational Health and Safety Expert full-time throughout the life of the Project. Collect, review and provide quality assurance and approval to customized project level ESMPs (including OHS measures), prepared by the Supervision Consultant and C-ESMPs/C-OHSPs submitted by Contractor. Execution of Project activities' preparation, design and implementation phases, following guiding principles and good practices with utmost technical quality. Train the PIU staff, supervision consultants and contractors who will be responsible for implementing ESMF.

Responsible Party	Roles and Responsibilities
	Train the Supervision Consultants and contractors on gender equality, gender-based violence and grievance mechanism. Procure Supervision Consultants and award the construction contracts for the sub-projects. Undertake the entire bidding process, financial management arrangements, and preparation of withdrawal applications in the scope of the Project. Ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs/OHSPs. Monitor civil works in terms of E&S issues and carry out site visits to make sure the activities comply with ESMF and ESMP/OHSP. Monitor and evaluate the Project activities against progress indicators defined in the Project Appraisal Document (PAD). Prepare and submit E&S Progress Reports to the Bank on quarterly basis about the project's implementation progress, results, identified/potential environmental and social issues, proposed solutions and corrective actions taken/to be implemented. Review and verify any project related data and evaluate results before including these results in reports sent to the Bank. Establish the grievance mechanism and ensure its maintenance during Project lifetime. Develop, consult upon, revise/update, disclose (both in the Turkish and English) and monitor the implementation of the ESMF, LMP, SEP, ESCP. Notify the WB about any serious incident, which may have significant adverse impacts on the environment, communities, the public or workers in 48 hour and send an incident investigation report together with the root cause analysis and corrective action plan in 30 days to the Bank. Prepare Completion Report (in coordination with the supervision consultant), upon completion of sub-project activities, describing the compliance of E&S risk management measures, and submit it to the Bank. Ensure qualified and competent OHS and ES personnel are assigned by the PDoEUCC to perform the tasks described in this document for PDoEUCC assigned OHS and ES personnel.
World Bank	Conduct implementation support missions in order to ensure that the project is implemented in compliance with WB standards. Review, clear and then disclose the final (i.e. consulted) version of the ESMF, SEP and LMP (following the disclosure of these documents on the MoEUCC's webpage.
Energy audit and technical design consultants	Conduct the initial project site assessment. Comply with the requirements of the World Bank and national relevant legislation specified in the tender documents.
Supervision Consultants	Support PIU in the preparation of the E&S Screening Form and conduct initial project site assessment. Customize the project level ESMP (including OHS measures), (annexed to this ESMF) in collaboration with PDoEUCC considering the specific circumstances and activities taking place in the sub-projects.

Responsible Party	Roles and Responsibilities
	Recruit one Environmental, one Social and one OHS specialist (full time, throughout the life of the Project) to monitor and control the ongoing activities on site to minimize the adverse impacts by applying the necessary mitigation measures. Oversee daily implementation and monitoring of environmental, social and OHS mitigation measures, and report progress and ESHS performance of the sub-projects to the PIU on monthly basis. Comply with the requirements of the WB and national legislation specified in the tender documents. Monitor/assess the Contractor's E&S implementations on site are in compliance with C-ESMP/C-OHSP. Assist the PIU for effective implementation of the SEP. Ensure the maintenance of the grievance mechanism on site. Receive, record and if possible, resolve the grievances/concerns/suggestions. Immediately notify the PIU about any serious incident which may have significant adverse effects on the environment, communities, the public or workers.
PDoEUCC	Monitor/assess the Contractor(s)' activities in compliance with the C-ESMP/C-OHSP. Ensure maintenance of the grievance mechanism on site Customize project level ESMP and prepare monthly progress reports in collaboration with supervision consultant for the review of MoEUCC. Give feedback and notice to the MoEUCC on the implementation of sub-projects about environmental, social and OHS issues. Ensure OHS and ES competent personnel is assigned for performing the above tasks. Inform PIU on the qualifications of the assigned OHS and ES personnel and get the approval of the PIU.
Contractors	Comply with the sub-project's E&S risk management plans (i.e. C-ESMPs/C-OHSPs) as well as national legislation. Take all necessary mitigation measures to protect the health and safety of workers and community members, and avoid, minimize or mitigate any environmental and social harm resulting from sub-project activities. Ensure health and safety measures are taken on site. Monthly report to the Supervision Consultant on the ESHS performance. Prepare and implement C-EMSP/C-OHSP (including related sub-management plans) in compliance with E&S risk management instruments prepared for the sub-projects. Prepare method statements for implementing E&S mitigation instruments. Ensure that construction-related grievances are received and addressed to Supervision Consultant on weekly basis. Resolve the grievances that could be resolved on site by the Contractor. Implement and monitor site activities on a regular (daily, weekly monthly, etc.) basis as defined in C-ESMP/C-OHSP in compliance with E&S risk management instruments prepared for sub-projects. Immediately notify the PIU about any significant incident (accidents, spills, fatalities, etc.) immediately, which may have significant adverse effects on the environment, community, the public or workers. Ensure the Project team has one Environmental, one Social and one OHS specialist during the life of the Project.

5.2. Technical Assistance Activities

The PIU/MoEUCC will ensure that the consultancies, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance (TA) activities under the Project are carried out in accordance with Terms of Reference acceptable to the Bank. The TA activities will integrate E&S concerns into ToRs, studies and any other analytical products that will ensure that the planning process includes adequate assessment of E&S implications and that the advice provided are consistent with the ESF.

5.3. Proposed Training and Capacity Building

Successful implementation of the Project depends among others on the effective implementation of the environmental and social risk management measures outlined in this ESMF. Training and capacity building will be necessary for the key stakeholders in order to ensure effective implementation ESMF and the SEP. An initial training approach is outlined in Table 7 below. To the extent possible, training on environmental and social risk management will be integrated into the project cycle and operational procedures. Given the need to raise awareness among project workers and stakeholders at many levels, a cascading model is proposed where information will follow from the national level to the field level.

Table 7. Proposed Training and Capacity Building Approach

Level	Responsible Party	Audience	Topics/Themes that May Be Covered
National level	World Bank	Relevant E&S staff of the PIU	• Requirements of the WB ESF • ESMF and approach: - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures - E&S monitoring and reporting - Incident and accident reporting
National Level	PIU (Environmental, Social and OHS specialists) both external and internal	PIU (other staff)	• OHS including emergency preparedness, • Specific aspects of environmental and social assessment • Risk screening and preparation of relevant E&S risk management measures/instruments • Specific aspects of environmental and social risk management implementation • Stakeholder engagement and grievance mechanism • Gender equality and gender-based violence • Codes of conduct • E&S monitoring and reporting (including incident and accident reporting)
Local level	PIU	Supervision Consultants	• Requirements of the WB ESF • Implementation of relevant E&S risk management measures/instruments • Application of SEP and grievance/beneficiary feedback mechanism • OHS including emergency preparedness and response • Community health and safety • Risk screening and adjusting project level ESMP • Specific aspects of environmental and social risk management implementation and monitoring including waste management, • Gender equality and gender-based violence • E&S monitoring and reporting

			• Implementation of LMP, including Code of Conduct, incident reporting, sexual equality and gender-based violence
Field level	**Supervision consultants**	**Contractors**	• Requirements of the WB ESF • Implementation of SEP and the grievance mechanism • Implementation of LMP, including Code of Conduct, incident reporting, SEA/SH • Implementation of relevant E&S risk management measures/instruments • OHS including emergency preparedness and response • Community health and safety. • Sexual equality and gender-based violence.
Field Level	**Contractors**	**Project workers**	• OHS including emergency prevention and preparedness and response arrangements to emergency situations, vehicle safety, safe use of tools, machinery and equipment, working at height. • Contractual E&S requirements • Contractor ESMP/OHSP • Code of conduct • Labor requirements for primary suppliers • Infectious/communicable diseases LMP measures • Diverse and respectful workplaces, free of SEA/SH.
Community level	Supervision consultants	Community members	• Basic OHS measures and personal protective equipment • Community health and safety measures • Code of conduct • Grievance redress • SH/SEA issues, prevention measures.

5.4.Estimated Budget

The project budget allows for the deployment of expertise and resources needed to ensure that project implementation is in line with the ESMF requirements.

Table ***8*** presents the estimated cost items for the implementation for the ESMF, which have been included in the overall project budget.

Table 8. ESMF Implementation Budget

Activity / Cost Item	Potential Cost (USD)
Individual Environmental, Social, Occupational Health and Safety Consultants	Environmental Expert, Social Expert, and OHS Expert USD 4 million (including VAT)
Monitoring Activities	
Preparation of simplified site-specific ESIAs (including ESMPs)	All Costs Incurred by Consultants: USD 2 million (including VAT)
Social, Environmental, and OHS Trainings, Awareness, Information Dissemination	
Capacity building	
Implementation of SEP and ESMP measures	All Costs Incurred by both Consultants & Contractors: USD 1.5 million (including VAT)
Any infectious disease measures	
TOTAL	USD 7.5 million (including VAT) 0,4% of The Project Budget

6. Stakeholder Engagement, Disclosure, and Consultations

The EEPB 2 Project recognizes the rights of the local communities and as key stakeholders in the project. During the life of the Project, stakeholder engagement will be free of manipulation, interference, and intimidation, and conducted on the basis of timely, relevant, understandable and accessible information, in a culturally appropriate format. It involves interactions between identified groups of people and provides stakeholders with an opportunity to raise their concerns and opinions and ensure that this information is taken into consideration when making project decisions.

Within the scope of the Project, stakeholder engagement activities will be initiated as early as possible and will be carried out throughout the life of the Project and this SEP will be updated accordingly to include and effectively address the outcomes of the consultations into the Project design (Project's preparation, construction and operation).

All environmental and social documents prepared for the Project (ESMF, ESCP, SEP and LMP) were disclosed (both in Turkish and English) on the official webpage5 of EEPB2 project for the review and feedback of the stakeholders on January 15, 2024 prior to the online public consultation meeting.

Notification for the date/time, venue and purpose of the consultation meeting to be held with the participation of ministries, beneficiaries and representatives of public institutions and universities was sent to the relevant institutions with an official cover letter dated January 16, 2024 (nb. E-69693089-755.01-8513759).

On January 25, 2024, a consultation meeting was held, moderated by Head of Department of External Investments, with the participation of approximately 170 people.

Initially, Head of Department of External Investments gave information about the financial resources, aims, objectives, components and tasks of the project and institutions, eligibility criteria for building selection and outputs of the project. She also presented examples of buildings completed under EEPB1.

The participants were then briefed by Environmental Consultant, Social Consultant and OHS Consultant about the World Bank's Environmental and Social Standards, Project's Environmental and Social Assessment documents, benefits of the project, potential environmental and social impacts and risks of the Project and mitigation measures, environmental and social management of the Project, stakeholder engagement processes, grievance mechanism and labor management procedures.

Participants had no objections to the Project and related management procedures. Questions from the participants and PIU's responses are listed in the Annex 13. The details and photographs taken during the meeting are given in Annex 11 and Annex 12.

Participant information is recorded by the PIU however, participant information will not be disclosed and published within the scope of the Personal Data Protection Law.

The ESMF, SEP and LMP will also be disclosed on the World Bank's external webpage[6], following the project Appraisal.

6.1.Grievance Mechanism

Grievance Mechanism (GM) is an arrangement that provides channels for project stakeholders to provide feedback and/or express their concerns and grievances related to project activities. Through this, the GM allows also for the identification and resolution of issues affecting the project.

[5] https://www.kabev.org/kabev2-cevresel-sosyal/

[6] https://projects.worldbank.org/en/projects-operations/project-detail/P500777

By increasing transparency and accountability, the GM aims to reduce the risk of the project inadvertently affecting citizens/beneficiaries and serves as important feedback and learning mechanism that can help to management of the project and expectations of the stakeholders.

The Grievance Mechanism that has been established and currently operational within the scope of the EEPB Project will be adopted to this Project (EEPB-2 Project) and will be utilized/maintained throughout the life of the Project.

In addition to the project level GM which will serve for the E&S performance related grievances, a separate GM that will serve project employees including PIU, Contractor, supervision consultants and PDoEUCC as addressed in the LMP and SEP of the Project will be established. The GM established during EEPB Project will be used in this Project also. Within the scope of the Project, grievances/concerns/suggestions will be handled at multiple levels: (a) Contractor level; (b) Supervision Consultant level; (c) Provincial Directorates level (PDoEUCC); (d) national/PIU (MoEUCC) level. The details of the GM to be maintained throughout the life of the Project and roles/responsibilities of different parties (PIU, Contractor, Supervision Consultant, PDoEUCC, etc.) for the operationalization of the GM is described in the detail in the Project SEP[7].

The MoEUCC currently has a call center that can be accessed via both phone and website. This call center is used for all site-related issues that are being carried out by the MoEUCC (Alo181). The Project's website also provides a grievance page for complaint submission (www.kabev.org). In addition to these communication channels, the stakeholders may also utilize the Presidency's Communication Office (CİMER) to submit their concerns and grievances about the project implementation (www.cimer.gov.tr or www.giris.turkiye.gov.tr, Alo150 as hotline). YIMER provides a centralized complaint system for foreigners and will be available to Project stakeholders as an alternative and well-known channel for conveying their project related grievances and feedbacks directly to state authorities (www.yimer.gov.tr and Alo157 as hotline).

[7] https://www.kabev.org/kabev2-cevresel-sosyal/

Annex 1. ENVIRONMENTAL AND SOCIAL CHECKLIST FOR SUBPROJECTS

The E&S Screening procedure comprises of two stages-process: (1) Initial screening by using the Exclusion List (Table 5); and (2) Screening the proposed activities to identify the approach for E&S risk management. This Screening Form is the second stage of screening process and is to be used for all subproject activities. The completed forms will be signed and kept in the Project ESF file. The World Bank may review a sample of the forms during implementation support visits.

1. Subproject Information:

Subproject Title	
Subproject Location	
Regional Unit in Charge	
Estimated Cost	
Start/Completion Date	
Brief Description of Subproject	

2. Environmental and Social Screening Questionnaires

Questions	Answer		Next Steps
	Yes	**No**	
ESS1 Assessment and Management of Environmental and Social Risks and Impacts			
1. Is the subproject likely to have significant adverse environmental impacts that are sensitive and unprecedented that trigger the 'Ineligible Activities' or other exclusion criteria?			If "Yes": Exclude from project.
2. Does the subproject involve <u>new construction or significant expansion</u> of ponds, solid waste management systems, shelters, roads (including access roads), community centers, schools, bridges and jetties?			If "Yes": 1. Prepare a site-specific E&S Assessment and C-ESMP for the proposed subproject, based on the template in Annex 4. 2. Include E&S risk management measures in bidding documents.
3. Does the subproject involve <u>renovation or rehabilitation</u> of any small-scale infrastructure, such as groundwater wells, latrines, showers/washing facilities, or shelters?			If "Yes": 1. Apply relevant measures based on project level ESMP (including OHS measures) in Annex 3 (unless one of the questions below raises specific environmental risks and requires a C-ESMP/C-OHSP).

			2. Include E&S risk management measures in bidding documents.
4. Will construction or renovation works require new borrow pits or quarries to be opened?			If "Yes": 1. Prepare a C-ESMP/C-OHSP for the proposed subproject, based on the template in Annex 3. 2. Include E&S risk management measures in bidding documents.
5. Does the project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable[8]?			If "Yes": Apply relevant measures described in the ESMF and SEP.
ESS2 Labor and Working Conditions			
6. Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?			If "Yes": Exclude from project.
7. Does the subproject involve recruitment of workforce including direct, contracted, primary supply, and/or community workers?			If "Yes": Apply the project level LMP
8. Will the workers be exposed to workplace hazards that needs to be managed in accordance with local regulations and EHSGs? Do workers need PPE relative to the potential risks and hazards associated with their work?			If "Yes": Apply the project level LMP. .
9. Is there a risk that women may be underpaid when compared to men when working on the project construction?			If "Yes": Apply LMP prepared as a separate document from ESMF for the Project.
10. Does the sub-project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable?			If "Yes": Apply the project level LMP and any relevant measures described in SEP.

[8] "Disadvantaged or vulnerable" refers to those individuals or groups who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or ethnic peoples status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits.

11. Does the project have potential to create OHS risks to the workers?			If "Yes" Prepare and apply C-OHSP based on the template provided in Annex 7.
ESS3 Resource Efficiency and Pollution Prevention and Management			
12. Is the project likely to generate solid or liquid waste that could adversely impact soils, vegetation, rivers, streams or groundwater, or nearby communities?			If "Yes": 1. Prepare C-ESMP for the proposed subproject, based on the template in Annex 4. 2. Include E&S risk management measures in bidding documents. 3. Prepare and implement a Waste Management Plan (Annex 10).
13. Do any of the construction works involve the removal of asbestos or other hazardous materials?			If "Yes": Apply asbestos guidance provided in the ESMP
14. Are works likely to cause significant negative impacts to air and / or water quality?			If "Yes": 1. Prepare C-ESMP for the proposed subproject, based on the template in Annex 4. 2. Include E&S risk management measures in bidding documents.
15. Does the activity rely on existing infrastructure (such as discharge points) that is inadequate to prevent environmental impacts?			If "Yes": 1. Prepare a C-ESMP for the proposed subproject, based on the template in Annex 4. 2. Include E&S risk management measures in bidding documents.
16. Is there any potential to have impact on soil or water bodies due to agro-chemicals (e.g., pesticides) used in farmlands due to the consequences of the subproject activities (e.g., development of irrigation system, agriculture related activities, seed			If "Yes": Prepare Fertilizer and Pest Management Plan as a part of E&S risk management measures/instruments.

and fertilizer assistance, procurement of pesticides)?			
ESS4 Community Health and Safety			
17. Is there a risk of increased community exposure to communicable disease (such as COVID-19, HIV/AIDS, Malaria), or increase in the risk of traffic related accidents?			If "Yes": Apply the project level LMP and any relevant measures in presented in the SEP.
18. Is an influx of workers, from outside the community, expected? Would workers be expected to use health services of the community? Would they create pressures on existing community services (water, electricity, health, recreation, others?)			If "Yes": Apply the project level LMP.
19. Is there a risk that SEA/SH may increase as a result of project works?			If "Yes": Apply the Project level LMP.
20. Would any public facilities, such as schools, health clinic, church be negatively affected by construction?			If "Yes": Apply relevant measures based on the project level ESMP provided in Annex 3 .
21. Will the project create any community health and safety impact and risk in the form of public nuisance, traffic and etc.?			If "Yes" prepare and implement a project specific Community Health Safety and Traffic Management Plan based on the template provided in Annex 8.
22. Will the subproject require the government to retain workers to provide security to safeguard the subproject?			If "Yes": Prepare a C-ESMP for the proposed subproject, including an assessment of potential risks and mitigation measures of using security personnel.
ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement			
23. Does the sub-project involve involuntary land acquisition?			If "Yes": Exclude from project.
24. Does the sub-project involve physical and/or economic displacement of people?			If "Yes": Exclude from project.
25. Is private land required for the sub-project activity being voluntarily donated to the sub-project?			If "Yes": Exclude from project.

26. Is there any possibility of moving out, or closing of business/commercial/livelihood activities of persons during construction (Are there any formal/informal users or non-titled people who are utilizing (inhabiting/doing business or using for other purposes etc.) the proposed site/project locations that will be used for civil work? If yes, please provide how many and for what purposes)?			If "Yes": Exclude from project.
27. Will there be any expropriation under the sub-project?			If "Yes": Exclude from project.
ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources			
28. Does the sub-project involve activities that have the potential to cause any significant loss or degradation of critical natural habitats9 whether directly or indirectly, or which would lead to adverse impacts on natural habitats?			If "Yes": Exclude from the project.
29. Will the sub-project involve the conversion or degradation of non-critical natural habitats?			If "Yes": Exclude from the project.
30. Will this activity require clearance of natural forest?			If "Yes": Exclude from the project.
31. Will this activity require the clearance of trees, including inland natural vegetation?			If "Yes": Exclude from the project.
32. Will there be any significant impact on any ecosystems of importance (especially those supporting rare, threatened, or endangered species of flora and fauna)?			If "Yes": Exclude from the project.
ESS8 Cultural Heritage			
33. Is the sub-project to be located within or adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?			If "Yes": Apply Chance Find Procedures provided in Annex-2.
34. Is the sub-project to be located near buildings, sacred trees or objects having spiritual values to local communities (e.g. memorials, graves			If "Yes": Apply Chance Find Procedures provided in Annex-2.

[9] Critical natural habitats such as legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, or recognized as protected by traditional local communities.

or stones) or require excavation near there?			

3. Conclusion

Based on the result from the screening above, please list the E&S risk management instruments (i.e. C-ESMP, C-OHSP, etc.) to be prepared/adopt and implemented:

a)
b)

Name and title of person who conducted screening:
Date of screening:

Annex 2. CHANCE FIND PROCEDURES

1.INTRODUCTION

The EEPB2 Project will govern renovation activities to improve the energy efficiency of public buildings and any building that might interfere with natural and archaeological sites, historical buildings or cultural sites will not be financially supported under this Project. However, during the Project implementation, there may be a slight possibility of encountering certain chance finds that must be registered.

1.1. SCOPE

The scope of this document is to provide a summary of a chance to find management actions, procedures and responsibilities in the event of encountering any such assets during Project construction activities.

This procedure is for all construction activities in the Project impact zone as well as in other project-related areas.

1.2. DEFINITIONS

CHANCE FINDS	Chance finds defines any potential objects, features or areas of cultural inheritance that have been defined as a result of regular monitoring of project-related construction works but extrinsically to an official site survey
MUSEUMS	
REGIONAL CONSERVATION BOARDS	
PROJECT	
WORK TO BE DONE	
MANDATED ACTIONS	
COMPULSORY WORK	

1.3. ABBREVIATIONS

Acronym	
E&S	Environmental and Social
GDCA	General Directorate of Construction Affairs

1.4. REFERENCES

STANDARDS, LEGISLATION, AND LAWS
Ministry of Culture and Tourism, Law No. 2863 on the Protection of Cultural and Natural Assets
Ministry of Culture and Tourism, Decree No. 658, Archaeological Sites, Conditions for Protection and Use

2. ROLES AND RESPONSIBILITIES

GDCA shall be responsible for ensuring that management plans and procedures prepared based on project-specific environmental and social impact analyses are implemented. Furthermore, GDCA shall also be liable, together with all its units and Contractors, to act in observance of these procedures during project construction activities. All construction staff shall be trained given the implementation of the procedure.

The Role of the Project	Responsibilities
Site Manager	Ensure that Environmental and Social (E & S) issues are handled sufficiently and as required by all units concerned. To support on-site support to E & S actions, to provide E & S monitoring and supervision, and to allocate adequate resources there too.

3. CHANCE FIND PROCESS

The step-by-step process to follow any chance found in the project site and its area of impact is given in the table below.

Table 2.1 Chance Find Procedural Steps to follow

<table>
<tr><td colspan="2">STAGE 1 - Following a chance find:
All works in the survey area shall cease.
Transitional buffer zones shall be established around the chance to find the area.
Site management and the museum archaeologist shall be contacted immediately.
The area of the finding shall be adequately secured by markings, signposts, banners, etc.
Protection of the site the chance finding shall not be transported lifted or damaged further.</td></tr>
<tr><td colspan="2">STAGE 2 – Registration
Chance Find Notification Form Section A shall be filled in and a copy shall be forwarded to the site manager in 24 hours.</td></tr>
<tr><td colspan="2">STAGE 3 - Communication with local authorities
The director of the respective museum shall be notified regarding the chance find.</td></tr>
<tr><td colspan="2">STAGE 4 - Museum Decision
The archaeologist of the museum concerned shall decide on actions to follow in the chance to find the site.</td></tr>
<tr><td>STAGE 4A - Site or the find is of no significance Museum archaeologist declares that the site/find is of no significance.
Site supervisor notifies respective authorities.</td><td>STAGE 4B - Site is significant.
Museum archaeologists declare that the site/find is significant.
The museum director or the archaeologist at the museum decides on further action and notifies the site supervisor.</td></tr>
<tr><td>Site supervisor retains a copy of the chance find for his/her records.</td><td>Site supervisor notifies respective authorities.</td></tr>
<tr><td>No further action is required.
The chance to find the procedure is closed.
Construction activities can resume/continue.</td><td></td></tr>
</table>

STAGE 5 - Site survey Project staff follows the instructions of the archaeologist of the Archaeology Museum concerned.		
Following the site survey, the museum Archaeologist declares that the site is of minor significance. Site supervisor notifies his/her superiors. Site supervisor retains a copy of the chance find for his/her records. No further action is required. The chance to find the procedure is closed. Construction activities can resume/continue	Following the site survey, the museum archaeologist declares that the site/find is **moderately significant.** More advanced works such as the test pit/recovery excavation or remote sensory surveys shall be completed. The museum archaeologist shall instruct and/or supervise works. Site supervisor notifies his/her superiors. Project management shall provide an archaeological task force under the leadership of the museum archaeologist. The task force shall be composed of qualified archaeologists as well as other specialists and workers. Upon completion of the excavation, the team shall report to the museum management. Museum management forwards the findings of the survey to the Regional Cultural Asset Conservation Board. The Regional Cultural Asset Conservation Board concerned shall officially approve such recovery and notify the project management duly. Site supervisor retains a copy of the chance find for his/her records. No further action is required. The chance find the procedure is closed. ***Construction activities can resume/continue.***	Following the site survey, the museum archaeologist declares that the site/find is **highly significant.** Recovery excavation shall be completed. The site shall be handled in observance of the provisions of Law No.2863 on the Protection of Cultural and Natural Assets dated 21.07.1983. Museum Archaeologist provides instructions and/or supervision for the test pit/archaeological recovery excavation. Site supervisor notifies his/her superiors. Project management shall provide an archaeological task force under the leadership of the museum archaeologist. The task force shall be composed of qualified archaeologists as well as other specialists and workers. Upon completion of the excavation, the team shall report to the museum management. The Regional Cultural Asset Conservation Board concerned shall officially approve such recovery and notify the project management duly. The site shall be registered and placed under protection as per Turkish legislation. Archaeology Supervisor(s) shall notify respective authorities. Site supervisor retains a copy of the chance find for his/her records. No further action is required. The chance find the procedure is closed. ***Construction works can continue or preventive measures might be needed.***

In cases where human remains have been found, it is of utmost importance to note that the entire project team and local authorities shall be immediately notified.

MONITORING AND REPORTING

Site supervisor shall visually monitor any construction and other activities as proof of the presence of cultural inheritance assets.

Chance Finds shall be recorded in the Chance Finds Notification Form (see. Annex A). Print copies of Chance Find Notification Forms shall be available on-site, which shall be always scanned once filled in and registered, and saved. Chance Find Notification Forms shall be updated by the site supervisor, which is recorded in the Chance Finds Log (see. Annex. B). This document shall be regularly checked.

Table 2.2. Reporting of Chance Finds – Notification Form

<table>
<tr><td colspan="6">PART A</td></tr>
<tr><td rowspan="2">Sub-Project Location:</td><td colspan="2">District</td><td rowspan="2">Date</td><td>Form No:</td><td></td></tr>
<tr><td colspan="2">Village</td><td></td><td></td></tr>
<tr><td colspan="2">Project Information</td><td colspan="4"></td></tr>
<tr><td colspan="3">Name of person reporting chance find</td><td colspan="3"></td></tr>
<tr><td colspan="3">Was work stopped in the immediate vicinity of the chance find?</td><td colspan="3">☐ Yes
☐ No</td></tr>
<tr><td colspan="3">Was a buffer zone created to protect the chance find?</td><td colspan="3">☐ Yes
☐ No</td></tr>
<tr><td colspan="6">NOTIFICATION</td></tr>
<tr><td colspan="4">Site manager and E&S manager contacted?</td><td colspan="2">☐ Yes
☐ No</td></tr>
</table>

CHANCE FIND DETAILS			
GPS coordinates		**Photo record**	☐ Yes ☐ No(HD quality – no cell phone photos)
		If not, explain why:	
		Other records (specify (drawings, HD quality videos, etc.)	☐ Yes ☐ No
Description of chance find			
Description of site/finding and other specifications of site/finding: (e.g., surface sediment type, ground surface visibility, distance to closest watercourse, etc.)			
PART B			
NOTIFICATION OF MUSEUM DIRECTORATE ARCHAEOLOGIST			
Monitoring archaeologist contacted museum directorate archaeologist		☐ Yes ☐ No	
Date of notification:			
Name of museum directorate and name of museum archaeologist:			
Contact number of museum directorate archaeologist:			
DECISION OF MUSEUM DIRECTORATE ARCHAEOLOGIST			
Date of site visit:			

	Site/Finding of no significance - Construction to proceed with no further action – End of a chance find the procedure		**Site/Finding of significance - Further actions required** ***Please Fill out Part C***
Date of notice to resume work:			
Name of museum directorate archaeologist: **Contact information:**			
Site manager and E&S manager contacted	☐ Yes ☐ No		
PART C			
FURTHER FIELD INVESTIGATION			
☐ **Site/Finding of minor significance**	☐ **Site/Finding of moderate significance**	☐**Site/Finding of high significance**	
Describe additional work to be conducted			
Date started		**Date completed**	
Date of notice to resume work			
Name of museum directorate archaeologist **Contact information**			
Construction manager contacted	☐ Yes ☐ No		

Annex 3. PROJECT LEVEL ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
General for All Construction Works									
Environmental and Social (E&S) Management: Inadequate management of environmental and social risks and impacts of the sub-project	The Contractor will prepare and submit for approval and subsequently implement its Contractor ESMP (C-ESMP). The C-ESMP should be submitted prior to the commencement of construction works and no construction activities will be carried out under the sub-project until approval of the C-ESMP. The C-ESMP will include additional site-specific management plans as appropriate to the risks and impacts of the sub project as such (but not limited): • Community health and safety (CHS) management plan including traffic management plan (see outline in Annex-8 of ESMF of the project) • Waste management plan (see Annex-10 of ESMF of the project) • Chance finds procedure (see	X	X		All sub-managements plans are approved prior to construction and implemented throughout the construction period.		X		Contractor (implementation) Supervision Consultant (supervision)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	Annex-2 of ESMF of the project) • Pollution prevention plan (see outline in Annex9X of ESMF of the project) • Grievance mechanism (GM) The Contractor will prepare and submit for approval and subsequently implement its Contractor OHSP (C-OHSP). The C-OHSP should be submitted prior to the commencement of construction works and no construction activities will be carried out under the sub-project until approval of the C-OHSP. Occupational health and safety (OHS) management plan including risk assessment and emergency response plan (see the outline in Annex-7 of the Environmental and Social Management Framework (ESMF) of the project)								
Air Quality	• Identified dust mitigation measures (i.e. by applying water on the ground regularly during dry season) will be		X		Visual inspection of air quality	X			Supervision Consultants (supervision)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
Dust generation around the sub project site due to construction activities, vehicles and machinery	implemented in line with good industry practices and with reliable method statements. • Ambient air pollution related to dust generation will be controlled by implementing mitigation measures provided in the "F Air Quality" section of this mitigation measures table. • Construction/demolition debris will be kept in a controlled area and sprayed with water mist to reduce debris dust. • Kept stockpile of aggregate materials will be covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. • The surrounding environment such as roads, etc. will be kept free of debris to minimize dust. • There will be no open burning of construction/waste material at the site.				control measures Records of complaints (if available) Records of maintenance				Contractors (implementation)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	• There will be no excessive idling of construction vehicles at sites. • Vehicle speed will be controlled when driving through community areas is unavoidable so that dust dispersion from vehicle transport is minimized. • The trucks that transport materials will be covered to decrease dust emissions. Dust measurements will be conducted by an authorized laboratory accordingly if any grievance regarding dust generation is received from the nearest receptors. If measured levels are above limit values, mitigation measures will be enhanced in this respect, i.e., increasing wet suppression /watering activities, applying non-toxic chemicals, further reducing speed/traffic.								
Noise Noise generation due to vehicles and equipment	• Identified noise mitigation measures (fences, barriers or deflectors such as muffling		X		Audio checks	X			Supervision Consultants (supervision)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	devices for combustion engines) will be implemented including respected method statements. • All equipment will be maintained to keep it in good working order by following manufacturer maintenance procedures and installing acoustic enclosures around generators to reduce noise levels. • Noise during construction will be limited to restricted times agreed to in the permit. • Principles of preventing adverse noise impact during construction of rural houses will be provided. • During operations, the engine covers of generators, air compressors, and other powered mechanical equipment will be closed, and equipment placed as far away from residential areas as possible.				Records of complaints (if available) Equipment records				Contractors (implementation)

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	• Unnecessary use of alarms, horns and sirens will be avoided. • Minimize project transportation through community areas. Maintain a buffer zone (such as open spaces, rows of trees or vegetated areas) between the project site and residential areas to lessen the impact of noise to the living quarters. • Noise measurements will be conducted if any grievance regarding noise generation is received from the nearest receptors. If measured levels are above limit values, mitigation measures shall be enhanced in this respect, i.e., installing acoustic barriers for mechanical equipment, limiting the hours of operation for specific pieces of equipment or operations, etc.								
Health and Safety. OHS-related risks due to unsafe practices and hazards at work	• All legally required permits will be acquired for		X		Visual inspection of	X			Supervision Consultants and Contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
sites such as work at height, rotating and moving equipment, electrical safety, working with hazardous material, etc.	construction and/or rehabilitation. • The regular site inspection will be conducted by PIU and Supervision Consultant to monitor and ensure that all construction activities to be implemented have been carried out in line with national law and regulations and requirements of WB's standards. • There will be a strengthened contract clause on Forced Labor on the Contractor's contract. • An occupational health and safety management plan (C-OHSP) will be prepared. The workers will be trained on the content and requirements of this plan. • The contractor will prepare and implement OHS working procedures/instructions for OHS critical works such as welding, working at heights, cutting, scaffolding installation and use and				control measures OHS records Employee records Incident statistics and records Records of worker's complaints Existence of working instrutons/procedures				

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	similar. The workers will be trained on the requirements of these instructions and procedures. • The contractor will hire trained and certified operators for the safe operation of specialized vehicles such as forklifts, including safe loading and unloading. • Before the construction works start, a Risk Assessment and Method Statements will be prepared and implemented for all works to be carried out. • Relevant procedures and plans: Health and Safety Plans which will include risk assessment, procedures on safety, training, monitoring, incident investigation and reporting, and Emergency Plans with relevant procedures will be put in place by the Contractor. • Appropriate signposting of the sites will inform workers of								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	key rules and regulations to follow. • The worksite will be kept clean and free of debris on a daily basis. • Provision of first aid kit and other emergency response equipment in line with legal requirements • Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas. • Ensure structural openings are covered/protected adequately. • Secure loose or light material that is stored on roofs or open floors. • Keep hoses, power cords, welding leads, etc. from laying in heavily traveled walkways or areas. • During heavy rains or emergencies of any kind, suspend all work. • Occupational Health and Safety (OHS) trainings and								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	toolbox talks will be provided to the employees indicating the possible risks and mitigation measures regarding the work site and the work to be carried out. • The Contractor will ensure a safe working environment for the workers and before construction activities will supply appropriate personal protective equipment (PPE) in line with international best practice and Turkish Legislation (always hardhats, as-needed masks and safety glasses, harnesses and safety boots, etc.) • All activities will be implemented in line with both Law on Occupational Health and Safety (Official Gazette No.28339, dated June 30, 2012) and its relevant regulations and also with the World Bank Group EHS Guidelines. • The Contractor will notify MoEUCC immediately in case								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	of any significant event occurs. MoEUCC will notify the World Bank about any significant incident (accidents, spills, fatalities, etc.) in 2 days (48 hours) and will send an incident investigation report together with the root cause analysis and corrective action plan in 30 business days to the World Bank.								
Health and Safety. Community health and safety risks associated with construction activities	• Mitigation measures in OHS plan will be applied. • Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs including at unsafe locations. Do not allow children to play in construction areas. • The project site will be lit during the night. • The surrounding area will be kept clean, without waste disposed of there. The waste needs to be collected and removed from the construction site.		X		Visual inspection of control measures Traffic accident records Records of complaints			X	Supervision Consultants and Contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	• The eventually broken glass will be cleaned immediately. • Following safety guidelines for the storage, transport, and distribution of hazardous materials aiming to minimize the potential for misuse, spills, and accidental human exposure. • Regular maintenance of vehicles to minimize potentially serious accidents caused by equipment malfunction or premature failure. • The public will be informed about the work to be carried out, including the measures taken regarding infectious diseases, using appropriate communication tools and methods (e.g., online/virtual and/or physically) in areas accessible to all stakeholders (including work sites). • In case of any epidemic or pandemic / communicable disease, the guidance, guidelines, and								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	recommendations to be provided by the Ministry of Health, the Ministry of Family and Social Services, and the World Health Organization will be followed, and all relevant measures will be taken for both employees and workplaces in terms of occupational health and safety. • Any traffic diversions will be taken into account the needs of disabled persons. • The Contractor will ensure the construction site is properly secured and construction-related traffic regulated properly (including proper route planning). This will include but not be limited to: • Signposting, warnings, barriers, and traffic diversions: the site will be visible, and the public warned of all potential hazards. • Traffic management system and staff training, especially for site access and near-site								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. • Adjustment of working hours to local traffic patterns, e.g., avoiding major transport activities during rush hours or times of livestock movement. • Active traffic management by trained and visible staff at the site, if required for a safe and convenient passage for the public.								
Generated wastewater/waste on the construction site may affect nearby streams and rivers (water pollution)	• Minimize storage or disposal of generated wastewater on the site. • Temporary or final waste disposal near/in water streams is strictly forbidden to prevent possible adverse impacts on surface waters. • Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies. • There will be dedicated storage area with required		X	X	Visual checks and records of water quality monitoring nearby carried out by MoEUCC	X			Supervision Consultants and Contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	precautions for the storage of the hazardous waste and end of life/ not in use solar panels.								
Soil and groundwater pollution due to construction activities	• Waste collection and disposal pathways and sites will be identified in site-specific Waste Management Plans for all major waste types expected from construction activities. • Minimize storage or disposal of generated waste on the site. • Mineral construction wastes will be separated from general refuse, organic, liquid, and chemical wastes by on-site sorting and stored in appropriate containers. • Hazardous and dangerous chemicals and materials will be secured in a designated storage area to prevent spillage and tip-over. • Semi-used chemical-containing containers will have lids and lids will be tightened while they are not in use.		X		Visual inspection of control measures Incident records Training records Records of complaints	X			Supervision consultants and contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	• In case of a spill of any hazardous material or hazardous wastes, spill prevention methods will be put in place in order to limit the exposure area. Workers who might intervene in such incidents should have relevant trainings on emergency response to spills. • Proper spill kits will be placed at appropriate locations in the construction area. • Schedule construction during the dry season, as appropriate.								
Waste generation due to construction activities (construction demolition wastes, hazardous, biodegradable, recyclable, non-hazardous, chemical, etc.)	• Waste Management and Pollution Prevention measures in the ESMPs/C-ESMPs will be implemented. • Non-hazardous wastes, inert and biodegradables wastes and also recyclables will be collected separately and special attention must be paid to prevent hazardous wastes from mixing. • Proper waste management will be applied to the		X	X (for solar panels	Records of waste generation Records of waste generation Waste disposal documents Visual checks	X			Supervision consultants and Contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	construction sites by the contractor. • Hazardous material (including end of life/not in use solar panels) will be secured in a designated storage area to prevent spillage and tip-over. • Semi-used chemical-containing containers will have lids and lids will be tightened while there are not in use. • Residual (left out) concrete in concrete mixers will not be allowed to wash out into the construction site, vicinity, or access roads of construction sites. • Related training will be provided to drivers of concrete mixers. • In case of a spill of any hazardous material or hazardous wastes, spill prevention methods will be put in place in order to limit the exposure area.								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	• Spill kits will be in place at appropriate points in construction sites. • In case of any spill, workers are determined to intervene in such incidents and trainings are provided on emergency response to the spills. • Training records will be kept on construction sites.								
Waste disposal (temporary storage site)	• Waste Management Plan must be implemented making sure that the wastes will be treated and disposed according to national legislations, international conventions and good practice (including end of life and not in use solar panels). • Daily visual construction site audits will be conducted by supervision consultants to monitor the implementation of mitigation measures. • PIU and supervision consultant will monitor implementations of E&S mitigation measures through site audits.		X	X (for solar panels	Waste records	X			Supervision Consultants and Contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
Vehicle traffic	• Community Safety and Traffic Management Plan will be implemented to prevent workers and local communities from traffic accidents. • The local construction and environment inspectorates and communities will be notified of upcoming activities. • Regular maintenance of vehicles to minimize potentially serious accidents caused by equipment malfunction or premature failure. • Route planning will be done carefully		X		Visual checks Complaints	X			Supervision Consultants and Contractors
Stakeholder Engagement and Grievance Mechanism Construction related complaints and temporary disruption to the local community (if public itself or any facilities related to public activities such as health clinics,	Follow the relevant measures suggested in the SEP. • Early liaison and effective communication will be carried out with people who may be affected by the work of the contractor. • Implementation of a program of ongoing liaison and respect		X		Records of complaints Stakeholder engagement records		X		PIU Supervision Consultant (supervision) Contractors *(implementation)*

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
mosques, schools, etc. are affected) exist	for the local environment and residences will be formed. • The Supervision Consultant and Contractor will appoint a dedicated person(s) accountable for community liaison who will be focused on engaging with the community to provide the appropriate information and to be the first line of response to resolve issues of concern. • Project Grievance Mechanism will be implemented through the opening and closing of forms and complaints. • The names and contact telephone numbers and email addresses of all site personnel with responsibilities for both supervision and management of the works will be displayed on the site hoarding. • Once planning consent has been obtained, formal contact will be established with the mukhtar of the neighborhood and those who could potentially be affected by the								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	construction of the rural houses will be informed via mukhtar. This will include consultation of an ESMP/ ESMP Checklist and/or E&S code and identifying any particularly sensitive times of the day. • All workers will sign/commit to and be trained on the Code of Conduct included in this ESMF to manage the potential adverse impacts on social cohesion and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks. • Any complaints will be logged, fully investigated, and responded to quickly, advising what action has been taken. Complaints will be registered and reported to the contractor, supervision consultant and also PIU. • Public notice boards will be established at site entrances providing contact details of the person(s) accountable for								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	liaison including environmental matters.								
Communicable diseases among the community and workers	• Use the mitigation measures underlined in LMP • Comply with the precautions announced by the local and international authorities		X		Health records	X			Supervision Consultants and Contractors
Asbestos Management: Environmental, health and safety risks due to asbestos or asbestos-containing materials	• The potential risk of asbestos existence at the work site should be evaluated in advance of the commencement of the Works. If potential of asbestos existence is confirmed , legally certified experts should be contacted for further location identification and disposal. • If asbestos or asbestos containing materials (ACM) are found at a construction site, they should be clearly marked as hazardous waste. • The asbestos will be appropriately contained and sealed to minimize exposure by certified experts in accordance with legislation. Further actions (removal and/disposal) will be advised		X		Visual inspection of control measures Asbestos or ACM removal records	X			Supervision Consultants and Contractors

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	by the experts in accordance with the legislation. • Prior to removal, if removal is necessary, ACM will be treated with a wetting agent to minimie asbestos dust. • If ACM is to be stored temporarily, it should be securely placed inside closed containers and clearly labeled. • Removed ACM will not be reused.								
Cultural Heritage Chance Find	• No disturbance of cultural or historic sites. If encountered with any cultural heritage/assets during the construction works apply the chance finds procedure (Annex-2 of ESMF)		X		Chance find records		X		Supervision Consultants and Contractors
Labor and Working Conditions: Risks associated with potential labor influx and presence of worker camps (such as accomodation conditions, child labor risks, gender based violence	• Workers will be provided with information and documentation that is clear and understandable regarding their terms and conditions of employment such as their rights under national labor and employment law (which will include any applicable collective agreements).		X		Visual inspection of control measures Health records	X			Supervision Consultant and Contractor

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
and harassment, human rights, etc.) and other labor issues	• Workers will be paid on a regular basis as required by national law and project LMP. • Workers will be provided with adequate periods of rest per week, annual holiday and sick, maternity and family leave, as required by national law and project LMP. • Workers will receive written notice of termination of employment and details of severance payments in a timely manner. • Workers will be employed on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship. • Project workers, including specific groups of workers, such as women, people with disabilities, migrant workers and children of working age, will be provided with appropriate measures of protection and assistance in				Employee records Training records Records of workers complaints				

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	line with ESS2 of WB ESF. This process will be executed in accordance with the project LMP. • Workers are allowed to participate, or seek to participate, in workers' organizations and collective bargaining or alternative mechanisms. • Children under the minimum age of 18 will not be employed or engaged by the Contractor in connection with this sub-project. • Forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty, will not be used in connection with this sub-project. • A worker's GM will be established by the Contractor at the construction site for all workers to raise workplace concerns. Contact details of								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	the worker's GM will be provided. • All workers will receive training about their rights under national labor and employment law and regarding the GM upon recruitment and before the implementation of the work. • Code of Conduct will be shared with project workers during employment. All workers are obliged to comply with the Code of Conduct and sign relevant documentation at the time of employment. • Movement in and out of the construction site will be controlled, and unauthorized access to the site will be prevented. • Contractor will confirm that workers are fit for work before they start work, paying special attention to workers with underlying health issues or who may be otherwise at risk.								

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*	
	• The Contractor will provide information and awareness of communicable diseases to workers. • The Contractor will arrange safe drinking water, adequate toilet facilities, accommodation, rest and dining areas for the workers. The Contractor will provide a first aid kit with bandages, antibiotic cream, etc. or health care facilities, and shall identify and train an adequate number of workers to provide first aid during medical emergencies.								

Annex 4. SITE SPECIFIC ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) OUTLINE

Environmental and social risks and impacts are strongly linked to subproject location and scope of activities. This Environmental and Social Management Plan (ESMP) should be customized for each specific subproject location and activities by the contractor.

1. Subproject Information

Subproject Title:	
Estimated Cost:	
Start/Completion Date:	

2. Site/Location Description

This section concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g., access roads, water supply, etc.). Please attach a map of the location to the ESMP.

3. Subproject Description and Activities

This section lists all the activities that will take place under the subproject, including any associated activities.

4. ESMP Matrix: Risk and Impacts, Mitigation, Monitoring

This section should identify anticipated site-specific adverse environmental and social risks and impacts; describe mitigation measures to address these risks and impact; and list the monitoring measures necessary to ensure effective implementation of the mitigation measures. It may draw from the ESMF's pre-identification of potential risks/impacts and mitigation measures, as applicable, and drill down further to ensure relevance and comprehensiveness at the site-specific level. For subprojects involving construction, two sets of tables may be needed, for the construction phase and the operation phase.

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Impact/Mitigation Monitoring		
		Location/Timing/ Frequency	Responsibility	Parameter to be monitored	Methodology, including Location and Frequency	Responsibility

5. Capacity Development & Training

Based on the implementation arrangements and responsible parties proposed above, this section outlines any capacity building, training or new staffing that may be necessary for effective implementation.

6. Implementation Schedule and Cost Estimates

This section states the implementation timeline for the mitigation measures and capacity development measures described above, as well as a cost estimate for the implementation. The cost estimate can focus on the line items that will be covered by the project implementing agency, with costs of mitigation measures to be implemented by the contractor left to the contractor to calculate.

7. Attachments

SEP, OHS Plan, Waste Management Plan, Community Safety and Traffic Management Plan, Pollution Prevention Plan and Legislative Framework, etc.

8. Review & Approval

Prepared By: ……(Signature) Position: …… Date ……	
Reviewed By: ……(Signature) Position: ……Date ……	**Approved By**: ……(Signature) Position: …… Date ……

Annex 5. SAMPLE GRIEVANCE FORM

Reference No	
Full Name	
Please mark how you wish to be contacted (by mail, telephone, or e-mail).	
Province/Town/Settlement	
Date	

Category of the Grievance	
1. On abandonment (public)	
2. On assets/properties impacted by the project	
3. On infrastructure	
4. On decrease or complete loss of sources of income	
5. On environmental issues (ex. pollution)	
6. On Employment	
7. On traffic, transportation and other risks	
9-Other (Please specify):	
Description of the Grievance What did happen? When did it happen? Where did it happen? What is the result of the problem?	
What would you like to see happen to resolve the problem?	

Although giving a name and address is not compulsory, it should be kept in mind that during the feedback process regarding the grievance, some problems may occur due to a lack of information.

Signature: **Date:**

Annex 6. SAMPLE GRIEVANCE CLOSEOUT FORM

Grievance closeout number:		
Define immediate action required:		
Define long-term action required (if necessary):		
Compensation Required?	[ ] YES	[ ] NO
CONTROL OF THE REMEDIATE ACTION AND THE DECISION		
Stages of the Remediate Action		Deadline and Responsible Institutions
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

COMPENSATION AND FINAL STAGES

This part will be filled and signed by the complainant after s/he receives the compensation fees and his/her complaint has been remediated.

Notes:

[Name-Surname and Signature]

Date: ___ / ___ / _____
Of the Complainant:
Representative of the Responsible Institution/Company
[Title-Name-Surname and Signature]

Annex 7. OCCUPATIONAL HEALTH AND SAFETY PLAN OUTLINE

The main objective of the OHS Plan is to ensure a safe and healthy working environment through careful planning, routine inspections, safety awareness, training of all personnel, and safety meetings. All contractors shall apply Zero Accident Policy.

Although OHS Plans should be frequently reviewed and updated as needed, incidents, accidents, new methods, and changes in the working environment (new methods, new materials, tools, etc.) are examples of items that must be taken into account when OHS Plans are reviewed and updated. All workers and subcontractors involved in renovation, demolition, reconstruction, or any other activities shall read the appropriate OHS Plan and shall be encouraged to prevent accidents and incidents detrimental to people and the environment.
The items listed below shall be addressed in OHS Plan:

- Policy, Leadership, Commitment
- Emergency Response Plan
  The Emergency Response Plan shall outline how to respond to general and sector-specific emergencies i.e. fire and blow-out (what phone number to call, whom to contact, how to contact, where to gather, etc.)
- Outline of health and safety issues and goals of the OHS Plan
- Roles and responsibilities (including roles and responsibilities of subcontractors)
- Applicable laws and regulations (6331 Code on OHS Law and relevant regulations)
- Training plan and goals
- Risk analysis and preventive measures
- General health and safety requirements (including instructions, personal protective equipment, work clothes, caution labels, tool inspections, and required qualifications)

Table of contents for a sample OHS Management Plan

Content

14. **Supervision**
15. **Training of Employees**
16. **Emergency Preparedness**
17. **Accident and Incident Investigations**
18. **Employee Health**

Annex 8. COMMUNITY SAFETY AND TRAFFIC MANAGEMENT PLAN OUTLINE

Major community health and safety issues in sub-projects involving renovation activities (i) noise and dust; (ii) work site safety; (iii) emergencies; and (iv) traffic safety. This Annex introduces general guidelines for the preparation of a Community Safety and Traffic Management Plan. The main objective of the plan is to ensure the safety and health of the community through careful planning, routine inspections, awareness, and training of the community during project development, exploration/drilling and to reduce risks associated with motor vehicle travel and to define practical actions which can be put in effect to mitigate road safety risks. The renovation activities may require detailed planning depending on site-specific issues. The items listed below shall be addressed in each plan:

- Policy, Leadership, Commitment.
- Outline of health and safety issues and goals of the plan.
- Roles and responsibilities (including roles and responsibilities of subcontractors).
- Applicable laws and regulations.
- Training plan and goals.
- Risk analysis and preventive measures against below topics:
- Pandemic (coronavirus and other communicable diseases)
- Release of pollutants and dust emissions into ambient air
- Excessive noise
- Excessive or unregulated vehicle traffic near the sub-project site and through communities at inappropriate times (e.g. children going to school) due to the movement of trucks and other vehicles and machinery to and from the plant
- Ensuring the driver is properly licensed for the class of a vehicle and free from fatigue, drug, or alcohol impairment.
- Driving with care at appropriate speeds for road conditions, ensuring all occupants fasten seatbelts.
- Avoiding the use of all mobile communication devices and other driver distractions, while using any company-leased vehicle on company time
- Designating safe areas while working around moving vehicles
- Exposure to hazardous substances
- Exposure to project-related emergencies (accident, fire, explosion, etc.)
- Improperly controlled or trained security guards
- Unresolved problems due to the absence of an external grievance mechanism
- Placement of access deterrents, such as fences and warning signs, to prevent access and warn of existing hazards.

Table of Contents of a Sample Community Safety and Traffic Management Plan

Annex 9. POLLUTION PREVENTION PLAN OUTLINE

Pollution Prevention Plan will be prepared and implemented for sub-projects where appropriate based on the screening procedure conducted. Construction activities will cause noise and air pollution and also hazardous material risks such as chemical spill risks.
The main objectives of preparation of the Pollution Prevention Plan are to:

- Define roles and responsibilities
- Define legal/institutional framework
- Describe and examine the project's potentially negative environmental impacts
- Recommend measures needed to minimize, mitigate, or compensate for adverse impacts
- Improve environmental performance
- Ensure proper monitoring and response to failures of environmental management measures

The following aspects should be addressed in each Pollution Prevention Plan:

- Project summary
- Description of the relevant baseline conditions
- Summary of impacts
- Description of mitigation measures
- Description of the monitoring program
- Institutional arrangements and outline of roles and responsibilities

The summary of impacts shall identify the predicted adverse environmental impacts for which mitigation is required. Each mitigation measure shall be briefly described regarding the impact to which it relates. The suggested mitigation measures shall be supported by relevant references, designs, equipment descriptions, and/or operating procedures. Monitoring is important to evaluate environmental performance. Thus, a monitoring program shall be designed to ensure mitigation measures are undertaken in case the proposed measures are inadequate or if impacts were underestimated. The monitoring program shall be linked to the impacts identified and the methods to be used.

Responsibilities for mitigation and monitoring shall be clearly defined and arrangements for coordination between various responsible actors shall be defined. This includes beneficiaries, Contractors, and administrative entities.

Annex 10. WASTE MANAGEMENT PLAN

The Waste Management Plan is developed for the Project to set out the primary applicable requirements associated with waste management in compliance with related national legislation and World Bank Environmental and Social Framework and its associated Environmental and Social Standards (ESSs). The plan will be applied during the renovation phase of the Project.

Throughout the Project life, different types of wastes and materials will be generated from different sources and activities. The purpose of this plan is to guide and obtain the acceptable collection, segregation, storage, handling, transportation, and disposal of non-hazardous and hazardous wastes generated from the Project activities in a way that minimizes the impacts on human health and the environment, including minimization of loss of valuable reusable/recyclable materials.

The Plan complies with national legislation, requirements of Resource Efficiency, Pollution Prevention and Management ESS3, and other applicable Good International Industry Practices. The plan will be applied systematically during the lifetime of the Project, in conjunction with the following related management plans and programs:

- Environmental and Social Management Plan (ESMP)
- Labor Management Procedure (LMP)
- Community Safety and Traffic Management Plan
- Method statement for environmental aspects
- Pollution prevention plan and
- Stakeholder Engagement Plan including grievance mechanism;

This Plan is a living document, and the responsibilities, procedures, and compliance actions should be updated as appropriate.

Legislative Requirements and Standards

National Legislation

The Environmental Law (No. 2872), which was published in the Official Gazette No. 18132 dated August 11, 1983, provides the legislative framework for the regulation of industries and their potential impact on the environment. Industrial projects are subject to varying levels of review that begin while projects are in the development phase. Additional regulations apply to facilities once they are in operation.

The Environmental Law authorized the promulgation of several regulations. Those that pertain to waste management and the Project must comply with are described below.

Regulation on Waste Management

The Regulation on Waste Management is the implementing legislation aimed at aligning with the EU Waste Framework Directive. The Regulation was published in the Official Gazette No. 29314 dated April 2, 2015.

The Regulation on Waste Management provides a single comprehensive framework for waste management. As of April 2015, it repealed and replaced the Regulation on Solid Waste Management and the Regulation on General Principles of Waste Management. As of April 02, 2016, it also repealed and replaced the Regulation on Control of Hazardous Wastes.

Article 9 of the Regulation stipulates the responsibilities of the waste generators and waste owners, including:

- Implementation of necessary measures to minimize waste generation;
- Preparation and submission of waste management plan regarding generated wastes (with prevention and minimization measures);
- Declaration of annual waste generation via the web-based system of the Ministry of Environment, Urbanization and Climate Change and use of Mobile Hazardous Waste Transport System (MOTAT) for wastes that require its use (template is provided in Annex 9-A of the Hazardous Waste Control Regulation which is repealed and replaced by Regulation on Waste Management).

Regulation on Control of Excavation, Construction, and Demolition Wastes

Regulation on Control of Excavation, Construction and Demolition Wastes was published in Official Gazette No. 25406 dated March 18, 2004. Articles 10, 34, 35, 36, 37, 38, 39, 40, 41, and 42 regarding the storage of the wastes were repealed by the Landfill Regulation published in Official Gazette No.27533 dated March 26, 2010.

This regulation aims to set the principles and procedures to minimize excavation, construction, and demolition waste at the source of generation, as well as to collect, temporarily store, transfer, recycle, reuse, and dispose of waste, in an environmentally sound manner.

By Article 9 of the regulation; excavation, construction, and demolition generating facilities are obliged to implement waste management in a way that will minimize the adverse effects of waste on the environment and human health. The facilities must acquire the necessary permissions that concern the generation, transportation, and storage operations of waste. The facilities are not allowed to dump construction wastes on the sites/locations and facilities other than the permitted ones by the municipal or other authorities.

The regulation also stipulates that the project owner is responsible for having precautions to minimize noise impacts, visual impacts, and dust emissions during the removal of excavation material. The operation area must also be enclosed. In addition, planning should be done in a way that the amount of excavated soil is equal to the filling volume. Excavated soils must be utilized within the operation Area to the extent possible.

Packaging Waste Control Regulation (PWCR)

PWCR was published in the Official Gazette No. 28035 dated August 24, 2011, and also updated and published in the Official Gazette No: 31523 dated June 26, 2021. The regulation aims to provide certain environmental criteria, requirements, and characteristics for packaging production, prevent direct and indirect disposal of packaging wastes causing environmental damage, and prevent and minimize the generation of package waste through reuse, recycling, and recovery methods.

PWCR states that the packaging wastes should be collected and stored separately from other wastes at the source to ensure their disposal without causing any environmental damage; to reduce environmental pollution; to benefit from the landfills at maximum levels; and to contribute to the economy.

Packaging waste-generating parties located in the boundaries of municipalities that conduct separate collection at source are obliged to deliver the packaging wastes to the responsible municipalities or their contracted and licensed collection/separation entities.

Waste Batteries

Waste Batteries and Accumulators Control Regulation was published in Official Gazette No. 25569 dated August 31, 2004. The purpose of this Regulation is;

- Arrange legal and technical principles for the development of policies and programs for batteries and accumulators from their production to their final disposal,
- Ensure production of batteries and/or accumulators with certain criteria and basic conditions and characteristics in terms of the environment,
- Prevent discharge to the receiving environments,
- Ensure technical and administrative management standards are in place, and
- Establish a collecting system for the recovery and final disposal of used batteries and accumulators.

According to the Regulation, battery, and accumulator consumers are obliged to;

- Collect used batteries separately from household wastes,
- Deliver used batteries to the collection points established by municipalities or enterprises that are engaged in the distribution and sales of battery products,
- Deliver the old accumulators to the temporary storage facilities established by the enterprises engaged in the distribution and sale of accumulator products and enterprises operating vehicle maintenance/ repair sites (accumulators cannot be delivered over 90 days once they are out of use),
- Pay a deposit if a new accumulator is to be purchased when delivering the old one and
- Ensure impervious ground and other required conditions are met for the temporary storage sites where batteries and accumulators will be stored,

Waste Oils Management Regulation (WOMR)

WOMR was published in the Official Gazette No. 26952 dated June 30, 2008, and also updated and published in the Official Gazette No. 32071 dated January 12, 2023. The purpose of the WOMR is:

- To prevent direct and indirect disposal of waste oils in the environment;
- To ensure temporary storage, transportation, and disposal thereof without causing harm to the environment and human health;
- To set up necessary technical and administrative standards in the management of waste oils;
- To determine the required principles and programs to establish temporary storage, handling, and disposal facilities and
- To manage these facilities in an environmentally friendly manner.

According to Article 9 of WOMR, waste oil producers are obliged to take the required measures to minimize the generation of waste oils, including waste motor oils and residues resulting from the processing of waste oils. Waste oil producers must conduct waste oil analyses and declare generated amounts to the Ministry of Environment, Urbanization, and Climate Change. Waste oil from different categories should not be mixed with other hazardous wastes.

Waste oil producers shall comply with the provisions of the Regulation on Waste Management for disposal. All records including waste oil declaration forms and analysis reports are required to be kept for at least five years. To transport waste oils, the regulations that will be determined by MoEUCC shall be complied with.

Waste oil is required to be collected in red colored tanks/containers with a label of "Atık Yağ" (“Waste Oil”) on it as stated in Annex-6/Article 6. The containers are placed in storage with provisions for protection from rain, as well as the impermeable ground (a thickness of at least 25 cm and covered by epoxy, geo membrane, and similar insulation materials).

Regulation on Control of Waste Electrical and Electronic Equipment

The regulation was published in the Official Gazette No. 28300 dated May 22, 2008, and also updated in the Official Gazette No: 32055 dated December 26, 2022. One of the main purposes of the Regulation is to identify the methods and targets regarding the minimization of electrical and electronic waste generation through reuse, recycling, and recovery.

Requirements of World Bank ESF

Regulation on General Principles of Waste Pre-treatment and Recycling Facilities

The regulation was published in Official Gazette No. 31623 dated October 09, 2021. It is to determine the procedures and principles regarding the technical criteria of the waste pre-treatment and recovery facilities operating for the processing of wastes and the minimum requirements to be found in these facilities.

Resource Efficiency, Pollution Prevention, and Management ESS3

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services, and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention, GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable.
This ESS sets out the requirements to address resource efficiency and pollution10 prevention and management11 throughout the project life cycle consistent with Global International Industry Practice (GIIP). Resource Efficiency and Pollution Prevention and Management Standard’s objectives are provided below:

- To promote the sustainable use of resources, including energy, water, and raw materials.
- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
- To avoid or minimize project-related emissions of short- and long-lived climate pollutants.

10 The term “pollution” is used to refer to both hazardous and nonhazardous chemical pollutants in the solid, liquid, or gaseous phases, and includes other components such as thermal discharge to water, emissions of short- and long-lived climate pollutants, nuisance odors, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light.
11 Unless otherwise noted in this ESS, “pollution management” includes measures designed to avoid or minimize emissions of pollutants, including short- and long-lived climate pollutants, given that measures which tend to encourage reduction in energy and raw material use, as well as emissions of local pollutants, also generally result in encouraging a reduction of emissions of short- and long-lived climate pollutants.

- To avoid or minimize the generation of hazardous and non-hazardous waste.
- To minimize and manage the risks and impacts associated with pesticide use.

European Union (EU) Legislation

Directive 2008/98/EC (the Waste Framework Directive) provides general provisions for waste management and sets the basic waste management definitions. It requires that waste is managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants, or animals, without causing a nuisance through noise or odors, and without adversely affecting the countryside or places of special interest. The Directive amended the former EU directive on waste, hazardous waste, and waste oils and is currently covering all wastes identified by Decision 2000/532/EC (i.e. the European Waste Codes).

To harmonize Turkish environmental protection standards with the EU's Waste Framework Directive (2008/98/EC) and the European Commission Decision establishing a list of waste (2000/532/EC), the Turkish MoEUCC adopted a new regulation on waste management that will significantly affect companies that produce waste in Türkiye. Waste management implementing legislation aimed at aligning with the Waste Framework Directive was adopted in 2015.

Currently, waste codes provided in Annex 4 of the Turkish Regulation on Waste Management are entirely the same as the European Waste Codes.

Roles and Responsibilities

Roles and responsibilities for Environmental and Social (E&S) management for the Project are described in detail in the Project ESMF. Within this scope, roles and responsibilities regarding waste management are provided in Table 10.1.

Table 10.1 Roles and Responsibilities

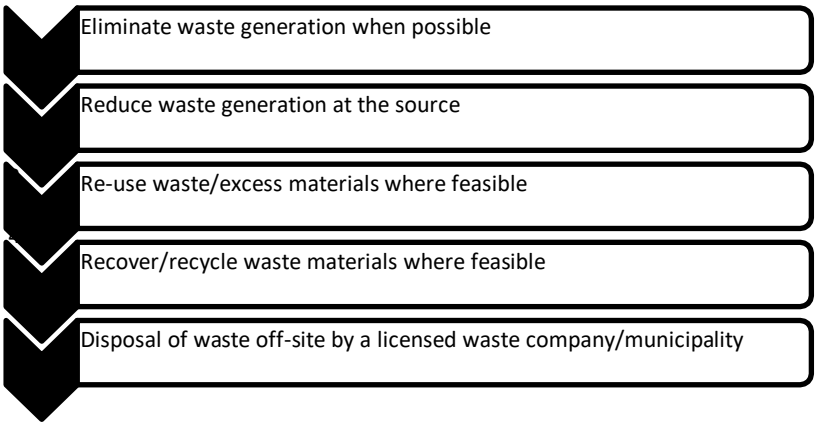
Roles	Responsibilities
Project Implementation Unit (PIU)	Ensure adequate resources are provided for the implementation of this Plan. As required, review and update the Plan
Supervision Consultant	Ensure technical support is provided to the Contractor for the implementation of the Plan. Ensure related trainings are provided by the Contractor, through a review of training records and related training documents. Oversee Contractors' HSE compliance with Project requirements through Contractor monitoring and reports.

Contractors	Ensure this plan is implemented in line with Project standards The main responsibility for ensuring the implementation of the Plan (including by the Sub-Contractors if any) and reporting non-compliances and implementation performance of the Plan to the supervision consultant. As required (e.g. in the case compliance is identified, a change in applicable legislation occurs, etc.), participate in the development of corrective and/or enhancement actions. Provide related trainings. Conduct internal audits and daily inspections and record identified in compliance. Ensure related non-compliances are recorded and responded to immediately. As required, review and update the Plan (in coordination with the supervision consultant). Ensure waste management issues are included in the daily checklist to be integrated into the monthly report to be submitted to PIU.
All personnel	Participate in trainings required for waste management. Ensure self-competency in terms of the implementation of this plan.

Waste Management

Waste Management Approach

The Waste Framework Directive (Directive 2008/98/EC) provides a waste hierarchy, which lays down priorities for the best overall environmental option in applicable waste legislation and policy. The EU waste hierarchy will also be the hierarchal approach of the Project. Within this scope, the management of wastes will be based on the following, in the order of decreasing preference:



In order to minimize and appropriately manage the waste generated on-site, the following good management practices will be used:

- Reduction of waste generation (through management practices, avoiding or decreasing materials use, etc.) is the primary goal of this plan.

- Non-hazardous wastes will be segregated from hazardous wastes.
- Recycling of wastes will be mandatory throughout all Project activities and related trainings will be provided.
- Wastes to be sent to licensed recycling/recovery firms will be segregated by type.
- An effort will be made to minimize the number of hazardous materials used.
- Personnel that handles hazardous materials and wastes, will be trained for proper handling and management.
- Spills of hazardous materials will be prevented through careful and sensible management of the materials.
- Where possible, non-hazardous alternatives will be used in place of hazardous materials.
- Regular inspections of storage areas will be conducted. If damaged or leaking containers are detected, they will be replaced.
- Preventive maintenance will be performed on equipment to avoid potential spills.
- Waste storage areas will have secondary containment or spill trays.
- Under no circumstances, waste will be disposed of on-site.

Classification of Wastes

The Project activities will lead to the generation of various non-hazardous and hazardous wastes.

Non-Hazardous Wastes

Typical non-hazardous wastes are given below;

- Domestic waste,
- Recyclable wastes (e.g. paper, glass, metals, wooden waste, trees, tin cans, textiles, etc.),
- Packaging waste,
- Waste tires, and
- Excavation waste.

Hazardous Wastes

Different types of hazardous wastes, that may potentially be generated as a result of the project activities, are given below:

- Waste batteries and accumulators,
- Waste vegetable oil,
- Medical waste,
- Waste oil (from maintenance of equipment and vehicles, transformers, etc.),
- Waste paint,
- Other hazardous waste related to operation and maintenance (O&M) activities, and
- Materials that came into contact with hazardous materials (including pesticide containers).

Implementation

Waste Collection, Storage, Transportation and Disposal

In line with the legal requirements, an industrial (hazardous and non-hazardous) waste management plan will be prepared and submitted to the PDoEUCC.
In addition, by the end of March of each year, the waste declaration form must be completed with the pr evious year's information and these forms must be submitted to the MoEUCC digitally.

Collection, Segregation and Storage

Wastes will be segregated and temporarily stored in designated secured storage areas separately defined for hazardous and non-hazardous wastes.

Non-Hazardous Wastes

Management of non-hazardous wastes will be as follows:

- Domestic wastes will be collected in special trash bins and temporarily stored onsite in compliance with the Regulation on Waste Management.
- Recyclable wastes will be separated and stored temporarily onsite in reserved areas.
- Packaging wastes will be collected separately and temporarily stored onsite in reserved areas in compliance with Packaging Waste Control Regulation.
- Suitable waste containers will be provided at the places of waste generation to facilitate safe and environmentally sound temporary storage. All containers will be marked according to contents.

Hazardous Wastes

Management of hazardous wastes will be as follows:

- In accordance with international standards and international common practice, hazardous wastes will be stored in containers that are non-damaged, leak-proof, safe, and appropriate. In line with related legislation, a dedicated area with a concrete floor will be used for storage.
- All waste containers that are being handled will have clear identification and accurate description of the type of waste. This will provide information to the site and external personnel for the safe handling and transfer of waste. Any unidentified waste will be considered hazardous waste. Waste labels will include information such as waste classification/category, the volume of waste, MSDS, and required PPEs. Any old labeling on the containers will be removed or covered to avoid confusion.
- The hazardous waste containers will be checked regularly, to determine whether they are damaged, or if any spillage has occurred.
- Hazardous waste containers will be kept closed and wastes will be stored in a way that they will not have chemical reactions.
- Vehicles and construction machinery will be used during the land preparation, construction, and closure phases of the Project. Maintenance (e.g., oil change, battery change, etc.) of machinery and equipment is planned to be performed outside of the Project Area, at qualified service providers. In case it is inevitable to perform an oil change, battery change, tire change, etc. site, reserved areas for this work (with appropriate drainage) will be used. An impermeable cover will

be laid under vehicles to prevent soil contamination and this activity will be conducted away from the water resources. When any oil/fuel/lubricant spill or leakage occurs at the site, the contamination will be controlled by using absorbents and the contaminated soil (if any) will be stripped to an adequate depth and stored also as hazardous waste.

- Absorbent material will be kept in all the vehicles used for transportation against any leakage or spill. Information will be given to workers on the use and disposal of materials. Filters or materials saturated with petroleum products will be drained into an appropriate container to remove any free product before disposal.
- Waste oils will be temporarily stored, handled, and disposed of in separate containers, according to the categories referred to in the Waste Oil Management Regulation. Waste oil will be collected inside the containers and placed on an impermeable surface. Different containers will be used for waste oils of different categories. Waste oil temporary storage containers will have a "Waste Oil" sign on.
- Waste vegetable oils will be collected in special containers temporarily.
- Discharge of the waste oils to receiving environments or lavatories/sinks will not be allowed.
- Waste batteries and accumulators will be collected and stored separately in compliance with Waste Batteries and Accumulators Control Regulation.
- Project vehicle maintenance will be conducted off-site. However, in case the tires of vehicles and the construction machines need to be changed, the changed tires will be kept in special reserved places in line with End-of-Life Tires Control Regulation
- The Project activities do not require the use of explosives. However, if required, waste explosives will be stored in their original type of container but marked as explosive waste and will be transported by licensed firms.

Transportation and Disposal

Non-Hazardous Waste

The following management controls will be in place for the transport and recycling, recovery and disposal of non-hazardous wastes:

- A protocol will be signed with the related municipality for the transfer of domestic wastes to the sanitary landfill.
- Agreements will be signed with licensed firms for the transport of segregated recyclable and packaging wastes.
- The portion of excavation waste that cannot be reused on-site will be transported to excavation, construction, and demolition disposal areas approved by the respective municipality as mentioned above. This must comply with the Excavation, Construction, and Demolition Waste Control Regulation.
- Agreements of the Company with licensed waste facilities will be annexed to this MP.

Hazardous Wastes

The following management controls will be in place for the transport and reuse, recovery, recycling, and disposal of hazardous wastes:

- Hazardous wastes will be transported off-site when the storage on site nears maximum storage capacity levels. Hazardous waste will be securely packed and labeled before removal from the site

to ensure the waste can be transported safely to the approved disposal site without risk to those handling the waste or to the environment.

- Separately collected waste batteries and accumulators will be delivered to the collection points established by enterprises engaged in the recovery, distribution, and sales of battery products; or by municipalities.
- Waste tires will be delivered to licensed transportation, recycling, or reuse (as fuel) companies.
- As mentioned above, this project does not require medical waste but if required, it will be sent to a nearby healthcare facility or a medical waste disposal firm, under the supervision of the workplace doctor.
- Waste oils will be transported by licensed transporters to the licensed processing and disposal facilities. National Transportation Form will be filled before transportation and the waste oil declaration form will be submitted to relevant authorities annually.
- Waste vegetable oils collected in special containers will be sent to licensed companies for reuse/ recovery.
- Licensed disposal facilities will be used for the transfer and disposal of other hazardous wastes.
- Agreements of the Company with licensed waste facilities will be annexed to this MP.

Monitoring and Reporting

The waste types, the amount collected of each type, and waste classifications, will be recorded monthly. Records of generated waste from the time of generation to the final destination will be maintained. A sample waste log form for this purpose is provided Table 10.2.

Annual waste declaration forms (online web-based system of the MoEUCC https://ecbs.cevre.gov.tr/) and the Mobile Hazardous Waste Transport System (MOTAT) records will be kept for 5 years onsite.

Daily inspections regarding the on-site management of wastes will be conducted during the construction and operation phases. A sample checklist for subjects to be covered during inspections is provided in Annex 2. In addition to these inspections, internal audits will be conducted quarterly during the construction phase. Results of inspections and monitoring will be provided to the supervision consultant/PDoEUCC, as well as to World Bank within the scope of biannual reporting.

Based on monitoring and audit results, corrective and/or enhancing actions will be designed and implemented. The performance of these actions will also be monitored and reported.

Training

Contractors will ensure sufficient training is provided to all personnel (including sub-contractors personnel if any). The scope of the training will ensure that workers can fulfill their waste management roles and functions through awareness of relevant aspects of this plan, related legislation and standards, and general waste management practices (e.g. tidiness, waste segregation, etc.).

Training details (e.g. participants, subjects, training hours provided, etc.) will be recorded and the records will be kept on-site. Personnel working routinely with hazardous wastes and materials will receive additional specialized training detailing the specific handling, segregation, labeling, storage, spill response, and disposal requirements.

Review and Update

This Plan is a living document, and the responsibilities, procedures, and compliance actions shall be updated as required (e.g. after a change in related legislation). It is the responsibility of supervision consultants and Contractors to be fully aware of its contents. The Contractor is to provide relevant training to staff and to ensure that measures/commitments are being implemented to achieve compliance with this Plan.

Table 10.2 Waste Log Form

Month:

Waste Log Form No:

No	Date	Type (Hazardous/ Non-hazardous)	Sub-type	Waste (ton or m3)	Transporter	Disposer	Disposal Method
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

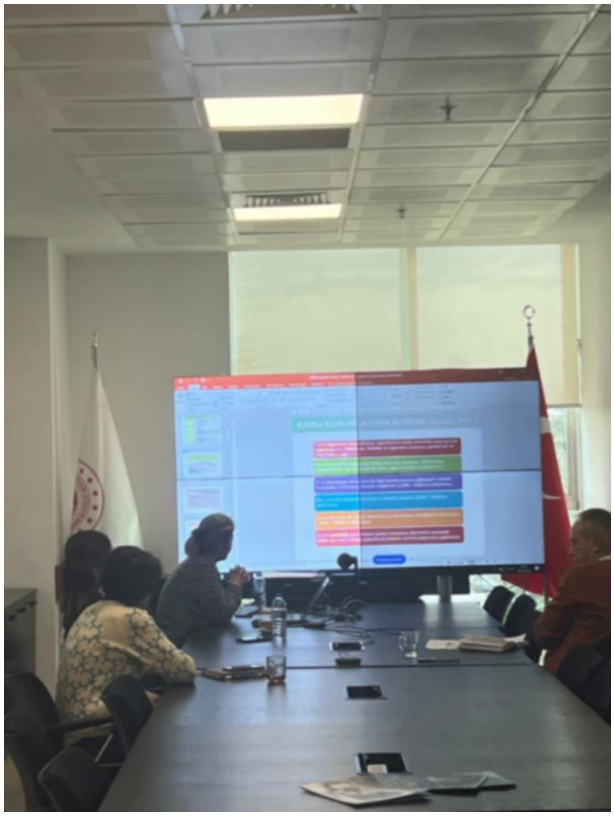
Table 10.3 Waste Management Inspection Checklist

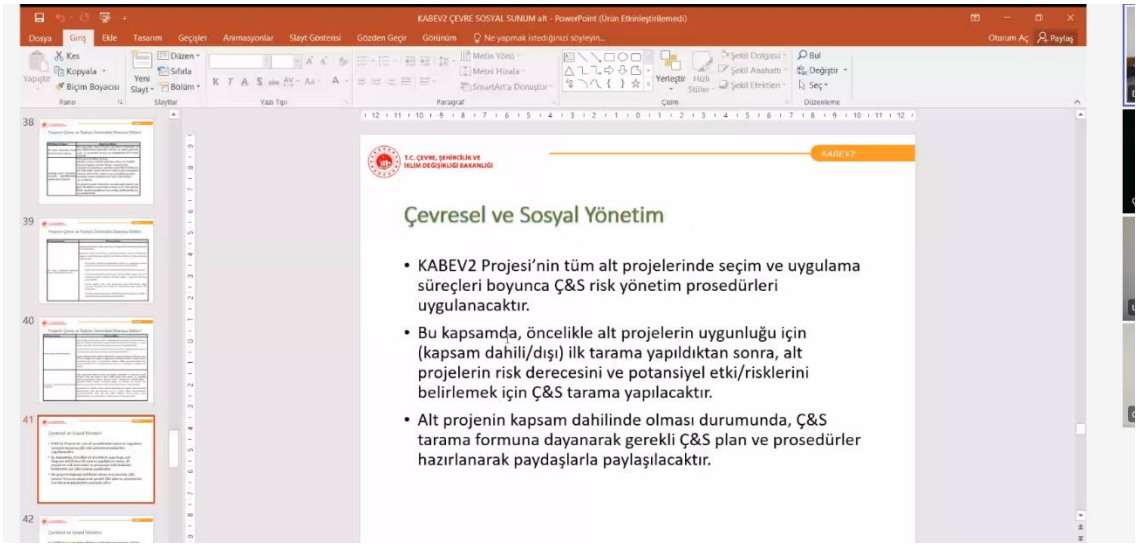
Inspection Date:

Inspection Location:

Control Measure	Compliance (Yes/No)	Comment
Are all waste streams being properly separated and labeled into the following categories? Hazardous Waste Non-hazardous waste		
Is the site waste inventory current and up to date?		
Are hazardous and non-hazardous wastes stored at separate locations?		
Has a map been produced showing the correct waste storage locations which are visible to all workers		
Are all waste storage containers appropriately labeled to prevent cross-contamination of waste materials?		
Are all waste labels complete and include the appropriate information? Waste stream (Hazardous, non-hazardous, etc.) Type of waste (solid, liquid, or sludge) Amount of waste Known environmental, health, and safety hazards (e.g. MSDS forms) Personal protection equipment (PPE) required		
Are licenses of companies contracted for waste transport and waste disposal valid and up-to-date?		

Annex 11. CONSULTATION MEETING PHOTOGRAPHS





Annex 12. THE LIST OF PARTICIPANTS

On January 25, 2024, a consultation meeting was held, with the participation of approximately 170 people. Participant information is recorded in order to be contacted by the Bank and EEPB2 PIU team when necessary but participant information will not be disclosed and published within the scope of the Personal Data Protection Law.

Annex 133. THE RECORDS OF MEETINGS AND CONSULTATIONS

Stakeholder (Group or Individual)	Dates of Consultations	Summary of Feedback	Response of Project Implementation Team	Follow-up Action(s)/Next Steps	Timetable/ Date to Complete Follow-up Action(s)
Malatya PDoEUCC	25.01.2024	Do you consider the size of the building while selecting?	We usually prefer buildings with large footprint during bidding and try to find minimum area of 5000m2. However, our main priority is not the area/size, but the buildings with high energy consumption and the extent of savings that could be achieved.		
Edirne Governorship	25.01.2024	We applied for EEPB1. Do we need to submit the information/data again for EEPB2?	The information you submitted is recorded in our database. If it is still valid, you do not need to submit again. However, if you have additional/new buildings and they happen to meet the eligibility criteria, you can also submit the information for those buildings as well.		

Giresun Governorship	25.01.2024	Can we apply using the building-registration certificate of our building started construction in 1991 and completed in?	The building registration certificate does not replace the license and does not give us information about the year of construction. We use the starting date of construction as basis, not the completion date. Therefore, for your building, the pre-2000 building application criteria apply.		
Atatürk SH	25.01.2024	What is the latest situation in Aydin ?	We are planning to visit the sites in Aydin in February 2024. We will provide you the latest information at the end of our sit visit.		
Gaziantep Governorship	25.01.2024	We have a total area of 86,000 m2 at the Regional Administrative Court. The natural gas meters are the same but the electricity meters are different. Can this be counted as a single building?	It would not be right to answer this question at this point without seeing the actual buildings. You can submit the information as individual buildings. If you make your application, we will evaluate it according to the eligibility criteria.		
Anonymous	25.01.2024	Are rental buildings included in the Project?	No, not included. It also does not include any building that is scheduled to be relocated.		
Diyarbakır PDoEUCC	25.01.2024	EEPB1 has a building age requirement (construction year). Does this apply in EEPB2 also?	Recently constructed buildings have little energy efficiency potential. We look at the potential of buildings and we can achieve at least 30% energy efficiency.		

İstanbul	25.01.2024	Do you identify the problems in the buildings? Are the problems identified by the administration also included in the program?	Upon application, we conduct building inspections and energy audits. If the problems specified by the administration of building users are within the scope of our energy efficiency renovation works, we include them and inform you.		
Giresun PDoEUCC	25.01.2024	Do we write down the total square meters of the building during application since we share the building as 75% as PDoEUCC and 25% as Special Provincial Administration ?	We will include this kind of buildings, 25% of which belongs to an administration, in our scope of evaluation.		
Kırşehir Governorship	25.01.2024	An additional clinic was built in our building registered to EEPB (2017). Should we submit the information again ?	You can add it to your existing application.		