



İLBANK



TURKEY CLIMATE AND DISASTER RESILIENT CITIES PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

JULY 2024

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ABBREVIATIONS

CHSS	Community Health Safety Standard
DRM	Disaster Risk Management
E&S	Environmental and Social
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ESAP	Environmental and Social Action Plan
ESCP	Environmental and Social Commitment Plan
ESDD	Environmental and Social Due Diligence
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standard
EU	European Union
FRIT	Facility for Refugees in Turkey
PDO	Project Development Objective
GHG	Greenhouse Gases
GM	Grievance Mechanism
GoT	Government of Turkey
IBA	Important Bird Area
IBRD	International Bank for Reconstruction and Development
IFI	International Finance Institution
ILO	International Labour Organization
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency

KBA	Key Biodiversity Areas
LMP	Labour Management Procedure
M&E	Monitoring and Evaluation
MoEUCC	Ministry of Environment Urbanization and Climate Change
MSP	Municipal Services Project
MSIP	Municipal Services Improvement Project
NGO/CSO	Non-Governmental Organisation/Civil Society Organization
NRW	Non-Revenue Water
NWMP&AP	National Waste Management Plan and Action Plan
OHS	Occupational Health and Safety
p.e.	Population equivalent
PIF	Project Information File
PIU	Project Implementation Unit
PMU	Project Management Unit
RF	Resettlement Framework
RP	Resettlement Plan
SBO	Strategy and Budget Office
SCADA	Supervisory Control and Data Acquisition
SCP	Sustainable Cities Project
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
TURKSTAT	Turkish Statistical Institution
UN	United Nation
WB	World Bank
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY

Turkey has been affected by the climate and disaster risks including pluvial, fluvial, and coastal flooding; earthquakes and landslides; extreme heat (and heavy snow in remote mountainous areas); water scarcity and droughts; and wildfires. These risks have an impact on infrastructure through direct damage, disruption of physical infrastructure networks, delays in service provision or maintenance, and cascading failures from interdependent infrastructure networks (e.g., the collapse of buildings from earthquakes can damage the pipes/lines of water, gas, electricity, telephone and internet). Managing climate change and disaster risk requires enhanced efforts in developing resilient infrastructure.

Project Description

The **Turkey Climate and Disaster Resilient Cities Project** will support the Government of Turkey to increase access to seismic and climate resilient housing, municipal infrastructure and services in Project provinces in Turkey. The Project is financed through two loans from the World Bank in a total amount of EUR 500 million. The Project includes five components:

- Component 1) Institutional strengthening to enable conditions for urban resilience,
- Component 2) Expanding access to resilient housing,
- Component 3) Investments in climate and disaster resilient municipal infrastructure,
- Component 4) Project Management, Monitoring, and Evaluation
- Component 5) Contingent Emergency Response Component

The Project is financed through two loan agreements with different borrowers and implementing agencies. A loan agreement in the amount of EUR 350 million was signed between the Republic of Türkiye, represented by the Ministry of Treasury and Finance (MoTF), and the World Bank on December 30, 2022. It covers Components 1, 2, 4a and 5 that will be implemented by the Urban Transformation Presidency of the Ministry of Environment, Urbanization, and Climate Change (MoEUCC). The other loan agreement in the amount of EUR 169.5 million was signed between İller Bankası Anonim Şirketi (ILBANK) and the World Bank on March 21, 2024. It covers Components 3 and 4.b that will be implemented by ILBANK and eligible municipal sub-borrowers. As financial intermediary, ILBANK will onlend sub-loans to eligible municipal sub-borrowers for eligible municipal investments. ***This Environmental and Social Management Framework (ESMF) is for Components 3 and 4b of the Project that are under the responsibility of ILBANK.***

Component 3- Investments in Climate and Disaster Resilient Municipal Infrastructure

The five metropolitan municipalities of Izmir, Sakarya, Kayseri, Manisa and İstanbul and their affiliated water and sanitation utilities (collectively, municipal sub-borrowers) were selected as Project provinces for Component 3. They were selected as they are highly vulnerable to the impacts of seismic hazards and climate change such as flooding, drought, and heat waves.

Component 3 will provide sub-loans to the municipal sub-borrowers to finance works, goods, consulting and non-consulting services for demand-driven, resilient and green municipal infrastructure investments in Project provinces including the construction or rehabilitation of stormwater, drainage, and flood management systems, construction or retrofitting of disaster-resilient water and wastewater systems and treatment plants, and construction or rehabilitation of resilient urban transport systems. The positive contribution of the investment to city resilience/reduction of disaster and climate risk as well as the readiness of projects and the creditworthiness of metropolitan municipalities/ utilities will also be selection criteria for

investments. Component 3 will also provide technical assistance to municipal sub-borrowers to strengthen municipal subproject management and implementation support.

Implementing Agency

ILBANK is a financial intermediary and it will onlend the IBRD loan to eligible municipal sub-borrowers for the implementation of their selected eligible municipal sub-projects under Component 3. The Project will be managed by ILBANK as financial intermediary, while municipal sub-projects will be implemented by the five metropolitan municipalities (İstanbul, İzmir, Manisa, Kayseri and Sakarya) and their affiliated utilities.

Purpose of the Environmental and Social Management Framework

The activities within this project will be in compliance to Republic of Turkey's legislations as well as the WB's Environmental and Social Standards (ESSs). ILBANK, acting as a financial intermediary for the activities under Component 3, will ensure compliance with relevant WB policies and procedures and legislative requirements of Republic of Turkey. Thus, ILBANK has put in place an Environmental and Social Management System (ESMS) in accordance with the WB's ESS9 requirements and has prepared this Environmental and Social Framework (ESMF) document for the activities under its responsibilities (Component 3 and 4.b).

As the municipal sub-projects under Component 3 have not yet been fully specified, their potential social and environmental risks and impacts cannot be fully assessed at this stage. This ESMF sets out the principles, rules, guidelines, and procedures for screening, assessing, and managing the potential social and environmental impacts of the municipal sub-projects which will be financed under Component 3 of the Climate and Disaster Resilient Cities Project. It contains measures and plans to avoid, and where avoidance is not possible, to reduce, mitigate and/or offset adverse risks and impacts throughout sub-project preparation and implementation to ensure that social and environmental issues are systematically addressed at the subproject stage. The ESMF specifies the most likely applicable social and environmental policies and requirements and how those requirements will be met through procedures for the screening, assessment, approval, mitigation, monitoring and reporting of social and environmental risks and impacts associated with the activities to be supported. A list of ineligible municipal sub-projects is included in section 1.4 of this ESMF.

POLICY, REGULATORY AND INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL ASSESSMENT

Institutional and Legal Framework for Environmental Protection and Conservation in Turkey

The Ministry of Environment Urbanization and Climate Change (MoEUCC) is the responsible organization for the implementation of policies adopted for protection and conservation of the environment, and for sustainable development and management of natural resources.

The Turkish Regulation on EIA

Under Article 10, Environmental Law sets out the general scope of the Environmental Impact Assessment (EIA) procedure in Turkey, indicating that institutions, agencies and establishments that lead to environmental problems as a result of their planned activities are required to prepare Environmental Impact Assessment report or Project Information File (PIF).

The EIA Regulation is largely in line with the EU Directive on EIA. The key relevant steps of the Turkish EIA procedure, i.e. screening, public consultation, scoping, disclosure and supervision, are briefly reviewed below in the order they are prescribed to occur.

National Laws on Social Impacts

Although the Turkish EIA Regulation does not entirely meet the requirements of international standards in terms of social impacts, it does include some legal provisions for managing various social impacts and stakeholder engagement. In this respect, the social and legal framework applicable for this project should be considered under below classification:

- National Laws on Labour and Working Conditions
- National Laws on Land Acquisition
- National Laws on Right to Information Acquirement
- National Environmental Impact Assessment Regulation

International Agreements and Conventions

The Turkish national policy on environmental protection, cultural heritage and conservation of biological resources was developed on the basis of relevant international agreements signed or ratified by Turkey. The construction and operation of the sub-projects have, as a minimum, to comply with the national policy.

World Bank's Environmental and Social Standards

The World Bank's new Environmental and Social Framework (ESF) will apply to the Project. The Environmental and Social Standards (ESSs) contained in the ESF, set the requirements to be met by Borrowers with respect to the identification, assessment and reduction/mitigation of social and environmental risks and impacts associated with projects supported by the Bank through Investment Project Financing. Nine (as ESS 7 will not apply) out of the ten ESSs establish the standards that the Borrower and the project will meet through the project life cycle.

In accordance with the ESSs, the World Bank Group's Environment, Health and Safety (EHS) Guidelines should be apply to the project as follows:

- World Bank Group's EHS General Guidelines;
- World Bank Group's EHS Guidelines for Water and Sanitation; and
- World Bank Group's EHS Guidelines for Waste Management Facilities.

Key Differences between the Turkish EIA Regulation and the WB ESSs

The Turkish EIA procedures are, with some exceptions, in line with the WB's ESSs. The primary exceptions are in project categorization, scope of environmental and social assessment, and public consultation. Differences between them are described and gap filling measures provided in Section 2.7. In cases where the Turkish legislation differ from the ESSs, the more stringent one will be applied to the project implementation.

BASELINE ANALYSIS

The metropolitan municipalities of Istanbul, Izmir, Kayseri, Manisa, and Sakarya and their affiliated water and wastewater utilities are participating under Component 3 of the Project. These municipalities were selected considering that all are: (a) highly vulnerable to the impacts of natural hazards and climate change (such as earthquakes, flooding, drought, heat waves); (b) have high numbers of risky housing units that require transformation; and (c) have multiple

risk-prone areas that require urgent investment in resilient infrastructure. Most of the targeted municipalities have already experienced operational problems in municipal service delivery such as high water losses, inadequate water treatment, inadequate access to wastewater collection, and lack of wastewater treatment due to deficiencies in financial capacity and insufficient institutional capacity. Also, the sudden increase in population, has put additional pressure on infrastructure and municipal services, and catalysed the need for immediate action. The environmental, social and economic baseline of the five provinces are provided in Section 3.

ENVIRONMENTAL AND SOCIAL RISK ASSESSMENT AND MANAGEMENT PROCESS

The overall project risk is rated as “**Substantial**”. The main Environmental risks of the Project are expected to be typical risks and impacts related to construction works and operation of sub-projects including; dust and noise emissions, hazardous, including Asbestos Containing Materials (ACM) and non-hazardous waste generation and disposal, Occupational Health & Safety (OHS) risks, interruptions to public services and infrastructure, and traffic safety risks, emission of bio-aerosols, odors, and vehicle exhaust due to waste collection and transportation activities, vibration from the operation of waste processing equipment, discharge of treated wastewater to receiving bodies, sludge and solids generation from water and wastewater treatment plants, and ecological impacts on nearby receptors and potential risks and impacts on cultural heritage sites. Main Social risks of the Project are: involuntary resettlement (temporary or permanent economic and/or physical displacement), restriction of land use, loss of livelihoods, potential exclusion of vulnerable groups (those who are not legal owners or renters/low income groups), labor risks related to OHS and community health and safety risks in civil works under construction of public infrastructure.

A number of steps and procedures needs to be followed to determine and manage the environmental and social impacts of subproject activities. The stages of this process are defined below

- 1) E&S screening of subproject proposals;
- 2) E&S assessment of the proposed sub-projects;
- 3) ILBANK consultation with World Bank;
- 4) Preparation of site-specific E&S documents for sub-projects as required, based on the screening outcome;
- 5) Public disclosure of subproject-specific E&S documents;
- 6) Stakeholder consultation on the draft E&S documents;
- 7) World Bank approval of the E&S documents as required for the substantial risk sub-projects;
- 8) Incorporation E&S documents into bidding documents and later – into contracts for the provision of works;
- 9) Supervision, monitoring and reporting of sub-projects’ E&S implementation.

INSTITUTIONAL ARRANGEMENTS AND CAPACITY FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT

Institutional Arrangements

Key actors in the implementation of this ESMF are the ILBANK PMU and project proponent municipalities/utilities.

ILBANK PMU

ILBANK PMU will be responsible for coordinating and supervising implementation of Components 3 and 4.b and for providing support to the sub-borrowers (municipalities/utilities). The PMU will be strengthened by hiring individual consultants, including a procurement specialist, an urban development expert, an environmental specialist, a social specialist, an OHS specialist, a finance expert, a M&E expert and a DRM Expert (in case of need).

Municipalities/Utilities

The five metropolitan municipalities (İstanbul, İzmir, Manisa, Sakarya, Kayseri) and their affiliated utilities will be responsible for sub-project investment implementation under Component 3 in accordance with their sub-loan agreements to be signed with ILBANK. They will establish Project Implementation Units (PIUs) to ensure adequate sub-project implementation after signature of sub-loan agreements. The PIUs will be staffed by municipal employees, and may be strengthened by individual consultants as deemed necessary. Municipalities/utilities are used to carry out infrastructure investments and are familiar with Turkish environmental, social and OHS legislation and construction procedures. They will be supported in accordance with the capacity strengthening for meeting WB requirements.

ESMS, Labour and Working Conditions and OHS of ILBANK

Area of Operation

The scope of the work potentially includes water network(s), water treatment plant(s), sewerage network(s), wastewater treatment plant(s) and landfill facilities, paving and road construction activities of local authorities, bridge construction and similar infrastructure projects as well as superstructure works. In addition to its domestic business partners, ILBANK has extensive cooperation with various international organizations such as the WB, European Investment Bank (EIB), JICA and Islamic Development Bank in the field of domestic operations as well as in the use of loans and funds abroad.

Environmental and Social Management System

ILBANK is strengthening its Environmental and Social Management System (ESMS) as per the requirements of ESS 9 that covers the IFI financed projects. At this stage, per the requirements of ESS 9, ILBANK is preparing an Environmental and Social Management Framework (ESMF) which meets the requirements of the World Bank's Environmental and Social Framework (ESF), including ESS 1 (Assessment and Management of Environmental and Social Risks and Impacts) and any other relevant ESS's. The ESMF needs to be prepared, consulted upon, reviewed by the World Bank and disclosed prior to appraisal.

The key procedural documents managing the project's environmental and social screening, review and monitoring procedures for sub-projects are the ESMF, Resettlement Framework (RF), Labor Management Procedures (LMP) and Stakeholder Engagement Plan (SEP) which are implemented throughout the lifetime of the international funded projects. For the World Bank-financed projects, these framework documents are integrated into the Project Appraisal Documents and Project Operational Manuals and the core elements are referred in the Loan

Agreements. Therefore, ILBANK becomes fully responsible for the satisfactory implementation of the Environmental and Social framework documents.

Environmental and Social Management Capacity

The PMU under ILBANK's International Relations Department has experienced staff in technical, procurement, environmental, social and financial management (FM)-related procedures of the World Bank. ILBANK staff received numerous trainings related to the World Bank's safeguard policies, and more recently – the ESF, as a part of the ESF Borrower Training roll out program.

Labour and Working Conditions (as per ESS2)

Occupational Health and Safety

Turkey's OHS legislation is generally applicable across all sectors and many industries. As a government agency, ILBANK has a separate OHS Policy and is subject to national law on OHS of the Ministry of Family, Labour and Social Security. All ILBANK facilities are equipped with fire safety instruments as required by local regulation.

For the substantial risk sub-projects, ILBANK will require that the sub-borrower municipality/utility ensures that OHS measures are undertaken according to the national OHS law, WB's ESS2 for Labour and Working Conditions and the World Bank Group General Environmental Health and Safety Guidelines.

Labour and Working Conditions

ILBANK has published a corporate level Human Resource Policy (Official Gazette numbered 28518, January 4, 2013) that is in line with national regulations as well as WB requirements. The document defines the employee personal rights including working hours, leave (maternity, social events, unpaid), financial rights, working conditions, promotions etc.

ILBANK is committed to ensure compliance of its own operations and those of any contractors or sub- contractors working at the Project with the provision of the following:

- The Turkish Labour Law
- The Turkish OHS Law
- WB ESS 2 Requirement
- World Bank Group General Environmental Health and Safety Guidelines
- ILBANK Human Resource Policy

ILBANK will put specific policies in place intended to maximise beneficial impacts of the Project and to minimise or mitigate its potential adverse impacts:

- a Human Resources Policy that prioritises local residents in employment, thus maximising socio-economic benefits to communities closest to operations;
- specific anti-discrimination policies and grievance management procedures.

Key management measures, reporting and monitoring of unregistered/uninsured employment, unequal employment opportunities for women etc. that may occur in civil works that ILBANK's or borrowing municipality's contractors are undertaking, will be covered under the project's Labour Management Procedures. The LMP will include such measures with particular attention to SEA/SH.

Grievance Mechanism for Municipalities

ILBANK already established a Grievance Mechanism in September 2021 and relevant mechanism will be in place during the course of the Project. Detailed Grievance Mechanism process and Sample Grievance Forms are added as Annex 3.

Apart from the ILBANK Grievance Mechanism, a grievance mechanism will also be established by the municipalities in order to receive, resolve and follow the concerns and complaints of the project affected communities. Municipalities' PIU and construction contractor will be accessible for the stakeholders and respond to all grievances (complaints, requests, opinions, suggestions) at the earliest convenience. This mechanism will be connected and communicate with the ILBANK Grievance Mechanism (GM) and all the complaints, requests, opinions and suggestions will be recorded in ILBANK GM software. Relevant grievances will be monitored by the ILBANK GM Team (please see Annex 3).

In addition, the project specific GM will include a channel to receive and address confidential complaints related with Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) with special measures in place. If an employee faces SEA/SH issue s/he can either apply to a higher level superior or directly go to police station, as stipulated in the national referral system of the country for dealing such cases. The content and procedures of the project's GM will also have a reporting line on such cases in regard to SEA/SH issues and will be handled under full confidentiality. Municipality PIU receiving the SEA/SH related grievance should direct this to national referral systems immediately and record that this has been directed, as set out in the GM Procedure of ILBANK. All details of the complainant of the sensitive case will be kept strictly confidential.

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

1 PROJECT DESCRIPTION

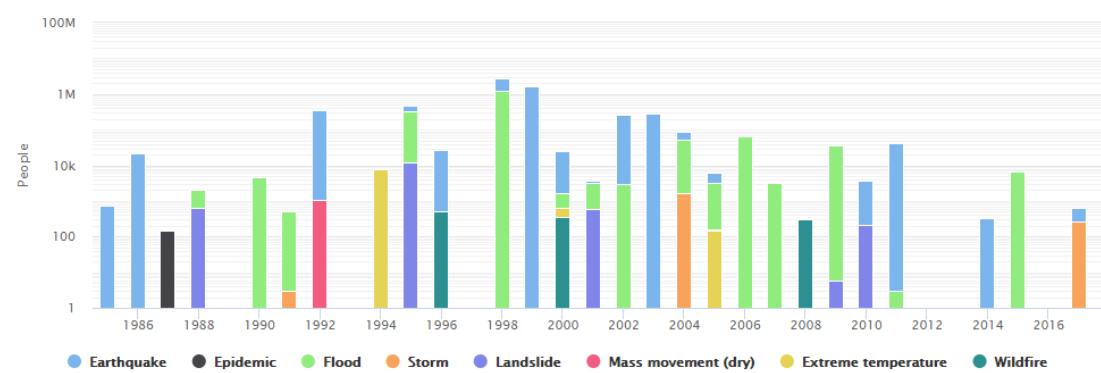
1.1 Introduction and Context

1.1.1 Country Context

Turkey has a population of 83 million and is growing at a rate of approximately 1.5% per year. Notably, Turkey has experienced rapid urbanization over the past several decades, shifting from a largely agrarian society before the 1950s to one in which approximately 75% of the population is urban. Moreover, Turkey's land area is nearly 800,000 km², covering a range of topographies and requiring significant infrastructure networks to connect people, goods, and services across the country.

Key climate and disaster risks that have affected Turkey include pluvial, fluvial, and coastal flooding; earthquakes and landslides; extreme heat (and heavy snow in remote mountainous areas); water scarcity and droughts; and wildfires (Figure 1). These risks can impact infrastructure through direct damages, disruption of physical infrastructure networks, delays in service provision or maintenance, and cascading failures from interdependent infrastructure networks (e.g., the collapse of buildings from earthquakes can damage the pipes/lines of water, gas, electricity, telephone and internet).

Among the disaster hazards, earthquakes pose a major risk to lives, livelihoods, and assets. In the past two decades alone, earthquakes in Turkey have contributed to nearly 300,000 casualties and cost approximately \$17 billion in direct and indirect losses. Therefore, improving the resilience of existing and planned infrastructure to earthquakes has the potential to avoid significant losses in the future while ensuring improved access to services for all citizens.



Source: World Bank. 2018. Climate Change Knowledge Portal. Country Profile Turkey: Vulnerability. <https://climateknowledgeportal.worldbank.org/country/turkey/vulnerability> (accessed November 2019).

Figure 1. Number of People Affected per Natural Hazard in Turkey (1985-2018)

Climate change acts as a risk multiplier for hazards in Turkey – even earthquakes that are not directly influenced by a changing climate can lead to more severe impacts as changing temperature and rainfall patterns lead to weakening or displacement of soil, further weakening grounds.

The temperatures in Turkey are projected to increase between 1.0°C and 2.5°C by the mid-21st century and between 2.5°C and 5.0°C by the end of the century, with the south-eastern area of the country projected to experience higher temperatures. Increasing temperatures contribute to extreme heat events, compound drought and water scarcity, and drive wildfires.

Shifting precipitation patterns increase the risk of water scarcity and drought, particularly in the southern and inland areas of Turkey and especially in the Tigris-Euphrates basin. Moreover, seasonal recharge from snowfall may decrease as increasing winter temperatures lead to a decrease in snowfall and/or early spring snowmelt. There is the potential that 45% of Turkey's population will be exposed to water stress by 2100 if aggressive mitigation measures are not undertaken. Conversely, the northern areas of the country, especially along the Black Sea region, are projected to experience an increase in precipitation which could lead to a corresponding increase in flooding and landslides.

Finally, Turkey has more than 8,000 kilometers of coastline susceptible to sea level rise, along which many key urban settlements and coastal towns are located. This has implications for the existing infrastructure and for where future infrastructure is located and/or the type of infrastructure that will be required to ensure the resilience of existing infrastructure. Coastal areas are also at risk of fluvial flooding at the junctures where rivers and drainage basins meet the sea.

While hazards are typically perceived in terms of acute shocks (i.e. one-off or short-term events), they are often compounded by chronic stresses (e.g. aging infrastructure or poverty). Accordingly, Turkey's infrastructure faces many interlinking and overlapping risks from both climate change and natural hazards. From this context of climate and disaster risks, it becomes clear that critical infrastructure's exposure to and vulnerability from various hazards need to be decreased. Furthermore, investments into increasing the resilience of infrastructure can have numerous co-benefits that strengthen the resilience of the spaces and communities around infrastructure. As such, improved climate and disaster resilience in infrastructure can safeguard the development progress achieved in the past decades in Turkey and underpin its resilient socioeconomic development in the future – in line with national strategic plans and international agendas, such as the Sustainable Development Goals.

1.1.2 Sectoral and Institutional Context

Managing climate change and disaster risk requires enhanced efforts in developing resilient infrastructure. Therefore, ILBANK – Türkiye's development and investment bank under the auspices of the Ministry of Urbanization, Environment and Climate Change (MoEUCC) – has a critical role to play.

Within the scope of the 12th Development Plan of the Republic of Türkiye (2024-2028), in urban infrastructure, the main objective is to create sustainable systems that provide access to healthy and reliable drinking and potable water, minimize the impacts of wastewater and solid wastes on human and environmental health, and ensure cost-effective, clean and energy-efficient urban transportation systems that are easily accessible for all individuals and have strong inter-modal connectivity.

In this manner ILBANK's fields of activity vary, with a focus on:

Projects that produce high benefits and value in production and common use areas, contribute to growth and development, and improve the spatial quality and quality of life extensively, especially in **disaster risk areas** i.e. construction or rehabilitation of stormwater, drainage, flood management systems, resilient bridges, roads, underpasses and junctions;

Sewage and wastewater treatment infrastructure in cities, ensuring that these infrastructures are operated to meet the discharge standards determined according to the basins, and encouraging reuse of treated wastewater;

Meeting all **drinking and potable water** needs of settlements, preventing water losses and leakages, improving existing networks, and expanding the use of healthy and environmentally friendly materials; and

Resilience of urban transportation systems against disasters with a specific focus on making urban transportation systems resilient against disaster risks that may cause unexpected service interruptions by reconsidering the routes that are evacuation corridors to be used in disasters and emergencies.

ILBANK's vision is to 'contribute toward sustainable urbanization in order to meet the urban needs of local governments.' As such, the bank is best placed to drive substantial changes for cities towards resilient infrastructure. To this end, the World Bank is collaborating with ILBANK on a range of activities which will provide climate and disaster risk management technical support and training to support ILBANK in integrating climate and disaster risks into municipal investment projects and capturing climate co-benefits associated with project-level interventions.

1.2 Project Development Objective and Key Results

The Project Development Objectives (PDO) are to increase access to seismic and climate resilient housing, municipal infrastructure and services in Project provinces in Türkiye, and to respond promptly and effectively in the event of an eligible crisis or emergency.

Under Component 2 of the Project, the investments in climate and disaster resilient municipal infrastructure will seek to achieve the following results, in line with the PDO:

- **strengthened institutional capacity** to manage disaster impacts in target municipalities and utilities in an efficient, equitable and socially responsive manner.
- creation of **resource diversity** to mitigate exploitation of and dependence on single water sources.
- Strengthened **water supply system** susceptible to hazards by using resilient material and designs.
- Reduction of the **water loss and leakage rates**.
- creation of a **separate collection network** for wastewater and storm water.
- creation of **rainwater collection tanks or ponds** for irrigating parks and gardens.
- Improved urban mobility in the event of a disaster by strengthening resilience of urban transportation systems to unexpected interruptions and providing adequate evacuation corridors.
- **increasing resilience** of the municipal infrastructures, i.e., water and wastewater treatment plants, landfills, bridges, underpasses, junctions, roads.

1.3 Project Components

The project includes five components.

- Component 1 - **Institutional strengthening to enable conditions for urban resilience** (EUR 6 million)
- Component 2 – **Expanding access to resilient housing** (EUR 323 million)
- Component 3 – **Investments in Climate and Disaster Resilient Municipal Infrastructure** (EUR 167 million)
- Component 4 – **Project Management** (EUR 4 million).
 - Subcomponent 4.a - MoEUCC
 - Subcomponent 4.b – ILBANK.
- Component 5 - **Contingent Emergency Response** Component (EUR 0 million)

Components 1, 2, 4a and 5 are being implemented by MoEUCC through a Project Management Unit (PMU) in the Urban Transformation Presidency, in coordination with municipalities and financed under the loan agreement signed between the Republic of Türkiye represented through MoTF and the World Bank. MoTF will be responsible for the repayment of the loan to the World Bank. The brief description of the components which will be implemented by MoEUCC are as follows:

Component-1 will finance the provision of technical assistance to relevant national and local government institutions to strengthen their capacity to develop, implement, and monitor climate and disaster-resilient urban transformation programs. GDIUT PMU will be responsible for technical and fiduciary management (procurement and financial management) and implementation of all activities in close collaboration with participating municipalities and related MoEUCC directorates as applicable.

Component-2 will finance loans to eligible households at below-market conditions to retrofit/reconstruct their units to meet resilient housing standards (i.e., through demand side housing finance assistance) and incentivize energy efficiency. It may also finance fees to commercial banks to administer the mortgage loan funds and recollect payment from beneficiaries, provided that participating commercial banks are selected competitively.

Component-5 could be included in accordance with OP/BP 10.00 (Investment Project Financing), paragraphs 12 and 13, for contingent emergency response through the provision of immediate response to an Eligible Crisis or Emergency, as needed. It will allow the government to request WB for rapid reallocation of project funds to respond promptly and effectively to an eligible emergency or crisis that is a natural or man-made disaster or crisis that has caused or is likely to imminently cause a major adverse economic and/or social impact.

Components 3 and 4.b will be implemented by ILBANK and municipal sub-borrowers. ILBANK is the borrower for the loan and signed a loan agreement with the World Bank on March 21, 2024. ILBANK will onlend funds to metropolitan municipalities/utilities. Legal arrangements for Component 3 include: (a) a Loan Agreement between the World Bank and ILBANK signed on March 21, 2024; (b) a Guarantee Agreement between MoTF and the World Bank signed on March 21, 2024; and (c) Sub-Loan Agreements to be signed between ILBANK and the participating municipalities/utilities during implementation.

Component-3 will provide sub-loans to eligible municipal sub-borrowers to finance goods, civil works, consulting services and non-consulting services in support of subprojects for the

following activities: demand-driven, resilient and green municipal infrastructure investments in Project provinces, including, *inter alia*, the construction or rehabilitation of (1) stormwater, drainage, and flood management systems, (2) water and wastewater systems and treatment plants, and (3) urban transport systems. The Government of Türkiye requested the inclusion of resilient municipal urban transport as eligible investments under Component 3, allowing for a greater focus on supporting the design and implementation of emergency evacuation routes and other preparedness efforts, as well as scaling up the integration of seismic and climate resilience into infrastructure investments nationwide following the February 2023 earthquakes. Component 3 will also provide technical assistance to municipal sub-borrowers in areas including municipal subproject management and implementation support (which includes subproject design, procurement, contract management, construction supervision, environmental and social management, monitoring and evaluation, outreach and citizen engagement).

The Project Management activities will be financed via Component 4.b. This component will finance the provision of goods, consulting services, non-consulting services, and operating costs to ILBANK for project management and supervision, including for the carrying out of Project procurement, financial management, environmental and social compliance, monitoring and evaluation, reporting, grievance redress mechanisms, communications and outreach.

ILBANK's ESMS as per WB ESS9 became effective on December 24, 2023, and will be applied to this Project after August 1, 2024. ILBANK also prepared the ESMF, RF, LMP, SEP and the ESCP for this Project.

Eligible Municipal Infrastructure and Consulting Services will be:

- a) Construction or rehabilitation of disaster-resilient stormwater, drainage, and flood management systems
- b) Construction or rehabilitation of disaster-resilient water and wastewater treatment plants
- c) Construction or rehabilitation of disaster-resilient urban transport systems (including, e.g., improvements of existing roads for use as emergency evacuation corridors, strengthening of bridges, overpasses and other urban transport infrastructure to withstand seismic risks, investments to increase resilience of mass transit systems to the impacts of natural hazards and/or to improve redundancy in the overall transportation network, pedestrian areas and bike paths as alternat modes of transport, etc.
- d) Goods (as required for the above-listed civil works)
- e) Consultancy Services for Design Review, preparation of bidding documents and supervision services for the above-listed civil works (for Local Authorities).

1.4 Ineligible Municipal Sub-Projects

Ineligible municipal investments will be:

- Investments and activities inconsistent with the requirements set forth in the Environmental and Social Commitment Plan for the Project.
- Administrative services and facilities of political parties, trade unions, etc.

- Religious infrastructure facilities and services
- Investments and activities for facilities with commercial character, including private, commercial and entertainment facilities (café, restaurant, etc.)
- Investment or activities for public buildings related to defense, judiciary, law enforcement, security, correctional facilities, and related areas.
- Investments in reserve areas (except on a case by case basis as reviewed and agreed).
- Investments and activities for buildings that have a Cultural Heritage (CH) designation or those, which may cause impacts on tangible or intangible CH sites
- Investments and activities that would impact natural habitats (ESS6), biodiversity conservation and sustainable management of living natural resources
- Investments or activities classified as a high risk in respect to potential environmental and/or social impacts
- Investments or activities that involve child or forced labor
- Investments which are not technically feasible,
- Investments which are not economically and financially viable,
- Investments which are not demand and needs driven, and that do not demonstrate substantial readiness, including not having approved feasibility studies, detailed designs, or draft environmental and social documentation in line with World Bank ESF requirements,
- Investments that include any of the activities listed, or activities that produce and/or use materials listed, in the World Bank Group/International Finance Corporation Exclusion List (see https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/ifcexclusionlist)
- Investments or activities that involve the potential use of, or discharge into, any waterways as defined and applicable under World Bank Operational Policy (OP) 7.50 (Projects on International Waterways) or detailed design and engineering studies of such investments; and
- Investments or activities that involve the construction of a new dam or dam under construction as per Annex-1 of ESS4.

1.5 Implementing Agency

ILBANK is a financial intermediary for the Project's Components 3 and 4.b and it will transfer the IBRD loan to borrowing municipalities/utilities for the financing of eligible sub-projects. The five metropolitan municipalities (İstanbul, İzmir, Manisa, Kayseri and Sakarya) and their affiliated utilities will be the municipal sub-borrowers for Component 3. The municipalities/utilities will be responsible for sub-project investment implementation in accordance with their sub-loan agreements to be signed with ILBANK. They will establish Project Implementation Units (PIUs) to ensure adequate sub-project implementation after signature of sub-loan agreements.

The organizational structure of ILBANK consists of the General Assembly, Board of Directors, Board of Auditors, General Directorate, Head of Departments, and Regional Directorates (Figure 2).

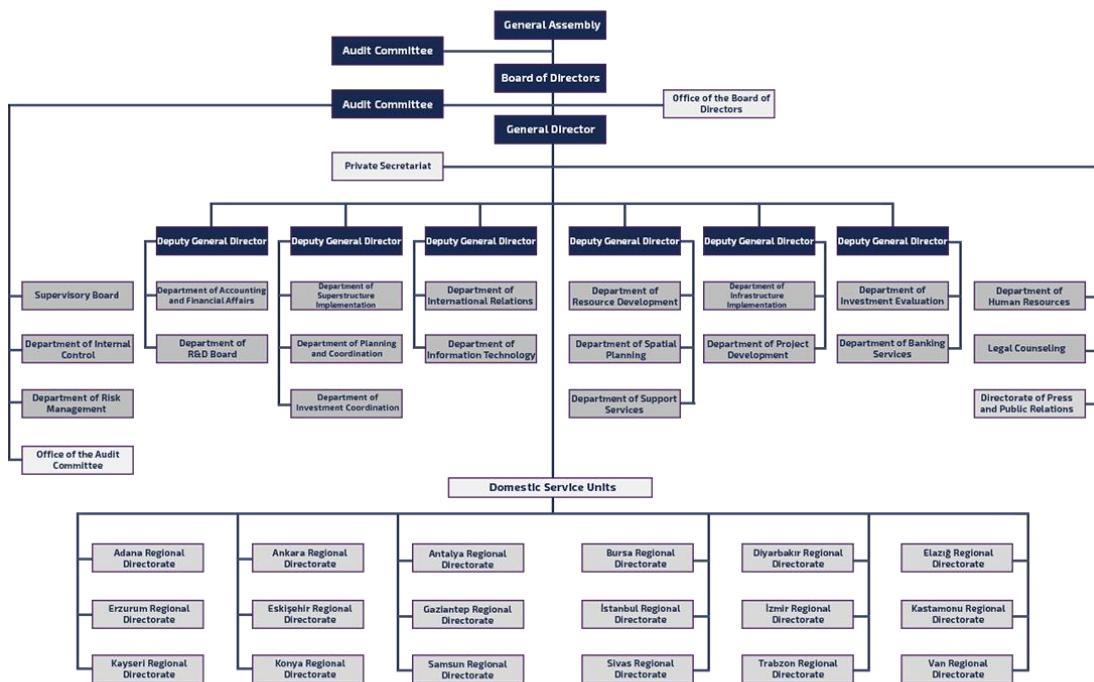


Figure 2. Organization Chart of ILBANK

General Assembly is the highest authorized body of ILBANK. It consists of 20 members chosen from the provincial assembly members to represent the provincial special administrations, and 1 mayor from each selected municipality, chosen by the Union of Municipalities council to represent the municipalities.

Board of Directors is the decision-making body in charge. Its 4 members are assigned by the ministry and 2 members are chosen by the General Assembly from the list of assembly member mayors and representatives of the provincial special administrations, suggested by the Ministry of Interior.

Director General is responsible for the coordination of the efficient and commercially healthy execution of the Bank's actions. The General Directorate has five directorate branches and 18 national service units which deliver the local administration services. Each directorate branch consists of three departments.

ILBANK's Project management Unit (PMU) has been established under the International Relations Department which oversees and administers all internationally financed projects by utilizing procedural documents. ILBANK's PMU has staff specialized in technical, procurement, environmental, social and FM related procedures of the WB. ILBANK staff received numerous trainings related to the World Bank's safeguard policies and more recently - the Environmental and Social Framework (ESF) as a part of the ESF Borrower Training roll out program. ILBANK's E&S team consists of 2 experts - one acting as the environmental focal point and the other - as the social development/land acquisition focal point. Besides, ILBANK's PMU has strengthened by hiring 2 additional social and 3 additional environmental consultants.

Until now, ILBANK has managed many WB, EIB and JICA-financed projects. The World Bank-financed projects include Municipal Services Improvement Project (MSIP) 1 and 2 and Sustainable Cities Project (SCP) 1 and 2.

ILBANK and the World Bank E&S teams conduct regular meetings, discussions and joint meetings with the sub-borrowers as necessary for environmental and social risk identification and monitoring of the subprojects. ILBANK and the World Bank teams also conduct site visits during subproject risk identification and implementation. ILBANK team gained significant experience during the implementation of previous projects financed by the World Bank.

ILBANK is subject to Turkish national laws and regulations. Projects that ILBANK finances through international financing are governed by specific E&S framework documents based on the international standards (standards by the loan-issuing IFIs). For the World Bank-financed operations, this would be an ESMF.

1.6 Purpose of Environmental and Social Management Framework (ESMF)

ILBANK has adopted its Environmental and Social Management System (ESMS) for IFI financed projects as per the requirements of ESS 9 and it is effective as of December 24, 2023. This Environmental and Social Management Framework (ESMF) has been prepared prior to the ESMS studies which meets the requirements of the World Bank's Environmental and Social Framework (ESF), including ESS 1 (Assessment and Management of Environmental and Social Risks and Impacts) and any other relevant ESS's being the key document. The ESMF has been prepared, consulted upon, reviewed by the World Bank and disclosed on July, 2022 prior to appraisal.

As the sub-projects have not been identified yet, their potential social and environmental risks and impacts cannot be assessed at this stage. This ESMF sets out the principles, rules, guidelines and procedures for screening, assessing, and managing the potential social and environmental impacts of the sub-projects which will be financed by the Climate and Disaster Resilient Cities Project. It contains measures and plans to avoid, and where avoidance is not possible, to reduce, mitigate and/or offset adverse risks and impacts. The ESMF specifies the most likely applicable social and environmental policies and requirements and how those requirements will be met through procedures for the screening, assessment, approval, mitigation, monitoring and reporting of social and environmental risks and impacts associated with the activities to be supported.

The E&S documents to be prepared for this project, besides ESMF include, Environmental and Social Commitment Plan (ESCP), Resettlement Framework (RF), Labor Management Procedures (LMP) and Stakeholder Engagement Plan (SEP).

The sub-projects to be financed under Component 3 will be identified and their location, capacity and design will be further defined during implementation, so it is not possible to assess the exact environmental and social footprint during preparation of this document.

After selection of the sub-projects to be financed, specific Environmental and Social Impact Assessment (ESIA) reports and/or Environmental and Social Management Plans (ESMPs), Resettlement Plans (RPs) and/or Ex-post Social Audit Report will be prepared, as and when necessary, throughout the lifetime of the project. The framework E&S documents will be integrated into the Operational Manual of the project and the core elements will be referred in the Loan Agreement. Therefore, ILBANK will be fully responsible for the satisfactory implementation of the E&S documents.

This ESMF covers the Component 3 and subcomponent 4b of the Climate and Disaster Resilient Cities Project. For the remaining components of the Project, MoEUCC is the implementing agency. MoEUCC has prepared the ESF documents under its responsibility.

The ESMF will comply with the national legal framework and the World Bank's Environmental and Social Framework (ESF), its Environmental and Social Standards (ESSs) and World Bank Group Environmental Health and Safety Guidelines (WBG EHSGs) as deemed applicable to the Climate and Disaster Resilient Cities Project.

The national legal framework which is provided in Section 2 is mainly based on Environmental Law No.2872, which is ratified in August 1983 (Official Gazette dated 11.08.1983 and numbered 18132). Several by-laws and decrees are enforced under the Environmental Law including the Regulation on Environmental Impact Assessment (henceforth "EIA Regulation") (Official Gazette No. 29186, November 25, 2014) .

The main mechanism by which ILBANK will comply with WB's ESF will be the ESMS and the ESMF is the key document committed by ILBANK to comply with national legislation and WB's ESF which will be shared with stakeholders before implementation starts.

The ESMF sets out the principles, rules, guidelines and procedures to screen the environmental and social risks of the sub-projects, assessment of the environmental and social risks and impacts; and it contains measures and plans to reduce or mitigate risks and impacts through implementation to ensure that social and environmental issues are systematically addressed at the subproject stage. The application and implementation of the ESMF will thus guide the integration of social and environmental aspects into the decision-making process at all stages related to the planning, design, execution, operation and maintenance of sub-projec

1.7 ILBANK's Environmental and Social Management System (ESMS)

ILBANK established ESMS and is effective since December 24, 2023. The ESMS procedure steps is given below generally;

- The Sub-Borrower will prepared the full E&S documentation (e.g. ESIA, ESMP, RP, SEP, etc.) for each of the subprojects in compliance with its E&S risk rating and this documentation will be reviewed & approved by ILBANK (as necessary through an iterative review and update process)
- Before sub-project financing decisions are taken by the ILBANK Board of Directors, E&S Due Diligence (ESDD) of sub-projects is conducted based on the review of relevant E&S documents and project site visits to ensure that the risk-based assessment and decision-making process is carried out.
- The Environmental and Social Action Plan (ESAP) prepared at the subproject level based on the outcomes of the ESDD to identify measures and actions required to be fulfilled by subprojects over a specified timeframe to achieve management of E&S risks and management of subprojects compliant with the ILBANK's ESMS. ESAP for subproject E&S implementation are integrated into the sub-loan agreements executed between ILBANK and the sub-borrowers.
- E&S Monitoring and Review is carried out periodically at the subproject level internally by sub-borrowers and their contractors, and externally by ILBANK, and that any non-conformities are identified and documented based on the outcome of E&S monitoring and corrective actions are planned and implemented by parties responsible for rectification (Frequency of construction and operation phase monitoring is identified within the ESAP of the subproject).

2 POLICY, REGULATORY AND INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL ASSESSMENT

2.1 Institutional and Legal Framework for Environmental Protection and Conservation in Turkey

Turkish environmental regulations were developed in line with national and international initiatives and standards, and some of them have recently been revised to be harmonized with the EU Directives in the scope of Turkey's pre-accession efforts.

The MoEUCC is the responsible organization for the implementation of policies adopted for protection and conservation of the environment, and for sustainable development and management of natural resources.

The MoEUCC (central organization) is based in Ankara and it has provincial directorates in each province. The MoEUCC has an overall coordinating role for the development and implementation of environmental policies in Turkey, including the harmonization process for the EU Environmental Acquis. The central organization is mainly composed of the following primary directorates and departments:

- General Directorate for Meteorological Service
- Housing Development Administration
- Turkey Real Estate Participation Bank
- General Directorate for ILBANK
- General Directorate for Land Registry and Cadaster
- General Directorate of EU and Foreign Relations
- General Directorate of Environmental Management
- General Directorate of Environmental Impact Assessment, Permit and Inspection
- General Directorate for Protection of Natural Assets
- General Directorate for Combating Desertification and Erosion
- Turkish Directorate of Environment Agency
- Directorate of Climate Change
- General Directorate of Infrastructure and Urban Transformation Services
- General Directorate of Geographic Information Systems
- General Directorate of Spatial Planning
- General Directorate of National Estate
- General Directorate of Construction Works
- Directorate General for Personnel
- Directorate for Strategy Development
- Directorate of Support Services
- Directorate of Training and Publication
- Directorate of Revolving Fund
- Directorate of High Technics Board
- Office of Legal Counsellor
- Directorate General of Vocational Services

- Directorate General for Local Authorities
- Office of the Private Secretary
- Directorate for Guidance and Inspection
- Directorate of Internal Auditing Unit
- Counsellor to the Minister
- Office of Press and Public Relations Counsellor

Main environmental responsibilities of the MoEUCC are summarized below:

- Prepare the legislation on environment, public works, and housing development and monitor and audit the related implementations;
- Identify the principles and policies on environmental protection, rehabilitation of 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 the global climate change and measures to be taken against its effects.

For the management of environmental issues, MoEUCC collaborates with other ministries (including their provincial organizations where relevant), government agencies and relevant stakeholders, such as; Ministry of Transport and Infrastructure (General Directorate of Highways, General Directorate of Infrastructure Investments), Ministry of Agriculture and Forestry (General Directorate of Nature Protection and National Parks, General Directorate of Water Management, General Directorate of State Hydraulic Works, General Directorate of Forestry, General Directorate of Meteorological Services, General Directorate of Agricultural Reform), Ministry of Culture and Tourism (General Directorate of Cultural Heritage and Museums), Ministry of Energy and Natural Resources (General Directorate of Mining and Petroleum Affairs, General Directorate of Mineral Research and Exploration), Ministry of Labour and Social Services (General Directorate of Occupational Health and Safety, General Directorate of Labour) and Ministry of Health (General Directorate of Health Services, General Directorate of Public Health).

2.2 National Environmental Legislation and Regulatory Requirements

The Turkish Environmental Law (Law No: 2872; Date of Ratification: 1983), which came into force in 1983, addresses environmental issues on a very broad scope. According to the basic principles that govern the application of the Environmental Law, and as stated in the Constitution, citizens as well as the state bear responsibility for the protection of environment. Complementary to the Environmental Law and its regulations, other laws also govern the protection and conservation of the environment, resources and cultural and natural assets, the prevention and control of pollution, the implementation of measures for the prevention of pollution, health, and safety and labour issues. Some of these laws are:

- Conservation of Cultural and Natural Assets Law (Law No: 2863, Date of Ratification: 1983)
- Energy Efficiency Law (Law No: 5627, Date of Ratification: 2007)
- Forestry Law (Law No: 6831, Date of Ratification: 1956)
- Groundwater Law (Law No: 167, Date of Ratification: 1960)
- Labor Law (Law No: 4857, Date of Ratification: 2003)
- Law on Soil Protection and Land Use (Law No: 5403; Date of Ratification 2005)
- Law on Soil Protection and Land Use (Law No: 6537; Date of Ratification 2014)
- Municipality Law (Law No: 5393, Date of Ratification: 2005)
- Metropolitan Municipality Law (Law No: 5216, Date of Ratification: 2004)
- National Parks Law (Law No: 2873, Date of Ratification: 1983)
- Occupational Health and Safety Law (Law No: 6331, Date of Ratification: 2012)
- Pastures Law (Law No: 4342, Date of Ratification: 1998)
- Public Health Law (Law No: 1593, Date of Ratification: 1930)
- Social Insurances and General Health Insurance Law (Law No: 5510, Date of Ratification: 2006)
- Law on Relieves and Measures to be Taken Against Disasters Affecting Communal Life (Law No. 7269 Date of Ratification: 1959)
- Law on Transformation of Disaster-Prone Areas (Law No. 6306 Date of Ratification: 2012)

Other National Policies for Climate Change and Disaster Resilience in Turkey:

- Decree of the Council of Ministers on Establishment, Tasks and Operating Principles of the Disaster Risk Reduction Platform of Turkey; 2011
- National Strategic Plans,
 - Climate Change Action Plan 2011 – 2023, 2011
 - Energy Efficiency Action Plan (NEEAP) 2017-2023
- 11th Development Plan, Presidency of Strategy and Budget (2019-2023)

The Turkish Environmental Legislation that sub-projects under Component 3 of Climate and Disaster Resilient Cities Project will comply with is provided in tables below.

Table 1. Waste Management

Legislation	Official Gazette Date	Official Gazette Number
Waste Management Regulation	April 2, 2015	29314
Regulation on Landfill of Wastes	March 26, 2010	27533
Regulation on the Control of Waste Oil	December,21,2019	30985
Regulation on the Control of Waste Vegetable Oil	January 6, 2015	29378
Regulation on the Control of Packaging Waste	December 27, 2017	30283
Regulation on the Control of Medical Waste	January 25, 2017	29959
Regulation on the Control of End-of-Life Tires	November 25, 2006	26357
Regulation on the Control of Waste Batteries and Accumulators	August 31, 2004	25569
Regulation on Control of Electric and Electronic Goods	May 22, 2012	28300
Regulation on the Control of Excavation Materials, Construction and Demolition Wastes	March 28, 2004	25406
Regulation on the Control of End-of-Life Vehicles	December 30, 2009	27448
Regulation on the Use of Domestic and Urban Sewage Sludge on Soil	August 3, 2010	27661
Regulation on the Incineration of Wastes	October 6, 2010	27721
Communique on Recycling and Recovery of Certain Non-Hazardous Wastes	June 17, 2011	27967
Regulation on Zero Waste	July 12, 2019	30829

Table 2. Water Quality Control and Management

Legislation	Official Gazette Date	Official Gazette Number
Water Pollution Control Regulation	December 31, 2004	25687
Regulation on the Water Intended for Human Consumption	February 17, 2005	25730
Regulation on the Control of Pollution Caused by Hazardous Substances in and around Water Environment	November 26, 2005	26005
Regulation on the Protection of Ground Waters against Pollution and Deterioration	April 7, 2012	28257
Surface Water Quality Regulation	November 30, 2012	28483
Regulation on the Monitoring of Surface Waters and Groundwater	February 11, 2014	28910
Urban Wastewater Treatment Regulation	January 8, 2006	26047

Communiqué on Technical Procedures in Wastewater Treatment Plants	March 20, 2010	27527
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Table 3. Air Quality Control and Management

Legislation	Official Gazette Date	Official Gazette Number
Regulation on the Control of Air Pollution from Heating	January 13, 2005	25699
Regulation on the Assessment and Management of Air Quality	June 6, 2008	26898
Industrial Air Pollution Control Regulation	July 3, 2009	27277
Regulation on the Control of Odor Causing Emissions	July 19, 2013	28712
Regulation on the Monitoring of Greenhouse Gas Emissions	May 17, 2014	29003
Regulation on Exhaust Gas Emission Control	March 11, 2018	30004

Table 4. Noise Control and Management

Legislation	Official Gazette Date	Official Gazette Number
Regulation on the Environmental Noise Emissions Caused by Equipment Used Outdoors	December 30, 2006	26392
Regulation on the Assessment and Management of Environmental Noise	June 4, 2010	27601

Table 5. Soil Quality Control and Management

Legislation	Official Gazette Date	Official Gazette Number
Regulation on the Control of Soil Pollution and Lands Contaminated by Point Sources	June 8, 2010	27605

Table 6. Environmental Management, Permitting and Planning

Legislation	Official Gazette Date	Official Gazette Number
Environmental Impact Assessment Regulation	November 25, 2014	29186
Environmental Auditing Regulation	November 21, 2008	27061
Environmental Permits and Licensing Regulation	September 10, 2014	29115
Regulation on Wastewater Collection and Disposal Systems	January 6, 2017	29940

Regulation on the Methods and Principles to be Followed in Determining the Tariff for Wastewater Infrastructure and Domestic Solid Waste Disposal Facilities	October 27, 2010	27742
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Table 7. Management of Chemicals and Other Dangerous Substances

Legislation	Official Gazette Date	Official Gazette Number
Water Pollution Control Regulation	December 31, 2004	25687
Regulation on the Classification, Labelling and Packaging of Materials and Mixtures	December 11, 2013	28848
Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals	June 23, 2017	30105
Regulation on Material Safety Data Sheets on Hazardous Materials and Mixtures	December 13, 2014	29204
Regulation on the Road Transportation of Hazardous Goods	April 24, 2019	30754

Table 8. Project related Turkish Legislation on the Conservation of Nature and Wildlife

Legislation	Official Gazette Date	Official Gazette Number
Regulation on the Protection, Usage and Planning of Agricultural Lands	December 9, 2017	30265
Regulation on the Management of Natural Assets, Natural Protected Areas, and State-Owned Lands Located on Environmental Conservation Lands	May 2, 2013	28635
Law on Conservation of Cultural and Natural Assets	July 23, 1983	18113
Land Hunting Law	July 11, 2003	25165
Law on Fisheries	April 4, 1971	13799
Regulation on Fisheries	March 10, 1995	22223

Table 9. Other Legislation related to Climate and Disaster Resilient Cities Project

Legislation*	Official Gazette Date	Official Gazette Number
Regulation on the Implementation of the Law Concerning Private Security Services	October 7, 2004	25606
Use of the Right to Petition Law No: 3071	November 10, 1984	18571
Regulation on Subcontractors	September 27, 2008	27010
Regulation Concerning the Buildings to be built in Earthquake Zones	March 6, 2007	26454
Building Earthquake Regulation	March 18, 2018	30364
Regulation on Structures to be built in Natural Disaster Areas	July 14, 2007	26582

Regulation on the Protection of Buildings from Fire	December 19, 2007	26735
Regulation Concerning the Ozone Depleting Substances	April 07, 2017	30031
Regulation Concerning the Increase in the Efficiencies of Energy Consumption and Energy Resources	October 27, 2011	28097

2.3 The Turkish Regulation on EIA

Under Article 10, Environmental Law sets out the general scope of the Environmental Impact Assessment (EIA) procedure in Turkey, indicating that institutions, agencies and establishments that lead to environmental problems as a result of their planned activities are obliged to prepare Environmental Impact Assessment 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 on February 7, 1993. Since then there had been several amendments in the first regulation and new EIA regulations were published in 2008 and 2013 repealing the former regulations in force. The latest EIA Regulation has been published in the Official Gazette dated November 25, 2014, and numbered 29186, which repealed the 2013 EIA Regulation.

The EIA Regulation is largely in line with the EU Directive on EIA. The key relevant steps of the Turkish EIA procedure namely: screening, public consultation, scoping, disclosure, and supervision are briefly reviewed below in the order they are prescribed to occur.

2.3.1 Screening

The EIA Regulation classifies projects into two categories:

- **Annex I projects.** These are projects that have significant potential impacts and require an EIA. Annex I of the EIA Regulation lists these project types, so project proponents are expected to start the EIA procedure without any other screening process; and
- **Annex II projects.** Annex II of the EIA regulation covers the projects that may or may not have significant effects on the environment. Proponents of Annex II projects are required to submit a Project Information File (PIF) to the MoEUCC. The PIF is prepared following the General Format for PIF provided in Annex IV of the EIA Regulation and contains information on: (i) project characteristics; (ii) environmental characteristics of the project site and impact area; and (iii) significant impacts of the project and measures to be taken during construction and operation phases of the project. A non-technical summary of the above items is also to be added to the PIF. The PIF is submitted to the MoEUCC for review and evaluation. 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 using appropriate means (i.e. announcement boards, internet).

Table 2 provides the list of project types that will be considered for funding under the project and their category per the EIA Regulation. The social impacts within the screening are not compulsory in the national EIA regulation and generally are either very briefly mentioned or not at all.

Table 10. General Project Types and Their Categorization (Turkish EIA Regulation)

Investment sector*	Annex I	Annex II
Water and Wastewater	<ul style="list-style-type: none"> Extraction or storage of ground water of ≥ 10 million m³/year Transmission of ≥ 10 million m³/year water in between river basins, except transmission of drinking water through pipes WWTP for population of more than 150.000 and/or having 30.000 m³/day flow. 	<ul style="list-style-type: none"> Extraction of ground water of ≥ 1 million m³/year Deep sea discharge Extraction or storage of ground water of ≥ 300.0000 m³/year Water transmission in between river basins (except Annex I projects) Projects on continuous river beds, exceeding 5 km. WWTP for population between 50.000 - 150.000 and/or less 10.000 - 30.000 m³/day flow
Coastal works	-	<ul style="list-style-type: none"> Coastal works and works that result in modification of the coast line for fighting against erosion (jetty, groyne, mole, barrier etc.) (except maintenance of such structures) Projects to gain an area of 10,000 m² or more from the sea Dredging projects planned to extract 50,000 m³ or more of material
Transportation		<ul style="list-style-type: none"> Logistics center, Tramway, subway, light rail transportation systems and similar for urban passenger transportation), Ring roads of 20 km or more, Provincial roads, (excluding Neighborhood and Village roads)

Energy efficiency projects are not covered in Annex I or Annex II of the national EIA Regulation; and no EIA or PIF is required- Source: Republic of Turkey, Regulation on EIA (Official Gazette No. 29186, November 25, 2014)

2.3.2 Public consultation

For projects that require the preparation of an EIA, the Governorate is required to inform the public that a project application has been submitted in a specified locality, that the EIA process has begun and that the public may submit its comments and suggestions to the Governorate or MoEUCC. The announcement is made using a variety of methods, including the internet, bulletin boards and loudspeaker announcements. MoEUCC informs the public of the same through the internet.

A formal public consultation meeting occurs for projects that are subject to an EIA after the screening process and prior to scoping. The project proponent organizes a “public participation meeting” chaired by MoEUCC provincial director in a location that affected local groups can access easily. The invitation to the meeting is published in a national and a local newspaper at least ten days prior to the meeting. There is no requirement that information on the project should be provided to the public in advance, except for the subject matter of the meeting. However, the EIA Regulation specifies that during the meeting, which is chaired by the Director or a member of MoEUCC’s provincial directorate, it should be ensured that the public is informed about the project, and its comments and suggestions regarding the project are obtained. The meeting chairperson may request comments in writing too. Minutes of the meeting are kept and submitted to MoEUCC and the Governorate. The Governorate is required to inform the public about the timeframe for submission of public comments and suggestions. Such comments and suggestions are submitted to the EIA commission.

2.3.3 Scoping

The project proponent presents a project dossier (PIF for Annex II projects or using the outline given in Annex III of the EIA regulation for Annex I projects) to a commission, which comprises representatives of MoEUCC and relevant organizations as identified by MoEUCC. Based on the information submitted, the commission determines the scope of the EIA and the “project specific format”. Furthermore, the commission may exclude or include some items depending on the specific characteristics of the proposed project. The commission also determines the level of detail under each heading depending on the special project’s environmental impacts. In this process, the commission takes into consideration of the opinions expressed during the public participation meeting.

2.3.4 Review and approval of the EIA report

As mentioned previously, the commission revises the draft version of the EIA report. In its review, the commission assesses (i) the adequacy of the EIA report and its annexes; (ii) whether the analyses, evaluations or calculations were adequately substantiated by relevant data and documentation; (iii) whether the potential environmental impacts of the project were evaluated in adequate scope and depth; (iv) whether measures necessary to prevent or mitigate negative environmental impacts have been identified; (v) whether the public participation meeting was carried out in accordance with prescribed procedures and the issues brought up during the meeting were adequately addressed in the report. While the EIA identifies a project’s environmental impacts and mitigation measures, it does not specify costs and institutional responsibilities associated with these mitigation measures. Neither does the EIA include a monitoring plan.

The final EIA report, which incorporates the commission's assessments, is then submitted to the MoEUCC for final review. MoEUCC determines whether the "EIA is positive" in which case the project proponent may implement the project or "EIA is negative" in which case the project may not go any forward.

2.3.5 Disclosure

The MoEUCC gives the "EIA Positive" or "EIA Negative" decision for the project within ten (10) working days, taking into account the work of the Commission and the opinions of the public, and notifies the Commission members of this decision. The "EIA Positive" or "EIA Negative" decision given for the project is announced to the public by the Ministry and the Governor's Office via pending announcements and the internet. Disclosure of the final EIA document is not foreseen in the EIA Regulation.

2.3.6 Monitoring and inspection

According to the EIA Regulation, MoEUCC monitors and inspects projects that were assessed either "EIA is not necessary" or "to have a positive EIA" based on provisions specified in the PIF or the EIA, respectively. Furthermore, the project proponent is obliged to submit project progress reports to MoEUCC only for Annex 1 projects. In case MoEUCC determines non-compliance, the Governorate issues a warning. If after the granted time compliance is still not achieved the Governorate may suspend the operation of the plant in question.

2.4 National Laws on Social Impacts

Although the Turkish EIA Regulation does not entirely meet the requirements of international standards in terms of social impacts and stakeholder engagement, there are some legal arrangements for managing various social impacts. In this respect, the following are identified to be a non-exhaustive list of social legal framework applicable for this project:

- Labor Law (No. 4857), published in the Official Gazette no. 25134 dated 10 June 2003
- Law on Occupational Health and Safety (No. 6331), published in the Official Gazette no. 28339 dated 30 June 2012
- Regulation on Contractors and Sub-contractors, published in the Official Gazette no. 27010 dated 27 September 2008
- Laws on Right to Information (No. 4982), published in the Official Gazette no 25269 dated 24 October 2003
- Regulation on the Environmental Impact Assessment (EIA) published in the official Gazette no. 29186 dated 2525 November 20142014.

In terms of land acquisition and involuntary resettlement, the relevant legal arrangements of Turkey are summarized below:

- Expropriation Law, published in the Official Gazette no. 18215 dated 8 November 1983
- Amendment on Expropriation Law, published in the Official Gazette no. 24393 dated 5 May 2011.

2.4.1 National Laws on Labor and Working Conditions

Occupational Health and Safety

In recent years, Turkey has undergone a reform to improve its national Occupational Health and Safety (OHS) system through adapting a set of international and regional standards into its national level requirements for the prevention occupational risks as defined in the ILO Occupational Safety and Health Convention, 1981 (No. 155). The convention, along with the Occupational Health Services Convention, 1985 (No. 161) were both ratified by Turkey in 2005 and Turkey is also party to the Labor Inspection Convention, 1945 (No. 81) since 1951. In 2014, Turkey ratified the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187).

During 2012, a stand-alone Law on OHS (No. 6331) was put into force (20 June 2012). The OHS Law governs workplace environments and industries (both public and private) as well as virtually all classes of employees including part-time workers, interns, and apprentices. The legislation is comprehensive and is generally applicable across all sectors and many industries.

Labor and Working Conditions

Turkey is party to a multitude of ILO conventions, including but not limited to conventions on: equal treatment of employees, gender equality, child labor, forced labor, OHS, right of association and minimum wage. Accordingly, the current Turkish Labor Law (No.4857) is to large extent consistent with ESS2 requirements.

There are also secondary legislation that may apply to the project which include regulations on annual leave, working hours, overtime work, minimum wage, female and child employees. The Ministry of Labor and Social Services has published various communiques and circulars that set ground for the implementation of the Labor Law which may also be referenced during project implementation.

2.4.2 National Laws on Land Acquisition

In the scope of the Turkish legal framework, land acquisition/expropriation related issues are handled through the Expropriation Law No: 2942 (amended by Law No: 4650 in 2001).

Compensation for the subject property/assets to be expropriated is determined according to procedures and principles outlined in Articles 8, 10 and 11 of the Law. Article 27 authorizes the expropriation agency to confiscate the assets required by the project earlier than the time needed in normal expropriation procedure. This process does not prevent challenges of the property owners against the determined valuation.

2.5 International Agreements and Conventions

Turkish national policy on protection of environment, cultural heritage and conservation of biological resources has been formulated on the basis of relevant international agreements signed or ratified by Turkey. Relevant environmental, OHS and international labor agreements and conventions ratified by Turkey are listed below:

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- Bern Convention on Protection of Europe's Wild Life and Living Environment
- Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)
- Convention on Long-range Transboundary Air Pollution
- European Convention on the Protection of the Archaeological Heritage
- European Landscape Convention

- International Convention for the Protection of Birds
- Montreal Protocol on Substances that Deplete the Ozone Layer
- Paris Convention on the Protection of the World Cultural and Natural Heritage
- Ramsar Convention on Wetlands of International Importance Especially as Wildfowl Habitat
- Stockholm Convention on Persistent Organic Pollutants
- United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa
- United Nations (UN) Framework Convention on Climate Change (Kyoto Protocol)
- UN (Rio) Convention on Biological Diversity
- Vienna Convention on the Protection of the Ozone Layer
- ILO Occupational Safety and Health Convention
- Occupational Health Services Convention
- Labor Inspection Convention
- Promotional Framework for Occupational Safety and Health Convention
- Worst Forms of Child Labor Convention

2.6 World Bank's Environmental and Social Standards

The WB Environmental and Social Standards (ESSs) set the requirements to be met by Borrowers with respect to the identification, evaluation and mitigation of social and environmental risks and impacts associated with projects supported by the Bank through Investment Project Financing. Nine (as ESS 7 is not relevant) out of the ten ESSs establish the standards that the Borrower and the project will meet through the project life cycle, as follows:

- ESS1: Assessment and Management of Environmental and Social Risks and Impacts;
- ESS2: Labor and Working Conditions;
- ESS3: Resource Efficiency and Pollution Prevention and Management;
- ESS4: Community Health and Safety;
- ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- ESS8: Cultural Heritage;
- ESS9: Financial Intermediaries; and
- ESS10: Stakeholder Engagement and Information Disclosure.

In accordance with the ESSs, the World Bank Group's Environment, Health and Safety (EHS) Guidelines should be applied to the project. Therefore, this project will apply the relevant requirements of the EHS Guidelines. In cases where the Turkish requirements differ from the levels and measures presented in the EHS Guidelines, the more stringent one (such as the most stringent discharge and emission standards) will be applied in the project specifications.

The applicable EHS Guidelines for this project are as follows:

- World Bank Group's EHS General Guidelines;
- World Bank Group's EHS Guidelines for Water and Sanitation; and
- World Bank Group's EHS Guidelines for Waste Management Facilities.

Additionally, the WB Note on “COVID-19 considerations in construction/civil works projects” will also be applied to the project to address health and safety risks related to COVID 19 at the project level.

2.6.1 ESS1 Assessment and Management of Environmental and Social Risks and Impacts

The World Bank requires assessment, management and monitoring of environmental and social risks and impacts of projects supported by the Bank to ensure that projects are environmentally and socially sound and sustainable. The objectives of ESS1 is; (i) to identify, evaluate and manage the environmental and social risks and impacts of the project in a manner consistent with ESSs; (ii) to adopt mitigation hierarchy approach to (a) anticipate and avoid risks and impacts, (b) where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels, (c) once risks and impacts have been minimized or reduced, mitigate, and (iv) where significant residual impacts remain, compensate for or offset them, where technically and financially feasible, (iii) to adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project, (iv) to utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects whenever appropriate, and (v) to promote improved environmental and social performance in ways which recognize and enhance Borrower capacity.

As per requirements of ESS1, the Borrower will: (i) conduct an environmental and social assessment of the proposed sub-projects; (ii) undertake stakeholder engagement and disclose appropriate information in accordance with ESS10; (iii) develop an Environmental and Social Commitment Plan (ESCP), and implement all measures and actions set out in the legal arrangement including the ESCP; and (iv) conduct monitoring and reporting on the environmental and social performance of the project against the ESSs.

2.6.2 ESS2 Labor and Working Conditions

The objectives of ESS2 is to: (i) promote safety and health at work; (ii) promote the fair treatment, non-discrimination and equal opportunity of project workers; (iii) protect workers including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with ESS2) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate; (iv) prevent the use of all forms of forced labor and child labor (v) support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; and (vi) provide project workers with accessible means to raise workplace concerns. The applicability and scope of application of ESS2 depends on the environmental and social assessment described in ESS1 and the type of employment relationship between the Borrower and the project workers.

ESS2 requirements cover; the development and implementation of written labor management procedures which will be applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS, and will include the description of the following; (i) working conditions and management of worker relationships (such as development and implementation of labor management procedures applicable to the project) including terms and conditions of employment, nondiscrimination and equal opportunity, and worker’s organizations; (ii) protecting the work force including defining a minimum age for workers, prohibition of child labor and forced labor; (iii) grievance mechanism (for the workers); (iv) occupational health and safety; (v) contracted workers; (vi) community workers; and (vii) primary supply workers.

2.6.3 ESS3 Resource Efficiency and Pollution Prevention and Management

The objectives of ESS3 is to: (i) promote the sustainable use of resources, including energy, water and raw materials; (ii) avoid or minimize adverse impacts on human health and the environment by avoiding minimizing pollution from project activities; (iii) avoid or minimize project related emissions of short and long-lived climate pollutants; (iv) avoid or minimize generation of hazardous and non-hazardous waste; and (v) minimize and manage the risks and impacts associated with pesticide use. The applicability of ESS3 depends on the environmental and social assessment described in ESS1.

ESS3 requirements cover: (i) resource efficiency including energy, water and raw material use; and (ii) pollution prevention and management including management of air pollution, hazardous and non-hazardous wastes, chemicals and hazardous materials, and pesticides.

2.6.4 ESS4 Community Health and Safety

ESS4 addresses potential health, safety, and security risks and impacts on project-affected communities and corresponding responsibility of Borrowers to avoid or minimize these, with particular attention to vulnerable people. The objectives of ESS4 is to: (i) anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and non-routine circumstances; (ii) promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams; (iii) avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials; (iv) have in place effective measures to address emergency events; and (v) ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities. The applicability of ESS4 depends on the environmental and social assessment described in ESS1.

ESS4 requirements cover: (i) community health and safety including infrastructure and equipment design and safety (including safety of dams), safety of services, traffic and road safety, ecosystem services, community exposure to health issues, management and safety of hazardous materials, and emergency preparedness and response; and (ii) security personnel.

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

The objectives of ESS5 is to: (i) avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives; (ii) avoid forced eviction; (iii) mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement costs and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher; (iv) improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure; (v) conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant; and (vi) ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected. The applicability of ESS5 depends on the environmental and social assessment described in ESS1, and applies to permanent or temporary physical and economic displacement resulting from the types of land acquisition or restrictions on land use undertaken or imposed in connection with project implementation described in ESS5.

ESS5 requirements cover the preparation and implementation of a resettlement framework or plan which will set ground for: (i) general requirements such as eligibility classification, project design, compensation and benefits for affected persons, community engagement, grievance mechanism, planning and implementation; (ii) physical and economic displacement; (iii) collaboration with other responsible agencies or subnational jurisdictions; and (iv) technical and financial assistance.

2.6.6 ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The objectives of ESS6 is to: (i) protect and conserve biodiversity and habitats; (ii) apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity; (iii) promote the sustainable management of living natural resources; and (iv) support livelihoods of local communities including Indigenous Peoples, through the adoption of practices that integrate conservation needs and development priorities. The applicability of ESS6 depends on the environmental and social assessment described in ESS1.

ESS6 requirements cover: (i) general requirements including assessment of risks and impacts, conservation of biodiversity and habitats (modified, natural, and critical habitats), legally protected and internationally recognized areas of high biodiversity value, invasive alien species, and sustainable management of living natural resources; and (ii) primary suppliers.

2.6.7 ESS8 Cultural Heritage

ESS8 sets out general provisions on risks and impacts to cultural heritage from project activities. The objectives of ESS8 is to: (i) protect cultural heritage from the adverse impacts of project activities and support its preservation; (ii) address cultural heritage as an integral aspect of sustainable development; (iii) promote meaningful consultation with stakeholders regarding cultural heritage; and (iv) promote the equitable sharing of benefits from the use of cultural heritage. The applicability of ESS8 depends on the environmental and social assessment described in ESS1.

ESS8 requirements cover: (i) general requirements, (ii) stakeholder consultation and identification of cultural heritage including confidentiality and stakeholders' access; (iii) legally protected cultural heritage areas; (iv) provisions for specific types of cultural heritage including archaeological sites and material, built heritage, natural features with cultural significance, and movable cultural heritage; and (v) commercial use of cultural heritage.

2.6.8 ESS9 Financial Intermediary

Financial Intermediaries (FIs) are required to monitor and manage environmental and social risks and impacts of the projects they finance. The objectives of ESS9 is to: (i) set out how the FI will assess and manage environmental and social risks and impacts associated with the sub-projects it finances; (ii) promote good environmental and social management practices in the sub-projects the FI finances; and (iii) promote good environmental and sound human resources management within the FI. ESS9 applies to FIs that receive financial support from the Bank including public and private financial services providers.

ESS9 requirements cover: (i) environmental and social management system including environmental and social policy, environmental and social procedures, organizational capacity and competency, and monitoring and reporting; and (ii) stakeholder engagement.

2.6.9 ESS10 Stakeholder Engagement and Information Disclosure

Open and transparent engagement between the Borrower and project stakeholders is one of the essential elements of good international practice and effective stakeholder engagement improves the environmental and social sustainability of projects. The objectives of ESS10 is to: (i) establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties; (ii) assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance; (iii) promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them; (iv) ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format; and (v) provide project-affected parties with accessible and inclusive means to raise issues and grievances, and allow Borrowers to respond to and manage such grievances. ESS10 applies to all projects supported by the Bank through Investment Project Financing.

ESS10 requirements cover the development of a stakeholder engagement framework and/or plan that will define the following; (i) engagement during project preparation including stakeholder identification and analysis, stakeholder engagement plan, information disclosure, and meaningful consultation; (ii) engagement during project implementation and external reporting; (iii) grievance mechanism; and (iv) organizational capacity and commitment.

2.6.10 World Bank Safeguards Policies

With the World Bank adoption of the ESF in 2018, the environmental and social safeguard policies are no longer apply with the exception of a few policies. One of them is OP 7.50 - Projects on International Waterways. It describes the types of waterways and projects that the policy applies, and the requirements and conditions of financing projects on international waterways. With regard to OP 7.50, ILBANK is responsible for ensuring that the sub-projects financed are located within and dependent on national waterways only. The waterways identified as NOT being international waterway (do not trigger OP 7.50) in Turkey include the following: Susurluk, North Aegean, Gediz, Kucuk Menderes, Buyuk Menderes, Western Mediterranean, Antalya, Sakarya, Western Black Sea, Yesilirmak, Kizilirmak, Konya Kapali, Eastern Mediterranean, Seyhan, Ceyhan, Eastern Black Sea, Burdur, Afyon, Orta Anadolu and Van.

2.7 Key Differences between the Turkish EIA Regulation and the WB ESSs

The Turkish EIA procedures are, with some exceptions, in line with the WB's ESSs. The primary exceptions are in project categorization, scope of environmental and social assessment, and public consultation. In cases where the Turkish legislation differ from the ESSs, the more stringent one will be applied to the project implementation.

Project categorization

According to the World Bank's E&S Policy, projects (including projects involving FIs) are classified into ***High Risk***, ***Substantial Risk***, ***Moderate Risk***, or ***Low Risk*** category, taking into account relevant potential risks and impacts, such as the type, location, sensitivity and scale of the project; the nature and magnitude of the potential E&S risks and impacts; the capacity and commitment of the Borrower; and other areas of risks that may be relevant to the delivery of E&S mitigation measures and outcomes (see Annex 1 for details).

There are no clear-cut border values distinguishing the classification of the projects or, unlike the Turkish EIA Regulation (where projects are classified into two categories as Annex I and Annex II projects according to the capacity of the facilities), projects are screened on a case by case basis with due consideration of the environmental and social risk classification of the WB and all environmental and social impacts are assessed according to ESSs.

Scope of Environmental and Social Assessment

The scope and type of E&S assessment required as per ESS1 varies proportionate to the potential risks and impacts of the project and, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts throughout the project life cycle, as per the ESSs 2-10, are assessed.

Indicative outlines of ESIA report and ESMP are given in Annex 2.

Comparison of the indicative outline required by the WB for ESIA with the general format of a Turkish EIA indicates a number of key differences as follows:

- the absence of an executive summary and information on the legal and institutional framework in the Turkish EIA (Technical level of information in the non-technical summary required in the Turkish EIA may not meet WB requirements);
- 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, and limited assessment regarding use of resources and GHG emissions in the 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 including, impacts on disadvantaged and vulnerable groups and gender related issues;
- there are limited requirement in the Turkish EIA to cover risks and impacts related to (i) community health and safety; (ii) occupational health and safety; and (iii) labor and working conditions;
- limited or no requirement in the Turkish EIA to assess and mitigate cumulative impacts; and
- limited emphasis on the associated facilities in the Turkish EIA.

Nevertheless, the project specific format for Turkish EIA may require more details under some of these headings than indicated in the general format. Consequently, a case by case review of the Turkish EIAs is necessary to identify gaps with WB requirements.

Public consultation and disclosure

Pursuant to ESS 1, stakeholder engagement is an integral part of E&S assessment and should be conducted in accordance with ESS 10. Within this scope, the Borrowers should identify the different stakeholders (project-affected parties and other interested parties including disadvantaged or vulnerable), and develop and implement a Stakeholder Engagement Plan (SEP), in consultation with the Bank, proportionate to the nature and scale of the project and its potential risks and impacts. SEP should describe the timing and methods of engagement

with stakeholders throughout the life cycle of the project, and also describe the range and timing of information to be communicated to the parties as well as the type of information to be sought from them. The Borrower should disclose project information to allow stakeholders to understand the risks and impacts of the project, and potential opportunities, in a timeframe that enables meaningful consultations with stakeholders on project design.

The Turkish EIA Regulation requires “pre-scoping” public consultation only for projects requiring an EIA, and only requires announcement of the environmental assessment together with the justification. However, ESS 10 does not specify an exact number and method of public consultation and information disclosure but instead the standard requires a continuous stakeholder engagement approach through the life cycle of the project that will be decided proportionate to the nature, scale and impact magnitude of the project.

2.8 Environmental and Social Risk Classification and Application of ESSs to Sub-projects

2.8.1 Overall Risk Assessment

The overall project risk is rated as “**Substantial**”. The main Environmental risks of the Project are expected to be typical risks and impacts related to construction works and operation of sub-projects including; dust and noise emissions, hazardous, including Asbestos Containing Materials (ACM) and non-hazardous waste generation and disposal, Occupational Health & Safety (OHS) risks, interruptions to public services and infrastructure, and traffic safety risks, emission of bio-aerosols, odors, and vehicle exhaust due to waste collection and transportation activities, vibration from the operation of waste processing equipment, discharge of treated wastewater to receiving bodies, sludge and solids generation from water and wastewater treatment plants, and ecological impacts on nearby receptors and potential risks and impacts on cultural heritage sites. Main Social risks of the Project are: involuntary resettlement (temporary or permanent economic and/or physical displacement), restriction of land use, loss of livelihoods, potential exclusion of vulnerable groups (those who are not legal owners or renters/low income groups), labor risks related to OHS and community health and safety risks in civil works under construction of public infrastructure.

The stakeholder risk, which is rated as substantial reflects past history where municipalities/utilities have withdrawn from similar projects either immediately before negotiations or subsequent to loan signing due to internal political and financial considerations. To mitigate this risk, municipalities/utilities are required to provide Municipal Executive Board/Utility Executive Board Decisions in support of their participation in the project and are also required to prepare feasibility studies that include a financial assessment of the subproject and the municipality. The risk rating also reflects possible community resistance to certain investments. To mitigate this risk, ESAs and/or ESMPs will be prepared for each subproject investment and a grievance mechanism will be set up within the project. The Stakeholder Engagement Plan (SEP) for each sub-project will clearly communicate with the project beneficiaries.

2.8.2 Environmental Risk Classification

The sub-projects to be financed under Component 3 have not been finalized before the preparation of this ESMF, thus this document will be a key reference document for the selection, environmental risk classification and identification of the E&S assessment reports to be prepared for the sub-projects. The sub-projects will be selected as they will not pose significant adverse effects to human health and/or the environment and that the project will not result in significant adverse cumulative or transboundary impacts. The high risk sub-projects will be excluded.

Overall, the project will finance a variety of sub-projects carrying low, moderate or substantial environmental risks which may materialize both at the construction and operation phases. The potential environmental risks associated with the construction and operation of WWTPs include: (i) generation of noise, dust, wastewater, excess material and other waste in the construction phase, (ii) emission of dust, bio-aerosols, odors, and vehicle exhaust during waste collection and transportation, (iii) contaminated runoff, leachate generation and landfill gas emissions; groundwater contamination, (iv) noise and vibration from the operation of waste processing equipment, (v) community health and safety impacts such as visual, dust and odor problems as well as scavenging related impacts and physical, chemical and biological hazards (vi) occupational health and safety impacts such as accidents and injuries, chemical exposure, noise and vibration exposure and exposure to pathogens and vectors, (vii) discharge of treated wastewater to receiving bodies, (viii) sludge and solids generation from wastewater treatment plants, (ix) emissions of hydrogen sulfide, methane, ozone, gaseous or volatile chemicals associated with WWTPs and (x) ecological impacts on the nearby receptors.

2.8.3 Social Risk Classification

Social risks and impacts intrinsic to the project are comparable to other municipal investment carried out under the Bank financed MSIP and SCP with ILBANK which have been assessed as Moderate. Contextual risks are rated Substantial because the sub projects to be financed under the project are designed to benefit a broad population regardless of any vulnerability and so attention to these vulnerabilities, strong communication and robust stakeholder engagement will be critical for mitigating any potential adverse social risks.

Risks related to the capacity of implementation agency (ILBANK) is Moderate as ILBANK has experience in applying ESF for WB financed projects under FRIT-MSIP. The sub-projects requiring land acquisition will follow the RP. Ex-post social audits may be required for land that has already been acquired prior to the commencement of the project and they will identify gaps or deficits that need to be addressed in light of the ESS5; the required mitigation measures will be completed before implementation of relevant sub projects. However, ex-post social audits are not a preferred approach, because the retroactive mitigation process is difficult to do. Therefore, ex-post studies will be limited and if there are a lot more ex-post social audits will be required, those projects will be excluded. Livelihood impacts on affected people will only be verified during site specific E&S studies to be undertaken during implementation.

Residual social risks following the integration of risk mitigation measures in the project design and additional measures provided through various ESF instruments are considered to be Substantial. These include: [ESIA/ESMP, SEP, RP, Ex-Post Social Audit]. Section 2.8.4 below sets out initial mitigation measures for social risks and impacts.

2.8.4 Application of the ESSs to Sub-projects

Application of the ESSs to sub-projects starts with a screening process: (i) initial E&S risk assessment by the Municipalities/Utilities as part of the sub-projects to be proposed for financing considering both the national legislative framework and World Bank E&S risk classification (ii) Review of the proposed sub-projects by ILBANK's E&S team and defining the risk categories, (iii) ILBANK PMU consults with the World Bank's E&S team for final decision of risk categorization (Substantial, moderate, low) of the sub-projects.

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Procedures for the identification, assessment and management of the environmental and social risks and impacts of subprojects include the following:

- Screening all subprojects against any exclusions in the legal agreement;
- Screening, reviewing and categorizing the subprojects according to their potential environmental and social risks and impacts. The categorization system will take into account (i) the nature and magnitude of environmental and social risks and impacts of subprojects; (ii) sectoral and geographical context; and (iii) financing details (i.e. creditworthiness).
- All E&S documents/instruments for each subproject will be assessed, prepared and implemented to meet the requirements of the applicable ESS's;
- The measures needed to satisfy the requirements of the above paragraph will be set out in the legal agreement between ILBANK and the sub-borrower municipality/utility;
- Monitoring and regularly updating environmental and social information on subprojects;
- If the risk profile of a subproject increases significantly, applying relevant requirements of the ESSs and documenting these appropriately; and
- Monitoring the environmental and social risk of the sub-project during construction

The municipal infrastructure investments will include construction or rehabilitation of storm water, drainage, and flood management systems, construction or retrofitting of disaster-resilient water and wastewater systems and treatment plants, construction or rehabilitation of resilient bridges, roads, underpasses and junctions. These investments will primarily have positive environmental impacts but specific sub-projects are also expected to have some significant environmental and social risks. The risks are related to both construction and operation phases of the investments.

The construction-related impacts are habitat disturbance, air and noise emissions, community health and safety (including traffic management related risks and gender-based violence risks), occupational health and safety risks, labor influx, land acquisition, loss of livelihoods, etc. There is also a risk of adverse impacts on culturally or naturally sensitive areas.

Operation phase impacts are generation and discharge of treated wastewater, sludge from the treatment, generation and disposal of leachate and landfill gases, odor generation and emission of bio-aerosols from wastewater treatment plants and landfill, and accidental spillage and leakage of chemicals, etc.

The sub-projects will be identified and preliminary feasibilities/designs will be reviewed. This ESMF will serve as a guideline to policies, procedures and provisions to be integrated into the overall project implementation to ensure that social and environmental issues are addressed at the subproject level. Site-specific issues/impacts will be determined by ILBANK during the screening process, as described in this ESMF. In addition, ILBANK will prepare a Stakeholder Engagement Plan (SEP), a Resettlement Framework (RF), Labor

Management Procedures (LMP) to include application of ESS2 to ILBANK employees and application to contracted workers.

For all sub-projects, site specific environmental and social assessment documents (e.g. ESIA/ESMPs, RP/Ex-Post Social Audit) will be prepared. It will be required that all site specific environmental and social assessment documents will be finalized and disclosed before the respective bidding processes of each subproject. Municipalities will produce these documents according to the environmental and social risk categorization of the sub-projects. During subproject E&S document preparation, the WBG EHS General Guidelines as well as relevant Industry Sector Guideline(s) i.e. Waste Management Facilities, Water and Sanitation etc., will be used in addition to the national legislation requirements. The most stringent discharge and emission standards will be applied in project specifications.

Social impacts and risks will be assessed in details at the subproject level in these environmental and social documents and will be monitored during implementation. These may include involuntary land take, potential non-land income losses, labor influx and SEA/SH risks, community health and safety, impacts on cultural assets and heritage, impacts on vulnerable groups, stakeholder relations and social cohesion risks. Positive social impacts anticipated include local employment and procurement opportunities and social welfare impacts as a result of improved access to municipal services. Vulnerable and disadvantaged groups (such as elderly, illiterate, individuals who are homeless or living in unstable housing situations women, disabled etc.) will be identified through the ESIA, RPs/Ex-Post Social Audits. Additionally, local NGOs/CSOs, and local government representatives residing or working in the project areas will also be considered as stakeholders.

Associated facilities¹ will be taken into account in the site-specific E&S assessments, as applicable, as well as cumulative impacts.

ESS2 Labor and Working Conditions

Project workers include the direct workers, contracted workers and primary supply workers. ILBANK PMU employees are civil servants and direct employees of this project. Contractors engaged in civil works are contracted workers. Primary supply workers will be determined under E&S studies of the sub-projects. The primary suppliers to the sub-projects shall be companies that manufacture transmission and network water pipes, WWTP utilities, pumps and valves, concrete, safety equipment. These sectors are not known to involve significant risks of child labor and forced labor. If backfilling or reinstatement material is needed, then local quarries also would be considered primary suppliers. Except for the local quarries, it is expected, that the primary suppliers will be large scale national companies.

ILBANK has prepared Labor Management Procedure (LMP) within MSIP project, which includes requirements for different categories of workers including contracted workers. LMP specific to Climate and Disaster Resilient Cities Project has been prepared including COVID-19 measures.

During project implementation, when bidding for civil works will take place, LMP will be attached to bidding documents. Awarded contractors will then adopt project LMP (including Code of Conduct). Main contractors will be responsible to manage their subcontractors.

¹ “Associated Facilities” means facilities or activities that are not funded as part of the project and, in the judgment of the Bank, are: (a) directly and significantly related to the project; and (b) carried out, or planned to be carried out, contemporaneously with the project; and (c) necessary for the project to be viable and would not have been constructed, expanded or conducted if the project did not exist.

LMP sets out the basic procedures and requirements to be implemented by ILBANK to ensure that ILBANK and its Project Partners and Contractors respect and protect the fundamental principles and rights of workers through promoting a decent work place. This includes:

- fair treatment;
- non-discrimination and equal opportunities of workers;
- establishing, maintaining and improving a sound worker-management relationship;
- compliance with national labor and employment laws; code of conduct
- protecting and promoting the safety and health of workers, especially by promoting safe and healthy working conditions;
- preventing the use of forced labor and child labor (as defined by the WB and Turkish legislation)
- Induction training for employees regarding to code of conduct, HSE, and Sexual Exploitation and Abuse/ Sexual Harassment (SEA/S) and WB requirements etc.

The LMP will help all parties and contractors to ensure they meet the requirements set out in Tender documentation for managing employment. GRM for all project workers are explained in detail under Section 6.

ESS3 Resource Efficiency and Pollution Prevention and Management

Feasibility studies of the sub-projects will be assessed in detail during the project preparation stage to determine the ESS3 aspects of sub-projects. The discharge locations for the wastewater treatment facilities will also be reviewed to ensure minimal impact on receiving water bodies and aquatic ecosystems. But it is mandatory that the effluent quality of treated wastewater and treatment sludge disposal will be in line with the requirements of the Turkish legislation (adopted from EU Directives) and WBG's EHS Guidelines regarding appropriate discharge/diposal standards.

Leachate and landfill gas management, assimilative capacity of receiving environments, sludge management, odor, noise, air quality aspects will be evaluated in details in the sub-project specific E&S documents. Leachate management is also critical for conservation of groundwater quality and national legislation and WBG's EHS guidelines will be applied.

GHG emissions will arise from the construction works but this will be limited spatially and quantitatively. More significant GHG can arise from the landfill gasses and sludge generation from wastewater treatment, however, with proper technologies the GHGs can be managed in the most efficient way. The alternatives for sludge and landfill gas management will be discussed in the subproject specific E&S assessments.

Energy and resource efficient equipment such as water pumps, WWTP units, pipes, valves, etc. will be preferred during the project design studies.

ESS4 Community Health and Safety

The proposed sub-projects will mostly be located in semi-urban areas and urban areas. Community access to construction sites will increase the likelihood of adverse community health and safety impacts such as accidents involving community members. Nearby communities and settlements will be informed in a timely manner of the construction activities and their implications prior to any activity. The construction sites for all sub-projects will be surrounded with appropriate fencing for avoiding nearby population's entrance to the project

sites. Traffic management plans will be prepared for all the sub-projects and will be integrated into the E&S documents.

Traffic will be a major issue due to transportation of the treatment sludge from WWTP to disposal facilities. Specific measures related to site integrity against floods, landslides, and earthquakes, will be integrated into the site-specific ESMPs based on the levels of risk assessed. The selection of sites for sub-projects will avoid areas vulnerable to the risks of flooding, landslides, and earthquakes to the extent possible.

Livelihood patterns and living conditions of the nearby communities including waste pickers will be investigated during subproject ESIA/ESMPs to develop proper measures in daily routines and avoiding health and safety issues that may be caused by sub-projects.

The sub-projects will be screened for potential cumulative impact issues, and where needed, cumulative impact assessment will be included in the ESIA. The potential adverse impacts of labor influx and sexual exploitation and abuse/sexual harassment (SEA/SH) risks will also be considered among the social issues in the ESIA and ESMPs, as per WB requirements.

Life & Fire safety is another important issue during construction and operation phases of the sub-projects. Design and operation of the buildings/equipment shall meet the requirements stipulated in WBG General EHS guidelines. With this intention, buildings accessible to the public should be designed, refurbished/constructed and operated in full compliance with local building codes, local fire department regulations, local legal/insurance requirements, and in accordance with an internationally accepted life and fire safety (L&FS) standard. Emergency preparedness and response plans for the sub-projects will be prepared as a part of site-specific E&S documents.

In addition, precaution plans/procedures including special measures will be prepared in order to prevent any possible project impact related to Covid-19 pandemic and implemented during construction and operation phases of the project. During preparation of these plans and procedures, official announcements of the authorities and Interim Guidance on Covid-19 of WB² will be considered and the plans and procedures will be updated regularly according to the updates of the documents and announcements.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

In case of land acquisition requirements of the sub-projects, **the policies, procedures and provisions are provided in the RF which is prepared for the Component 3 of Climate and Disaster Resilient Cities Project**. For any subproject requiring land acquisition, where the process has already been completed, Ex-Post Social Audits will be carried out after detailed designs become ready but before construction works start in order to determine any gaps that may exist vis-à-vis ESS 5 in terms of the process and outcomes. For sub-projects that may require alterations in final design, the RF will serve as a guiding document on how to address land based impacts and compensation measures. Should there be any non-land based livelihood losses, those impacts will be addressed under the requirements of ESS1 under the sub-project specific ESIA/ESMPs. Relevant land based social impacts associated with the construction and operation phase of each sub-project and corresponding entitlement and mitigation measures is elaborated in the RF that is produced by ILBANK and approved by the World Bank. The RF also details the institutional implementation/monitoring arrangements between ILBANK and the borrowing municipalities.

² World Bank, 2020, ESF/Safeguards Interim Note: Covid-19 Considerations in Construction/Civil Works Projects

The sub-projects are likely to have temporary and/or permanent land acquisition. ILBANK and borrowing municipalities in previous projects make efforts to utilize public lands and existing roads for their investments requiring land. In cases where public lands are not available, land acquisition will be kept to a minimum during project design. Where land take is inevitable, ILBANK will ensure that borrowing municipalities compensate for the loss at replacement cost, in compliance with Bank standards. While physical displacement will be avoided in all sub-projects, economic displacement is likely to happen. Entitlement matrix regarding economic displacement has been formulated in the RF and will be used in the subproject specific RPs and Ex-Post Social Audits..

ILBANK and the relevant municipalities are responsible for determining site-specific impacts, yet RPs/Ex-Post Social Audits will be prepared, implemented and monitored by the municipalities. ILBANK will provide close support to municipalities during RP/Ex-Post Social Audit preparation and will supervise the implementation of RPs. Generally, water and sewage network projects tend to follow public roads and are in their right-of way, which minimizes both physical and economic displacement. Every sub-project specific RP and Ex-Post Social Audit prepared by Municipalities will be reviewed by ILBANK and sent to the World Bank for no-objection until the World Bank and ILBANK agree that prior review is no longer required in some or all circumstances.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Sub-project sites will be screened to determine whether they could have adverse impacts on any areas of Natural Habitat (NH). If so, the site-specific E&S assessment will assess the biodiversity and ecological significance of the potentially area of impact (terrestrial and aquatic), including determining whether any parts are likely to meet the criteria for Critical Habitat (CH). The site-specific E&S Assessment will include a detailed survey of flora and fauna species, habitats and ecological systems and services, and will analyse the nature and extent of the sub-project's potential adverse impacts, and will indicate whether a more detailed Critical Habitat Assessment and/or Biodiversity Management Plan are required. Any sub-projects that would have significant adverse impacts on Critical Habitat or on species or habitats of high conservation importance (e.g. as indicated in a global, regional or national IUCN Red List, designation as a national Protected Area, a Key Biodiversity Area, KBA, or Important Bird Area, IBA) will not be eligible for financing under the project. Other sub-projects that affect natural or modified habitats can be financed if appropriate mitigation measures to minimize potential adverse impacts on biodiversity, ecological systems and/or ecosystem services are included in the site-specific ESMPs and BMPs.

Site selection of subprojects will avoid all of the nationally protected areas, KBAs, IBAs, critical habitats, and species on IUCN Red List. The feasibility studies of the identified sub-projects will determine the existence of critical habitats, natural habitats, and modified habitats (according to the definitions of ESS6). Additionally, the site-specific E&S documents will include a detailed analysis of flora & fauna species, habitats and the level of impacts of subproject activities on those. If any of the sub-projects have significant impacts on biodiversity values (terrestrial and/or aquatic) including ecosystem services, those subprojects will not be financed under this project. Subprojects that moderately impact natural and modified habitats, that do not belong to the above-mentioned categories, may be financed under this project. However, mitigation measures will be put in place in site-specific ESMPs (and/or BMPs) to minimize the sub-projects' impacts and disturbances.

ESS8 Cultural Heritage

Subproject sites will be assessed in accordance to the presence of any known cultural heritage sites in their footprint. The subprojects that would affect known cultural heritage sites/assets will be excluded. As the project involves large-scale construction works in five selected municipalities, there is a risk of chance finds during excavation works. Therefore, the subproject-specific E&S documents will need to include chance find procedures at a minimum, and these should be included in civil works contracts.

ESS9 Financial Intermediaries

The project will be implemented by ILBANK – in its capacity as a Financial Intermediary, and it will transfer the funds received from World Bank to clearly identified sub-projects of five targeted municipalities (Istanbul, Izmir, Sakarya, Manisa, Kayseri) and their affiliated utilities. As an affiliate institution to the MoEUCC, ILBANK is subject to Turkish national laws and regulations. Therefore, it is responsible for the application of various law and regulations including Environment Law, Expropriation Law, Resettlement Law, Labour Law etc. for the sub-projects it finances or signs sub-loan agreements. Credit evaluation process of ILBANK includes technical, economic and financial assessment of subject loans. The environmental and social assessment is mainly based on the permitting and land acquisition requirements in the scope of technical assessment.

Projects that ILBANK finances through international financing institutions such as WB, EIB, and JICA are handled by International Relations Department which utilizes key procedural documents for internationally financed investments. The key procedural documents managing the project's environmental and social screening, review and monitoring procedures for sub-projects are the ESMF and RF which will be implemented throughout the lifetime of the projects. ILBANK signs sub-loan agreements with the municipalities and the ESMF is a part of these agreements. ILBANK ensures that municipalities work in full compliance with the ESMF, and the subproject-specific E&S documents are prepared and implemented in line with the ESF. The ESMF and RF are integrated into the Operational Manuals of the project and also the core elements are referred in the PADs and Loan Agreements. Therefore, ILBANK is fully responsible for the satisfactory implementation of the E&S framework documents. The ESMF and RF additionally require that site-specific E&S documents are prepared for the sub-projects and these become a part of the sub-loan agreements between ILBANK and sub-borrowers. Through these sub-loan agreements ILBANK and the World Bank manage and monitor the sub-projects in conformity with the World Bank's environmental and social requirements. The ESMF describes the subproject screening criteria according to the World Bank requirements and comparison of World Bank's requirements and standards with respect to national standards. Similar to the ESMF, the RF compares national law and World Bank policy requirements on land acquisition and sets the principles for a best practice land acquisition process. As a rule of thumb, the most stringent standards apply to the projects for all environmental and social standards.

The screening process of sub-projects covers: (i) initial E&S risk assessment by the Municipalities/Utilities as part of the sub-projects to be proposed for financing considering both the national legislative framework and World Bank E&S risk classification; (ii) Review of the sub-projects by ILBANK's E&S team and defining the risk categories (iii) ILBANK PMU consults with the World Bank's E&S team for final decision of risk categorization (Substantial, moderate, low) of the sub-projects. The appropriate E&S documents to be prepared is then decided upon the mutually agreed E&S risks. ILBANK also undertakes the initial review of the E&S documents, however substantial risk sub-projects will be subject to prior review and approval by the WB until there is an agreement between the WB and ILBANK to limit or end prior review by the WB.

After site visits and review of E&S documents, ILBANK team will prepare semi-annual progress reports for the WB which also includes environmental and social performance of the related sub-projects.

ILBANK will adopt an Environmental and Social Management System (ESMS) as per the requirements of ESS 9 that covers IFI funded projects. Any gaps between the ESF and the existing E&S management criteria of ILBANK will be evaluated in detail and the relevant actions for fulfilling the gaps will be described in the Environmental and Social Commitment Plan (ESCP).

ILBANK will prepare an E&S policy, which needs to be approved by the senior management and disclosed.

ILBANK is preparing a Resettlement Framework (RF) which, per ESS 9 on Financial Intermediaries, will meet the requirements of ESS 5 (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement). The RF will be prepared, consulted upon, reviewed by the World Bank and disclosed prior to appraisal.

Per the requirements of ESS 9, ILBANK is preparing an ESMF which meets the requirements of the World Bank's ESF, including ESS 1 (Assessment and Management of Environmental and Social Risks and Impacts) and any other relevant ESS's. The ESMF will be consulted upon, reviewed by the World Bank and disclosed prior to appraisal.

Per the requirements of ESS 9 and ESS 2 (Labor and Working Conditions), ILBANK is preparing Labor Management Procedures (LMP). The LMP includes a description of the Grievance Mechanism (GM) for the project workers.

Per the requirements of ESS 10 (Stakeholder Engagement and Information Disclosure), the project needs to prepare a Stakeholder Engagement Plan (SEP) prior to appraisal. ILBANK is preparing the SEP. The SEP includes a description of the Grievance Mechanism (GM) for the project.

The E&S procedures will meet the requirements of the applicable ESS's as discussed previously. Relevant E&S issues such as gaps, adherence to national laws, relevant E&S requirements should be included in finance Loan Agreement documentation.

The ILBANK's organization structure and the staff capacity have been provided in Section 1. A representative of ILBANK's senior management has been designated to have overall accountability for environmental and social performance of the FI subprojects, for the implementation of ESSs and resources necessary to support such implementation. A staff member of PMU will be designated to be responsible for day-to-day implementation of the ESMS, including the environmental and social procedures. The representative will ensure that adequate resources are available for management of and training in environmental and social issues; and ensure that adequate technical expertise, either in-house or external expert support, is available to carry out due diligence and manage the environmental and social risks of ILBANK's IFI financed subprojects, including providing implementation support as required.

ILBANK will also ensure that the requirements of ESS 9 and ESS 2 are clearly communicated to all relevant personnel, and ensure that relevant personnel have the necessary knowledge and capabilities for managing environmental and social risks in accordance with the ESMS.

ILBANK will monitor the environmental and social performance of the subprojects in a manner proportionate to the risks and impacts of the subprojects, and provide regular progress reports to the FI's senior management. As part of its ESMS, ILBANK will adopt written procedure detailing how performance monitoring and reporting is conducted. Monitoring is proportionate to the environmental and social risks and impacts of ILBANK's projects. It is conducted on a regular basis, and outcomes and identified corrective actions will be documented. ILBANK will ensure corrective actions are implemented for each sub-project.

The ESMS will be reviewed periodically by ILBANK to assess effectiveness, and determine whether changes are needed. The review of the ESMS will evaluate ILBANK's implementation of its own environmental and social policy and how environmental and social procedures have been implemented with respect to subprojects.

ILBANK will submit annual Environmental and Social Reports on the implementation of its ESMS to the World Bank, including its environmental and social procedures, ESS 9 and ESS 2, as well as the environmental and social performance of its portfolio of subprojects. The annual report will include details of how the requirements of this ESS are being met, the nature of the FI subprojects financed through the project, and the overall portfolio risk, profiled by sector.

ILBANK will adopt an external communications mechanism, ensuring that it is known and accessible to stakeholders. Procedures for external communications on environmental and social issues are designed to receive, respond to, and document requests for information or concerns to allow a timely response. This includes making contact information publicly available and easily accessible (for example, a phone number, website, e-mail address). If a concern is deemed not to be relevant, ILBANK records the reasons for this determination.

ESS 10 Stakeholder Engagement and Information Disclosure

Site specific stakeholder engagement plans will be prepared by sub-borrower municipalities. ILBANK has also prepared a framework Stakeholder Engagement Plan (SEP) as a guidance document for the preparation of sub-project specific SEPs. The SEP will be disclosed with a public disclosure meeting. The SEPs will also be disclosed through public consultation meetings by municipalities at local level with the participation of local stakeholders.

The various sub-projects require stakeholder engagement, and consultations with project-affected peoples are particularly important. A majority of the municipalities have citizen engagement and grievance mechanisms in place. Since the Project's E&S risk is rated as Substantial, the capacity of ILBANK's and borrowing municipalities' to manage stakeholder engagement needs to be improved considerably during project preparation in order to minimize the risk of community resistance against the municipal investments. The project will employ a rigorous engagement strategy throughout project implementation, in accordance with ESS10. The existing capacity of the Borrower municipalities will be strengthened through recruitment of communication and stakeholder engagement specialists in order to manage the communication, information disclosure and consultation activities of the sub-projects.

Vulnerable and disadvantaged groups (such as elderly, illiterate, women, disabled etc.) will be identified through the ESIAs, RPs and during sub-project specific SEPs. Additionally, local NGOs/CSOs, community leaders, and local government representatives residing or working in the project areas will also be considered as stakeholders.

Grievance Mechanism: Detailed information regarding the GM Policy and procedure is given in Annex-3.

World Bank's Safeguard Policy OP/BP 7.50 Projects on International Waterways

ILBANK is responsible for ensuring that the projects financed are located/depend on national waterways only. The waterways identified as NOT an international waterway (OP 7.50 does not apply) in Turkey are as follows: Susurluk, North Aegean, Gediz, Kucuk Menderes, Buyuk Menderes, Western Mediterranean, Antalya, Sakarya, Western Black Sea, Yesilirmak, Kizilirmak, Konya Kapali, Eastern Mediterranean, Seyhan, Ceyhan, Eastern Black Sea, Burdur, Afyon, Orta Anadolu, and Van. Any subproject that may trigger OP 7.50 will not be eligible for Bank financing.

3 ENVIRONMENTAL AND SOCIAL BASELINE ANALYSIS

The objective of the Project via Component 3 is to upgrade the critical environmental infrastructure in the five pilot municipalities: Kahramanmaraş, Tekirdağ, İzmir, Manisa, İstanbul (Figure 3). These investments would be; (i) in areas or facilities that have been designated as risk prone and requiring improvements or that contribute to the resilience of risk prone areas per the city-wide disaster and climate risk assessments; and (ii) selected from other existing studies and plans, related national policy documents, as well as the current project portfolio of ILBANK in these municipalities.

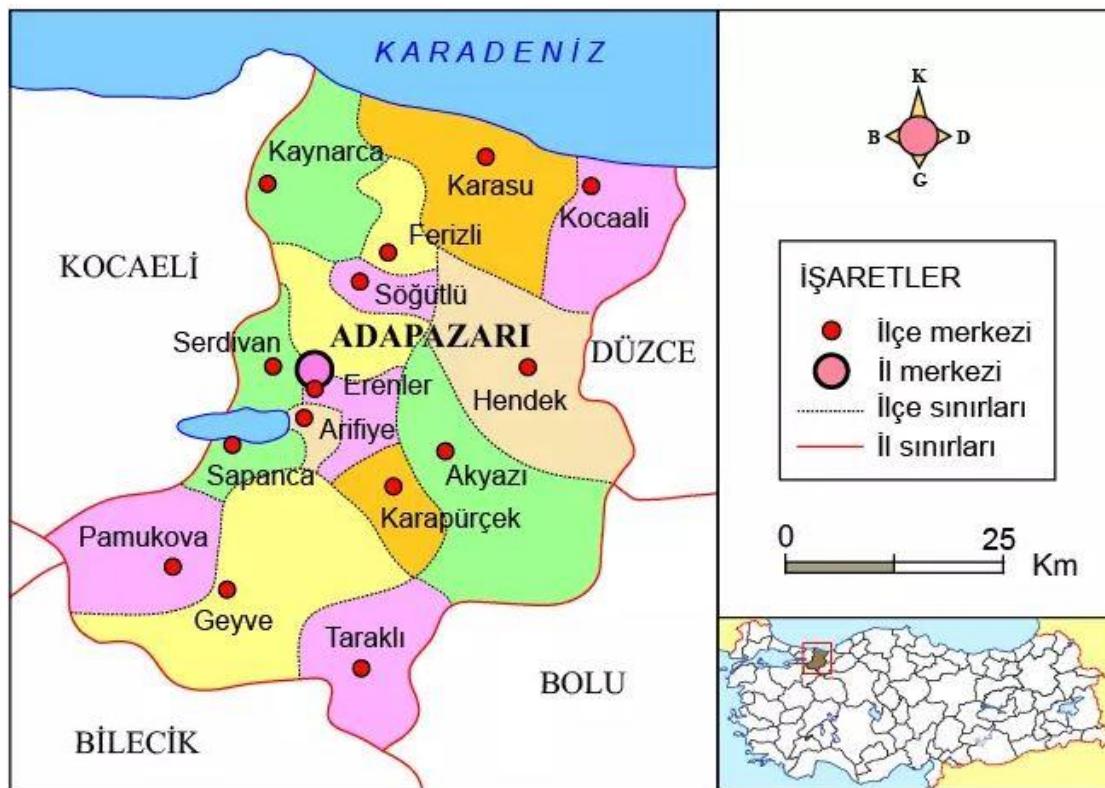


Figure 3 Geographical Coverage of the Climate and Disaster Resilient Cities Project

In the following sections, a short general description of the geographical conditions along with the social and economic baseline of the provinces are provided. The technical details of Kayseri and Sakarya provinces are retrieved from the justification report that was submitted to the Strategy and Budget Office (SBO). The basic environmental, social and economic information for all provinces are retrieved from the web-based research.

3.1 Sakarya

Sakarya is the twenty-second most populous province in Turkey. The province was named after the Sakarya River that flows through its territory. The center of Sakarya province is Adapazarı. According to 2023 year-end TurkStat data, the provincial population is 1,098,115. There are 16 districts and municipalities and 668 neighborhoods in these municipalities. It is located in the Çatalca-Kocaeli Section of the Marmara Region.



Sakarya is bordered by the Black Sea to the north, Kocaeli and Bursa to the west, Düzce to the east, and Bolu and Bilecik to the south. The Sakarya River flows into the Black Sea in the Karasu district of Sakarya.

Agriculture has an important place in Sakarya's economy. There is hazelnut cultivation in Hendek, Karasu and Kocaali districts.[3] There is also corn cultivation. Industry in Sakarya has started to develop near the provincial center Adapazarı. Industrial enterprises established in recent years have further increased this industrialization. With a total population approaching one million, Sakarya is the fifth largest province in the Marmara Region after Istanbul, Bursa, Kocaeli and Balıkesir.

The topography of the province is analyzed in three main sections: 1. Low hilly areas in the north, 2. Adapazarı plain in the central part, 3. Rugged mountainous areas in the south. To the north of the North Anatolian Fault line, the Kocaeli plateau extends from the west to the Sakarya River. Except for the Çam Mountain mass, the northern parts are the continuation of the Kocaeli plateau.

Adapazarı plain (Akova) was formed by the alluvium carried by the Sakarya River. Adapazarı and Düzce plains, which are the continuation of the Gulf of Izmit and Sapanca Lake, are tectonically formed plains. There are alluvial deposits up to 400 meters in the plain.[14] 34% of the provincial territory is formed by plains, 44% by plateaus and 22% by mountains.

Streams such as Sakarya River, Mudurnu Stream, Darıçayı Stream, etc. in the province cause floods from time to time. Floods occur during sudden downpours and snowmelt.

It is of great importance for the city that the summer intersection, which connects the city center and central districts of the city and the Yenikent region, where important attraction centers are located in the north of the city, remains operational and provides service in case of disaster. Disaster.

Considering the disruptions experienced in post-disaster operations and since Sakarya is an earthquake city located on the active North Anatolian fault line; transportation and logistics needs during and after the disaster (Discharging the city before, during and after the disaster, reaching aid after the disaster, debris works, etc.). It is important that the roads and intersections in the mentioned region respond to overloads in disasters and emergencies.

3.2 Kayseri

Kayseri is a province and the 14th most populated city in Turkey. As of 2023, it had a population of 1,445,683. It consists of 16 districts: Akkişla, Bünyan, Develi, Hacılar, İncesu, Kocasinan, Melikgazi, Pınarbaşı, Sarıoğlan, Sarız, Tomarza, Yahyalı, Talas, Özvatan, Felahiy and Yeşilhisar.

It is the third largest city and industrial center of Central Anatolia after Ankara and Konya.

It is a province in the Middle Kızılırmak Region, at the foot of Mount Erciyes. It is surrounded by Yozgat to the north and northwest, Sivas to the north and northeast, Kahramanmaraş to the east, Adana to the south, Niğde to the southwest and Nevşehir to the west. Kayseri, one of the oldest cities in the world, is located in the region called Cappadocia in classical times. Located south of the Kızılırmak River, this region stretches from the Salt Lake to the Euphrates River. The Silk Road passes through here. The region has been the cradle of many civilizations.

Figure 5. Districts of Kayseri Kayseri has a total road network of 1,132 km, including 464.4 km of State Roads and 667.6 km of Provincial Roads. 566.7 km of the road network is divided and the number of vehicles registered to traffic is 449,474 as of the end of December 2023 and the number of vehicles registered to traffic increased by 1% compared to November 2023 (447,023).

In line with the "Emergency Action Plan", Mustafa Kemal Paşa Boulevard, Mehmet Özhaseki Boulevard, Talas Boulevard, Seyyid Burhaneddin.

Bulvarı, Kartal Bulvarı main arteries are the most important transportation routes of the city and come to the forefront as the most important "Evacuation Corridor" of the city within these plans. This Kartal Junction is located at the intersection of the "Evacuation Corridor", which will be formed from important routes.

3.3 Manisa

Manisa, situated in Aegean Region of Turkey (Balıkesir on the north; İzmir on the west; Kütahya, Uşak and Denizli on the east; Aydın and İzmir on the south), covers an area of 13,810km² with a population of 1,450,616 (TurkStat, 2020). Manisa holds the second place in terms of population density after Izmir within Aegean Region. There are 17 districts within the Province borders. In Manisa, there is 1 National Park (Spil Mountain National Park), 1 Natural Monument (Kula chimneys Natural Monument) and 2 Nature Park (Mesa Nature Park and

Suresh Nature Park). Manisa Province is located between Spil Mountain that gives a steep topography in the south and Manisa Plains that is forming flat areas at north.

Pursuant to the provisions of Law No. 6360 in 2012, Manisa Municipality gained the status of Metropolitan Municipality on March 30, 2014. On the other hand, as of 31 March 2014 with the Council of Ministers Decision No. 2014/6072 published in the Official Gazette No. Manisa Water and Sewerage Administration (MASKI) was established. Manisa Water and Sewage Administration (MASKI), covering a geographical area of 13,339km², serves 1,450,616 people. As of the end of 2020, the number of subscribers of MASKI has reached 621,697. MASKI had completed 225 kilometers of drinking water and 250 kilometers of sewage system in 26 neighborhoods in 2020 and rapidly continued their infrastructure and superstructure investments of 2,128,000 square meters. MASKI invested 315 million TL in the facilities of wastewater treatment for Gediz and Bakırcay Basins. 19 wastewater treatment plants were operated by end 2020 and MASKI treated 217 million cubic meters of wastewater since its establishment. The wastewater treatment plants in Alasehir center and Kavaklıdere become operative in 2020. MASKI had also commissioned the system of the drinking water lines and sources (SCADA system) to be monitored systematically. The aim is to manage more effectively and to reduce loss and leakage in the drinking water resources and to provide more than 2 thousand kilometers to supply water to the citizens through modern systems. MASKI renewed the number of 1,087 drinking water tanks across the province and drilled 384 boreholes for new drinking water sources in 2020.



Figure 6. Districts of Manisa

3.4 İzmir

Izmir is the third most populous city in Turkey, with a population of approximately 4 million inhabitants. İzmir MM has 30 districts. Izmir has a geography surrounded by Madra Mountains and Balıkesir on the north, Kuşadası Gulf and Aydın on the south, Çeşme Peninsula and İzmir Gulf on the west, and Manisa on the east. Within the borders of the city, there is the lower branch of Gediz river, which is one of the most important rivers in Aegean Region and also Little Maeander and Bakırçay are active rivers. Gediz River has its source from the Mountain of Murat, which is in Central Western Anatolia. Its total length is 400 km. Kemalpaşa Stream, which has its source in the Yamanlar Mountain within İzmir provincial border, is one of the most important branches of Gediz River. The population of Izmir is 4,394,694 (TurkStat 2020).

Landforms of İzmir province is a result of geologic events of rather recent times. Subsidence plains and alluvial deposit plains located between range mountains lying on east-west line, form the main outlines of the landforms. On the farthest north of the province there is Madra Mountains. These mountains, having an altitude of more than 1250 m, form a significant height between Burhaniye-Havran Plains on their north and Bergama Plain on their south. Some parts of these mountains reach towards southwest to Altınova and Dikili and arrive to the seashore by descending to the plains. Southwestern edge of Madra Mountains is known as Geyiklidağ on the west side of Bergama district where its altitude reaches to 1061 m.



Figure 7. Districts of Izmir

The local climate is Mediterranean, with long summers and mild winters; resulting in the city's cooling loads outweighing its heating loads. However, the city is densely populated and the need for housing has come at the cost of green space; making urban areas highly susceptible to the effects of the urban heat island (UHI) effect. In order to mitigate against the risks of the UHI effect, Izmir is participating as a leading city in the European Union's Urban GreenUP program. As part of this program the city is looking at creating green corridors to decrease urban temperatures whilst promoting cycling and walking within the city.

The city of Izmir sustained significant damages in the October 30, 2020, Aegean Sea earthquake. The earthquake was followed by a succession of flash floods caused by heavy prolonged rainfall (in mid-December and early February 2021) in the city which created additional damage and loss of life in both instances and was preceded with a drought. The flood and drought highlighted the city's vulnerability to climate change.

Two-thirds of the population of Izmir lives in a relatively narrow area around the bay, which makes it difficult to protect the people of Izmir against flood. This situation is exacerbated as city's sewage and stormwater flows on the same pipes, reaching the pumping stations and the Cigli wastewater treatment plant in the northwest of the gulf. When the capacity of the canal and treatment is exceeded, flooding occurs and the sewage and stormwater is discharged into the sea creating ocean pollution, sedimentation and eutrophication.

3.5 İstanbul

Istanbul is located between 28° 01' and 29° 55' eastern longitudes and 41° 33' and 40° 28' latitudes in north-western Turkey and straddles the strait Bosphorus, which provides the only passage from the Black Sea to the Mediterranean via the Sea of Marmara. Istanbul is spread over two continents, with the Bosphorus strait forming the dividing line between Europe and Asia. The Golden Horn, an inlet stemming from the Bosphorus, further cuts the European side of Istanbul into northern and southern halves. The provincial lands of Istanbul cover a total area of 5,512 km².

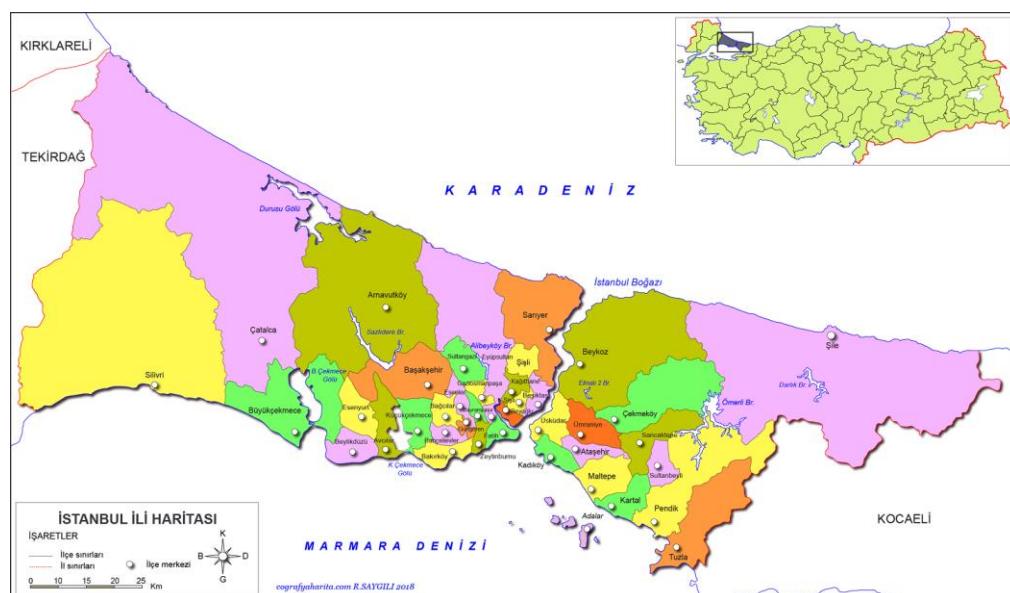


Figure 7. Districts of Istanbul

Istanbul's importance rests on its strategic importance in a commercial sense. Istanbul is a city that has been the capital of many civilizations. The City of Istanbul served as the Capital of the Roman Empire, Byzantine Empire, the Latin Empire, and finally the Ottoman Empire as it is known. The geography of Istanbul is at such an important point that it constitutes the transition zone between many countries. Many civilizations have lived in the city of Istanbul so far. There are ruins from 5000 BC in Istanbul, which show how old its history is. Istanbul province is also one of the few cities in the world with a population of approximately 16 million.

The vegetation around Istanbul resembles the plants of the Mediterranean climate. The most important of the forested areas seen in patches is the Belgrad Forest, 20 km north of the city. There is no big river in Istanbul province. The largest stream is Riva Stream, which is also the largest water of the Kocaeli Peninsula. The 71 km Riva Stream takes its sources from Kocaeli province and flows in the southeast-northwest direction and flows into the Black Sea near Riva village. The most important of the waters flowing into the Bosphorus are Küçüksu and Göksu streams. Apart from these, Kağıthane and Alibey Streams flowing into the Golden Horn, Sazlıdere flowing into Küçükçekmece Lake, Karasu Creek flowing into Büyükçekmece Lake, Trança Creek flowing into Terkos Lake are the main rivers of Istanbul. The water of the city is provided from the Terkos Lake. The waters of Küçükçekmece (11 km²) and Büyükçekmece (16 km²) Lakes, which are located on the shores of the Marmara Sea, are salty due to their contact with the sea.

Istanbul has the characteristics of the Mediterranean climate, but it has different characteristics with the influence of the Marmara Sea and the Bosphorus. During the winter months, the cold-dry air mass coming from the Black Sea and the cold-rainy air mass coming from the Balkans are especially under the influence of the warm and rainy southern air masses from the Mediterranean. The cold rainy (northeaster) weather of the Black Sea and the warm (southwester) air of the Mediterranean follow each other throughout the province. There are no big temperature differences between summer and winter and day and night in the province.

The Northern Anatolian Fault, NAF is a very important fault line for Turkey, which is declared to be a single piece of continuation in the Sea of Marmara and may break in one piece if it takes action, which may cause a very severe earthquake as a result. In terms of seismicity, the NAF is one of the fastest moving and most active fault zones in the world. There were nine major earthquakes in this fault zone from 1900 to 1999, and ruptures occurred in 3/4 of this fault, which is approximately 1200 km long. Two major earthquakes occurred in the eastern part of the Marmara Region, on 17 August 1999 in the Gulf of Izmit (Gölcük); and on 12 November 1999 in Düzce, which caused significant damage. The earthquake that occurred in the Gulf of Izmit on 17 August 1999 caused the loss of nearly 20,000 lives (Gündoğdu, 2011).

Istanbul city also suffered from severe floods and heavy mucilage problem in Marmara Sea.

4 ANALYSIS OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS OF PROPOSED SUB-PROJECTS

4.1 Environmental and Social Risk Categorization of Proposed Sub-projects

The metropolitan municipalities of Istanbul, Izmir, Kayseri, Manisa, and Sakarya were confirmed as participating municipalities under Component 3 of the Project. These municipalities were selected considering that all are: (a) highly vulnerable to the impacts of natural hazards and climate change (such as earthquakes, flooding, drought, heat waves); (b) have high numbers of risky housing units that require transformation; and (c) have multiple risk-prone areas that require urgent investment in resilient infrastructure.

Component 2 will finance demand-driven, resilient, and green municipal infrastructure investments in Project provinces including the construction or rehabilitation of stormwater, drainage, and flood management systems, construction or retrofitting of disaster-resilient water and wastewater systems and treatment plants, and construction or rehabilitation of resilient urban transport systems (including, for instance, improvements to existing roads for use as emergency evacuation corridors, strengthening of bridges, overpasses, and other urban transport infrastructure to withstand seismic risks, investments to increase resilience of mass transit systems, etc.).

The World Bank, ILBANK and MoEUCC agreed on the need to identify lower risk sub-projects for investment during this first phase project to set a strong foundation for future financing. All parties confirmed that the project would focus on strengthening both earthquake resilience and climate adaptation but would also create an integrated approach to urban resilience building on the city-wide risk assessment work that was conducted for some of the Project provinces (notably Manisa) during project preparation. Izmir will be reviewed based on the analysis and studies the city has already carried out, since comprehensive citywide risk assessment would not be completed during the project preparation timeline. Istanbul, Kayseri, and Sakarya have been included as the last sub-borrower during project preparation and existing climate and disaster studies will be used to inform investment selection in these municipalities.

When the selection of the sub-projects under Component 3 are finalized, the E&S risk categorization and E&S assessment requirements of subprojects will be determined jointly by ILBANK and WB teams for the first five sub-projects. Thereafter, ILBANK will be responsible for the whole process from screening to implementation and monitoring, applying ILBANK's ESMS, with the Bank reviewing the documents on sample basis, or upon specific request from ILBANK.

In addition to the E&S assessment requirements, ILBANK prepared a resettlement framework (RF) for the Project that was disclosed in July 2022 date on ILBANK's website. As ESS2 will be applied to the sub-projects, ILBANK also prepared a labor management procedure (LMP) that was disclosed in July 2022 on ILBANK's website.

4.2 Potential Environmental and Social Impacts of Proposed Sub-projects

This section identifies the potential environmental and social impacts that could arise from the activities of the sub-projects either during the construction phase or the operational phase.

The highlighted impacts listed in below are broad and envisaged as cutting across most of the sub-projects. The specific potential impacts for each sub-project will be provided in E&S assessment section of its feasibility report.

However, more detailed potential environmental and social risks of each sub-project will be assessed during the preparation of the specific sub-project ESIA or ESMP. Proposed mitigation measures to avoid, reduce or compensate the impacts of such activities will be identified in these reports.

4.2.1 Cross Cutting Potential Impacts

Typical project activities to be implemented are broadly categorized into:

- Construction phase, and
- Operation phase.

General, cross-cutting potential environmental impacts, which could be expected for all sub-projects, are presented below.

Construction Phase

Environmental Impacts

Soil erosion, loss and contamination

The major impact on soil could be the potential topsoil loss at the footprints of the sub-projects where excavation will be carried out. Excavated soil may be exposed to agents of erosion, mostly water and wind. Due to the involvement of heavy machinery during the construction phase, soil contamination may be seen due to accidental oil leakages in the areas. The impacts on soil will be minimal and localized in the areas where construction will take place only. It will be low in significance in terms of magnitude.

The potential impacts of the sub-projects on soil environment are summarized below:

- Soil compaction as a result of topsoil stripping, levelling, excavation and filling activities, work of construction machinery
- Mixing of soil layers as a result of excavation and filling activities
- Soil contamination as a result of oil or fuel leaks or spillage that may result from incidents and unexpected events
- Soil pollution which may occur in case of uncontrolled storage or disposal of solid and/or liquid wastes to be generated within the scope of the sub-project
- Erosion potential due to earthworks

Impacts on Natural Habitats

There might be tree and other vegetation loss during the construction phase for each sub-project either to pave way for access roads or for the actual project construction area. The vegetation will be cleared so that the area where the construction work is to take place is clear for the construction work to be performed. The construction works will involve direct land take of productive pastureland and agricultural lands, bush clearing, removal of top soil, excavation and mass haulage. These activities will also expose the land to elements of erosion such as wind and water and thus will trigger the process of land degradation. The impacts may be occurred due to spillage/leakage of chemicals and hazardous materials and poor waste/wastewater

handling and disposal. These issues may create negative impacts on ecosystem services from low significance to high significance considering the magnitude (amount of spillage, toxicity level of spilled chemical, etc.) of the impact. The impact of project activities on ecological components is related to the size of the impact and the vulnerability of the recipient.

Dust and exhaust gases emission and noise pollution

During construction, there will be material handling and movement of construction equipment at the sub-project sites. In addition to the fugitive dust emissions, there will be exhaust emissions of heavy construction machinery. Primary emissions from exhaust gases of vehicles are NO₂, CO, HC, SO₂ and PM. Also, bio-aerosols, and odors, could cause deterioration of air quality during waste collection and transportation. The impacts can be considered of low in terms of magnitude, duration, and spatial extent, as it is localized and occurs only during the construction phase.

Impacts associated with water, energy and raw materials use

Employees' needs and dust suppression will create water supply requirement. Construction phase activities will require resource consumption such as concrete, reinforcement, structural steel, ferrocement, prestressed concrete, energy etc. Civil works at the project site could be a risk of contaminating the clear river water with cement and muddy waters or soil movement. Increase in suspended particles due to construction works, risk of human contamination from construction camps and production of wastewater originated from the workers might affect the surface water and groundwater quality especially where the sub-projects are close to natural water bodies. This impact is of low in significance in terms of magnitude and spatial extent. It could occur only during construction phase and rainy period.

Solid Waste

During construction phase of the Project, activities such as vegetation clearance, levelling, construction and installation of main operation and auxiliary units, procurement, transportation and assembly of units and equipment will be carried out. Solid waste types expected to be generated within the scope of these activities are; municipal wastes, packaging wastes of system equipment (e.g. wood, cardboard, plastic, etc.), hazardous wastes, special wastes, excavation and construction wastes (e.g. scrap metal, wood, concrete waste, etc.), and waste system equipment (panels, cables, electronic components). Hazardous and special wastes may contain chemical substances (e.g. paint, solvent) or packaging materials and cloths contaminated with oils, waste oils resulting from operation and maintenance of machinery and vehicles, solvents, accumulators, batteries, filters, machine parts.

Social Impacts

Occupational Health and Safety and Labor

Construction works can cause incidents and accidents that may threaten the health and safety of workers if measures are not taken proactively.

Potential health and safety risks during the construction have been listed below;

- Working at height,
- Moving objects,
- Slips and trips,
- Noise vibration and exposure to dust,
- Materials handlings,

- Unintended collapse,
- Asbestos,
- Electricity,
- Traffic related risks due to increased traffic, and
- Associated risk of occupational accidents, injuries and diseases.

Details and area specific risks will be obtained during site studies and will be assessed under social impact sections of the documents. Mitigation measures and occupational health and safety issues are managed in line with the Occupational Health and Safety Law (Law No: 6331, Date of Enactment: 20/06/2012), World Bank ESS2 and World Bank Group General Environmental Health and Safety Guidelines.

Community Health and Safety

Project should bring benefits to the community in terms of improved access to municipal services which in turn may enhance local business opportunities and new infrastructure opportunities in the region. However, there may also be impacts arising from accidents, structural failures, release of hazardous materials, impacts on water quality and quantity, pressure on existing social infrastructure and SEA/SH risk due to labor influx, construction impacts on natural resources, exposure of disease. The Project identified the following potential Community Health Safety (CHSS) impacts due to the construction phase.

- Speed and road damage of transportation and traffic; increased traffic and risk of road traffic accidents and injuries,
- The emergency situations due to contextual risks (i.e., flooding, landslides, earthquakes, fires etc.)
- Access to clean and sustained water sources,
- Damage to existing underground public utility cables and pipes and disruption of services,
- Noise and Vibration,
- Increased demand on existing community health and sanitation infrastructure due to influx of temporary workers & camp followers,
- Threat to community culture, safety and security associated with presence of construction workers and business opportunists,
- Risk of communicable diseases such as sexually transmitted diseases (STDs) due to labor influx and interaction of temporary workers with the community and increased SEA/SH risk,
- Effect of the construction on the accessibility of the community to their houses, business, schools, etc.,
- Effect of the construction on potential vulnerable groups, and
- Impacts on potential waste pickers in the project site (if any present).

Traffic

Traffic congestion and temporary interruptions from construction phases of the investments and which could potentially cause annoyance, disruption, health and safety impacts, as well as economic impacts. The use of heavy moving construction vehicles and machineries in project sites is generally known to cause traffic reducing movement and flow of vehicles. This is likely to cause increased frequency and severity of accidents.

Loss of Land and Livelihoods

The existing land use of the project area will be affected by the construction of access roads, construction camps, opening up of material sites and quarry sites among others. These will scar the land, cause vegetation loss leading to soil erosion. In the local communities, project-affected people may lose their land, assets and means of livelihood due to construction needs of the investments. These impacts may comprise loss of farmland, grazing land, businesses and structures among people with formal or informal ownership of the affected lands.

Vulnerable groups

Certain vulnerable groups such as disabled people, children or elderly people, certain minorities and groups with livelihood dependencies in the project regions might be affected during the construction phase. An environmental and social impact assessment to be conducted at the subproject level will identify vulnerable groups relevant to respective sub-projects.

Sub-project specific ESIAs/ESMPs will consider any impacts in association with the daily living patterns of potential vulnerable groups (i.e., school aged children commuting for school) that may be generated due to civil works. Similarly, measures will be in place to prevent labor influx related risks on communities, in particular women, residing in the vicinity of the proposed sub-project sites. The RPs may include measures, as required, to provide assistance to vulnerable people affected by temporary or permanent physical or economic displacement, including assistance in moving, allowances, job placement, training, etc.

Operation Phase

Environmental Impacts

Solid Waste

Municipal wastes as well as hazardous and special wastes are expected to generate. Solid waste residuals generated by water/wastewater treatment include sludge generated in treatment process, used filtration membranes, spent media and miscellaneous wastes. There may be waste generation resulting from damaged, malfunctioned or end-of-life equipment and material that could be replaced or controlled during maintenance and repair activities to be performed periodically or in case of a breakdown. Also, procurement of new equipment, pieces and other needed materials (such as flocculants, disinfectants etc.) will result generation of packaging waste. There may be waste oil due to the oil change of equipment.

Air Quality, Odor and Noise

The impacts may be due to emissions of hydrogen sulfide, methane, ozone, gaseous or volatile chemicals associated with WWTPs. Due to improper operation of water and wastewater treatment plants, odor problems may occur. If there is a settlement nearby, there may be some complaints. Noise may also be a problem arising from pumping stations and treatment plants. Odor and noise problems might also occur during the operation of sanitary landfills, particularly due to improper operation practices.

Soil and Water Pollution

Leakage of chemicals used in treatment plants to soil or water sources in the vicinity may cause pollution. Improper management of excess sludge also causes negative impacts on the ambient media. During the operation of sanitary landfills, wastes spilled from trucks can pollute roads

and the environment. Potential impacts from the uncontrolled flow of leachate into the groundwater might include degradation of groundwater quality, soil contamination and adverse impacts to surface water quality. If not re-used, treated wastewater can be discharged to the sea; rivers; large surface water bodies; smaller, closed surface water bodies; and wetlands and lagoons. The treatment should be consistent with effluent water quality goals based on the assimilative capacity and the most sensitive end use of the receiving water. In case projects involve recourse to pest management measures, the integrated pest management (IPM) or integrated vector management (IVM) approaches using combined or multiple tactics will be preferred to minimize and manage the related risks and impacts in line with ESS 3 and in compliance with the EHSGs.

Climate Change

Methane gas as a GHG emission may emit to the atmosphere from landfill sites and might contribute to the climate change. Similarly, treatment sludge generated from wastewater treatment plants may cause an adverse effect on climate change issues.

Social Impacts

Health and Safety

Operators of water and wastewater treatment plants and sanitary landfill might be exposed to variety of hazards during the operation and maintenance. There may be fire and explosion risks due to landfill gas. The occupational health and safety impacts such as accidents and injuries, chemical exposure, noise and vibration exposure and exposure to pathogens and vectors. The community health and safety impacts such as visual, dust and odor problems as well as scavenging related impacts and physical, chemical and biological hazards. Sewage sludge may also contain pathogenic bacteria, viruses, protozoa, parasites, and other microorganisms that can cause disease. Land application and surface disposal of untreated sewage sludge create a potential for human exposure to these organisms through direct and indirect contact.

Reducing the impact of vector-borne disease on the long-term health of workers is best accomplished through implementation of diverse interventions aimed at eliminating the factors that lead to disease as referred in IFC General EHS Guidelines.

Traffic

Trucks carrying sludge from treatment plants and waste to the landfills can readily create significant traffic problems, increased air pollution, roadway deterioration, etc.

Post physical and economic displacement

Compensation for land acquisition alone does not guarantee the restoration or improvement of the livelihoods and social welfare of displaced persons and communities. Restoration and improvement of livelihoods often includes many interconnected assets that may include access to land, marine and aquatic resources, access to social networks, access to natural resources as well as employment.

Attention to vulnerable groups

As part of the process of identifying risks and impacts, it is highly important to identify individuals and groups that may be directly and differentially or disproportionately affected by the project and project outcomes because of their disadvantaged or vulnerable status. It should be proposed and implemented differentiated measures so that adverse impacts do not fall

disproportionately for the individuals or groups who are disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities.

Management of grievances

Project specific Grievance Mechanism should be in place during the operation phase of the project where stakeholders and other interested parties can submit grievances and concerns.

4.2.2 Mitigation

A general mitigation plan for water, and wastewater sub-projects covering possible impacts of the sub-projects is given in Table 12 whereas general mitigation measures for the landfill sub-project is given in Table 13. These should be taken into consideration in the preparation of site specific ESIA/ESMPs for the sub-projects.

The recommended sub-management plans to be prepared are provided in Annex-2C.

Table 12. Mitigation Plan for Water and Wastewater Sub-projects

Phase	Topic	Risk	Mitigation Measures	Costs	Institutional Responsibility
Construction	Traffic	Interruptions in Transport and Transport Safety	<p>Positioning clear warning and information signs around the construction zone. Imposing time constraints (e.g. 7AM to 5PM) for works. Considering disabled, women, children and people with special needs while locating and marking alternative roads (roundabouts)</p> <p>Traffic Management Plan will be prepared for all construction sites</p>	Included in construction costs	Contractor
Construction	Air Quality	Dust emissions	<p>Close or cover trucks for the transport of materials. Spraying water on the ground where dust is generated, disposing of excess material and cleaning the location upon the finalization of works. Protective covers or curtains for zone where the largest amounts of dust are generated.</p> <p>Air Quality Management Plan will be prepared if required</p>	Included in construction costs	Contractor
Construction	Air Quality	Exhaust gases from equipment and vehicles	<p>Restricting works during daytime (e.g. 7AM to 5 PM).</p> <p>Air Quality Management Plan will be prepared if required</p>	Included in construction costs	Contractor
Construction	Noise and Vibration	Increase in noise and vibration levels	<p>Restricting works during daytime (e.g. 7AM to 5PM). Establish schedules and/or other forms of specific limitations for works.</p> <p>Noise and Vibration Management Plan will be prepared if required</p>	Included in construction costs	Contractor
Construction	Soil Environment	Spill outs of fuel, lubricant, antifreeze etc. may result in contamination	<p>Periodic examination of the condition of vehicles and other machinery and equipment used in the course of the performance of works. Compliant warehousing of fuel and lubricant, and in case of a spill out, isolation and cleaning of the location.</p> <p>Soil Management Plan will be prepared if required</p>	Included in construction costs	Contractor
Construction	Soil Environment	Topsoil loss, Deposit of excavated soil, erosion, landslides or sedimentation may occur.	<p>The provisions of the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes shall be complied during land preparation and construction phase of the Project.</p> <p>Soil Management Plan will be prepared if required</p>	Included in construction costs	Contractor

Phase	Topic	Risk	Mitigation Measures	Costs	Institutional Responsibility
Construction	Soil Environment	Damage to road cover	Public roads and streets will be backfilled and recovered	Included in construction costs	Contractor
Construction	Water Resources and Wastewater	Water Quality and Domestic wastewater generation	Discharge of wastewater, residues or other waste into groundwater or into surface water will be avoided. Water Resources Management Plan will be prepared if required.	Included in construction costs	Contractor
Construction	Water resources	Periodic interruptions in water supply to neighboring population	Scheduling interruptions in water supply in cooperation with the Water Supply Company and informing the population with the objective of minimizing the negative effect on the population. Water Resources Management Plan will be prepared if required.	Included in construction costs	Contractor and Water Supply Company
Construction	Ecosystem	Damage to trees and vegetation may onset in the course of construction	Minimizing the areas requiring the removal of vegetation, and upon finalization of works, replace/restore removed vegetation. Special measures if needed to avoid damage to protected trees or species. Biodiversity Management Plan will be prepared if required.	Included in construction costs	Contractor
Construction	Cultural Heritage	There is a possibility of discovering artifacts or other cultural and historical items of value.	Discontinuing all works. Contact responsible authorities. Organizing all necessary measures to protect the location. No works to proceed until official notification is received. Chance Finds Procedures will be prepared prior to construction works.	Included in construction costs	Contractor
Construction	Waste Management	Excavated and removed material is harmful to environment if it is not disposed of adequately. Especially if the material or waste is dangerous or might be dangerous (such as, for example, asbestos and cement pipes, pieces of profiles etc.)	All non- waste and excavated material generated in the course of construction has to be deposited in the landfill and in a manner that is not harmful to the environment. Stone, soil and other materials that may be reused shall be utilized in the procedure of project realization. Materials that cannot be used and hazardous waste should be removed in compliance with entity level regulations. Waste Management Plan (including municipal, hazardous and non-hazardous wastes) will be prepared if required	Included in construction costs	Contractor

Phase	Topic	Risk	Mitigation Measures	Costs	Institutional Responsibility
Construction	Waste Management	Transportation management of waste (both hazardous and non-hazardous) to the appropriate landfills/disposal sites	<p>Wastes generated should only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes should be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context should be recorded and records should be kept.</p> <p>Waste Management Plan (including municipal, hazardous and non-hazardous wastes) will be prepared if required</p>	Included in construction costs	Contractor
Construction	Community Health and Safety	Access to common resources or services may be interrupted due to construction works	<p>Time schedule for all construction works should be communicated with local communities prior to construction. Alternative and secure means to access resources and services should be introduced.</p> <p>Community Health and Safety Management Plan will be prepared if required.</p>	Included in construction costs	Contractor
Construction	Community Health and Safety	Community health and safety	<p>The construction area should be fenced to prevent trespassing. Necessary signage and lighting equipment shall be established. Traffic safety shall be established through appropriate management measures. Community should be informed about transfer of large machinery and equipment. If necessary, emergency drills should be implemented with the participation of the emergency authorities in the area.</p> <p>Design and the construction works of the projects should be in line with the WBG guidelines including the life and fire safety provisions.</p>	Included in construction costs	Contractor/ Municipality
Construction	Labor	Labor Influx (Not all sub-projects may have labor influx issues, however projects with long term construction works will require camps sites to be established to accommodate construction workers. Conflicts may	<p>For sub-projects that may have labor influx issues, camp sites should be arranged to properly accommodate workers and meet their needs within the camp site. Workers must be provided with relevant trainings as needed. Workers will sign and receive a training on the Code of Conduct. Nearby communities will be consulted regarding the locations of the work camp.</p>	Included in construction costs	Municipality/Contractor

Phase	Topic	Risk	Mitigation Measures	Costs	Institutional Responsibility
		arise between communities and workers)			
Construction	GBV/SEA/SH	Gender Based Violence/Sexual Exploitation and Abuse/Sexual Harassment (GBV/SEA/SH)	Information on GBV/SEA/SH service providers should be shared during public consultations. The Project GRM should be designed to receive GBV/SEA/SH grievances anonymously and ensure they are addressed in a confidential manner. Relevant Project staff should be trained in order to refer GBV survivors to existing identified service providers and ensure that they are provided services promptly. The Code of Conduct for workers will include the prohibition of GBV/SEA/SH.	Included in construction costs	Contractor/ Municipality
Construction	Occupational Health and Safety.	Construction works can cause accidents that may threaten the health and safety of workers if measures are not taken.	The workers shall be informed about job descriptions, responsibilities and risks about OHS. The workers will be provided working conditions in accordance with the Labor Law (such as wages, working hours, payment for overtime hours, period of rest, social security benefits). The workers will be provided with the necessary personal protective equipment and information on works and occupational safety through regular trainings. Before the construction works starts, a Risk Assessment Report shall be prepared for all works to be carried out and necessary measures shall be taken to avoid related risks. "Emergency Response Plans" shall be prepared for possible accidents and emergency situations (i.e., fires, earthquakes, floods, etc.) events and emergency teams shall be established and drills and training shall be carried out in line with the emergency scenarios. OHS Management Plan will be prepared to outline all the actions and procedures for ensuring OHS for all workers	Included in construction costs	Contractor/ Municipality
Construction / Operation	Vulnerable Groups	Identification of vulnerable groups impacted by the sub-projects	Certain groups that may be considered vulnerable (people with disabilities, waste pickers, elderly, and certain groups with livelihood dependencies in the project region) should be identified. Their engagement in project planning and implementation should be ensured through consultations as required in the Stakeholder Engagement Plan. Certain vulnerable groups (i.e. waste pickers) might be earning income from the project affected area/land. Ensure that they are informed about the project and can continue to generate income.	Included in ESA study costs	Municipality

Phase	Topic	Risk	Mitigation Measures	Costs	Institutional Responsibility
Construction / Operation	Citizen Engagement	Lack of effective engagement of the citizens will reduce the positive impacts and benefits of the project	Citizen engagement activities to facilitate effective two-way engagement among stakeholders, including Turkish citizens and other nationalities, municipalities, and SKIs, will seek to identify the needs and priorities of beneficiary groups to improve access to effective municipal services.	Included in project budget	Municipality
Pre Construction / Construction / Operation	Involuntary Resettlement	Negative impacts on livelihoods of project affected people	Design works to minimize the involuntary land take Preparation of a Resettlement Plan Compensate losses resulted from involuntary resettlement In case of people with special needs (elderly, women, children etc.) or disabled who could be negatively impacted from the construction, ensure that temporary measures for accessibility is put in place	Included in resettlement budget	Municipality
Construction / Operation	contextual risks	flooding, landslides, earthquakes	avoidance of vulnerable locations when selecting sites for subprojects	Included in project budget	Municipality
Operation	Water Resources	Poor operation may result in inadequate water quality released to the general population	Establish emergency procedures for notification and alerting the public	Included in the operating costs	Operator
Operation	Chemicals	Environmental safety hazards from chlorine storage and use	Establish continuous chlorination control and monitoring, chlorination equipment maintenance procedures, storage procedures, and emergency response procedures. Chlorination plant should have ambient monitoring and locked. Accessible only to authorized staff.	Included in the operating costs	Operator
Operation	Chemicals	Chlorine and other process chemicals leaks and spills	Establish safe delivery/storage/handling procedures in accordance with material safety data sheets (MSDSs). Immediately contain and clean-up any spilled material.	Included in the operating costs	Operator
Operation	Sludge Management	Process sludge (filtration and flocculation processes)	Sludge to be disposed on site approved by municipality. Sludge Management Plan will be prepared if required.	Included in the operating costs	Operator

Phase	Topic	Risk	Mitigation Measures	Costs	Institutional Responsibility
Operation	Occupational Health and Safety	Training	The workers shall be informed about job descriptions, responsibilities and risks about OHS. The workers will be provided working conditions in accordance with the Labor Law (such as wages, working hours, payment for overtime hours, period of rest, social security benefits). The workers will be provided with the necessary personal protective equipment and information on works and occupational safety through regular trainings. Before the operation, a Risk Assessment Report shall be prepared for all works to be carried out and necessary measures shall be taken to avoid related risks "Emergency Response Plans" shall be prepared for a possible accident and emergency, and emergency teams shall be established and drills and training shall be carried out in line with the emergency scenarios. The workers shall be made aware of accessible GRM.	Included in the operating costs	Operator
Operation	Community Health and Safety	Community health and safety	The operations should be engaged without posing risk to the community safety. The facility should be fenced to prevent trespassing. If necessary, emergency drills should be implemented with the participation of the emergency authorities in the area.	Included in the operating costs	Operator
Operation	Community Health and Safety	Community conflict	Consultation on risks and adverse impacts of the project and create opportunities to receive affected communities view on project Establishment of grievance mechanism to collect and provide timely resolution of affected communities concerns and grievances regarding of the client's environmental and social performance. Transparent public disclosure to inform each phase of the project through web-site, notice boards, telecommunication tools and public meetings. Establishing well designed and structured public questionnaire to receive feedback from affected communities	Included in the operating costs	Operator

5 ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCESS

ILBANK, as the implementing agency, is responsible for the overall implementation of the project through its PMU that will have day-to-day responsibility for project management and support, including ensuring that project implementation is compliant with the World Bank's ESF, particularly the relevant ESSs; the World Bank Group's EHS Guidelines; WHO Covid-19 Guidelines; and this ESMF. A certain process needs to be followed to determine the environmental and social aspects of subproject activities. The stages of this process are defined below. A detailed overview of ILBANK's capacity in environmental and social management and assessment of the ILBANK's labor and working conditions are explained in sections 1 and 6.

Step 1: Screening

Environmental and social assessment starts with the Environmental and Social Screening of proposed sub-projects. The main purpose of the environmental and social screening is to get relevant concerns addressed in the implementation phase of the project. Environmental and Social Screening will determine whether proposed sub-project will require an ESMP or a full scale ESIA. This process will cover an ineligibility assessment and environmental and social risk categorization of a subproject in line with the ESF. First, the sub-projects will be screened through the Exclusion List given in Section 1.4.

The proposed sub-projects will be screened by ILBANK PMU, in consultation with the World Bank by using the screening forms provided in Annex 1. Outcomes of the Turkish EIA Process is another source to identify the impact significance of the project as well as to identify the sensitivity level of Project Area of the Influence (e.g. presence of natural habitats, projected areas etc.). In this process, it will be Municipalities'/Utilities' responsibility to hire the consultancy services for the preparation of sub-project feasibility reports, including an initial assessment of E&S risks to reach more informed decisions.

Environmental and social risk classification takes into account relevant potential risks and impacts, such as:

- the type, location, sensitivity and scale of the Sub-Project.
- the nature and magnitude of the potential E&S risks and impacts, including impacts on Natural Habitats; the nature of the potential risks and impacts (e.g. whether they are irreversible, unprecedented or complex); resettlement activities; presence of vulnerable groups/people; and possible mitigation measures considering the mitigation hierarchy;
- the capacity and commitment of the Sub-Borrower to manage such risks and impacts in a manner consistent with the ESSs, including the country's policy, legal and institutional framework; laws, regulations, rules and procedures applicable to the investment sector; the technical and institutional capacity of the Sub-Borrower; the Sub-Borrower's track record of past project implementation; and the financial and human resources available for management of the Sub-Project; and
- other areas of risk that may be relevant to the delivery of E&S mitigation measures and outcomes, depending on the specific Sub-Project and the context in which it is being developed, including the nature of the mitigation and technology being proposed,

considerations relating to domestic and/or regional stability, conflict or security. The outcome of the screening process is to categorize the sub-project in terms of its environmental and social risks.

Considering potential environmental impacts and their significance, proposed sub-projects will be categorized in four levels: i. High Risk ii. Substantial Risk iii. Moderate Risk iv. Low Risk

In accordance with the screening procedure, the sub-projects with High Risk Category will be ineligible for funding.

Step 2: Environmental and Social Assessment

The type and content of the environmental and social assessment that fulfil the ESSs will depend on the category and special issues associated with the project as discussed above and summarized in table below.

ILBANK will guide the municipality regarding the environmental and social assessment document to be provided (as detailed in Section 7 of this document).

In cases where several separate investments (components) constitute a subproject, all components will be evaluated as a single subproject. The ESIA/ESMP prepared for such subproject should combine all the components to be implemented under the subproject. However, the ESIA/ESMPs of the activities may be prepared separately and works may commence at separate times as long as the components are independent of each other in terms of impact on the social and natural environment. When in doubt, ILBANK will consult with the World Bank environmental and social specialist assigned to the project.

Municipalities/Utilities will be responsible for the preparation of the ESIA/ESMPs and RPs and ex-post social audits, and share these with the ILBANK and WB as required. The type and content of the environmental and social assessment that fulfil the ESSs will depend on the risk category and special issues associated with the sub-project as discussed above. A part of the information and analysis may already be available in the EIA or PIF document if the proposed subproject is classified as either an Annex I or and Annex II project according to the Turkish EIA Regulation. Then, according to the category of the sub-projects (Substantial, Moderate, Low), the Turkish PIFs and EIAs could be used to prepare ESIA/ESMPs. **Completing a satisfactory ESIA/ESMP is the responsibility of the concerned** Municipalities/Utilities. They may fund the cost of the ESIA/ESMP either from the municipality's own resources or from the sub-project loan. The cost estimates of the site specific ESIA/ESMPs will provide specifics about the responsible agency and relevant costs for each mitigatory/monitoring activity.

ILBANK will perform an overall quality assurance function to confirm that the documents prepared meet the World Bank requirements. In reviewing an ESIA or ESMP, ILBANK will also confirm that it is clear, feasible and appropriate.

Substantial Risk Sub-Projects

As per the procedures provided in the Table 14 below, for Substantial Risk Category subprojects, detailed ESIA in line with the Turkish regulations and WB ESF will be required. This will include site-specific information including but not limited to baseline information (e.g. environmentally sensitive areas, or need to better define and understand potential issues, brief description of impacts specifying well defined mitigating measures and adopting accepted operating practices and monitoring), the methodology for impact assessment, analysis of alternatives, and analysis of respective environmental and social impacts in accordance with

the methodology, mitigation and monitoring plans and roles and responsibilities. The structure of an ESIA is provided in Annex 2.

Table 14. Procedures for Substantial Risk Sub-Projects

Sub-Project Phase	Procedure	Responsible Part
Project Identification /PreFeasibility	Environmental and Social Screening of sub-project (see Annex 1)	ILBANK
Feasibility Study/Design	Conduct ESIA	ILBANK, Municipality
	Public consultations (as per SEP)	Municipality
	Implement RF and if required, prepare RP	Municipality
Detailed Design & Tendering	Ensure mitigation measures (from ESMP) are included in design	ILBANK, Municipality
	Ensure ESMP and LMP aspects are included in Bidding Documents	ILBANK, Municipality
	If required, prepare and implement Chance Find Procedure for Cultural Heritage	Municipality
Construction Works	Implement and monitor ESMP, LMP and CFP (if necessary)	Municipality
	Update ESIA (and ESMP) as required	Municipality

Moderate Risk Sub-Projects

As per the procedures provided in the Table 15 below, for Moderate Risk Category sub-projects, a site-specific ESMP will be required to ensure enhancements such as greening measures are implemented. The ESMP should clearly lay out: (a) the measures to be taken during both construction and operation phases of a sub-project to eliminate or offset adverse environmental and social impacts, or reduce them to acceptable levels; (b) the actions needed to implement these measures; and (c) a monitoring plan to assess the effectiveness of the mitigation measures employed. The structure of an ESMP is given in Annex 2.

Table 15. Procedures for Moderate Risk Sub-Projects

Sub-Project Phase	Procedure	Responsible Part
Project Identification /PreFeasibility	Environmental and Social Screening of sub-project (see Annex 1)	ILBANK
Feasibility Study/Design	Conduct ESMP	ILBANK, Municipality
	Public consultations (as per SEP)	Municipality
	Implement RF and if required, prepare RP	Municipality
Detailed Design & Tendering	Ensure mitigation measures (from ESMP) are included in design	ILBANK, Municipality
	Ensure ESMP and LMP aspects are included in Bidding Documents	ILBANK, Municipality
	If required, prepare and implement Chance Find Procedure for Cultural Heritage	Municipality

Construction Works	Implement and monitor ESMP, LMP and CFP (if necessary)	Municipality
	Update ESMP as required	Municipality

Low Risk Sub-Projects

A project is classified as Low Risk if its potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. Therefore, Low Risk Category sub-projects, with few or no adverse risks and impacts and issues, will not require further E&S assessment following the initial screening according to the World Bank's ES Policy.

Step 3: Public Consultation and Disclosure

Stakeholder Engagement Plans (SEPs) proportionate to the nature and scale of the proposed sub-projects will be prepared as an integral part of E&S assessment as given in Section 4.1. All sub-project specific E&S documents (i.e., ESIA, ESMP and RP etc.) will be disclosed to the public as a part of SEP.

The timing and methods of engagement with stakeholders throughout the life cycle of the project will be described in the SEPs. Public consultation activities (including public consultation meetings) will be carried out as per the SEPs to be prepared. All consultation activities will consider additional measures to be taken in line with prevailing governmental restrictions under pandemic conditions.

Records of meetings and consultations with stakeholders will be included in the draft and final E&S assessment documents.

Preparing and implementing a satisfactory SEP is the responsibility of the municipalities. They may fund the cost of the SEP either from the municipality's own resources or from the subproject loan.

ILBANK will perform an overall quality assurance function to confirm that the documents prepared meet the WB requirements. In reviewing a SEP, ILBANK will also confirm that it is clear, feasible and appropriate.

Step 4: World Bank Clearance

According to the project's overall screening criteria, the proposed sub-projects that have completed national EIA procedure, screened with respect to eligibility criteria and environmental and social assessment conducted based on the provisions set out in this ESMF will be eligible for financing.

The risk categorization of sub-projects will be determined via consultation with the WB. In case of any change in the risk category, ILBANK should discuss the new risk category with the WB and reach consensus.

The WB will provide prior review and approval to substantial risk sub-projects and then provide a no-objection for the relevant environmental and social assessment documents. ILBANK conducts prior review of the environmental and social assessment documents of **Low** and **Moderate Risk** sub-projects and the World Bank conducts post review. Prior review by the

World Bank on sub-projects will continue until ILBANK and the World Bank agree to discontinue the World Bank's prior review in some or all circumstances.

Step 5: Incorporation in Works Contracts

Sub-loan agreement must include the requirement to implement the site specific ESIAs and ESMPs to be prepared during implementation. The sub-loan agreements will also include the relevant elements for complying with the ESMF and the Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP), Labor Management Procedure (LMP), Ex-Post Social Audits and RPs. For all sub-projects, the site specific ESIAs (ESMP section), ESMPs, LMP and RPs will also be attached to the procurement documents and be part of the contract with the contractor selected to carry out the subproject works. These sections include potential impacts that may occur during the set of works in question and measures that the contractor needs to take to mitigate them. In addition, the tender documents will specify the environmental, social and OHS requirements, and these requirements will be binding clauses/provisions in the contracts

Step 6: Information Disclosure

Likewise, public consultation and information disclosure activities will also be described in SEP, and will be conducted accordingly. All E&S documents prepared under the project and subprojects will be disclosed (Both in English and in Turkish) and consulted in a timely and transparent manner acceptable to the Bank and in line with SEP, considering any governmental restriction on the COVID19 pandemic.

The draft site-specific E&S documents will be disclosed prior to consultation meetings and after receiving the feedback of the stakeholders. The E&S documents will be finalized and disclosed in the country, including in local areas at or near subproject sites. Prior to subproject approval (by the World Bank), ILBANK will submit English versions of the final ESIA, ESMP and RP documents to the World Bank for posting on its external website.

Step 7: Implementation of ESMPs for Sub-projects

The contractor will develop its site specific sub-management plans in line with the ESMP prepared for the sub-project, including OHS plans before construction (Annex-2A). The contractor will:

- Have sufficient E&S capacity with sufficient qualifications and skills assigned on site, as needed
- Develop site specific ESMP and sub-management plans as needed before construction, as part of their method statement and submit to Municipality for reviewing and approval;
- Duly implement the mitigation measures set out in the site-specific E&S document and respective sub-management plans for construction work ;
- Control and minimize environmental and social impacts;

- Ensure that all staff and workers understand the procedure and tasks in the environmental and social management program;
- Ensure environmental hygiene;
- Submit a monthly report on safeguard issues, mitigation, and results throughout the construction period to the Municipality;
- Promptly notify Municipality on any accident and incidents, and keep an incident register at construction site throughout the Project life; and
- Be responsible for the training of staff and workers regarding environmental, social and OHS issues.

Step 8: Supervision and Monitoring

The contractors on the site will be continuously monitored by the beneficiary Municipality ES team. In this respect, the Municipality will make sure that the site-specific ESA documents are duly implemented on site. This will be ensured through the ES capacity of the Municipality. This will be:

- Hire/assign respective environmental and social experts with sufficient qualifications and skills as needed
- Ensure that site-specific ESA documents are in place and respective environmental and social mitigation measures are duly implemented by the contractor on site
- Monitor and supervise the activities of the contractor in line with WB ESF requirements
- Keep track of contractor's day to day activities, their commitment for implementation of the site-specific ESA documents, quality of work, adherence to safety guidelines and method statements.
- Collect information on environmental and social issues for monthly progress reports submitted to ILBANK and eventually WB and make sure that these are all compliant with the Bank's requirements

ILBANK will carry out regular supervision of sub-projects during construction to ensure that the ESIA reports, ESMPs, SEPs, LMPs, RPs and any other E&S reports/plans are being duly implemented and that GMs are accessible and functional. When ILBANK notices any problems in the implementation of ESIA, ESMP, SEPs, LMPs, or RP, it will inform the relevant municipality and agree with them on the steps to rectify those problems. Specifically, for any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.), the municipalities will inform ILBANK within 3 business days, and ILBANK will inform the World Bank about the incident as soon as it is informed. The incident report including root cause analysis, precautions and compensation measures taken, will be submitted to ILBANK within 30 business days, and ILBANK will forward the incident report to the World Bank. ILBANK will also report its findings to the World Bank in its biannual project progress report or more frequently, as needed to bring issues to the attention of the World Bank. The

World Bank's Task Team for the project will, on occasion, and as required, also visit project sites as part of project supervision.

6 INSTITUTIONAL ARRANGEMENTS AND CAPACITY FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT IMPLEMENTATION

6.1 Institutional Arrangements

Key actors in the implementation of this framework are the ILBANK PMU and the municipalities/utilities participating in the project.

The PMU was established under the International Relations Department of ILBANK for the implementation of the Municipal Services Improvement Project (MSIP), which began preparation in 2003 and was implemented, together with an MSP-AF through 2016. This PMU has continued to implement the Sustainable Cities Project (SCP) 1, 2, SCP2-AF, and FRIT-MSIP. The PMU is led by a department head and unit managers and has staff capacity in procurement, financial management (FM), environmental and social, and technical sectors, particularly water, wastewater, and transport. In terms of technical sectors, other departments of ILBANK support the PMU in project preparation and implementation. ILBANK and its PMU are familiar with and experienced in applying the World Bank guidelines, procedures and standards for both fiduciary (procurement and FM) and environmental and social management. Under SCP1, SCP2 and FRIT-MSIP, participating municipalities are responsible for undertaking procurement and contracting activities for their specific sub-projects with the technical support and oversight of ILBANK.

A positive legacy of the MSIP and SCP has been that ILBANK has developed its project implementation and management capacity substantially. The ILBANK PMU staff were the beneficiaries of the intensive training sessions on World Bank procurement, safeguard implementation and other topics. The experience gained during implementation, together with the efforts of the Government of Turkey to reform ILBANK have made it a more attractive institution for other international investors and laid the groundwork for harmonizing development financing in the sector. The already existing organizational setup and improved project implementation capacity of ILBANK PMU which have been reached through the long collaboration with the World Bank will increase sustainability of the project.

While most of the Metropolitan and Provincial municipalities have experienced and dedicated departments for running projects financed by International Financial Institutions (IFIs), the institutional capacities of some of the municipalities are still not sufficient for sustaining outcomes. Most of the district municipalities have no capacity to perform IFI funded projects.

In the following the overall roles and capacities of key factors are discussed. The summary of roles and responsibilities is listed in Table 16.

Table 16. Roles and Responsibilities

	Municipalities	ILBANK	WB
Financial Roles	Sub-Borrower	Financial Intermediary	Main Finance Source
Application Process	Submit Demand Based Applications to ILBANK	Review/analyse the applications in order to provide information to the WB	Concur the final selection of the sub-projects from the five participating municipalities
Preparation Process	Apply the relevant environmental and social standards that are introduced by the WB through the ILBANK Screen proposed subprojects for E&S risks per the World Bank risk categorization and make arrangement for site-specific E&S assessments	Coordinate the selected municipalities to ensure all the relevant rules and regulations will be adopted throughout the project Organize internal working structure for the investment options	Assist ILBANK for monitoring the Results Framework of the Project Provide technical guidance to the ILBANK
Number of Staff	Assign one of each expert/focal point listed; Social Expert Environmental Expert, and OHS experts.	The present team of PMU will be strengthened by one environment specialist, one social specialist and one OHS specialist. Individual freelance consultants can also be employed.	Assist the ILBANK in establishing monitoring team
Project Roles	Preparation and implementation of ESIAs, ESMPs, LMP, RPs and SEPs including management of subproject level Grievance Mechanisms Monitor environmental and social performance of the contractors' works on site, in line with the site-specific environmental and social requirements. Reporting to the ILBANK on quarterly basis on E&S compliance and monitoring	Responsible for reviewing and approving site-specific E&S documents for low and moderate risk sub-projects; and for monitoring the implementation of ESMF, ESCP, ESIAs, ESMPs, LMP and Grievance process Reporting to WB on biannual basis on E&S compliance and monitoring	Prior review and approval of E&S documents for Substantial risk subprojects. Overall review of the project development stages

	Municipalities	ILBANK	WB
	Tendering all the project works and consulting services	Supervise and monitor the whole process to ensure the proper application of the WB's ESSs and safeguard policies	Review of submitted reports to ensure compliance with WB standards

6.1.1 ILBANK PMU

ILBANK PMU will include at least one environmental, one social specialist and one OHS specialist within the scope of this project to coordinate the implementation of the Environmental and Social Management Framework. The OHS, Environmental and Social specialists' responsibilities will be as follows:

- Carry out screening of the sub-projects with regard to E&S risk categorization according to the World Bank's requirements.
- Provide municipality E&S consultants' guidance on the preparation of E&S assessment documents in accordance with the World Bank's requirements.
- Provide municipality officials/municipality E&S consultants with the guidance on the World Bank's E&S assessment standards and procedures, notably consultation and disclosure requirements for sub-projects.
- Provide municipality officials/municipality E&S consultants with the guidance on the World Bank's ESSs and safeguard requirements (documentation and procedures) for cultural properties, natural/critical habitats, forests, and international waterways.
- Review the E&S assessment documents, provide written comments to municipality E&S consultants, and ultimately provide formal approval of E&S assessment documentation and procedures in accordance with the requirements of the World Bank's E&S policies and ESSs.
- Ensure that the sub-loan documents include the agreements to implement the ESMF, ESCP, site specific ESMPs ESA, and any other ESSs & safeguard requirements.
- Supervise municipalities' implementation of ESMF, ESCP, site specific E&S documents and any other ESSs requirements, document municipalities' E&S performance, and provide recommendations and any further actions required as part of the overall project supervision reporting to the World Bank.
- Be open and responsive to concerns raised by affected groups and local environmental authorities regarding the environmental and social aspects of subproject implementation. Meet with these groups during site visits, as necessary.
- Report to the WB on compliance with environmental, social, and OHS requirements set out in the project framework documents, the site-specific ESAs and ESCP.

- Notify the World Bank about any significant incident (accidents, spills, fatalities, etc.) within 3 business days and send an incident investigation report together with the corrective action plan in 30 business days to the World Bank
- Coordinate and liaise with the World Bank supervision missions regarding environmental and social aspects of subproject implementation.

6.1.2 Municipalities/Utilities

The Municipalities will hold ultimate responsibility for the environmental and social performance of the sub-project, including the performance of its contractors. A Project Implementation Unit (PIU) will be established to carry out operational and administrative tasks to oversee the implementation of the E&S instruments and monitoring progress. The municipalities/utilities will be responsible for the preparation and implementation of ESIAs, ESMPs, RPs and SEPs including management of subproject level Grievance Mechanisms; for the monitoring environmental and social performance of the contractors' works on site, in line with the site-specific environmental and social requirements; for the reporting to the ILBANK on quarterly basis on E&S compliance and monitoring as stated in Table 16.

The Municipalities will be responsible for the incident and accident reporting and informing the necessary institutions (WB, ILBANK etc.), as per the provisions explained below:

- The World Bank and ILBANK will be promptly notified of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers including but not limited to; incidents and accidents encountered during construction works, environmental spills, etc.
- Sufficient detail will be provided regarding the incident or accident, findings of the Root Cause Analysis (RCA), indicating immediate measures or corrective actions taken or that are planned to be taken to address it, compensation paid, and any information provided by any contractor and supervision consultant, as appropriate. It will be ensured that the incident report is in line with the World Bank's Environment and Social Incidence Response Toolkit. Subsequently, as per the Bank's request, a report on the incident or accident and propose any measures to prevent its recurrence will be prepared.
- Municipality will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 3 business days and submit an incident report, including RCA, precautions and compensation measures taken within 30 business days. ILBANK will forward the incident report to the World Bank immediately upon receipt from the municipality.

The E&S documents to be prepared by the Municipalities utilizing consultancy companies of which there is an adequate number in Turkey. Municipalities have been carrying out infrastructure investments and are familiar with Turkish environmental legislation and construction procedures. However, knowledge of the World Bank's requirements is less common. To help build capacity in this regard, ILBANK will organize training workshops to familiarize municipalities and their potential consultants with the WB's ESF, ESSs, and safeguard policies.

The municipalities generally have the capacity to properly implement ESMF, ESIA/ESMP, RF, ESCP, SEP, LMP and subproject-specific E&S documents during the construction and operational phases. Where such capacity is lacking the municipalities will be encouraged to retain environmental and social specialist consultants as well as OHS Expert to assist them in supervising the works carried out by the contractor and ensuring that the ESMF, ESIA, ESMP, RF, ESCP, SEF subproject-specific E&S documents are followed adequately. Furthermore, the project may provide institutional strengthening to municipalities through additional training or acquisition of equipment, as needed. The capacity strengthening of the participating municipalities will be carried out by ILBANK PMU in close collaboration with the World Bank as discussed in Section 6.1.4.

Municipalities/utilities will be responsible for tendering all the project works and consulting services as stated in Table 16.

6.1.3 Construction Contractor/ subcontractors, Supervision Engineering Consultants

The contractor will carry out the construction activities of the sub-project in line with the approved design documents and will be the responsible body to implement and apply the mitigation measures given in ESIA/ESMP during construction phase. The contractor should adhere to assigned duties and responsibilities as specified in the ESIA/ESMP to ensure compliance with related national regulations and WB's ESSs. The contractor will employ a full time OHS specialist and a full time environmental and social expert who will instruct and consult the workers on compliant working structure and implementation of ESIA/ESMP (including grievance redress mechanism and the applicable stakeholder engagement activities detailed in project SEP). Furthermore, a competent ESHS manager of contractor will monitor implementation of measures given in the mitigation plan. The prompt notification of accident and incidents within the scope of construction works in line with the above-described provisions is the responsibility of the contractor. The contractor will keep an incident register at construction site throughout the construction and defects liability period.

The contractor will develop monthly and quarterly Environmental and Social Monitoring Reports in order to submit to the ILBANK through Municipality and supervision consultant. The contractor will prepare;

- the monthly monitoring report and submit to municipality through supervision consultant.
- the quarterly monitoring report and submit to municipality through supervision consultant.

The supervision consultant will submit the non-compliances for the construction works (if any) to the municipality through monthly and quarterly reports and the municipality will submit the quarterly monitoring report to ILBANK.

During the construction phase, the contractor firm will train its workers on environmental and social aspects (including OHS) as per WB's ESSs and national regulations in order to raise environmental and social awareness. During the defects liability period, the contractor will be responsible for any repairs of the newly constructed facilities, in accordance with legal regulations as of provisional acceptance. Within the liability period, the contractor will implement measures given in Environmental and Social Mitigation Plan for operation.

Supervision consultant will include at least one Environmental Expert, one Social Expert and one Occupational Health and Safety Expert. Number of experts will be increased if necessary. Supervision Consultant will provide supervision of construction and/or rehabilitation works

and installation of equipment. The experts will identify and manage environmental, social and OHS related risks and initiate corrective actions where necessary. The experts will also monitor and evaluate performance of services provided by the contractor. In addition, regular monthly report regarding to environmental, social and OHS issues of the Project during construction phase will be provided by Supervision Consultant to the concerned municipality. These reports will be integrated in the regular reports of the ILBANK submitted to the World Bank.

6.2 Training Programme and Budget

The capacity strengthening of the participating municipalities/utilities within Component 4.b will be carried out by ILBANK PMU in close collaboration with the World Bank. In this regard, ILBANK will organize training workshops to familiarize municipalities and their potential consultants with the World Bank's ESSs and E&S policies. The project may also provide institutional strengthening to municipalities/utilities through additional training or acquisition of equipment, as needed. The budget for capacity building activities are covered under Sub-Component 4.b of the Project.

Table 17. Training Programme

Item No	Heading of the Training	Target Group	Timing and Duration
1	Environmental and Social Framework: <ul style="list-style-type: none"> Training on ESF and the 10 ESSs including preparation of ESIA, ESMP, RP Implementation of ESMF, RF, ESIA, ESMP, LMP, SEP, GM and RP 	PIUs	After award of the contract. (in 1 week)
2	Occupational Health and Safety <ul style="list-style-type: none"> Workplace risk management Prevention of accidents at work sites Use of Personal Protection Equipment's (PPEs) Health and safety standards Hazardous waste management Solid and liquid waste management Preparedness and response to emergency situation Awareness on communicable diseases (i.e. Covid-19, HIV/AIDS etc.) 	PIUs	After award of the contract. (in 2 weeks)
3	Labour and Working Conditions: <ul style="list-style-type: none"> Implementation of LMP Terms and conditions of employment according to national working laws and regulations Contractor and sub-contractor codes of conduct Worker's organizations Child labor and forced labor issues Workers Grievance Mechanism 	PIUs	After award of the contract. (in 3 weeks)
4	Grievance Mechanism: <ul style="list-style-type: none"> Implementation of GM Registration and processing procedure Grievance redress procedure Documenting and processing grievances 	PIUs	After award of the contract. (in 4 weeks)

6.3 Capacity Assessment of ILBANK

ILBANK's organizational information has been provided in Section 1.5. ILBANK's capacity in environmental and social management is detailed in this section.

6.3.1 Area of Operation

ILBANK is a leading organization that carries out important activities in main areas such as providing finance, developing and executing projects, consultancy and technical services to local authorities, distributing the shares allocated to local authorities from the general budget, making applications with profit-oriented real estate investment projects, carrying out the construction works with the demanded special projects and urban infrastructure projects. Within the scope of the work, water network, water treatment plant, sewerage network, wastewater treatment plant and landfill facilities, paving and road construction activities of local authorities, bridge construction and similar infrastructure projects as well as superstructure works are also included. In addition to the domestic business areas, ILBANK cooperates highly with various international organizations such as the WB, EIB, JICA and Islamic Development Bank in the field of domestic operations as well as the use of loans and funds abroad.

6.3.2 Environmental and Social Management Capacity

ILBANK will adopt an Environmental and Social Management System (ESMS) which includes: an Environmental and Social Policy; procedures for the identification, assessment and management of the environmental and social risks and impacts of subprojects; organization structure and staff capacity resources necessary to support such implementation; monitoring and review of environmental and social risks of subprojects and the portfolio; and an external communications mechanism

As an affiliate to MoEUCC, ILBANK is subject to Turkish national laws and regulations. Therefore, it is responsible for the application of various law and regulations including Environment Law, Expropriation Law, Resettlement Law etc. for the sub-projects it finances or signs sub-loan agreements.

Credit evaluation process of ILBANK includes technical, economic and financial assessment of subject loans. The environmental and social assessment is mainly based on the permitting and land acquisition requirements in the scope of technical assessment.

Projects that ILBANK finances through international financing institutions such as WB, EIB, and JICA are handled by International Relations Department which utilizes key procedural documents for internationally financed investments. The key procedural documents managing the project's environmental and social screening, review and monitoring procedures for sub-projects are the ESMF and RF which are implemented throughout the lifetime of the international funded projects. For the World Bank-financed projects, these framework documents are integrated into the PAD and Operational Manual of the project and also the core elements are referred in the Loan Agreements. Therefore, ILBANK is fully responsible for the satisfactory implementation of the framework E&S documents. The ESMF and RF additionally require that subproject-specific E&S documents are prepared for the sub-projects and these become a part of the sub-loan agreements between ILBANK and sub-borrowers. Through these sub-loan agreements, ILBANK and the World Bank manage and oversee the sub-projects in terms of the World Bank E&S requirements.

PMU has been established under the International Relations Department which oversees and administers all internationally financed projects by utilizing procedural documents. ILBANK's

PMU has staff specialized in technical, procurement, environmental, social and FM related procedures of the WB. ILBANK staff received numerous trainings related to the World Bank's safeguard policies and more recently - the Environmental and Social Framework (ESF) as a part of the ESF Borrower Training roll out program. ILBANK's E&S team consists of 2 experts - one acting as the environmental focal point and the other - as the social development/land acquisition focal point. Besides, ILBANK's PMU has strengthened by hiring 2 additional social and 3 additional environmental consultants.

6.3.3 Labor and Working Conditions (as per ESS2)

Occupational Health and Safety

In recent years, Turkey has undergone a reform to improve its national OHS system through adapting a set of international and regional standards into its national level requirements for the prevention occupational risks defined in the ILO Occupational Safety and Health Convention, 1981 (No. 155). The convention, along with the Occupational Health Services Convention, 1985 (No. 161) were both ratified by Turkey in 2005 who is also party to the Labor Inspection Convention, 1945 (No. 81) since 1951. In 2014, Turkey ratified the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187).

During 2012, a stand-alone Law on OHS (No. 6331) was put into force (20 June 2012). The OHS Law governs workplace environments and industries (both public and private) as well as virtually all classes of employees including part-time workers, interns, and apprentices. The legislation is comprehensive and is generally applicable across all sectors and many industries.

ILBANK has a separate Occupational Health and Safety Policy, however it lacks detailed procedures. As government agency ILBANK is subject to national law on OHS of the Ministry of Labor and Social Security. ILBANK will appoint OHS specialist responsible for the supervision OHS measures implementation, which are required Turkish OHS laws and regulations and ESS2. ILBANK will make sure that supervision consultants and municipalities will also appoint OHS specialist responsible for the supervision OHS measures implementation.

According to the national OHS Law, all employers must notify the Ministry in 3 business days after OHS related incidents. Specifically, for any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.), the municipalities will inform ILBANK within 3 business days, and ILBANK will inform the Bank about the incident as soon as they are informed. The incident report including root cause analysis, precautions and compensation measures taken, will be submitted to ILBANK in 30 business days and ILBANK will forward the incident report to the World Bank.

All ILBANK facilities are equipped with fire safety instruments as required by local regulation. Fire safety plans are also prepared and revised by the responsible department. The staff receives routine training on fire safety and first aid. Regular drills are conducted and reported. For all sub-projects, ILBANK will require the sub-borrower municipalities/utilities to ensure that OHS measures are undertaken according to the national OHS law and international best practice.

Labor and Working Conditions

Turkey is a party to a multitude of ILO conventions, including but not limited to conventions on: equal treatment of employees, gender equality, child labor, forced labor, OHS, right of association and minimum wage. Accordingly, the current Turkish Labor Law (No.4857) is to a large extent consistent with requirements of ESS2.

ILBANK has published a corporate level Human Resource Policy (dated January 4, 2013 in the Official Gazette numbered 28518) that is also in line with national regulations as well as WB

requirements. ILBANK employees are civil servants and only OHS, and prohibition child and forced labor ESS 2 provisions applied to civil servants. The HR policy aims to define employees' personal rights including; working hours, leaves (maternity, social events, unpaid), financial rights, working conditions, promotions etc. The policy allows for equal opportunity and employment rights. As ILBANK is a government agency no one under the legal age (18 years) is permitted to work within the institution; thus, no child labor related issues exist. Cases including unregistered/ uninsured employment, unequal employment opportunities for women etc. that may be relevant to civil works that ILBANK's or borrowing municipality's contractors may encounter, will not be an issue in terms of incompliance with ESS2 for ILBANK.

ILBANK is committed to ensure compliance of its own operations and those of any contractors or sub-contractors working at the Project with the provision of the following:

- The Turkish Labour Law
- WB ESS 2 Requirement
- ILBANK Human Resource Policy.

ILBANK will have specific policies in place intended to maximize beneficial impacts of the Project and to minimize or mitigate its potential adverse impacts:

- A Human Resources Policy that prioritizes local residents for employment, thus maximizing socio-economic benefits in communities closest to operations;
- Specific anti-discrimination policies and grievance management procedures.

Key management measures, reporting and monitoring on unregistered/uninsured employment, unequal employment opportunities for women etc. that may be relevant to civil works that ILBANK's or borrowing municipality's contractors will be presented in Labor Management Policy.

Labor Management Procedures: ILBANK has published a corporate level Human Resource Policy (dated January 4, 2013 in the Official Gazette numbered 28518) that is also in line with national regulations as well as the WB requirements. The document aims to define the employee personnel rights including; working hours, leaves (maternity, social events, unpaid), financial rights, working conditions, promotions etc. The policy allows equal opportunity and employment rights. As ILBANK is a government agency no one under the legal age (18 years) is permitted to work within the institution; thus, no child labor related issues will exist. Detailed assessment of labor management within the scope of ILBANK's current operational procedures has been carried out and presented via the project LMP document in order to verify that Turkish labor law requirements are implemented under the civil works conducted by the contractors.

Grievance Mechanism for ILBANK Employees: ILBANK aims to follow-up on customer satisfaction as well as to meet the needs and expectations of its employees through a grievance mechanism. For this purpose, there are Request and Complaint Boxes in various parts of ILBANK buildings. Additionally, a Grievance Mechanism (GM) already established in September 2021 and will be active during the course of the Project. Detailed information regarding the GM Policy is presented in Annex-3. Grievance Mechanism for Municipalities

Detailed information regarding the GM is presented in Annex-3. The White Table System

Additional to the GM established by ILBANK, all municipalities adopted a service called *Beyaz Masa* ("White Table" in English) in Turkey to collect feedback from citizens. This municipal

department was established to collect all the complaints and requests of the local residents and aims to provide possible solutions within the municipal structure for the requested concerns.

Although the White Table system is not considered as a grievance mechanism, it is still acknowledged as a general complaint mechanism that the municipalities adopted within their structure. Therefore, the White Table system can be considered as an additional complaint mechanism for the selected projects since the selected projects are already within the municipality structure.

Citizens can access the White Table by calling the Call Center (Alo 153), internet page or in person. There will be a tracking number given for each comment/complaint that allows following up the status of the report. Alo 153 Call Center intends to provide better quality assistance and faster solutions for concerned residents through the White Table solutions team. There is also an internet page of municipalities, which includes a White Table section that allows the residents to contact public relations experts electronically. Also, the residents can apply their requests in person for an instant solution.

The White Table system provides data management through the feedback of the citizens, however due to some organizational barriers (lack of specific departments and personnel); the system may disable itself to address the received concern/comments. Therefore, this system will be improved as mentioned above and will be tailored for the subproject needs, as necessary.

All the grievances and feedbacks received from the White Table system will be registered and handled in the existing GM.

7 MONITORING AND REPORTING

7.1 Environmental and Social Monitoring

Environmental and social monitoring system starts from the construction phase of the project thorough the operation phase, verifying the implementation of the mitigation measures in the E&S instruments and assessing their effectiveness, thus enabling the Borrower and the WB to take action when needed.

The monitoring system provides:

- Technical assistance and supervision when needed;
- Early detection of conditions related to particular mitigation measures;
- Follow up on mitigation results; and
- Provide information of the project progress.

Municipalities will monitor the environmental and social impacts of their project activities on a regular basis (i.e., monthly and quarterly monitoring reports prepared and submitted by the constructor to the municipality through supervision consultant). The environmental and social issues included within the mitigation measures will also be monitored and supervised by the appointed specialists through ILBANK.

Quarterly Environmental and Social Monitoring Report is one of the most important tools to record the monitoring activities which will be submitted to ILBANK by the municipality during construction phase and will at least include all the issues defined in the ESIA/ESMP of the sub-project. The monitoring results will be compared with the national legislative requirements and World Bank EHS Guidelines.

When ILBANK notices any problems in ESIA, ESMP, LMP, SEP or RP implementation, it will inform the relevant municipality and agree with them on steps to rectify these problems. Specifically for any significant environmental or social incidents, the municipalities will inform ILBANK, and ILBANK will inform the World Bank.

7.2 Reporting to the World Bank

In its biannual project progress reports, ILBANK will include a section titled “Environmental and Social Requirements” which will summarize the status of ESCP and compliance with ESMF, RF (including the performance related to subproject-specific ESIA, ESMPs and RPs), LMP and SEP implementation based on its monitoring activities as well as incidents/accidents, if any. Any sub-projects that may involve land acquisition and which have prepared a RP will also be monitored and updates on RP implementation will be included in the biannual progress reports or submitted separately semi-annually. Such reports will highlight any issues arising from non-compliance with E&S requirements and how it has been/is being addressed from the environmental and social environmental and social point of view. The biannual reports will also include account of any stakeholder engagement activities carried out along with a summary of all grievances received and resolved during that reporting period. Upon agreement with the WB, a more frequent reporting (i.e. monthly or quarterly) on the implementation of the E&S &OHS requirements could also be prepared and submitted. The Table 18 provides a summary

on the general E&S reporting requirements including the responsibilities of the related entities. The reporting requirements for OHS are specifically provided in Section 6.1.2.

Table 18. Reporting Requirements of Relevant Entities

Company/Institution	Tasks
Construction Contractor	<p>The construction contractor should develop monthly and quarterly Environmental and Social Monitoring Reports and submit to Municipality through the Supervision Consultant.</p> <p>During the defects liability period, the contractor will be responsible for any repairs of the newly constructed facilities, in accordance with legal regulations as of provisional acceptance. Within the liability period, the contractor will implement measures given in Environmental and Social Mitigation Plan for operation.</p>
Municipality PIU	<p>The PIU will examine the monthly and quarterly Environmental and Social Monitoring Reports of the contractor/s and the Supervision Consultants and will be responsible for the timely delivery of the Quarterly ESMR to ILBANK.</p>
Supervision Consultant	<p>The Supervision Consultant will review the monthly and quarterly Environmental and Social Monitoring Reports of the contractor/s and will include its own assessments and observations on ESHS aspects.</p> <p>The Supervision Consultant has the responsibility to prepare non-conformity forms in the event of any non-conformity observed during the site inspections and within the reports.</p>
ILBANK's PMU	<p>The PMU will review the quarterly reports delivered by the Municipality during the construction phase. ILBANK will inform the WB by providing regular semi-annual monitoring reports on the ESHS performance of the project.</p>
World Bank	<p>The WB will review regular semi-annual monitoring reports on the ESHS performance of the project and instruct ILBANK if any non-conformity or non-compliance identified.</p>

8 ESMF DISCLOSURE AND CONSULTATION

The draft ESMF was disclosed on ILBANK's webpage on July 2022 and initial stakeholder participation meetings were organized by the ILBANK on 2022 (from November 2021 to May 2022). ILBANK held an additional consultation meeting on April 04, 2024, in order to obtain views and comments of relevant stakeholders, including the recently added Metropolitan Municipalities of Kayseri and Sakarya and the General directorate of Sakarya Water and Wastewater Utility.

For the consultation meetings, the following institutions were invited:

1. Ministry of Environment, Urbanization and Climate Change, General Directorate of Environmental Impact Assessment, Permitting and Inspection
2. Ministry of Environment, Urbanization and Climate Change, General Directorate of Local Administrations
3. Ministry of Environment, Urbanization and Climate Change, General Directorate of National Estate
4. Union of Municipalities of Turkey
5. Metropolitan Municipality of İzmir
6. Metropolitan Municipality of İstanbul
7. Metropolitan Municipality of Kayseri
8. Metropolitan Municipality of Sakarya
9. General Directorate of Manisa Water and Wastewater Utility (MASKİ)
10. General Directorate of Sakarya Water and Wastewater Utility (SASKİ)
11. General Directorate of Land Registry and Cadaster

In the Stakeholder Consultation Meeting on April 4, 2024, the ESMF that was prepared in line with the WB's ESF and Turkish Regulation as well as the RF that was prepared in line with WB ESS5 were discussed. At the end of the meeting, a question-and-answer session was held. Participants list and minutes prepared for the meeting and included as annex to this ESMP. The ESMF has previously been disclosed on ILBANK's website, in local communities and at the World Bank's external website.

The ILBANK International Relations Department gave the opening speech for the meeting and also provided information on ILBANK's Environmental and Social Management System (ESMS) which has been effective since 24.12.2023. During the meeting, participants were informed about the following: (i) the scope of the Project, (ii) potential environmental, social, and OHS risks/impacts of the Project and how these risks/impacts will be monitored and mitigated, (iii) E&S documents (ESMF, RF, SEP, LMP) that have been prepared for Component 3 of the Project, (iv) E&S documents that will be prepared for each of the subprojects and their scope, (v) roles and responsibilities of different parties involved in project implementation. Additionally, participants were informed about the ESMS and that the project will be implemented under this ESMS.

In total, 9 participants (3 females and 6 males), from respective institutions attended the consultation meeting.

For the consultation meetings, all relevant institutions were invited, the participants are as follows:

1. İzmir Metropolitan Municipality
2. Kayseri Metropolitan Municipality
3. Manisa Water and Wastewater Administration
4. Sakarya Water and Wastewater Administration

At the end of the meeting, a question-and-answer session was held. The İzmir Metropolitan Municipality requested information on the expiration date of the Project's loan, and they were informed that the loan will come to an end in October 2028.

Participants list and minutes were prepared for the meeting and were included as annex to this ESMF. (Please See Annex 4)

ANNEXES

ANNEX 1. WORLD BANK'S PROJECT CATEGORIZATION

According to the World Bank's E&S Policy, projects (including projects involving FIs) are classified into one of four classifications as **High Risk**, **Substantial Risk**, **Moderate Risk** or **Low Risk** taking into account relevant potential risks and impacts, such as the type, location, sensitivity and scale of the project; the nature and magnitude of the potential E&S risks and impacts; the capacity and commitment of the Borrower; and other areas of risks that may be relevant to the delivery of E&S mitigation measures and outcomes.

A project is classified as **High Risk** after considering, in an integrated manner, the risks and impacts of the project, taking into account the following, as applicable:

- a. The project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the project, the scale (large to very large) or the sensitivity of the location(s) of the project. This would take into account whether the potential risks and impacts associated with the Project have the majority or all of the following characteristics:
 - i. long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the project;
 - ii. high in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large);
 - iii. significant adverse cumulative impacts;
 - iv. significant adverse transboundary impacts; and
 - v. a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.).
- b. The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas.
- c. Some of the significant adverse E&S risk and impacts of the project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.
- d. There are significant concerns that the adverse social impacts of the project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security.
- e. There is a history of unrest in the area of the project or the sector, and there may be significant concerns regarding the activities of security forces.

- f. The project is being developed in a legal or regulatory environment where there is significant uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex projects, or changes to applicable legislation are being made, or enforcement is weak.
- g. The past experience of the Borrower and the implementing agencies in developing complex projects is limited, their track record regarding ES issues would present significant challenges or concerns given the nature of the project's potential risks and impacts.
- h. There are significant concerns related to the capacity and commitment for, and track record of relevant Project parties, in relation to stakeholder engagement.
- i. There are a number of factors outside the control of the Project that could have a significant impact on the ES performance and outcomes of the project.

A project is classified as ***Substantial Risk*** after considering, in an integrated manner, the risks and impacts of the project, taking into account the following, as applicable:

- a. the project may not be as complex as ***High Risk*** projects, its ES scale and impact may be smaller (large to medium) and the location may not be in such a highly sensitive area, and some risks and impacts may be significant. This would take into account whether the potential risks and impacts have the majority or all of the following characteristics:
 - i. they are mostly temporary, predictable and/or reversible, and the nature of the project does not preclude the possibility of avoiding or reversing them (although substantial investment and time may be required);
 - ii. there are concerns that the adverse social impacts of the project, and the associated mitigation measures, may give rise to a limited degree of social conflict, harm or risks to human security;
 - iii. they are medium in magnitude and/or in spatial extent (the geographical area and size of the population likely to be affected are medium to large);
 - iv. the potential for cumulative and/or transboundary impacts may exist, but they are less severe and more readily avoided or mitigated than for ***High Risk*** projects; and
 - v. there is medium to low probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.), and there are known and reliable mechanisms available to prevent or minimize such incidents.
- b. The effects of the project on areas of high value or sensitivity are expected to be lower than ***High Risk*** projects.
- c. Mitigatory and/or compensatory measures may be designed more readily and be more reliable than those of ***High Risk*** projects.
- d. The project is being developed in a legal or regulatory environment where there is uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex projects, or changes to applicable legislation are being made, or enforcement is weak.

- e. The past experience of the Borrower and the implementing agencies in developing complex projects is limited in some respects, and their track record regarding ES issues suggests some concerns which can be readily addressed through implementation support.
- f. There are some concerns over capacity and experience in managing stakeholder engagement but these could be readily addressed through implementation support.

A project is classified as ***Moderate Risk*** after considering, in an integrated manner, the risks and impacts of the project, taking into account the following, as applicable:

- a. the potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. This is because the project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential risks and impacts and issues are likely to have the following characteristics:
 - (i) predictable and expected to be temporary and/or reversible;
 - (ii) low in magnitude;
 - (iii) site-specific, without likelihood of impacts beyond the actual footprint of the project; and
 - (iv) low probability of serious adverse effects to human health and/or the environment (e.g., do not involve use or disposal of toxic materials, routine safety precautions are expected to be sufficient to prevent accidents, etc.).
- b. The project's risks and impacts can be easily mitigated in a predictable manner.

A project is classified as ***Low Risk*** if its potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. These projects, with few or no adverse risks and impacts and issues, do not require further ES assessment following the initial screening.

Annex 1-A: Environmental and Social Impacts Screening Template

Sample Environmental Screening Form

Sub-project Information

Sub-project name	
Procurement Plan Item No	
Type of sub-project	
Implementing authority(ies)	
Location of sub-project (Neighborhood(s), District, Province)	
Brief Description of Sub-project activities: (construction and operation/implementation activities)	
Geographical coordinates of the Site:	
Area of land that will be used for the sub-project:	
Current Land use	
Land ownership	
Access routes to the Site	

Baseline Environmental Conditions

Is the sub-project site located on or adjacent to any of the following (Provide information for all sites and alignment of the project components/sub-components, associated activities; give details, mention distance to these features in km)

No	Environmental Aspects	Yes	No	Details
1.	Sensitive ecosystems			
2.	Natural habitats			
3.	Areas with protection status (cultural /archaeological /natural)			
4.	Critical habitats			
5.	Describe the soil and vegetation on site	n/a	n/a	

Sensitive Receptors

Are there sensitive receptors in the area of influence of the sub-project, such as:

No	Sensitive receptors	Yes	No	Details
1.	Housing units, schools, hospitals or other sensitive receptors			
2.	Culturally and/or socially important paths, areas/religious occupancies, burial grounds, tourist or pilgrim congregation areas, etc.			
3.	Drinking water sources (groundwater wells, springs, surface water resources)			
4.	Areas prone to flooding / landslides			
5.	Downstream communities			
6.	Areas affected by landslides			
7.	Other sensitive receptors			

Current Environmental Status

1.	Is the site in critical / over exploited condition?			
2.	Is the site covered with vegetation?			
3.	Is the site disaster-prone? If yes; list all disaster zone categories applicable.			
4.	Is the site suitable for proposed development?			
5.	Describe existing pollution or degradation in the site(s)	n/a	n/a	
6.	Any other remarks on baseline condition?			

Anticipated Environmental Impacts: Impacts on Land, Geology and Soils

Will the proposed sub-project cause the following on land / soil?

Item	Impacts	Yes / Maybe	No	Details
1.	substantial removal of top soil (indicate in sqm)			
2.	degradation of land			
3.	loss or impacts on cultural/heritage properties			
4.	physical changes in the project area (i.e. changes to the topography) due to cutting and filling, excavation, earthwork or any other activity			
5.	contamination or pollution of the Land? (indicate possible risks)			

Impacts on Water Environment

Will the sub-project or its components cause any of the following impacts on quantity or quality of water sources?

Item	Impacts	Yes / Maybe	No	Details
1.	Will the sub-project involve dredging in the river environment?			
2.	Impacts on availability and access to water resources			
3.	Pollution of water bodies/ground water nearby or downstream			
4.	Impacts on river flow patterns			
5.	Will the project result in stagnation of water flow or pondage?			

Impacts on Biodiversity

Will the sub-project or its components cause any of the following impacts on biodiversity?

Item	Environmental Impacts	Yes / Maybe	No	Details
1.	cutting of trees or clearing of vegetation?			
2.	habitat fragmentation due to the clearing activities? (i.e. hindrance to the local biodiversity like disturbing the migratory path of fish, birds, mammals, etc.)			
3.	potential nuisance of noise and light pollution or any disturbance on surrounding habitats			

Impacts on Communities

Will the sub-project or its components cause any of the following impacts on nearby communities?

Item	Environmental Impacts	Yes / Maybe	No	Details
1.	Health & Safety risks in nearby communities (major accident risks such as explosions, fires, toxic releases, etc.)			
2.	Potential noise/vibration to nearby communities			
3.	Potential damages to common property, roads, etc.			
4.	Potential risks of traffic accidents			

Impacts due to Storage and Wastes: Pollution and Hazards

Will the sub-project or its components cause any impact due to storage of materials, wastes or pollution due to releases during various project activities?

Item	Type	Yes	No	Details
1.	Does the project include use or storage of dangerous substances (e.g., large quantities of hazardous chemicals/ materials like Chlorine, Diesel, Petroleum products; any other?)			
2.	Will the project produce solid or liquid wastes; including construction/demolition wastes (including dredging, de-weeding wastes, muck/silt, dust); polluted liquids?			

Environmental Pollution

Will the process cause or increase the following?

Item	Type	Yes	No	Details
1.	Air pollution			
2.	Odor nuisance			
3.	Environmental noise			
4.	Visual blight or light pollution			
5.	Water pollution (surface waters, groundwater)			
6.	Soil contamination			
7.	Other types of impacts on the ambient environment			

Suggested Environmental Enhancement Measures

Has the sub-project design considered the following enhancement measures?

Item	Enhancement Measures	Yes	No	Details
1.	Energy conservation measures/ energy recovery options incorporated in sub-project design			
2.	Waste minimization or waste reuse/recycle options			
3.	Rainwater harvesting, water recycling and other water resource enhancement measures			
4.	Mitigations against extreme events, drought, flood, other natural disasters			
5.	License for water withdrawal from surface water source			
6.	Dredging permits			
7.	License for transportation and storage of diesel, oil and lubricants, etc.			
8.	License for transportation of hazardous wastes			

For sub-projects envisaging construction or rehabilitation of large dams and other water retaining structures, the following screening criteria should be applied to identify potentially high risk investments. Investments will be considered as High risk if one or more of the below criteria are answered “Yes”. For sub-projects rated as Substantial risk, and where specific “Yes/No” answer requires further investigation/analysis, risk categorization will be reconfirmed through site-specific ESIA based on the pre-mitigation risk assessment. Those activities which will be found of high risk through the below screening and/or site-specific ESIA, will be excluded from the project scope.

Item	Type	Yes	No	Details
1.	Dam with reservoir area (>1km ²)			
2.	Dams with a height of 15 meters or greater from the lowest foundation crest or dams between 5 meters and 15 meters and impounding more than 3 million cubic meters			
3.	Presence of protected areas/rivers, valuable natural habitats, critical habitats in or in the vicinity of the proposed sub-project area			
4.	Presence of valuable aquatic species in the waterbody proposed for dam construction, rehabilitation/ multipurpose reservoir			
5.	Risk of significant habitat fragmentation			
6.	Risk of major flow deviations downstream			
7.	Risk of significant water stagnation upstream			
8.	Other water retaining structures on the same waterbody which might cause significant cumulative impact			
9.	Need for physical resettlement (> 200 households) <i>In cases where these is physical resettlement of fewer than 200 households, the World Bank will still assess the level of risk associated with the resettlement and closely monitor implementation</i>			
10.	Need for economic displacement (> 200 households) <i>(assessments can be done on a case by case basis by the Bank)</i>			

SUMMARY OF ENVIRONMENTAL SCREENING

Project Categorization and Need for ESF Instruments, Oversight

Project Category	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial <input type="checkbox"/> High
Key Reasons	
Safeguards Instruments Required	<input type="checkbox"/> ESIA and ESMP <input type="checkbox"/> ESMP <input type="checkbox"/> SEP <input type="checkbox"/> RP <input type="checkbox"/> LM Plan

Status	IA	Name, Signature with Date
Prepared by		
Checked and categorized as (low, moderate, substantial, high) by		
Reviewed and approved by		

Annex 1-B: Sample Social Screening Form

Land Acquisition and Livelihoods

Land Acquisition	Yes	No	Details
Does the sub-project require private land acquisitions?			
Was the land required for sub-project already acquired?			
Has the acquired lands been duly transferred and are there any litigation/legacy (pending for title transfer, compensation payment, ownership disputes etc) issues?			
Are there any complaints/unresolved cases of already acquired lands?			
Is it possible to purchase privately owned through Willing Buyer–Willing Seller agreement?			
Does the sub-project cause any access restriction to the commuters/pedestrians/ business and trades?			
Is land for material mobilization or transport for the civil work available within the existing plot/Right of Way?			
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.			
Is any temporary impact likely on livelihoods of persons living on the land to be acquired?			
Is there any possibility to move out, close of business/commercial/livelihood activities of persons during constructions?			
Is there any case of temporary or permanent physical displacement of persons due to sub-project works?			
Does this project involve resettlement (physical displacement) of any persons? If yes, give details.			
Will there be loss of/damage to productive trees, fruit plants or crops that generate livelihood income for the households?			
Will there be loss of incomes and livelihoods for anyone due to project intervention?			
Will people permanently or temporarily lose access to facilities, services, or natural resources?			

Labor

Labor issues	Yes	No	Details
Will project cause loss of employments/jobs?			
Will project generate excessive labor influx as a result of new constructions?			
Does construction activities require additional/skilled labor from outside the locality?			
Will sub-project/construction activities cause destruction/disturbance to host community living?			
Will construction of new buildings, drainage lines, powerlines create any degradation/disturbances for public buildings/resources/ adjacent houses, wells, lands, burial places, children parks, schools etc.?			
Will this intervention generate downsize in current labor force (retrenchments) of the agency?			

Vulnerable Groups

Vulnerability issues	Yes	No	Details
Are there any vulnerable groups who may be affected adversely due to the sub-project?			

SUMMARY OF SOCIAL SCREENING**Project Categorization and Need for Safeguards Instruments, Oversight**

Project Category	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> Substantial	<input type="checkbox"/> High
Key Reasons				
Safeguards Instruments Required	<input type="checkbox"/> ESIA and ESMP <input type="checkbox"/> ESMP <input type="checkbox"/> SEP <input type="checkbox"/> RP <input type="checkbox"/> LM Plan			

Status	Agency / Official	Name, Signature with Date
Prepared by		
Checked and Categorized as (low, moderate, substantial, high) by		
Reviewed and accepted by		

ANNEX 2. SUGGESTED FORMATS

Annex 2A. Indicative Environmental and Social Impact Assessment (ESIA) Outline

(a) Executive Summary

- Concisely discusses significant findings and recommended actions.

(b) Legal and Institutional Framework³

- Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 26.
- Compares the Borrower’s existing environmental and social framework and the ESSs and identify the gaps between them.
- Identifies and assesses the environmental and social requirements of any co-financiers.

(c) Project Description

- Concisely describes the proposed project and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project’s primary suppliers.
- Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS 1 through 10.
- Includes a map of sufficient detail, showing the project site and the area that may be affected by the project’s direct, indirect, and cumulative impacts.

(d) Baseline Data

- Sets out in detail the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data as well as information about dates surrounding project identification, planning and implementation.
- Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions.
- Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, demographic, and socioeconomic conditions, including any changes anticipated before the project commences.
- Takes into account current and proposed development activities within the project area but not directly connected to the project.

³ This analysis will also include labor, health, and safety laws.

(e) Environmental and Social Risks and Impacts

- Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESS2 – 8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.

(f) Mitigation Measures

- Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts.
- Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
- Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the proposed mitigation measures.
- Specifies issues that do not require further attention, providing the basis for this determination.

(g) Analysis of Alternatives

- Systematically compares feasible alternatives to the proposed project site, technology, design, and operation -including the "without project" situation- in terms of their potential environmental and social impacts.
- Assesses the alternatives' feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the alternative mitigation measures.
- For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

(h) Design Measures

- Sets out the basis for selecting the particular project design proposed and specifies the applicable EHSGs or if the ESHGs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

(i) Environmental and Social Management Plan (ESMP) (see Annex 2B)

(j) Appendices

- List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
- References-setting out the written materials both published and unpublished, that have been used.
- Record of meetings, consultations and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.
- Tables presenting the relevant data referred to or summarized in the main text.
- List of associated reports or plans.

Annex 2B. Indicative Environmental and Social Management Plan (ESMP) Outline

An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. The Borrower will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

ESMPs will be prepared as a stand-alone document. The content of the ESMP will include the following:

(a) Mitigation

- The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. The plan will include compensatory measures, if applicable. Specifically, the ESMP:
 - (i) identifies and summarizes all anticipated adverse environmental and social impacts (including those involving land acquisition, involuntary resettlement workers and community health and safety, vulnerable groups and cultural heritage or);
 - (ii) describes -with technical details- each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
 - (iii) estimates any potential environmental and social impacts of these measures; and
 - (iv) takes into account, and is consistent with, other mitigation plans required for the project (e.g. for involuntary resettlement, labor, stakeholder engagement or cultural heritage).

(b) Monitoring

- The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

(c) Capacity development and training

- To support timely and effective implementation of environmental and social project components and mitigation measures, the ESMP draws on the environmental and social

assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.

- Specifically, the ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g. for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).
- To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

(d) Implementation schedule and cost estimates

- For all three aspects (mitigation, monitoring, and capacity development), the ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

ANNEX-2C Recommended Management Plans for Construction and Operation Phases of the Project

Management Plans	Stage to be Prepared	Responsible Party	Approving Party
Construction Phase			
A Soil Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
An Air Quality Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Noise Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Water Resources Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Waste Management Plan that is in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Traffic Management Plan in line with the ESS1, ESS4, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Labor Management Plan in line with the ESS1, ESS2, WBG EHS Guidelines (both general and sector specific) and ILBANK's Labor Management Plan	Prior to construction	Construction Contractor	ILBANK
An Occupational Health and Safety Management Plan in line with the ESS1, ESS2, WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Community Health and Safety Management Plan in line with the ESS1, ESS4, and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
A Contractor-level Labour Management Procedures in line with the Project-Level LMP and ESS2	Prior to construction	Construction Contractor	ILBANK
A Contractor and Subcontractor Management Plan in line with the ESS1, ESS2, WBG EHS Guidelines (both general and sector specific)	Prior to construction	Municipality	ILBANK
An Emergency Preparedness and Response Plan in line with WGB ESS's and WBG EHS Guidelines (both general and sector specific)	Prior to construction	Construction Contractor	ILBANK
Operation Phase			
An Air Quality Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to operation	Municipality	ILBANK
A Sludge Management Plan line with the ESS1, ESS3 and WBG EHS Guidelines (both general and sector specific)	Prior to operation	Municipality	ILBANK
A Waste Management Plan in line with the ESS1, ESS3 and WBG EHS Guidelines (both general and sector specific)	Prior to operation	Municipality	ILBANK
A Water Resources Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to operation	Municipality	ILBANK
A Maintenance Management Plan in line with the ESS1, ESS3, and WBG EHS Guidelines (both general and sector specific)	Prior to operation	Municipality	ILBANK
An Occupational Health and Safety Management Plan in line with the ESS1, ESS2, WBG EHS Guidelines (both general and sector specific)	Prior to operation	Municipality	ILBANK
A Labor Management Plan in line with the ESS1, ESS2, WBG EHS Guidelines (both general and sector specific), and ILBANK's Labor Management Plan	Prior to operation	Municipality	ILBANK
An Emergency Preparedness and Response Plan in line with WGB ESS's and WBG EHS Guidelines (both general and sector specific).	Prior to operation	Municipality	ILBANK

ANNEX-2D Environmental Monitoring Plan Template for Sub-project

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How? <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When? <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments <i>to be filled out during supervision with reference to adequate measuring reports</i>
Land Preparation							
Construction							
Operation							

ANNEX 3. GRIEVANCE MECHANISM

(Enclosed as separate files)

ANNEX 4. STAKEHOLDER CONSULTATION MEETING MINUTES AND ATTENDANCE LIST

Attendance List:

The list of the participants is not disclosed here as per the law on the protection of personal data the list of the participants is not disclosed but kept in ILBANK's records

