

Luxembourg, 27 August 2025

Environmental and Social Data Sheet

Overview

Project Name:	KARACHI WATER INFRASTRUCTURE FRAMEWORK LOAN
Project Number:	2024-0752
Country:	Pakistan
Project Description:	Rehabilitation and construction of water treatment facilities in Karachi to increase safe water supply and improve water security
EIA required:	This is a multi-scheme Framework Loan operation. Some of the schemes might require an EIA.
Project included in Carbon Footprint Exercise ¹ :	no

Environmental and Social Assessment

The project is located within the city of Karachi, in the province of Sindh. Karachi is the main economic hub of Pakistan. As a result of rapid urbanization and expansion, the 16 million inhabitants of Karachi are currently faced with surging water demand and low service standards. Currently appr. 1.9 million m³/day of drinking water is treated in the city's seven main water treatment plants, supplying primarily domestic customers. Several of these treatment plants are obsolete and beyond their economic life, resulting in recurring failures to meet the national drinking water quality standards (which are based on World Health Organisation (WHO) recommendations and are in line with EU drinking water quality standards).

This project aims to enhance water supply and improve energy efficiency of the whole water supply system serving the City of Karachi by renovating two existing plants and constructing four new plants. Key results are expected to include the delivery of almost 1,000,000 m³/day additional drinking water supply to Karachi benefiting almost 7 million inhabitants. The improvements to the water treatment plants are foreseen to deliver full compliance with the national drinking water standards, which will significantly improve the living standards of residents in Karachi.

The Promoter of the project is the Karachi Water and Sewerage Corporation (KWSC). KWSC is a public sector organization responsible for the provision of water supply and sewerage services in the City of Karachi. This entity is responsible for the production, transmission, and distribution of potable water to Karachi's citizens. KWSC will also be responsible for the project implementation and operation.

The project is proposed to be co-financed in parallel with the World Bank (WB) and the Asian Infrastructure Investment Bank (AIIB) as part of the WB-lead Second Karachi Water and Sewerage Services Improvement Project 2 (KWSSIP-2). The KWSSIP-2 is the continuation of the KWSSIP-1 project, which is already under implementation by KWSC.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.



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Strategic Environmental Assessment

The project's objectives are fully aligned with the national and provincial water sector policies, enshrined in the Sindh Water Policy 2023 and Sindh Water, Sanitation and Hygiene (WASH) Sector Development Plan (2016-2026). The main objectives of these policies are to provide universal and equitable access to safe and affordable drinking water and sanitation services for all citizens, improve water quality by reducing pollution and substantially increase water efficiency across all sectors to reduce water scarcity. These policy documents were subject to widespread and long-term public consultation prior to their approval and adoption by the Sindh Provincial Government in 2015 and 2024 respectively. The Promoter has confirmed that they are legally binding documents in terms of strategic planning for water supply and sanitation services within the Province of Sindh.

Environmental Assessment

The Competent Authority for environmental licensing is the Sindh Environmental Protection Agency (SEPA).

The environmental laws relevant to the Project are the Sindh Environmental Protection Act (SEPA) 2014, and Sindh Environmental Protection Agency (Environmental Assessment) Regulations, 2021, which set out the requirements for environmental assessment procedures in the province of Sindh. Public water supply projects (including water filtration or treatment plants) fall under Schedule III of these regulations. Given the scope of the proposed schemes, which are located within the perimeter of existing water treatment plant sites fully owned by the Promoter, the approval of an Environmental and Social Impact Assessment (ESIA) is not required. The approval of an Initial Environmental Examination (IEE) (or Environmental Checklist according to the terminology used by local environmental legislation) is deemed sufficient to fulfil the SEPA requirements.

If the Project schemes were located inside EU, they would likely fall either under Annex II (i.e. be subject to screening by the Competent Authority) or outside the scope of the Directive 2011/92/EU as amended by the Directive 2014/52/EU.

Therefore, according to the types of schemes expected to be implemented under the proposed operation, it is unlikely that they will require a full ESIA. In any case, if a scheme requires a full ESIA, its implementation will not start before receiving first all the necessary approvals from the Competent Authority. In this case, the Bank will also require from the Promoter to provide a full copy of the approved ESIA.

The proposed schemes are not located within or nearby nature conservation areas. Therefore, no negative impact on nature is foreseen. Nevertheless, their compliance with the Biodiversity and Habitats National Legislation, their alignment with the Habitats and Birds EU Directives (92/43/EEC, 2009/147/EC), with international conventions, which Pakistan has endorsed, and with the EIB Environmental Social Sustainability Framework (EIB ESSF) will be further checked during appraisal of individual schemes, before allocation and during their implementation.

An Environmental Management Framework (EMF) has already been prepared by the WB for the KWSSIP-1 project, and the Promoter intends to apply it also during the implementation of this project. The EMF is assessed as aligned with the EIB's environmental and social standards, and it will be used for screening the proposed individual schemes against EIB's ESSF. Under the EMF, Environmental and Social Management Plans (ESMPs) have already been prepared for two schemes of the project (Pipri Old and Gharo water treatment plants).



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Environmental Impacts

The project contributes to the protection of surface water bodies as well as the more rational and sustainable use of surface water resources by improving the efficiency of the water treatment infrastructure, including reduction in energy consumption and water losses, and improvement in treated water quality compliance.

Due to the nature of the investments, the schemes are expected to have only minor and temporary negative environmental impacts during construction phase. Negative environmental impacts are associated with the period of construction only and are considered localised and temporary: (i) dust and air emissions, (ii) impacts on water or soil in case of mismanaged waste and (iii) noise and vibrations.

Climate Change

The Project will have a contribution to Climate Change Mitigation by achieving reduction in greenhouse gas (GHG) emissions. These savings are due to the increased energy efficiency of the new treatment equipment as well as the use of renewable energy generated by photovoltaic panels (PV) within the treatment plant sites.

The Project is also expected to contribute to Climate Change Adaptation by improving the availability and security of the drinking water supply to the city of Karachi.

In terms of Climate Risk Vulnerability Assessment (CRVA) studies, the WB has already prepared such studies for other schemes which are included under the KWSSIP-2 program, have a similar climate risk profile and are located close (within the service area of the Promoter) to the schemes financed under this operation. Therefore, it was considered as acceptable to apply these CRVAs to the suggested schemes under this operation. All the schemes will be required to incorporate in their designs the necessary measures to mitigate physical climate risks, as identified in the abovementioned CRVAs, and therefore the operation is considered as adapted to Climate Change.

Carbon Footprint

Framework loans are not covered by the EIB's Carbon Footprint Exercise. Each scheme will be included in the carbon footprint exercise if emissions are above the threshold.

EIB Paris Alignment for Counterparties (PATH) Framework

The counterparty is in scope and screened out of the PATH framework, because it is not considered high emitting nor high vulnerability.

Social Assessment

The proposed schemes are designed to improve the livelihoods of the affected population by providing access to safe and high quality water supply. They aim to improve public health by reducing waterborne diseases as well as to increase safe access to drinking water for all residents, especially the underserved segment of the population.

The schemes under consideration are not anticipated to involve any land acquisition. New infrastructure will be developed solely within the boundaries of existing treatment plant sites, all of which are fully owned by the Promoter. The civil works related to the modernization of these infrastructures are not expected to result in any involuntary displacement, whether physical or economic, of residents or users.

Furthermore, schemes that result in permanent displacement will not be eligible for financing under the EIB loan.

The Promoter has prepared several social safeguard-related plans for both KWSSIP-1 and 2 programmes, which are applicable to the project.



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Among these, a Social Management Framework (SMF) was developed at the outset of the programme, and more recently, Labour Management Procedures have been established.

The Promoter has gained experience in applying international good practices, particularly those aligned with World Bank standards, including provisions related to Occupational Health and Safety (OHS). Specific requirements consistent with EIB standards and the project's Labour Procedures will be incorporated into the terms of all works contracts. Labour and OHS practices will be subject to regular monitoring and reporting. A review of one or more schemes will be carried out to assess whether any adjustments or additional measures are required.

In addition, the Promoter will adopt measures for the prevention and mitigation of sexual harassment prior to the engagement of Project workers.

Public Consultation and Stakeholder Engagement

A Stakeholder Engagement Plan (SEP) was prepared by the Promoter for the KWSSIP-1 and KWSSIP-2 projects, and it will also be applicable to this project. A Grievance Mechanism Framework, developed as part of the Social Management Framework (SMF), has likewise been established. Both the stakeholder engagement approach and the grievance mechanism will be adapted, as needed, to reflect the specific characteristics of each scheme allocated under the EIB financing.

Other Environmental and Social Aspects

The Promoter has prior experience in managing projects that comply with environmental and social standards, (namely, the World Bank standards). A Project Implementation Unit (PIU) is already in place for the management of the KWSSIP-1 project, and it is expected that the same PIU will continue to manage the implementation of this project. The PIU will be supported by an experienced external consultant for project management and supervision. Additionally, for the preparation, supervision, and monitoring of each scheme, the Promoter will be assisted by a Technical Assistance consultant managed by the EIB and expected to be funded by the EU Delegation in Pakistan. The promoter will be subject to environmental and social reporting requirements, in line with EIB standards.

Conclusions and Recommendations

The project contributes towards the fulfilment of UN Sustainable Development Goals (SDGs), particularly SDG 6 "Clean water and sanitation", SDG 11 "Sustainable Cities and Communities" and SDG 13 "Climate Action".

Overall, the project has positive net social and environmental benefits. The negative impacts expected from the schemes are mainly construction related, that means minor and temporary ones and thus they can be addressed through adoption of good engineering practices and appropriate mitigation measures during project implementation.

Conditions related to first disbursement

- The Promoter shall have established and staffed, with personnel of adequate qualifications and experience, an environmental and social management team or unit responsible for the implementation, monitoring, and reporting of all Environmental and Social management plans, as a condition precedent to first disbursement.



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Conditions related to each allocation:

- The Promoter shall ensure that an Environmental and Social Management Plan (ESMP) is in place for each scheme, in accordance with EIB standards.
- The Promoter shall ensure that the Stakeholder Engagement Plan (SEP) and Grievance Mechanism are adapted as necessary to address the specific environmental and social characteristics of each scheme. The Promoter shall submit these documents for review and approval prior to the financing of any sub-project

The following undertakings shall be included in the finance contract:

- The promoter shall not commit EIB funds to schemes triggering permanent involuntary resettlement.
- Unless a scheme to be financed by EIB is already covered by a Climate Risk Vulnerability Assessment (CRVA) prepared under the KWSSIP-2 programme and to the Bank's satisfaction, before the first allocation request, the Promoter will prepare scheme-specific CRVAs satisfactory to the Bank's requirements. All the schemes financed by the Bank will include in their designs the necessary measures to mitigate identified climate risks (if required).
- The Promoter shall not allocate any EIB funds to schemes that require an ESIA study or a Nature/Biodiversity (Appropriate) Assessment under applicable laws without first obtaining either the consent from the competent authority or a screening-out decision. Additionally, the Promoter shall ensure that the ESIA is submitted to EIB for publication on the Bank's website prior to commitment
- The Promoter shall store and maintain updated the relevant environmental and social management documents to be provided to the Bank upon request. In case the EIB requires such documentation, the promoter shall provide all documents requested promptly.
- The Promoter undertakes to ensure that labour and Occupational Health and Safety (OHS) practices are subject to regular monitoring and reporting throughout the project. The Promoter shall conduct a review of one or more schemes, as appropriate, to assess the effectiveness of these practices and determine if any adjustments or additional measures are necessary. Any such adjustments or measures will be implemented promptly to ensure full compliance with EIB standards and the project's Labour Procedures.
- The Promoter undertakes to adopt and implement measures for the prevention and mitigation of sexual harassment prior to the engagement of Project workers. These measures will be aligned with international best practices and in accordance with EIB standards. The Promoter commits to ensuring that all workers are informed of these measures and that appropriate training and mechanisms for reporting and addressing complaints are established and maintained throughout the project
- The Promoter shall submit regular reports on the implementation of the Environmental and Social Management Plans, as well as any other relevant environmental and social aspects of the project, to the Bank. These reports will include necessary information to demonstrate compliance with the EIB environmental and social standards.

Considered the above, the project is acceptable for EIB financing from an environmental and social point of view.