REPUBLIC OF UZBEKISTAN

Joint-Stock Company
UZTRANSGAZ

UZBEKISTAN GAS LEAK REPAIR FACILITY

(P508941)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

[BORROWER APPROVAL AND DISCLOSURE DATE]

November 2025

Table of Contents

Abbreviations and Acronyms

CE	-	Citizen Engagement
DSEI	-	Draft Statement of Environmental Impact
ESCP	-	Environmental and Social Commitment Plan
ESMF	-	Environmental and Social Management Framework
ESF	-	Environment and Social Framework
ESS	-	Environmental and Social Standards
EHSG	-	Environmental, Health and Safety Guidelines
ESIA	-	Environmental and Social Impact Assessment
FM	-	Financial Management
GBV	-	Gender Based Violence
GOU	-	Government of Uzbekistan
GRC	-	Grievance Resolution Committee
GRM	-	Grievance Redress Mechanism
GFC	-	Grievance Focal Point
IA	-	Implementing Agency
IPF	-	Investment Project Financing
ISR	-	Implementation Status and Results
LMP	-	Labor Management Procedures
LC	-	Labor Code
MEF	-	Ministry of Economy and Finance
M&E	-	Monitoring and Evaluation
NGO	-	Non-Governmental Organization
OHS	-	Occupational Health and Safety
OIPs	-	Other interested parties
PAPs	-	Project-affected parties
PDO	-	Project Development Objectives
PPE	-	Personal Protective Equipment
PIU	-	Project Implementation Unit
SEP	-	Stakeholder Engagement Plan
SEA/SH		Sexual Exploitation and Abuse/Sexual Harassment
UGLRFP		Uzbekistan Gas Leak Repair Facility Project
UTG	-	Uztransgas
WMP	-	Waste Management Plan

Executive Summary

1. Uzbekistan Gas Leak Repair Facility Project aims to reduce fugitive methane emissions and strengthen asset management capacity in state-owned companies in the gas sector of Uzbekistan. The project will establish a recipient-executed financial Facility under the Ministry of Economy and Finance (MoEF) for leak repair of existing assets of state-owned gas transmission operator Uztransgas (UTG). The financial Facility will start with an initial USD 10 million grant from the GFMR trust fund. The money will be allocated by the MoEF to a series of repair activities to reduce fugitive emissions of methane. The proposed repair activities will be submitted by the SOEs on a rolling basis, according to pre-agreed eligibility criteria. Proposed activities will be prioritized based on cost, complexity, impact, and other relevant criteria to maximize net benefits. Activities will also include investments in the capacity of the SOEs to carry out monitoring, reporting and verification of methane emissions in line with the OGMP 2.0 standard. A key aspect of the financial Facility will be that a portion of the financial savings resulting from recovery of gas previously lost in form of fugitive emissions, will be reinvested in the Facility to ensure the mobilization of additional capital. This means that the proposed approach can be scaled up and progressively cover the needs for rehabilitation of the entire state-owned gas sector. Eligible activities within the scope of the Facility, initially financed from the GFMR Grant, will only include repair work at gas compressor stations of the UTG high-pressure asset base, and the purchase and installation of cluster meters, methane emission metering equipment, small repair equipment (e.g. connectors, valves, small pipe sections), adequate clothing and PPE for LDAR crews, as well as contract services for the leak repair program.

2. **The UGLRFP comprises the following 3 components**

   - **Component A:** Activities financed by the project comprise repair of legacy gas infrastructure according to the original design specification, including replacement of small parts that are beyond repair.
   - **Component B:** investment in capacity building of UTG to carry out monitoring, reporting and verification (MRV) of methane emissions.
   - **Component C**: Establishing and overseeing the financial facility, as well as procuring consultancy services to support project implementation.

3. The project will be implemented across the entire Republic of Uzbekistan. It focuses on reducing fugitive methane emissions and strengthening asset management capabilities in state-owned entities within Uzbekistan's gas sector.

4. This Environmental and Social Management Framework (ESMF) has been prepared to identify the potential environmental and social risks and impacts of proposed Project activities and propose suitable mitigation measures to manage these risks and impacts. The ESMF sets out principles and implementation arrangements, including robust stakeholder engagement, grievance redress, and labor and working conditions management. It outlines the Uzbekistan laws and regulations, as well as the World Bank policies applicable to the Project, and describes the principles, approaches, implementation arrangements, and environmental and social mitigation measures to be followed.

5. This ESMF is prepared in accordance with the World Bank Environmental and Social Framework (ESF), specifically addressing ESS1, ESS2, ESS3, ESS4, ESS8, and ESS10, as relevant to the project.

6. The potential environmental and social risks for project activities and its mitigation measures are identified as:

7. The project’s environmental and social risks are both rated as Moderate. Environmental impacts are expected to be limited, reversible, and mainly associated with small-scale works within existing gas

infrastructure. The project will significantly reduce methane emissions, improving air quality and safety. Risks such as minor waste, noise, dust, and potential contamination from small pipeline leaks can be managed with standard mitigation measures. Occupational health and safety will be addressed through compliance with regulations and World Bank guidelines, and UTG will enhance its management capacity with consultant support. No new Environmental Impact Assessment (EIA) is required.

8. Social risks are also moderate, with no anticipated physical or economic displacement since activities are restricted to existing facilities and corridors. Main concerns include potential gas leaks or explosions, worker safety, possible labor influx causing social tensions or disease risk, and the risk of excluding vulnerable groups from project benefits. In addition to environmental outcomes, the project will enhance community health and safety by reducing risks of gas leaks and potential explosions near settlements. These will be managed through effective stakeholder engagement, social assessments, and implementation of plans such as the Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP). Although labor influx is expected to be limited, it may heighten risks of communicable disease transmission and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH). To address these risks, the GRM will incorporate a confidential, survivor-centered SEA/SH reporting pathway with clear procedures for timely referral, protection of complainant privacy, and non-retaliation. Minor risks to road traffic and pedestrians will be mitigated by adhering to safety regulations, ensuring vulnerable groups are protected.

9. **Implementation Arrangements.** Project implementation is managed by Uztransgaz (UTG), which is the project's Implementing Agency (IA). The Borrower (the Republic of Uzbekistan, through the Ministry of Economy and Finance (MoEF)) oversees the financial facility. UTG is supported by a Project Implementation Unit established within the relevant government agencies. This unit is responsible for overall project execution, including financial management, monitoring and evaluation, and ensuring compliance with environmental and social safeguards. The Project Implementation Unit prepares semiannual progress reports on environmental and social matters.

10. The UTG is responsible for the preparation and implementation of the ESMF on base of the requirements of the WB for Investment Project Financing (IPF) operations. Among its responsibilities are the preparation, implementation, and oversight of environmental and social instruments such as the Environmental and Social Commitment Plan (ESCP), Environmental and Social Management Framework (ESMF), Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), and Grievance Redress Mechanism (GRM). The PIU of the UTG will prepare semiannual E&S Progress reports in accordance with the ESCP and submit them to the WB within the stipulated timelines.

11. The estimated budget for the ESMF implementation is part of the $10 million overall project funding, ensuring that adequate resources are allocated for environmental and social management. Training activity on ESMF:

    - Identifying all parties that require training (e.g., PIU members, contractors, etc.).
    - Developing training materials that cover the ESMF's requirements, which might include compliance with environmental regulations, social impact mitigation strategies, reporting procedures, and emergency response protocols.
    - Organizing training sessions, which could be in-person workshops, online courses, or a combination of both (it would be identified during the Project implementation).
    - Evaluating the effectiveness of the training through assessments or feedback mechanisms.

12. Allocating $25,500 only for ESMF training suggests a commitment to ensuring that all parties responsible for project implementation are well-informed to manage environmental and social risks effectively. In

implementing the training, it's important to consider not only the initial rollout but also how knowledge will be sustained and updated throughout the life of the project. The allocated budget should reflect this by possibly setting aside part of those funds for ongoing training and updates to the ESMF as the project progresses.

13. **Monitoring.** The Project Implementation Unit conducts regular site visits and monitoring, tracks project performance, and prepares biannual progress reports. These reports cover the implementation of environmental and social risk management measures, occupational health and safety, community health and safety, stakeholder engagement, public notifications, project progress, and a summary of grievances received. A mid-term review is scheduled to be conducted by the World Bank. Grievances and beneficiary feedback are systematically tracked as part of the monitoring process. In the event of a serious incident, the World Bank is notified within forty-eight hours. Upon completion of project activities, the Project Implementation Unit reviews progress, prepares a completion report, and submits it to the World Bank.

14. Through the PIU, UTG will be responsible for (1) collecting and consolidating all data related to their specific suite of indicators; (2) evaluating results; (3) providing the relevant performance information to the World Bank, and relevant stakeholders; and (4) reporting results to the World Bank immediately before each semi-annual supervision mission. Each department of the UTG and other institutions engaged in project activities and the PIU will perform their project-related functions. Each institution will also appoint a focal point to ensure the timely provision of project implementation updates and monitoring data.

15. A separate **Stakeholder Engagement Plan** (SEP) has been prepared for the Project, based on the WB's Environmental and Social Standard 10 on Stakeholder Engagement. The SEP details all types of grievance redress mechanisms and contact details. The SEP can be found here on the UTG's website, providing a transparent and iterative process for community and stakeholder feedback throughout the project lifecycle: The SEP can be found here: https://www.utg.uz/en/open-information/ . In addition, the project-level GRM will offer multiple channels (phone, email, in-person; accessible formats), acknowledge complaints within 3 working days, and resolve within 15 working days, with appeals and confidentiality/risk-based handling for SEA/SH.

1. Introduction

16. The Environmental and Social Management Framework (ESMF) has been carefully developed to provide a comprehensive approach to environmental and social due diligence for all activities financed by the World Bank under the Uzbekistan Gas Leak Repair Facility Project. This project is designed to address two critical challenges within Uzbekistan's gas sector: the reduction of fugitive methane emissions, which contribute significantly to greenhouse gas emissions and environmental degradation, and the strengthening of asset management practices among state-owned companies. By focusing on these priorities, the project seeks to improve both the environmental sustainability and operational efficiency of the sector.

17. To facilitate these objectives, the project will establish a dedicated financial Facility, which will be recipient-executed and managed under the auspices of the Ministry of Economy and Finance (MoEF). This Facility will specifically support the repair of leaks in existing infrastructure operated by Uztransgas (UTG), the state-owned gas transmission company. Through targeted investments in leak detection and repair, the project aims to deliver measurable reductions in methane emissions while also enhancing the long-term reliability and safety of Uzbekistan's gas transmission assets. This ESMF applies to all activities financed under Component A of the project. Covered activities include: (i) repair and replacement of small parts (e.g., valves, connectors, pipe sections) at existing compressor stations and facilities, confined within UTG-owned fences or established rights-of-way; (ii) purchase and installation of methane emission metering equipment, cluster meters, and related monitoring technology; and (iii) procurement of small repair equipment, PPE, and contracted services for LDAR. The ESMF also applies to Technical Assistance and implementation support under Components B and C, ensuring that the output is consistent with the Environmental and Social Standards. Activities listed in the Exclusion List are not eligible under this Project, including any greenfield construction, activities requiring land acquisition or causing physical/economic displacement, and any activity rated High or Substantial risk. Since the specific sub-project sites and activities (i.e., which leaks at which compressor stations) will be identified on a rolling basis during project implementation, this Framework establishes the principles, rules, and procedures for screening, assessing, and managing environmental and social risks. It will guide the preparation of site-specific Environmental and Social Management Plans (ESMPs) or ESMP Checklists for each sub-project activity once details are known.

18. The ESMF is fully aligned with the requirements of the World Bank's Environmental and Social Framework (ESF), ensuring that all project activities adhere to internationally recognized standards for environmental and social risk management. In addition, the ESMF complies with the relevant national, state, and local laws and regulations of Uzbekistan, reflecting a commitment to both global best practices and local legal requirements. The primary purpose of the ESMF is to systematically identify, assess, and mitigate any potential negative environmental and social risks and impacts that may arise during project implementation. By doing so, the ESMF ensures that the project not only achieves its technical and operational goals, but also safeguards the well-being of affected communities and the environment, in accordance with the Environmental and Social Standards (ESSs) of the World Bank ESF and Uzbekistan's regulatory framework. Specifically, the ESMF aims to:

    a) Assess the potential environmental and social risks and impacts of the proposed Project and propose mitigation measures;
    b) Establish procedures for the environmental and social screening, review, approval, and implementation of activities;
    c) Specify appropriate roles and responsibilities, and outline the necessary reporting procedures for managing and monitoring environmental and social issues related to the activities;

d) Identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF;
e) Address mechanisms for public consultation and disclosure of project documents, as well as redress of possible grievances;
f) Establish the budget requirements for the implementation of the ESMF.

19. This ESMF should be read in conjunction with other plans prepared for the project, including the Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), and Grievance Redress Mechanism (GRM). A project-level Grievance Redress Mechanism (GRM) is detailed in the SEP, and a worker-specific GRM is included in the LMP. These documents collectively ensure a comprehensive approach to managing the environmental and social aspects of the Project, promoting sustainable development and compliance with both World Bank and national standards.

2. Project Description

20. Uzbekistan Gas Leak Repair Facility Project (UGLFRP) aims to reduce fugitive methane emissions and strengthen asset management capacity in state-owned companies in the gas sector of Uzbekistan. The project will establish a recipient-executed financial Facility under the Ministry of Economy and Finance (MoEF) for the repair of leaks in existing assets of the state-owned gas transmission operator Uztransgas (UTG). The financial Facility will start with an initial USD 10 million grant from the GFMR trust fund. The money will be allocated by the MoEF for a series of repair activities aimed at reducing fugitive emissions of methane. The proposed repair activities will be submitted by the SOEs on a rolling basis, in accordance with pre-agreed eligibility criteria. Proposed activities will be prioritized based on cost, complexity, impact, and other relevant criteria to maximize net benefits. Activities will also include investments in the capacity of the SOEs to carry out monitoring, reporting, and verification of methane emissions in line with the OGMP 2.0 standard. A key aspect of the financial Facility will be that a portion of the financial savings resulting from the recovery of gas previously lost in the form of fugitive emissions will be reinvested in the Facility to ensure the mobilization of additional capital. This means that the proposed approach can be scaled up and progressively cover the needs for rehabilitation of the entire state-owned gas sector. Eligible activities within the scope of the Facility, initially financed from the GFMR Grant, will only include repair work at gas compressor stations of the UTG high-pressure asset base, and the purchase and installation of cluster meters, methane emission metering equipment, small repair equipment (e.g. connectors, valves, small pipe sections), adequate clothing and PPE for LDAR crews, as well as contract services for the leak repair program.

21. The proposed operation aims to contribute to the World Bank's goal of reducing poverty and boosting shared prosperity on a livable planet. By supporting investments in reducing methane emissions from gas infrastructure, the proposed operation will contribute to mitigating global and local environmental impacts, reducing the average cost of gas supply and the subsidy burden to the GoU, and improving security of gas supply. The operation will directly contribute to the improvement of living standards of Uzbek people. It will also help improve the competitiveness and sustainability of commercial businesses and industries, which are essential for job creation and poverty reduction.

22. The proposed operation supports the achievement of GoU's goals set in the updated Nationally Determined Contribution (NDC) 2021 and is aligned with the Paris Agreement. The GoU's new NDC target of reducing specific GHG emissions per unit of GDP by 35 percent by 2030 from the 2010 levels will be achieved through both energy efficiency improvement and large-scale renewable energy deployment. The

updated NDC under the United Nation Framework Convention on Climate Change highlights that the "introduction of energy saving technologies", "halving the energy intensity of GDP" and "increasing the share of renewable energy" are among the mitigation measures aligned with the national policies of Uzbekistan. The operation aims to promote climate change mitigation by improving efficiency of the gas network resulting in a decrease in GHG emissions.

23. The operation is aligned with its Climate Change Action Plan (CCAP) 2021-2025 and the Uzbekistan Country Climate and Development Report CCDR 2023. The energy sector, which accounted for 74% of GHG emissions in Uzbekistan in 2019, is a primary focus for decarbonization efforts. This operation will address the 850 million cubic meters of technical gas losses per year from the gas infrastructure. It is estimated that some 40 percent of these methane emissions (approx. 140 million m3) can be abated with relatively straightforward interventions.

24. **Implementation Agency:** UTG will be the Project's implementing agency. UTG is both the recipient and beneficiary of the GFMT grant and will act as the project implementing entity. UTG is the implementing agency for the project and has overall responsibility for project implementation, including fiduciary, monitoring and evaluation, and environmental and social safeguards. UTG will be supported by a Project Implementation Unit (PIU) responsible for overseeing overall project implementation and ensuring the active engagement of the relevant project stakeholders at the national and local levels. The PIU will include civil servants and contracted consultants, including one Environmental Specialist and one Social Specialist and will provide day-to-day support for project implementation. The PIU will oversee and monitor all Project operating costs and logistics, all in coordination with UTG management. The UTG holds responsibility for both the preparation and implementation of the ESF, as well as for meeting the World Bank's requirements for Investment Project Financing (IPF) operations. This includes developing, executing, and overseeing a range of environmental and social instruments, such as the ESCP, ESMF, SEP, LMP, and the Grievance Redress Mechanism (GRM).

25. Within UTG, the PIU is tasked with preparing semiannual Environmental and Social (E&S) Progress Reports in accordance with the ESCP. These reports must be submitted to the World Bank within the specified deadlines. Additionally, all matters related to labor management will be systematically documented as part of the project's progress reporting requirements. The PIU's Social Specialist will be responsible for tracking and managing these labor-related issues, as outlined in the project's ESCP.

26. **The UGLRFP comprises the following 3 components:**

    A. **Activities financed by the project comprise repair of legacy gas infrastructure according to the original design specification, including replacement of small parts that are beyond repair (Component A).** The work will be confined within the fence of facilities owned and operated by UTG. Notably, this implies that project funds will not be used to carry out work on third-party land. As and when gas leaks are detected, gas leak repair activities will be proposed for funding through the Facility by UTG on a regular basis according to pre-agreed eligibility criteria and prioritized based on the estimated cost vs. the expected emission reduction potential. To ensure transparency and independent oversight, all proposed activities for funding by the Facility will be submitted to MEF for review. Periodically, UTG will report gas savings resulting from leak repair according to a pre-agreed protocol, and a pre-agreed portion of the resulting financial savings over a pre-agreed period will be set aside for re-investment in the Facility. Component A also includes procurement of detection, measurement, and monitoring equipment, personal protection equipment for working on-site, and digital solutions for monitoring emissions.

B. **Furthermore, the project scope includes investment in capacity building of UTG to carry out monitoring, reporting and verification (MRV) of methane emissions** in line with international standards and best practices in the oil and gas industry, in particular the Oil and Gas Methane Partnership (OGMP) 2.0 gold standard **(Component B).**

C. **The financial Facility itself will be established and monitored by MoEF to ensure transparency and independent oversight of financial flows between state(-owned) entities.** MoEF will appoint a representative who will review proposed repair activities for funding through the Facility and countersign all financial transactions from the Facility. UTG will be the proposed Implementing Agency for the World Bank project and will be responsible for day-to-day project management, including monitoring and evaluation and progress reporting, procurement, financial management including financial reporting, and management of environmental and social and other risks. The project will include a small component for procurement of consultancy services by the Implementing Agency to support project implementation as and when needed **(Component C).**

27. **Project Location.** The project is planned for implementation throughout the Republic of Uzbekistan. Its primary objectives are to reduce fugitive methane emissions and to enhance the asset management capabilities of state-owned enterprises operating within Uzbekistan's gas sector. By targeting these areas, the project aims to contribute to environmental sustainability and improve the operational efficiency of key entities in the country's energy industry. Please see Figure 1.

Figure 1: Map of Uzbekistan and Neighboring Countries

3. Environmental and Social Policies, Regulations, and Laws

3.1 Uzbekistan Legal Framework

28. The proposed Project will be implemented in compliance with applicable environmental and social laws and regulations. This chapter presents an overview of the major national environmental and social laws and regulations that are relevant and may apply to activities supported by the project, and World Bank's ESF and Environmental and Social Standards (ESSs).

Table 3.1. Uzbekistan Relevant Legal Framework

Law	Description and Relevance to Project Activities
Constitution of the Republic of Uzbekistan (amended 30.04.2023)	Focuses on human and civil rights emphasizing equality before the law and the inalienability of human rights, crucial for ensuring non-discrimination and equity in project implementation. **Article 19.** All citizens of the Republic of Uzbekistan shall have the same rights and freedoms and shall be equal before the law, without discrimination by sex, race, ethnicity, language, religion, convictions, social origin, and social status. **Article 20.** A citizen of the Republic of Uzbekistan and the state shall be bound by mutual rights and duties. **Article 21.** Every person has the right to the free development of his or her personality. No one shall be subjected to an obligation not established by law without his or her consent.
The Law "On nature protection" #754-XII dated 09.12.1992.	This Law states legal, economic, and organizational bases for the conservation of the environment and the rational use of natural resources. Its purpose is to ensure balanced relations between man and nature, to protect the environmental system, and to guarantee the rights of the population to a clean environment. Article 25 of this law states that State Environmental Expertise (SEE) is a mandatory measure for environmental protection, preceded by a decision-making process. In addition, article 25 says that the implementation of the project without a positive conclusion of SEE is prohibited.
The Law "On environmental control" #363-dated 27.12.2013	The purpose of this Law is to regulate relations in the field of environmental control. The main objectives of environmental control are (i) prevention, detection, and suppression of violation of the requirements of legislation in the field of environmental protection and rational use of natural resources;(ii) monitoring the state of the environment, identifying situations that can lead to environmental pollution, irrational use of natural resources, create a threat to life and health of citizens; (iii) determination of compliance with the environmental requirements of the planned or ongoing economic and other activities; (iv) ensuring compliance with the rights and legitimate interests of legal entities and individuals, performing their duties in the field of environmental protection and rational use of natural resources
The Law "On Protection of the Atmospheric Air" # 353-I-dated 27.12.1996.	Defines the issues of preservation of the natural state of the atmospheric air; legal regulation of the activity of state bodies, enterprises, institutions, organizations, public associations, and citizens in the field of protection of the atmospheric air

The Waste Act 362-II dated 05.04.2002#	Regulates waste management and empowers the State Environmental Committee to inspect, coordinate, assess the environment, and establish certain parameters for those places where waste can be disposed of.
Law on Environmental Expertise	Provides for mandatory examination of the impact on the environment and human health, and also serves as a legal basis for the examination
The Law on Environmental Control #73-II dated 25.05.2000	Regulates relations in the field of environmental protection. The main objectives of environmental control are prevention, detection, and suppression of violations of environmental legislation; monitoring of the environmental situation and factors that may lead to environmental pollution, irrational use of natural resources, threat to the life and health of citizens
Labor code and employment law (amended 28.10.2022)	These two documents are the main legislations regulating labor relations of individuals employed with labor contracts by enterprises, institutions, and organizations of all types of ownership forms, including those contracted by individuals. These legislations consider the interests of employees and employers to provide the efficient function of the labor market, just and secure labor conditions, protect labor rights and employees' health, promote the growth of labor productivity, increase work quality, raising this matter of welfare and social livelihood level of the population
Resolution of the President of the Republic of Uzbekistan#RP-51, dated 11.02.2025	On improving the efficiency of using funds from international financial institutions and foreign government financial organizations to achieve the goals set in the "Uzbekistan - 2030" strategy, and on selecting projects aimed at priority social, infrastructure and environmental protection and developing a green economy, qualitative preparation and assessment of pre-project documentation, acceleration of project implementation, and radical improvement of monitoring and post-monitoring systems.
Decree of the President of the Republic of Uzbekistan No. PF-6277 "On providing financial assistance to low-income families and measures to further expand the scope of fighting poverty".	The main purpose of this Decree is to direct the system of allowances for the development of children's potential and poverty reduction by enhancing the efficiency of support for families raising children, increasing the material support for families in need of social protection and support, implementing internationally recognized standards, and automated transparent electronic mechanisms for assessing families in need.
Decree of the President of the Republic of Uzbekistan No. PF-82 "On complex measures to provide quality social services and assistance to the population and its effective control system".	The main objective of this Decree is to ensure the interests and rights of citizens to social protection, significantly improve the quality of social services provided to the population and introduce an entirely new management system based on advanced international standards in this sphere.

Decree of the President of the Republic of Uzbekistan No. PF-128 “On additional measures for financial support of population straits in need of social protection”	This document was adopted to ensure the consistency of measures aimed at increasing the standard of living of the population, providing social protection and material support to citizens, indexing their incomes according to the inflation rate, and ensuring that the amount of relevant social payments is not less than the value of minimum consumption expenses.

29. **Normative documents on nature protection, organization of workplaces, including on construction sites**.

Many important aspects of public administration, use and protection of nature and agricultural plants are regulated, for example, by the Cabinet of Ministers through different by laws:

- Law "On Industrial Safety of Hazardous Production Facilities" (No. ZRU-57) *(law regulates safety at hazardous facilities (like compressor stations). It mandates certification, emergency planning, and state supervision, which are directly relevant to the project's "gas leak repair" activities.);*
- Law "On Subsoil" (No. 444-II, dated December 13, 2002) *(Relevant for any excavation or works affecting the subsurface;*
- Law "On Fire Safety" (No. ZRU-226);
- Additional measures to improve the beautification of Uzbekistan's population centres (No. PP-1045, 22 January 2009);
- On the approval of the rules for the organization of works on the improvement of residential areas in view of modern architectural and town-planning requirements (PKM № 59, 09.03.2009);
- "Procedure for the development and execution of draft standards for maximum permissible discharges of pollutants discharged into water bodies, including sewage" (RD118.0027719.5-91);
- "Procedure for granting permission for special water use (RD 118.0027714.6-92);
- State standard - Water quality. O'z DST 951:2011 - Sources of centralized domestic and drinking water supply. Hygiene, technical requirements and selection rules;
- "Temporary recommendations on control over groundwater protection in the Republic of Uzbekistan". State Committee on Nature Protection and Uzbekhydrogeology of the Republic of Uzbekistan, Tashkent, 1991;
- Resolution of the Cabinet of Ministers "On Approval of the Regulation on State Environmental Control" (No. 49, 3.04.2002);
- Fire Safety Rules (approved by Cabinet of Ministers Resolution No. 649, dated Oct 20, 2020);
- SanPiN RUz № 0179-04 Hygiene standards. List of Maximum Permissible Concentrations (MPCs) of Pollutants in the Air of Residential Areas in the Republic of Uzbekistan, including Annex 1;
- KMK 3.01.02-00 "Safety measures in construction". *(Primary safety norm for construction sites in Uzbekistan and its absence is a significant gap for Component A repair works.);*
- SanPiN RUz No. 0267-09 Permissible noise level in the residential area, both inside and outside the buildings;
- SanPiN No. 0120-01 "Sanitary standards of permissible noise levels at workplaces";
- Sanitary Regulations and Norms No. 0122-01 "Sanitary Regulations on Local Vibration at Workstations";
- SanPiN RUz № 0088-99 Sanitary requirements for the development and approval of projects of maximum allowable discharges (MPD) of substances entering water bodies with waste water;
- SanPiN RUz № 0321-15 Hygienic classification of toxicity and hazard;

- "Regulation on the procedure of burial of toxic chemicals and other toxic substances, as well as protection and maintenance of special grounds" (registered with the Ministry of Justice under No. 2438 of 20.03.2013);
- Resolution of the Cabinet of Ministers of the Republic of Uzbekistan of 24.03.1995
- Resolution of the President of the Republic of Uzbekistan of 16.03.2017 NPP-2841
- GOST-23941-79 "Noise. Measurement methods";
- "Methodical guidelines for measuring and hygienic assessment of noise at workplaces" No. 1844-78;
- SanPiN No. 0046-95 "Maximum permissible concentrations (MPC) of harmful substances in the air of the working zone";
- Procedure for the development and approval of design standards for maximum permissible concentrations in water bodies, including drainage water" (RD 118.0027719.5-91);
- Permit for special water use" (RD 118.0027714.6-92);
- Instruction on determining the damage caused to the national economy by groundwater pollution". (PP 118.0027719.5-91) (PARAS. 118.0027714.47-95);
- Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 226 dated March 16, 2019 on “approval of safety rules in the gas industry”;
- Order of the Head of the State Inspectorate of the Republic of Uzbekistan for Supervision of Safety in Industry, Mining and the Public Utilities Sector, dated 04.12.2008 No. 279 "ON APPROVAL OF SAFETY REQUIREMENTS FOR DRILLING EQUIPMENT FOR THE OIL AND GAS INDUSTRY";
- Sanitary Regulations No. 0289-10. Sanitary rules and hygienic requirements in the organization of construction and construction;
- Sanitary rules and standards for the maintenance and improvement of residential areas in the conditions of the Republic of Uzbekistan (Sanitary Rules and Regulations No. 0329-16).

3.2 National Environmental and Social Assessment and Permitting

30. Key regulatory processes encompass Environmental Impact Assessments (EIAs) and the fulfillment of permit requirements, both of which are administered by the relevant national authorities. These procedures are designed to ensure that projects adhere to established environmental standards and safeguard public safety throughout their implementation.

31. **Responsible Agencies:**

- **Ministry of Ecology, Environmental Protection, and Climate Change** – Oversees environmental safety and management of waste, contributing to improved living standards and ecological conditions.
- **Ministry of Employment and Poverty Reduction** – in the frame of the project responsible for compliance with labor legislation, employment regulations, labor safety, compulsory employer liability insurance legislation, and legislation on social protection of persons with disabilities regarding the creation of work conditions for individuals with disabilities to ensure unhindered access to social infrastructure facilities, as well as the use of all types of transportation, transport communications, public communication and information facilities, are mandatory for implementation by state and economic management bodies, local government bodies, and other organizations, as well as individuals acting as employers.
- **Ministry of Economy and Finance** – responsible for developing priorities for the socio-economic development of the country in the medium and long term, in the budget, tax and customs-tariff spheres, as well as in the financial market, insurance, citizens’ rights, pension provision, accounting and financial reporting, financing of budget organizations and budget recipients, setting prices for

goods and services of monopolistic enterprises, implementing the functions of ensuring the achievement of strategic macroeconomic indicators and parameters of the State budget of the Republic of Uzbekistan is the executing authority.

- **Ministry of Investments, Industry and Trade** – In cooperation with the Ministry of Economy and Industry of the Republic of Uzbekistan, as well as other ministries, departments, and economic entities, the project initiators organize a monitoring system to track the progress of implementation of state development programs and investment programs, including investment projects involving foreign investments and loans. This system identifies systemic issues hindering the timely implementation of investment projects and develops proposals based on this for improving investment processes.
- **Ministry of Justice** – the development and support of activities of non-governmental non-profit organizations, as well as the further enhancement of international legal cooperation, the intensification of activities in ensuring the legal protection of the interests of the Republic of Uzbekistan in international and foreign organizations.
- **Civil society groups and NGOs on districts,** national, and local levels that pursue environmental and socio-economic interests and may become partners of the project – overall, private provision of social services in Uzbekistan is very low, owing to regulatory barriers and limited capacity of Civil Society Organizations (CSOs) and non-governmental organizations (NGOs) to operate at scale and low utilization of their services by local authorities. At the same time, there are few examples of CSOs providing innovative services for various vulnerable groups, but at a limited scale (such as the Youth Social and Legal Rehabilitation Center for Persons with Disabilities in Tashkent “Millennium”). The Law on Social Partnership was adopted in 2014, but its implementation remains limited, especially in the area of social service provision, because of the low utilization of local authorities' services. Regulatory barriers that prevent potential providers of social services from registering as NGOs make them seek other forms of becoming established legal entities (such as for-profit entities). This, in turn, limits the ability of local authorities to work with them. Overall, information about private provision of social services is limited and a comprehensive database of providers does not exist.

32. The National environmental impact assessment (EIA) procedure is regulated by the Law on Environmental Expertise (2000), updated on 14.09.2017, and the Cabinet of Ministers Resolution No. 541 of 07.09.2020: "On further improvement of the environmental impact assessment mechanism". In accordance with Article 3 of the above-mentioned law, an environmental impact assessment is carried out in order to identify:

    - Compliance of planned economic and other activities with environmental requirements at the stages preceding the decision on their implementation;
    - The level of environmental hazard from planned or ongoing economic and other activities that may have or have had a negative impact on the environment and public health;
    - Adequacy and validity of measures provided for environmental protection and rational use of natural resources.

33. The specially authorized state body in the field of state environmental expertise is the Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan (MEEPCCH).

34. The Center for State Environmental Expertise carries out the state environmental expertise of the EIA of economic activities objects belonging to Category I and II of environmental impact (high and medium risk);

35. Territorial Centers of the State Ecological Expertise carry out environmental expertise of the EIA of objects of economic activities belonging to Categories III and IV of environmental impact (low and local risk).

36. Environmental impact assessment is a procedure that includes the next stages of the EIA:

- The Draft Environmental Impact Statement (DEIS) should be conducted at the planning stage of the proposed project prior to the allocation of development funds and contain the following sections:
- environmental conditions prior to the beginning of the planned activity, population of the territory, land development, analysis of environmental characteristics;
- a situational plan indicating the existing recreational zones, settlements, irrigation, reclamation facilities, farmlands, power lines, transportation, water supply, gas pipelines and other information about the area;
- proposed (planned) main and auxiliary facilities, used machinery, technology, natural resources, materials, raw materials, fuel, analysis of their environmental impacts, environmental hazards of the products;
- expected emissions, discharges, wastes, their negative impact on the environment, and methods of neutralization;
- warehousing, storage, and utilization of wastes;
- the analysis of alternatives to planned or ongoing activities and technological solutions from the perspective of nature protection, taking into account the achievements of science, technology, and best practices;
- organizational, technical, and technological solutions and measures that exclude negative environmental consequences and reduce the environmental impact of the facility;
- analysis of emergency situations (with an assessment of their probability and a scenario to prevent their negative consequences);
- forecast of changes in the environment and environmental consequences as a result of the implementation of the object under the expertise;

37. **Project Categories.**

38. According to the Cabinet of Ministers Decree No. 541 of 07.09.2020: "On further improvement of the environmental impact assessment mechanism ". All types of environmental activities are divided into four categories with different degrees of impact:

- Category I - high risk of environmental impact (SEE is conducted by the “Center for State Environmental Expertise" within 20 days, all stages of the EIA are required);
- Category II - " medium risk of environmental impact" (SEE is conducted by the Center for State Environmental Expertise Center within 15 days, all stages of the EIA are required);
- Category III - "low risk of impact" (SEE is conducted by the regional branches of the Center of State Environmental Expertise within 10 days, all stages of the EIA are required);
- Category IV - "minor impact, local" (SEE is conducted by regional branches of the Center for State Environmental Expertise within 5 days.

39. All other subprojects that do not fall into specific categories are considered projects that do not have an environmental impact and do not require state environmental expertise or environmental licenses.

Table 3.2. Risk categorization

WB (High, Substantial, Moderate, and Low risk)	Uzbekistan (I-IV)

High risk	Category I
Substantial risk	Category II
Moderate risk	Category III-I
Low risk	IV

40. The SEE opinion is valid for three years from the date of its issuance. If a project is not implemented within three years from the date of issuing the opinion, the environmental assessment reports (PEIS or EIS) need to be revised and re-submitted to the CSEE for revision and approval.

41. The opinion of the SEE shall be shared with the relevant regional (city) Control Environmental Inspectorates for their follow up and supervision. Such Inspectorates under the MEEPCC supervise the compliance with the requirements and terms specified in the SEE's opinion.

42. The national Law "On Environmental Expertise" and RCM # 541 require preparation of the environmental assessment report for all type of activities which may have environmental impact. This project's civil works activities associated with installation of reference stations and laying out power cables fall under the Category IV (local impact) which includes "laying of optical fiber and other cables, installation of mobile antennas. Therefore, a Preliminary Environmental Impact Statement (PEIS) will be required prior commissioning of the construction works. PIU will ensure that PEIS is obtained before start of civil works.

43. The environmental appraisal will be valid for three years. If reconstruction/construction activities do not start until month, year, the revised version of PEISs will be submitted for approval to the branches of the MEEPCC. Mitigation measures identified in the PEISs are included in this ESMF.

44. State ecological expertise of objects of activities belonging to category IV of environmental impact is carried out on the basis of a questionnaire on environmental impact assessment (hereinafter referred to as the questionnaire) submitted by customers to the territorial branches of the State Ecological Expertise Center.

45. The questionnaire is filled out by the PIU in electronic form through the personal cabinet of the State Ecological Committee on the Internet and sent to the relevant regional branch of the State Ecological Expertise Center.

46. The State Ecological Expertise Center or its regional branch will analyze the documents submitted for state ecological expertise within one day and, if the documents are complete, decide to conduct a state ecological expertise and send the customer an agreement on conducting an ecological expertise by e-mail.

47. The state ecological expertise is carried out for objects of activities belonging to category IV of environmental impact within a period of no more than 5 calendar days. For activities belonging to category IV of environmental impact - 0.5 times the base calculation amount is to be charged.

48. According to the Resolution of the Cabinet of Ministers No. 541, public consultation meetings are required for the category I and II projects.

49. Prior to making a decision on including a sub-project, if any, in the program, PIU Environmental and Social Specialist will check on eligibility of the sub-project against the Exclusion List in this ESMF. After that, an environmental category of the project has to be defined in accordance with Resolution of Cabinet of Ministers No. 541 and World Bank ESS.

50. If the sub-project belongs to the category “substantial” (WB) equivalent to category I (Uzb), it has to be excluded from the Project. It is expected the supported sub-projects will not be related to the specified above circumstances and, respectively, will not have significant environmental and social impacts.

51. The potential impact of a project depends not only on the type of activity but also on the

52. Location of the sub-project. Thus, there are several types of locations that should be considered when making a decision to upgrade a project’s risk category:

    - in sensitive and valuable ecosystems or near wetlands, virgin lands, and habitats of endangered species
    - in or near areas with archaeological and/or historical sites or existing cultural and social institutions,
    - in densely populated areas where relocation might be needed or where a potential pollution impacts and other disturbances may significantly affect communities,
    - in regions subject to heavy development activities or where there are conflicts in the distribution of natural resources along watercourses, in recharge zones of aquifers or in catchment areas used to supply drinking water, and on lands or waters containing valuable resources (such as fisheries, minerals, medicinal plants, primary agricultural soils).

53. All documents and steps required for preparing a national Environmental Impact Assessment (EIA) can be accessed through the following: https://eco-service.uz/public/pages/main_conclusions?lang=uz. An EIA is only required for Categories I, II, and III. For Category IV, uploading a checklist to the system suffices.

3.3 World Bank Standards and Key Gaps with the National Framework

54. The project will follow the World Bank Environmental and Social Standards (ESSs), as well as the World Bank Group Environmental, Health and Safety Guidelines (EHSG). Based on these policies, the environmental and social risk of the project is categorized as a moderate risk category identified in the World Bank Environmental and Social Risk Summary (ESRS).

55. The overall environmental and social risk is classified as moderate, with the Environmental and Social Standards (ESSs) ESS1, ESS2, ESS3, ESS4, ESS8, and ESS10 considered relevant.

56. **Environmental Risk:** The project’s environmental risk is rated Moderate at concept stage, as impacts are expected to be limited, reversible, and site-specific. The project will deliver significant positive outcomes by reducing methane emissions (140 million m^3/year, ~2.7 $MtCO_2e$/year), improving air quality and community safety. Activities are restricted to small-scale civil works within existing infrastructure, with minor risks such as waste generation, localized noise and dust, and potential soil or groundwater contamination from small leaks. Occupational health and safety risks will be managed through national regulations and World Bank guidelines. Uztransgaz will strengthen its E&S management capacity through consultant support and training. Existing national EIA procedures are adequate, but a project-specific ESMF will be prepared to ensure alignment with World Bank standards.

57. **Social Risk:** The project’s social risk is assessed as Moderate. No physical or economic displacement is expected, as all activities will occur within existing facilities or right-of-way corridors. Key social risks include potential impacts on local communities from gas leaks or explosions, occupational health and safety risks for workers, possible labor influx leading to social tensions and increased pressure on local resources, and the risk of excluding vulnerable groups from project benefits. Health and safety risks may also affect nearby communities during repair and equipment installation. Effective stakeholder engagement and communication are essential to prevent misunderstandings and conflicts. Social assessments and stakeholder analysis will inform mitigation measures, such as a Stakeholder Engagement

Plan and Labor Management Procedures. Minor risks to road traffic and pedestrians may arise during certain project stages, which will be managed through adherence to ESMPs, safety regulations, and current legislation, with particular attention to avoiding disproportionate impacts on vulnerable groups.

58. The following Table 3 outlines the relevant World Bank ESSs applicable to the project, along with key gaps identified in comparison to the existing national framework and identifies key gaps and gap-filling measures. Where discrepancies exist between national legislation and World Bank ESF requirements, the project will apply the more stringent standard to ensure best practice in E&S risk management.

Table 3.3. Relevant World Bank ESS and Key Gaps with the National Framework

E&S Standard	Relevance	Key Gaps and Gap-Filling Measures
ESS 1. Assessment and Management of Environmental and Social Risks and Impacts	ESS1 is applicable to the entire project where social environmental impacts and risks are expected. The project does not include major civil works. Specifically, Project Components A will provide activities financed by the project that comprise the repair of legacy gas infrastructure according to the original design specification, including the replacement of small parts that are beyond repair. The project may cause Environmental and Social risks and impacts in targeted transactions of gas related investments in the near and mid-term. Small-scale rehabilitation works will be addressed through the development of an ESMF and site-specific ESMP checklist.	**Key Gaps:** National EIA (SEE) is generally required only for new construction or major rehabilitation, not for the minor, dispersed repair activities planned under this project. The national framework may not cover site-specific E&S management for these small-scale repairs to the extent the ESF does. **Gap-Filling:** This ESMF, the ESCP, and the subsequent site-specific ESMPs/Checklists will be prepared to meet ESF requirements, covering all sub-projects regardless of national EIA triggers.
ESS 2. Labor and Working Conditions	Workers to be employed on the project are expected to be of two main categories: (i) direct workers, including those responsible for overall project implementation management, supervision, and monitoring. It is planned to involve full-time employees, including specialists involved in various stages of project activities, and the government at the local and central level as well as consultants employed directly by the client for the project; and (ii) contracted workers employed/engaged by contractors/subcontractors most of whom will be local and who will perform construction-related unskilled/manual labor activities. Some primary suppliers may be involved in providing materials e.g. for construction. No community labor is expected. Potential ESS2 risks include: child labor; forced labor, incidence of GBV/SEA/SH and other communicable diseases among project workers and between project workers and local communities; non-compliance by contractors and other employers with national labor laws and regulations, including in relation to working hours, rest period, pay and legally mandated benefits; discrimination in	**Key Gaps:** While Uzbekistan has a national Labor Code, it may not fully align with ESF requirements on OHS, principles of non-discrimination, or specific requirements for project-level worker Grievance Mechanisms (GRMs). National law may not specifically address SEA/SH risks from project workers. **Gap-Filling:** A project-specific Labor Management Procedures (LMP) has been prepared. This LMP includes OHS measures, a dedicated worker GRM, and a worker Code of Conduct that prohibits SEA/SH and discrimination.

	recruitment and employment in relation to disability, gender and other personal characteristics unrelated to inherent job requirements; and occupational, health and safety problems. Worker GRM managed by Contractor's site manager, overseen by PIU Social Specialist. The Labor Management Procedures (LMP) was prepared by the UTG. The LMP has detailed information on the work terms and conditions, including explicit prohibition and monitoring of child labor and forced labor. The LMP ensures that the health and safety of all workers, especially women, are given adequate attention with respect to GBV/SEA/SH. The LMP also includes the requirements of contractors, including any requirements for workers' camps if needed. To prepare various tools, such as a Code of Conduct and training programs, that are reviewed by the PIU social teams and cleared by the Bank before being implemented. All Contractors' employees and laborers will be required to sign the Code of Conduct and go through trainings on gender, SEA/SH awareness. The project will also strengthen the existing sexual harassment policies at the implementing universities to ensure that it will address the issues of GBV and sexual harassment at the institutional level. Further, a project GRM that is attentive to GBV/SEA will be in place to manage project-related grievances from project-affected people and other stakeholders in order to address them appropriately. In line with ESS2, the project will establish and operate a worker grievance mechanism to enable project workers to raise workplace concerns, including work-related sexual harassment. Workers (direct, contracted, primary supply) can submit grievances in person to the contractor's site manager or PIU Social Specialist, via a dedicated phone/email, or through secure boxes. Anonymous submissions are allowed, and a confidential survivor-centered pathway exists for SEA/SH. Complaints are acknowledged within 3 working days and targeted for resolution within 15. All cases are logged in a central register (date, issue, responsible person, actions, outcome) managed by the contractor and overseen by the PIU Social Specialist, with escalation to PIU management or courts if needed. Outcomes are communicated to complainants via their	

	preferred channel, and anonymized aggregate data (types, status, trends) are reported in semi-annual E&S reports to the World Bank.	
ESS 3. Resource Efficiency and Pollution Prevention and Management	Construction materials such as sand, gravel, and water are expected to be supplied by authorized vendors. In addition, the minor rehabilitation works within existing buildings, necessary to accommodate the newly procured equipment, may lead to short-term increases in air and noise pollution and generate a small amount of waste. These risks can be effectively mitigated by adhering to the World Bank Environmental, Health, and Safety Guidelines (WB EHSGs). The ESMF has recommended mitigation measures to be implemented, ensuring that methods of material extraction and transportation do not lead to soil erosion or pollution of water bodies and the air. The measures will be detailed and elaborated further at the project activity level (as part of ESMP/ESMP checklists as a part of ESMF). Site-specific environmental and social assessments will determine the significance of the likely impacts and risks, and mitigation measures will be included in the ESMP/ESMP checklists as a part of ESMF.	**Key Gaps:** National waste and pollution laws exist, but their application and enforcement for small, temporary, and geographically dispersed repair sites may be limited. **Gap-Filling:** This ESMF and the site-specific ESMPs will include specific protocols for Waste Management Plans (WMP), noise/dust control, and hazardous material handling.
ESS 4. Community Health and Safety	Mismanaged waste can pose significant risks to community health and safety. However, the amounts of waste generated are expected to be small and manageable, following the waste management plan prepared by the project, which is designed to prevent community exposure. The waste management plan will also include provisions for any waste resulting from the rehabilitation works. The ESMF and ESMP/ESMP checklists as a part of ESMF for civil works will incorporate traffic management plans, public access controls, noise and dust reduction measures, emergency response plans, and worker codes of conduct. Additionally, a grievance redress mechanism will be established to address community concerns, ensuring the overall protection of the health and safety of those living near the construction sites. Social risks to be addressed in the ESMP/ESMP checklists as a part of ESMF include potential impacts on communities from workers (including labor influx), including sexual harassment and GBV, and the possible spread of communicable diseases. These risks will be	**Key Gaps:** National laws cover general community safety, but may lack specific procedures for project-related risks such as minor traffic disruptions from equipment delivery or community-worker interactions related to labor influx. **Gap-Filling:** Site-specific ESMPs/Checklists will include measures to manage community health and safety risks. Risks from labor influx will be managed via the LMP and worker Codes of Conduct.

	mitigated through tools such as Codes of Conduct that will be signed by contractor's workers and through training on gender, GBV, and SEA/SH awareness.	
ESS8. Cultural Heritage	Gas leak detection sites may sometimes be situated in proximity to cultural or historical landmarks. To effectively manage and mitigate any potential risks to these sensitive locations, the project will implement a range of protective measures. These will include the application of Chance Finds Procedures, as well as thorough screening for any known cultural heritage sites. Such measures will be systematically incorporated into ESMF and site-specific ESMPs or ESMP checklists as a part of ESMF. Before commencing any civil works, the project will secure the necessary permissions from the relevant authorities to ensure that all activities are conducted in accordance with local regulations and requirements. Furthermore, the project will adhere to international standards for the monitoring, reporting, and verification of methane emissions. In prioritizing project activities, careful consideration will be given to factors such as cost, complexity, and potential impact, with the aim of maximizing net benefits while maintaining robust safeguards for cultural heritage.	**Key Gaps:** National cultural heritage laws exist, but their implementing procedures may not have clear "Chance Finds Procedures" applicable to small-scale repair works that do not trigger a full EIA. **Gap-Filling:** This ESMF includes a "Chance Finds Procedure" in Annex 3. This procedure will be included in all works contracts.
ESS 10. Stakeholder Engagement and Information Disclosure	A stand-alone Stakeholder Engagement Plan (SEP) proportionate to the Project's scale and risks has been prepared by the UTG. During Project implementation the UTG will continue to carry out stakeholder engagement activities including (i) identifying the Project stakeholders, making a distinction between those directly affected by the project and other interested parties, (ii) carrying out consultations with key stakeholders on project activities prior to appraisal; (iii) broaden the Grievance Mechanism (GM). A separate GM for Project workers under ESS2 will also be established. During implementation, UTG/PIU will hold an annual public consultation with stakeholders to discuss the project's progress and publish an accessible annual report on the project's progress. The SEP includes a Grievance Mechanism integrated into the Environmental and Social Commitment Plan (ESCP) and the Project Operational Manual (POM). It outlines the	**Key Gaps:** National laws may not meet the ESF's standards for proactive, ongoing, and inclusive stakeholder engagement, or require an accessible and responsive project-level GRM. **Gap-Filling:** A project-specific SEP has been prepared. A project-level GRM will be established and maintained as detailed in the SEP.

	process for disclosure and consultation, with provisions for planning, implementation, and monitoring of Citizen Engagement (CE) and Stakeholder Engagement (SE) activities. The SEP identifies stakeholders and vulnerable groups to ensure their inclusion, with specific provisions in the POM. Mitigation measures include significant capacity building and outreach to potential and actual beneficiaries, communication about the benefits of the systems developed under the project, representation from all key stakeholders in the UTG development and implementation of a SEP promoting inclusive dialogue and consultation, job retention programs, and addressing gender disparities through social assessments and specific measures will be part of the POM.	

4. Potential Environmental and Social Risk Impacts and Standard Mitigation Measures

59. This section presents a comprehensive overview of the project's various components and subcomponents, encompassing the procurement of goods and services, civil works, installation, and rehabilitation activities. Each of these activities may carry specific environmental and social risks and impacts. For every activity type, the section identifies the potential risks and impacts and details the standard mitigation measures and procedures that are expected to be implemented.

60. The main objective is to provide a broad, yet thorough understanding of the risks, impacts, and mitigation strategies associated with the project. This enables stakeholders to anticipate potential challenges and understand the approaches designed to address them. It is essential to note that during project implementation, contractors will be required to conduct detailed, site-specific assessments for all subprojects. These assessments will involve evaluating the unique environmental and social characteristics of each location and developing customized mitigation measures to effectively manage and minimize any adverse effects.

61. By offering this level of detail, the section ensures that all stakeholders are informed about the possible risks and impacts linked to project activities and are equipped with the appropriate tools and strategies to address them. This proactive and informed approach supports sustainable and responsible project implementation, thereby protecting both the environment and the interests of affected communities.

Table 4.1. Environmental and Social Risks and Mitigation Measures

Component Activity	Risks and Impacts	Mitigation Measures	Timeframe	Responsible
General Project Implementation	- Labor and Working Conditions: Risks from failing to provide fair, safe, and healthy working conditions, including forced and child labor,	- Ensure that no forced labor is employed, which includes any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. This covers indentured labor, bonded labor, or	Throughout the project lifecycle	UTG, PIU Environmental and Social Specialists

	and discrimination against certain categories of workers - Community Health and Safety: Adverse impacts on the health, safety, and security of project-affected communities, including risks associated with gender-based violence and climate change/natural hazards during the project lifecycle - Impact on members of the public during rehabilitation/civil works for the repairing activities.	similar labor-contracting arrangements. - Provide a safe and healthy work environment, taking into account inherent risks in the particular sector and specific classes of hazards in the work areas, including physical, chemical, biological, and radiological hazards, and specific threats to women. - Implement preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances. - Train workers on safety protocols and ensure proper documentation and reporting of occupational accidents, diseases, and incidents. - Establish emergency prevention, preparedness, and response arrangements - Provide training on Occupational Health and Safety (OHS) to workers, particularly on workers' code of conduct (CoC). - Conduct community sensitization and empowerment programs for women and girls to address issues related to sexual exploitation and abuse/sexual harassment (SEA/SH) - Adhere to established labor laws regarding working hours, leave entitlements, and other employment conditions - Implement robust safety protocols, including clearly marked signage, barriers, and designated pedestrian pathways to protect the public from construction hazards.		

Comprise repair of legacy gas infrastructure according to the original design specification, including replacement of small parts that are beyond repair	- Waste generation, disposal, and pollution - No special screening form for rehabilitation works. - Adequate OHS practices may not be in place. - Rehabilitation works on existing buildings to facilitate the modernization of data centers and installation of new hardware - Working at height when repairing some parts - Risk from exposure to asbestos (rehabilitation of existing buildings with asbestos materials) or lead (e.g. in paints)	- Store solid waste temporarily on-site in a designated place prior to off-site transportation and disposal. - Dispose of waste at the designated place identified and approved by the local authority. Open burning or burial of solid waste shall not be allowed. It is prohibited for the contractor(s) to dispose of any debris or construction material/paint in environmentally and culturally sensitive areas (including watercourses, natural habitats, and cultural sites). - To the degree feasible, recyclable materials such as wooden plates for trench works, steel, site holding, packaging material, etc., shall be segregated and collected on-site from other waste sources for reuse or recycling (sale). - Require adoption of adequate OHS practices. - Prepare ESMF and disclose it. - Hire professional supervisors for installation. - Assess sewerage water disposal/treatment and arrange proper facilities. - Follow World Bank Environmental Health and Safety Guidelines (EHSGs) and Good Industry Standards (GIIP) to manage occupational health and safety (OHS) risks and limited environmental impacts such as noise, dust, and vibrations - Personal Protective Equipment (PPE): Provide workers with appropriate	During the project implementation	UTG, PIU Environmental and Social Specialists

		PPE, such as safety harnesses and helmets, and ensure they are trained in their use. - Proper Planning: Plan the work carefully, considering weather conditions and ensuring all necessary equipment is available. - Conduct thorough asbestos assessments, use proper containment and ventilation, provide personal protective equipment (PPE), and ensure safe removal and disposal of asbestos materials - Conduct lead testing and assessment, use appropriate PPE, implement containment measures, ensure proper ventilation, and provide training on safe handling and disposal of lead materials		
Operation Phase	- Adherence to state standards and national requirements might not be sufficient. Including: 1. Health and Safety Standards. 2. Environmental Standards. 3. Labor Standards 4. International Best Practices	- Follow state standards and national requirements as per the National Economy Minister's order. - Preparation of Waste Management Plan - Ensuring adequate occupational health and safety measures during construction and operational phases - Proper disposal of waste and pollution control and asbestos. - Providing fair working conditions, preventing forced and child labor, and adhering to anti-discrimination laws - Adopting good international practices for various aspects, such as construction, waste management, and occupational safety, which	During the project implementation	UTG, PIU Environmental and Social Specialists

		might go beyond local regulations		
Disruption of Local Communities	Disruption from civil works, including: changes in project scope, defective plans, severe weather, strikes, unavailability of materials, equipment breakdowns, and more	- Comprehensive Planning: Develop detailed project plans with risk assessments and contingency plans. - Effective Communication: Maintain clear communication among all stakeholders. - Regular Monitoring: Continuously track progress and address deviations early. - Risk Management: Implement a risk management framework with mitigation strategies. - Resource Management: Ensure availability of necessary resources through effective scheduling and procurement. - Training: Provide training on handling disruptions and best practices. - Stakeholder Engagement: Address concerns from local communities and other stakeholders	During the project implementation	UTG, PIU Environmental and Social Specialists
Gender Disparities	Exacerbation of gender gaps	- Conduct specific social assessments, including gender-specific data and indicators, and address gender disparities in the POM and system designs	During the project implementation	UTG, PIU Environmental and Social Specialists
Stakeholder Engagement	Limited experience with interinstitutional cooperation and potential resistance to data sharing	- Develop and implement a Stakeholder Engagement Plan (SEP) to promote inclusive dialogue and consultation, and provide significant capacity building and outreach	Throughout the project lifecycle	UTG, PIU Environmental and Social Specialists
Grievance Redress	Addressing complaints from adversely affected communities and individuals.	Utilize existing project-level grievance mechanisms and the Bank's Grievance Redress Service (GRS) to ensure complaints are promptly reviewed and addressed	Throughout the project lifecycle	UTG, PIU Environmental and Social Specialists

4.1 Risks and Mitigation Measures Specific to Disadvantaged and Vulnerable Groups

62. Disadvantaged and vulnerable groups frequently encounter distinct risks and challenges that can intensify their susceptibility to negative impacts arising from development projects. These groups encompass individuals or communities who, because of characteristics such as age, gender, ethnicity, religion, physical or mental disability, economic status, or other social factors, are at a heightened risk of experiencing adverse effects from project activities. Moreover, they often face barriers that limit their ability to access or benefit from the opportunities and resources generated by such projects. As a result, these populations may be disproportionately affected, both in terms of exposure to harm and in their capacity to participate in or gain from project outcomes. Please see the table below:

Table 4.2. Risks and Mitigation Measures Specific to Disadvantaged and Vulnerable Groups

Risks	Mitigation Measures
1. Social Exclusion from Project Benefits: A primary risk is that vulnerable groups—such as women, youth, the elderly, and marginalized communities—may be left out of the project's benefits. This exclusion can occur if these groups are not adequately informed about the project, if their specific needs and concerns are overlooked, or if improvements in safety and environmental conditions do not reach them.	To mitigate the risk of social exclusion from project benefits, the project will proactively identify and engage vulnerable groups (such as women, youth, the elderly, and marginalized communities) to ensure their participation. A Stakeholder Engagement Plan will use tailored communication and consultations, while an accessible grievance mechanism will allow all stakeholders to raise concerns. A Code of Conduct will prohibit sexual exploitation and abuse, and specific protocols will address SEA/SH and child protection. Labor Management Procedures will ensure fair employment and safety for all workers, and Environmental and Social Management Plans will minimize disruptions and ensure benefits reach all community members. These measures collectively promote equity, inclusion, and protection for those most at risk.
2. Labor Influx and Social Tensions: The arrival of workers from outside the local area for repair and installation activities can increase social tensions and the risk of communicable diseases. Vulnerable populations, who may have less access to healthcare or be more susceptible to illness, are at greater risk from such impacts.	To address risks from labor influx and social tensions, the project will prioritize hiring local workers to minimize the number of outsiders and foster community acceptance. All workers will adhere to a Code of Conduct prohibiting sexual exploitation, abuse, and harassment. Health awareness campaigns and improved access to healthcare will be provided for both workers and local communities, with special attention to vulnerable groups. Fair employment practices and accessible grievance mechanisms will be established, while social interactions and communicable disease risks will be closely monitored and managed through Environmental and Social Management Plans. These measures collectively aim to reduce social tensions and

	safeguard the health of all community members, especially the most vulnerable.
3. Disproportionate Impacts from Project Activities: Certain activities, such as equipment delivery or repair work, may pose risks to road traffic and pedestrian safety. Vulnerable individuals—especially those with mobility challenges or limited awareness—could be disproportionately affected by these disruptions.	To mitigate disproportionate impacts from project activities—such as equipment delivery or repair work that may endanger road traffic and pedestrian safety, especially for vulnerable individuals—the following measures are recommended: Implement a Traffic Management Plan with clear signage, speed reduction, and safe pedestrian crossings. Notify communities in advance about disruptions and engage directly with vulnerable groups to address their needs. Use barriers and trained personnel to manage traffic and protect pedestrians, and ensure adequate lighting. Schedule works during off-peak hours and minimize the duration of disruptions. Incorporate accessible design features like ramps and tactile paving, and consult disability organizations. Establish grievance mechanisms and monitor safety incidents to adjust measures as needed. These steps help ensure all community members, particularly the most vulnerable, are protected during project activities.
4. Exclusion from Grievance Mechanisms: If grievance mechanisms are not designed to be accessible or understandable to all, vulnerable groups may be unable to voice concerns or seek redress for negative impacts they experience.	To prevent exclusion from grievance mechanisms, ensure they are accessible and understandable to all, especially vulnerable groups. GRM materials should be prepared in relevant languages, ensure physical accessibility, and accept anonymous complaints. Key mitigation measures include: identifying and consulting with at-risk groups; providing multiple, easy-to-use channels for submitting complaints (e.g., in-person, phone, online, intermediaries); using clear, simple language and translations; ensuring confidentiality and protection from retaliation; and regularly monitoring and adapting the mechanism to address barriers and improve inclusiveness.
5. General Vulnerability to Climate Change and Energy Sector Reforms: Broader risks include the disproportionate impact of climate change and energy sector reforms (such as tariff increases) on poor and marginalized communities. Without targeted support, these groups may face increased hardship.	To mitigate the disproportionate impact of climate change and energy sector reforms (like tariff increases) on poor and marginalized communities, the main measures are: Provide targeted social protection and financial support (such as cash transfers or lifeline tariffs), phase in tariff increases gradually, increases subsidy targeting, invest in energy efficiency and resilience, and ensure clear communication and inclusive engagement with affected groups. These

	steps help cushion vulnerable households from hardship and support their adaptation to reforms.

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

63. In the planning and design phase of the project, careful consideration of environmental and social factors is paramount to avoid adverse impacts and ensure sustainable outcomes. This ESMF outlines key considerations and strategies to mitigate potential risks associated with project development. By integrating these considerations into the project planning and design process, we aim to proactively address environmental and social risks, thereby promoting long-term sustainability and success. This section outlines key considerations and strategies to mitigate potential risks:

64. **Environmental Risk Avoidance:**

- Thorough Environmental Impact Assessment (EIA): Conduct comprehensive EIAs prior to any infrastructure development or procurement activities to identify potential environmental risks and impacts.
- Site Selection and Design: Choose project sites and design infrastructure layouts to minimize disturbance to sensitive ecosystems and habitats. Incorporate green infrastructure and nature-based solutions where feasible.
- Resource Efficiency: Emphasize resource efficiency in design practices to minimize resource consumption, waste generation, and environmental footprint.
- Adoption of Sustainable Technologies: Incorporate sustainable technologies and practices, such as renewable energy systems and energy-efficient building designs, to reduce environmental impacts throughout the project lifecycle.

65. **Social Risk Avoidance:**

- Equitable Access and Inclusion: Ensure equitable access to project benefits and services for all community members, particularly marginalized and vulnerable groups. Design interventions to address barriers to access and promote social inclusion.
- Community Engagement and Consultation: Engage with local communities early and throughout the project lifecycle to solicit input, address concerns, and incorporate local knowledge into planning and decision-making processes.

66. **Health Emergency Response Planning:**

- Emergency Preparedness and Response Training: Provide comprehensive training for project personnel and stakeholders involved in emergency response activities. Conduct regular drills and simulations to test response capabilities and identify areas for improvement.
- Community Awareness and Education: Raise awareness among local communities about health emergency risks and preparedness measures. Provide training and educational materials to empower communities to respond effectively to emergencies and mitigate potential impacts.

67. **Project Governance and Oversight:**

- Clear Roles and Responsibilities: Define clear roles and responsibilities for environmental and social risk management within the project governance structure. Ensure accountability and transparency in decision-making processes.
- Monitoring and Evaluation: Establish robust monitoring and evaluation mechanisms to track project performance against environmental and social objectives. Regularly review and update risk management strategies based on monitoring findings and stakeholder feedback.
- Adaptive Management: Adopt an adaptive management approach to respond to emerging risks and changing circumstances. Incorporate lessons learned from previous projects and best practices in environmental and social risk management.

5. Environmental and Social Screening and Assessment

5.1 Criteria for project categorization

68. The World Bank classifies all projects into one of four categories: high risk, substantial risk, moderate risk, or low risk. Each project must comply with both the national environmental and social regulatory framework and World Bank policies.

69. **The environmental risk is rated Moderate**. Impacts are limited and reversible. The project is expected to have a positive long-term impact by significantly reducing methane emissions (~140 million m^3/year, or around 2.7 $MtCO_2e$/year), thereby improving air quality and community safety. Activities are confined to small-scale works within existing gas infrastructure, with no large-scale or irreversible impacts expected. Main risks include minor waste, localized noise and dust, and potential soil or groundwater contamination from small pipeline leaks, all of which can be mitigated with standard measures. Occupational health and safety risks will be addressed through compliance with national regulations and World Bank guidelines. UTG will strengthen its environmental and social management with consultant support and capacity building. Existing national EIA procedures are sufficient; therefore, no new EIA is required.

70. **The social risk is assessed as Moderate.** No physical or economic displacement is anticipated, as all activities will take place within existing facilities or right-of-way corridors. Key social risks include threats to local communities from potential gas leaks or explosions, occupational health and safety risks for workers, possible labor influx leading to social tensions and increased disease risk, and the potential exclusion of vulnerable groups from project benefits. Effective stakeholder engagement and communication are crucial for preventing misunderstandings and conflicts. Social assessments will inform mitigation measures, such as a Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP). Minor risks to road traffic and pedestrians may arise during certain project stages, which will be managed through adherence to safety regulations, ensuring vulnerable groups are not disproportionately affected.

Table 5.1: Project Categorization

Project category, According to World Bank ESF requirements	
Category	**Moderate Risk**
Reason for proposed category	***Moderate risk sub-projects*** whose requirement is the preparation of a sub-project ESMP report which includes inter alia : the potential environmental and social impacts related to siting, construction and operation of the sub-project; mitigation and institutional monitoring measures

	to address potential risks and impacts; responsibilities for monitoring sub-project ESMP requirements; training and capacity building requirements for the PIU and the environment staff at the local level; monitoring indicators; estimated budget for implementation and training, grievance and redress mechanism; and public consultation and disclosure, as well as the This will also include Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) risks.
Requirements for project category/environmental assessment according to national policy	
Category	III
Reason for proposed category	Moderate impact on air, water, soil, and biodiversity, but not irreversible or large-scale. Impacts are localized and can be mitigated through standard environmental protection measures. No significant impact on protected areas, historical sites, or critical habitats. Category II projects undergo a limited EIA to assess environmental risks and mitigation strategies. Must comply with sector-specific environmental regulations, including air emissions, wastewater management, and waste disposal. Environmental Management Plans (EMPs) should include specific measures to minimize air, water, and soil pollution. Regular monitoring and reporting to environmental authorities are required. In some cases, additional environmental permits or licenses may be necessary.

5.2 Environmental Impact Assessment Procedures

71. The national procedure for mandatory environmental impact assessment (EIA) in Uzbekistan is regulated by the Law “On Environmental Expertise” and the Regulations on State Environmental Expertise (SEE), approved by Resolution of the Cabinet of Ministers No. 541 of September 7, 2020. These documents establish legal requirements for conducting environmental impact assessments, which are carried out by the Center for State Environmental Expertise under the Ministry of Ecology, Environmental Protection and Climate Change at the national or regional level, depending on the category of the project.

72. The Ministry of Ecology, Environmental Protection and Climate Change organizes state environmental expertise through the unified system of the Center for Environmental Expertise, the methodological guidance of which is provided by Center for State Environmental Expertise.

73. According to Section 21 of the Regulations on State Environmental Expertise (SEE), an application for the submission of environmental impact assessment (EIA) materials is submitted by the customer through the personal account of the Ministry of Ecology and Climate Change on the official website of the Ministry of Environment and Climate Change on the Internet.

74. Activities of categories I and II of environmental impact are classified as pre-project and are required to undergo state environmental assessment, subject to confirmation of project documentation at public hearings in accordance with the established procedure. The procedure for conducting public consultations is regulated in Appendix 3 to Resolution of the Cabinet of Ministers No. 541 of 09/07/2020.

75. Section 24 of the Regulations on State Environmental Expertise (SEE) contains information on documentation requirements at each stage of environmental impact assessment (EIA). The stages of EIA and the required results can be summarized as follows:

- **Stage I:** "Draft Statement of Environmental Impact (DSEI)" ("PZVOS" is the national acronym), which must be carried out during the planning stage of the proposed project before development funds are committed.
- **Stage II:** "Statement of Environmental Impact (SEI)" ("EIS" is the national abbreviation), completed if the "State Expertise" at Stage I identified the need for additional research or analysis. The conclusion must be submitted to the State Environmental Expertise before approval of the project's feasibility study, and therefore before the start of construction.
- **Stage III:** Statement of Environmental Effects (SEC) ("ZEP" is the national acronym) is the final stage of the EEE process and must be completed before the project is commissioned. The report details changes made to the project design as a result of the Gosekoekspertiza review during the first two stages of the EIA process, comments received during public consultations, environmental standards applicable to the project and environmental monitoring requirements associated with the project and the main conclusions.

76. Approval of the State Environmental Expertise (SEE), or the conclusion of the "Gosekoekspertiza", is a mandatory document for obtaining other lenders at stages I and II of environmental impact assessment (EIA). It is also necessary to commission the project at the III stage of the national EIA procedure in Uzbekistan. This confirms the project's compliance with environmental standards and requirements before its implementation and operation. All

77. Environmental impact assessment (EIA) plays a key role in the construction and reconstruction of the modernization of existing substations. The development of an EIA involves a comprehensive analysis of the potential environmental consequences of the project on the regional ecosystem, including an assessment of the impact on biodiversity, land resources, water bodies, and the air environment.

78. The use of modern EIA techniques in the design of energy systems allows us to minimize the negative impact on nature. This includes selecting line routes to minimize encroachment into protected areas, using innovative technologies to reduce noise and visual effects, and installing modern filtration and emission treatment systems at substations.

79. In an environmental context, the development of modern technologies for energy systems aims to reduce the ecological footprint. This includes the use of more efficient and environmentally friendly materials in the construction of lines and substations, as well as the use of advanced technologies to control and monitor power systems.

5.3 World Bank Environmental and Social Screening Tools

80. Screening is the first stage of the environmental and social process, at which a key environmental and social decision is made: to conduct an environmental impact assessment (based on expected significant impacts) or not to conduct an environmental impact assessment (if no such impacts are expected). This process must follow certain procedures, often set out in legislation, to ensure a consistent approach to all projects.

81. Key contributions of the screening process include:

- (a) Helps make informed decisions by providing a clear and well-structured factual analysis of the consequences of proposed actions.
- (b) Influences project selection and policy development by eliminating environmentally and/or socially unsound proposals and identifying feasible actions.

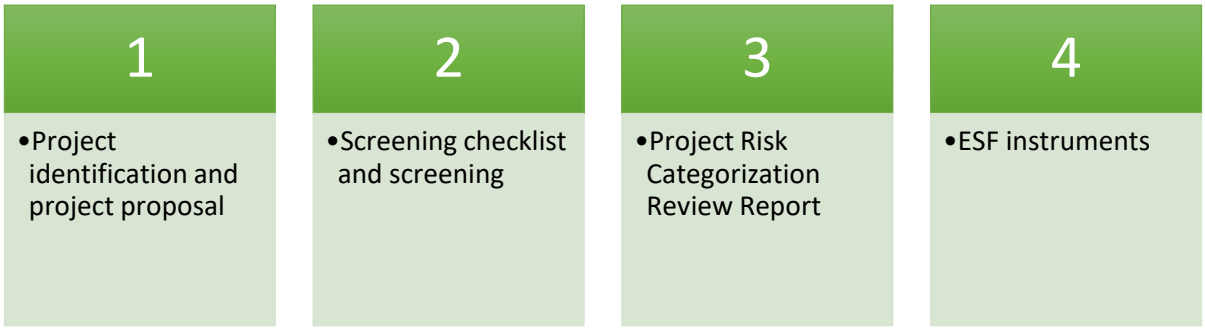
82. This stage plays a key role in the initial stage of environmental impact assessment, aimed at minimizing negative impacts and ensuring sustainable development of projects.

83. The proposed screening process during the project identification/planning phase aims to determine the environmental feasibility of the project and the need for environmental analysis, as well as the development of safeguards in accordance with national requirements and World Bank ESS standards. The subproject selection process includes the following steps:

- Purpose of the review: Determine the environmental feasibility of the project and the need for environmental analysis.
- Timing of the review: Carrying out the review at the project identification/planning stage.
- Review Process: All project documentation and progress are reviewed by the PIU to assess potential environmental and social impacts.

84. This process aims to ensure compliance with environmental and social standards within the project and involves the use of protection tools developed in accordance with the requirements of national legislation and international standards.

85. The suggested verification process is as follows:



Step 1: Project Identification and Project Proposal

86. **Methane Emissions Reduction:** Targeting a reduction of 420 million cubic meters of fugitive methane emissions from the gas transmission network by December 2028.

87. **Asset Management Capacity:** Strengthening Uztransgaz's capacity to manage assets according to international best practices.

88. **Public Safety:** Reducing the risk of accidents for the general public through early detection and prevention of gas leaks.

89. **Concept and Activities**

- Establishment of a recipient-executed Financial Facility to finance repairs of identified methane leaks in state-owned gas company assets.
- Focus on both transmission and distribution networks, with some exclusions due to existing commercial agreements.
- Initial funding from a USD 10 million grant from the GFMR trust fund, with a mechanism to reinvest savings from recovered gas to replenish and scale up the facility.
- Exclusion of activities in high-pressure pipelines; eligible activities include repair work at gas stations, purchase and installation of methane emission metering equipment, small repair equipment, and contract services for leak repair.
- Investments in SOE capacity for monitoring, reporting, and verification of methane emissions (OGMP 2.0 standard).

Step 2. Screening checklist and screening

90. Once the project proposal has been prepared, the E&S specialist will review all subprojects to determine the need for environmental and social instruments. A safety and security specialist can visit the site and conduct consultations to gather additional information to allow for a better inspection.

Step 3: Review Report and Project Risk Categorization

91. The purpose of the review at this stage is to identify the environmental and social risks associated with the proposed development, and to identify measures to mitigate negative impacts, if any. In addition, review includes assessing the quality of project design and facilitating informed decision making by providing clear and understandable data and structured analysis of the effects and consequences of proposed actions. The Environmental and Social Specialists will prepare an audit report including the decision made and the rationale for it. The report will also indicate the project's environmental and social risk rating based on criteria established by national legislation and the World Bank's ESS standards. Once this categorization is done, then the assessment will be started in compliance with National EIA requirements.

Table 5.2: Categories of environmental and social risks

Project type	Categorization according to national policy	Categorization according to World Bank security requirements	Notes
The project is likely to have significant adverse impacts on the environment and society.	Category I	High risk	A full-scale EIA is required. Excluding sub-projects
A project may have adverse environmental or social impacts, but these impacts are less significant than those of high-risk projects. These impacts are site specific; few, if any, are	Category II	Substantial risk	Depending on the scale of the negative impact, a full-scale EIA may or may not require additional research. In addition, in the event of a sub-project posing substantial risks, it will

irreversible; in most cases they can be mitigated, unlike high-risk projects.			be necessary to reassess the overall project risk rating and make the required adjustments to E&S instruments to effectively manage any additional risks..
The project is likely to have minimal or no adverse environmental or social impacts.	Category III	Moderate risk	The ESMF, site-specific ESMPs will also target moderate-risk sub-projects.
Subprojects that have minimal or no impacts.	Category IV	Low risk	Low risk in the context of this project refers to situations where negative effects are minor, manageable, and unlikely to escalate or cause significant harm.

5.4 Environmental and Social Risk Management Procedures

92. Environmental and Social Risk Management Procedures are a set of processes and systems designed to identify, evaluate, and manage the environmental and social risks and impacts associated with a project throughout its lifecycle. These procedures ensure that projects are implemented in a manner that minimizes adverse impacts and enhances positive outcomes for both the environment and affected communities. In summary, the procedures aim to do the following:

Table 5.3. Project Cycle and E&S Management Procedures

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Project identification and preparation	Screening	- During subproject identification, ensure subproject eligibility by referring to the Exclusion List in table 5.4 below - Conduct screening assessments to identify potential environmental and social risks (Annex I). - Initiate stakeholder engagement activities to gather input from local communities, state organizations, civil society organizations, and government agencies. - Identify the documentation, permits, and clearances required under the government's Environmental Regulation.
b. Environmental and Social Risk Identification	Project identification and preparation phase	- Screening assessments will be conducted to identify potential environmental and social risks associated with the proposed project's components. Continuous stakeholder engagement activities will be conducted to gather input from local communities, civil society organizations, and government agencies
c. Formulation and Planning: Planning for project activities, including human and	Planning	- Adopt and/or prepare relevant environmental and social procedures and plans, based on the screening form. - For activities requiring Environmental and Social Management Plans (ESMPs), submit the first 5 ESMPs/ESMP Checklist for prior

budgetary resources and monitoring measures		review and no objection by the World Bank prior to initiating bidding processes (for subprojects involving bidding processes) and/or launching activities (for subproject activities not subject to bidding). - Ensure that the contents of the ESMPs/ESMP Checklist are shared with relevant stakeholders in an accessible manner and consultations are held with the affected communities in accordance with the SEP. Annex II - Complete all documentation, permits, and clearances required under the government's Environmental Regulation. - Train staff responsible for implementation and monitoring of plans. - Incorporate relevant environmental and social procedures and plans into contractor bidding documents; train contractors on relevant procedures and plans.
d. Environmental and Social Risk Assessment	Approval phase	- Comprehensive environmental and social risk assessments will be conducted for prioritized projects' components. Mitigation and management measures will be developed to address identified risks and ensure compliance with applicable ESF requirements
e. Implementation and Monitoring: Implementation support and continuous monitoring of projects	Implementation	- Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring. - Track grievances/beneficiary feedback. - Establish robust monitoring and evaluation mechanisms to track the effectiveness of implemented mitigation measures. - Conduct regular site visits and inspections to assess project performance and address concerns promptly. - Continue awareness raising and/or training for relevant staff, volunteers, contractors, communities.
f. Capacity building and training	Implementation and operation	- Provide capacity-building and training programs to project staff, implementing partners, and relevant stakeholders. - Prioritize empowerment of local communities, fostering their active participation in project activities. - Local staff and contractors will be trained on environmental and social procedures and requirements, ensuring their awareness and adherence to standards
g. Documentation and reporting	Throughout the project	- Maintain comprehensive documentation of environmental and social assessments, mitigation measures, and stakeholder consultations. - Prepare monthly, quarterly and semi-annual progress reports on environmental and social performance for project stakeholders.
h. Continuous Improvement and Adaptation	Continuous Monitoring and Evaluation	- Commit to regular reviews and updates of E&S management procedures based on monitoring findings and lessons learned. - Actively seek stakeholder feedback and incorporate it into decision-making processes for continuous improvement. - Regular reviews and updates of E&S management procedures will be undertaken based on monitoring findings, lessons learned, and evolving best practices. Stakeholder feedback will be actively sought and incorporated into decision-making processes for continuous improvement
i. Review and Evaluation: Qualitative, quantitative, and/or	Completion	- Assess whether plans have been effectively implemented. - Ensure that physical sites are properly restored.

participatory data collection on a sample basis		
j. E&S feedback and adaptive management	Throughout the project	- Monitoring results and stakeholder inputs (via GRM and consultations) will be reviewed regularly and used to update ESMPs and mitigation measures. - Operational steps: biannual PIU review meetings aligned with progress reporting; maintenance of an E&S update log with version control (date, change, rationale); - PIU E&S Specialists initiate revisions based on findings; - PIU Director approves substantive updates; significant changes are re-disclosed on the UTG website and communicated to affected stakeholders per the SEP. Continuous tracking of corrective actions will ensure lessons learned are integrated into contractor method statements and supervision plans.

93. **World Bank Prior Review:**

94. If applicable, site-specific environmental and social management plans (ESMPs)/ESMP Checklist will undergo a prior review by the World Bank to ensure compliance with ESF requirements. Responsible parties include Environmental and Social ESF Specialists and Project Managers. The time frame for review will be determined based on project timelines and World Bank guidelines.

a. *Subproject Assessment and Analysis – E&S Screening*

95. If a subproject assessment is necessary during the project's implementation phase, an Environmental and Social (E&S) screening must be carried out. As a first step, all proposed activities should be screened to ensure that they are within the Project's eligible activities and not considered activities listed on the E&S Exclusion List in the table below.

Table 5.4. Exclusion List

• Any activity with significant environmental and social risks and impacts that require an Environmental and Social Impact Assessment (ESIA). • Activities that violate human rights, including forced labor, child labor, discrimination, or exploitation of vulnerable populations. • Activities that result in significant emissions of greenhouse gases or other pollutants contributing to climate change or air and water pollution. • Disposal of hazardous waste or electronic waste without proper treatment or recycling measures to prevent air and groundwater pollution. • Activities that involve significant disruption or destruction of ecosystems, including wetlands, rivers, or marine habitats, without appropriate mitigation measures. • Any activity that would be classified as 'High' or 'Substantial' Risk. • Any activity involving involuntary resettlement or land acquisition (physical or economic displacement). • Any new greenfield construction. • Any activity located outside the existing UTG-owned facility fences or established Right-of-Way (ROW).
• Activities that have the potential to cause any significant loss or degradation of critical natural habitats, whether directly or indirectly, or which would lead to adverse impacts on natural

habitats.

- Activities that contribute to social exclusion, discrimination, or marginalization of vulnerable populations, including women, children, persons with disabilities, or minority groups.
- Activities with a high likelihood of causing harm to worker health and safety, including inadequate occupational health and safety practices or exposure to hazardous substances.
- Use of child or forced labor in project activities or supply chains, including subcontractors or suppliers.
- Activities that involve unethical or exploitative practices, including corruption, bribery, or coercion of stakeholders or beneficiaries.
- Any other activities that are deemed incompatible with project objectives, environmental and social safeguards, including any activity entailing physical or economic displacement, land acquisition, or access restrictions, or applicable laws, regulations, or World Bank policies.

- Activities that involve the use of international waterways.
- Any activity affecting physical cultural heritage such as graves, temples, churches, historical relics, archeological sites, or other cultural structures.
- Any activity on land that has disputed ownership or tenure rights.
- Any activity located on a disputed area or across the undermarketed border line(s).
- Purchase or use of banned/restricted pesticides, insecticides, herbicides, and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides)

96. As a second step, the PIU will use the ***E&S Screening Form in Annex 1*** to identify and assess relevant environmental and social risks specific to the activities, and identify the appropriate mitigation measures. The *Screening Form* lists the various mitigation measures and plans that may be relevant for the specific activities (such as the Environmental and Social Codes of Practice, the Environmental and Social Management Plan, the Labor Management Procedures, Chance Find Procedures, etc.)

97. The PIU will also identify the documentation, permits, and clearances required under the government's Environmental Regulation.

b. *Subproject Formulation and Planning – E&S Planning*

98. If a subproject assessment is necessary based on the process above and the Screening Form, the PIU under UTG will adopt the necessary environmental and social management measures already included in the Annexes of this ESMF (such as the ESCOPs, the LMP, WMP, etc.) or develop relevant site-specific environmental and social management plans.

99. If site-specific ESMPs are necessary, the PIU, together with the Contractor, will prepare them and other applicable documents as needed. The PIU will provide approval for the Contractor and compile the ESMPs and other applicable forms. The contents of the site-specific ESMPs/ESMP Checklist will be shared with relevant stakeholders in an accessible manner, and consultations will be held with the affected communities on the environmental and social risks and mitigation measures. If certain subprojects or contracts are being initiated at the same time or within a certain location, an overall ESMP/ESMP Checklist covering projects' components or contracts can be prepared.

100. Alternatively, the first five site specific ESMP/ESMP Checklists in each category of a subproject or a different number to be agreed upon with the World Bank will also be submitted to the World Bank for

prior review and no objection. After this first 5, the World Bank and the PIU will reassess whether prior review is needed for further ESMP/ESMP Checklists or a certain category of ESMP/ESMP Checklists.

101. The PIU will also complete the documentation, permits, and clearances required under the government's Environmental Regulation before any project activities begin.

102. In addition, at this stage, staff who will be working on the various subproject activities should be trained in the environmental and social management plans relevant to their work. The PIU should provide such training to field staff.

103. Based on the subproject activities if any, the PIU should also ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as standard operating procedures for civil works. The PIU should provide training to selected contractors to ensure that they understand and incorporate environmental and social mitigation measures; it should also plan for cascading training to be delivered by contractors to subcontractors and vendors. The PIU should further ensure that the entities or communities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

c. *Implementation and Monitoring – E&S Implementation*

104. This section outlines the procedures and implementation arrangements for effectively managing environmental and social aspects throughout the project lifecycle. It delineates the roles and responsibilities of key stakeholders, establishes monitoring and reporting mechanisms, and details the steps for implementing mitigation measures.

105. During implementation, the PIU will conduct regular monitoring visits. Including:

I. Mechanisms:

1. Monitoring and Evaluation (M&E):

- The PIU will carry out M&E of project results and outcomes.
- Project performance will be evaluated through quantitative indicators and qualitative assessments.
- Individual indicators will be measured against annual targets to detect and address gaps promptly.

2. Biannual Progress Reports:

- The PIU will submit biannual progress reports to their management and the WB.
- These reports will record progress at the individual component level and include implementation status and analysis of project performance related to key indicators.

3. Mid-Term Review:

- A Mid-Term Review will be conducted by the WB at the mid-point of the project implementation to assess overall project progress, identify critical implementation issues, and make necessary revisions to the project design or schedule.

II. Responsible Parties:

Project Implementation Unit (PIU):

- The PIU will oversee and monitor all project operating costs and logistics.

- The PIU will be responsible for the preparation, update, and disclosure of Environmental and Social Framework (ESF) documents and overall ESF and national legislation compliance.
- The PIU will include a director and a technical team consisting of an office manager, and specialists in procurement, financial management, environmental, and social aspects.

106. The PIU working to implement the project will ensure that monitoring practices include the environmental and social risks identified in the ESMF and will monitor the implementation of E&S risk management mitigation plans as part of regular project monitoring.

107. At a minimum, the reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the local levels will be submitted to the PIU at the national level, where they will be aggregated and submitted to the World Bank on a biannual basis.

108. Throughout the Project implementation stage, the PIU will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures. An initial list of training needs is proposed below, in Section 5.6, table 5.7.

109. The PIU will also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

110. Last, if the PIU becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, or kidnappings.

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

111. Upon completion of Project activities, the PIU will review and evaluate progress and completion of project activities and all required environmental and social mitigation measures. Especially for civil works, the PIU will monitor activities with regard to site restoration and landscaping in the affected areas to ensure that the activities are done to an appropriate and acceptable standard before closing the contracts, in accordance with measures identified in the ESMP/ESMP Checklists and other plans. The sites must be restored to at least the same condition and standard that existed prior to commencement of works. Any pending issues must be resolved before a subproject is considered fully completed. The PIU will prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

5.5 Technical Assistance Activities

112. The PIU will ensure that the consultancies, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance activities under the Project are carried out in

accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs. They will also ensure that the outputs of such activities comply with the Terms of Reference.

113. **Implementation Arrangements**

114. This section outlines the procedures and implementation arrangements for effectively managing environmental and social aspects throughout the project lifecycle. It delineates the roles and responsibilities of key stakeholders, establishes monitoring and reporting mechanisms, and details the steps for implementing mitigation measures.

115. The main agency implementing the project is the Uztransgaz (UTG). The Project Implementation Unit (PIU) is established at the national level to coordinate and implement the project in the regions. The PIU project team comprises a diverse group of highly skilled professionals, each bringing their unique expertise to ensure the initiative's success. These individuals are responsible for various critical roles, including project management, procurement, financial management, monitoring and evaluation, and environmental and social protection. Each specialist plays a vital role in the smooth operation and progress of the project.

116. The project will involve full-time staff, including specialists involved in various stages of the project. The exact number of staff has not yet been determined and will be clarified during the preparation of project documentation and the development of the project's organizational structure. It is also possible to engage freelance specialists and consultants, depending on the needs of the project and the specific tasks being performed.

117. Together, these all professionals work collaboratively to achieve the project's goals. Their combined efforts are supported by both the World Bank loan funds and the Republic of Uzbekistan funds, ensuring that the project has the necessary resources to succeed. The team's dedication and expertise are key to the project's success, and their work will have a lasting impact on the company's digital presence and customer engagement

118. The responsibilities of the PIU include issues related to project preparation, including the implementation of the ESMF, procurement strategy and plan, and other fiduciary activities. The PIU will hire one environmental and one social specialist who will oversee the overall coordination of ESMF reporting to UTG and to the WB regarding E&S issues, as well as integrating ESF requirements into bidding and contracting documents. E&SS will also be responsible for interacting with environmental authorities, ensuring the efficient implementation of ESF documents. Additionally, it will undertake random field visits and environmental supervision and monitoring, assessing environmental compliance at worksites and regional administration on environmental and social issues. The E&SS will also be responsible for identifying ESA training needs for all parties involved in ESMF implementation.

119. The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for noncompliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental supervisor. Contractors are also required to comply with national and municipal regulations governing the environment, public health and safety.

120. The table below summarizes the roles and responsibilities regarding the implementation arrangements for **environmental and social management.**

Table 5.5. Implementation Arrangements

Level/	Roles and Responsibilities

Responsible Party	
Uzatrangas (UTG)	Responsible for strategic oversight and technical aspects of project implementation. Establishes the Project Implementation Unit (PIU) to facilitate day-to-day implementation and administration. Manages the project according to rules and procedures agreed with the World Bank.
National Level Project Implementation Unit (PIU)	The PIU is led by a Project Director and includes a dedicated team, including a full-time Environmental and Social Specialist. The PIU is responsible for the overall coordination of the ESMF and other relevant ESF instruments. This includes reporting to the UTG and the WB on E&S issues, as well as integrating ESF requirements into bidding and contracting documents. The PIU is tasked with interacting with environmental authorities to ensure the efficient implementation of ESF documents. Additionally, the PIU will conduct random field visits and perform environmental supervision and monitoring to assess compliance at worksites. - Provide support, oversight, and quality control to field staff working on environmental and social risk management. - Collect, review, and provide quality assurance and approval to Screening Forms and ESMPs as relevant if any. Keep documentation of all progress. - Oversee overall implementation and monitoring of environmental and social mitigation and management activities, compile progress reports from local levels/subprojects, and report to the WB on a quarterly or biannual basis. - Train central and field staff and contractors who will be responsible for implementing the ESMF. - If contracting is managed centrally, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs if any. - Undertake a thorough review of the environmental classification in accordance with the WB requirements; - Be open to comments from affected groups and local environmental authorities regarding the environmental aspects of subcomponents implementation. Meet with these groups during site visits, as appropriate; - Coordination and liaison with the WB Supervision Mission with regard to environmental issues and aspects of the components
PIU Regional/local field staff under UTG	- Ensure project activities do not fall under the Negative List. Fill out Screening Forms by regional/local field staff for relevant subproject activities if any and submit forms to the national level. - If relevant, complete site-specific ESMPs for subproject activities and submit forms to the national level. - Oversee daily implementation and monitoring of environmental and social mitigation measures, and report progress and performance to the national level on a monthly basis. - Provide training to local contractors and communities on relevant environmental and social mitigation measures, roles, and responsibilities. - If contracting is managed regionally, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMP if any
Contractors	Compete for a public tender process. Operate in full compliance with national environmental and social legislation and ESMP requirements. Responsible for regulatory compliance in areas including traffic safety, occupational health and safety, fire safety, environmental protection, and community health and safety. Finance all ESMP-associated activities, such as Contingency Funds: Establish contingency funds to address unforeseen environmental and social issues that may arise during project implementation. Designate a person in charge of environmental, social, health, and safety issues and implementation of ESMP.
Subproject Beneficiaries (if any)	Often local municipalities. Appoint responsible persons to supervise subproject implementation and report any environmental or social non-compliance to PIU. Including PIU E&S Specialists: Coordinate and implement environmental and social standards, ensure

	compliance, conduct monitoring and evaluation, and prepare reports. Regional Staff: Support PIU by conducting on-the-ground monitoring, collecting data, identifying non-compliance issues, and reporting to the PIU. Municipality Staff: Manage and oversee subprojects locally, ensure compliance with local regulations, address immediate non-compliance issues, and liaise with regional staff and PIU. Assist in ensuring efficient implementation of ESMPs.

Table 5.6. Key E&S Monitoring Indicators, Responsibilities, and Reporting Schedule

Area	Indicator	Metric/Target	Responsible Party	Reporting Frequency
OHS	Incidents (accidents, near-misses, fatalities)	Zero fatalities, declining incident rate	Contractor ESHS Officer (daily), PIU Environmental/OHS Specialist (supervision)	Immediate for serious incidents (≤48h), monthly (contractor), semi-annual (PIU)
Waste Management	Segregation, storage, disposal (solid/hazardous)	100% disposal at approved sites, no open burning	Contractor ESHS Officer, PIU Environmental Specialist	Monthly (contractor), semi-annual (PIU)
Stakeholder Engagement	Consultations conducted	As per SEP plan, inclusive participation	PIU Social Specialist	Semi-annual (PIU)
GRM (Workers & Community)	Grievances received/resolved/pending	Acknowledge ≤3 working days, resolve ≤15 working days	PIU Social Specialist, Contractor ESHS Officer (worker GRM)	Continuous tracking, semi-annual summary (PIU)
SEA/SH	Worker Code of Conduct, SEA/SH cases via confidential pathway	100% workers sign CoC, survivor-centered handling	PIU Social Specialist, Contractor ESHS Officer	Immediate for incidents, semi-annual anonymized summary (PIU)
Environmental Compliance	Permits/clearances, compliance with EHSGs and national limits (dust, noise, emissions)	All permits in place before works, full compliance	PIU Environmental Specialist, Contractor ESHS Officer	Monthly (contractor checks), semi-annual (PIU)
Training & Capacity	Sessions delivered, personnel trained on ESMF/OHS/GRM/SEA/SH	All relevant staff trained before activity start	PIU Environmental & Social Specialists	

5.6 Proposed Training and Capacity Building

121. The successful implementation of the Project is fundamentally reliant on the effective execution of the environmental and social risk management measures outlined in this ESMF. These measures are critical to mitigating potential adverse impacts and ensuring sustainable project outcomes. To achieve this, it is essential to provide comprehensive training and capacity building for key stakeholders, ensuring they are well-equipped to implement the ESMF, SEP, and other related environmental and social documents.

122. The table below details an initial training strategy. This strategy aims to integrate training on environmental and social risk management into the project cycle and operational procedures as much as possible. The training will cover various aspects, including environmental impact assessment, social impact assessment, mitigation measures, monitoring and evaluation, and compliance with relevant regulations and standards.

123. Given the necessity to raise awareness among project workers and stakeholders at various levels, a cascading model is proposed. This model facilitates the dissemination of information from the national level to the field levels, ensuring that all parties involved are adequately informed and capable of effectively implementing the required measures.

124. Furthermore, the training program will include practical exercises, case studies, and interactive sessions to enhance the learning experience and ensure that participants can apply the knowledge and skills gained in real-world scenarios. Continuous monitoring and evaluation of the training program will be conducted to assess its effectiveness and make necessary adjustments to improve its impact.

125. In summary, the success of the Project is contingent upon the effective implementation of the environmental and social risk management measures outlined in the ESMF. Comprehensive training and capacity building for key stakeholders, utilizing a cascading model, will be crucial in achieving this goal and ensuring sustainable project outcomes.

Table 5.7. Proposed Training and Capacity Building Approach

Level	Responsible Party	Audience	Topics/Themes that May Be Covered
National level	World Bank	National staff responsible for overall implementation of ESMF	**ESMF and approach:** - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures/instruments - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH - Application of SEP and the grievance/beneficiary feedback mechanism **Waste Management Plan approach:** - Waste Management Plan Overview - Waste Minimization Strategies - Waste Handling and Storage - Waste Transportation - Waste Disposal
Regional level	National staff	Regional staff Contractors	**ESMF and approach:** - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH, - Application of SEP and the grievance/beneficiary feedback mechanism **Waste Management Plan approach:** - Waste Management Plan Overview - Waste Minimization Strategies - Waste Handling and Storage - Waste Transportation - Waste Disposal
Local/site level	Regional staff	Local staff	- Application of SEP and the grievance/beneficiary feedback mechanism

		Local contractors	- Application of LMP, including Code of Conduct, incident reporting, SEA/SH, - Application of ESCOPs or ESMPs, as relevant **Waste Management Plan approach:** - Waste Management Plan Overview - Waste Minimization Strategies - Waste Handling and Storage - Waste Transportation - Waste Disposal
Community level	Local staff	Community members Community Workers, if relevant	- Basic OHS measures and Personal Protective Equipment - Community health and safety issues - Worker Code of Conduct - SEA/SH issues, prevention, measures] - COVID-19 mitigation - Grievance redress - Workers' grievance redress

126. Training effectiveness will be evaluated through post-training, short anonymous feedback surveys on relevance/clarity and trainer performance, on-site observations using supervision checklists (PPE, OHS procedures, waste management, GRM/SEA/SH protocols), spot audits of logs/permits, and review of incident/near-miss trends and non-compliance findings as outcome proxies. Contractor ESHS Officers will administer tests and surveys and maintain attendance, while PIU Environmental/OHS and Social Specialists will validate results, conduct field observations and spot audits, and consolidate findings. Results will feed a corrective action loop—targeted refreshers and toolbox talks, coaching for low performers, updates to materials/methods, and, if gaps persist, contractual corrective actions—with aggregated outcomes included in periodic E&S reports and used to adjust the training plan.

5.7 Estimated Budget

127. The following table lists estimated cost items for the implementation for the ESMF, which have been included in the overall project budget:

Table 5.7. ESMF Implementation Budget

Activity/Cost Item	Potential Cost (USD)
Trainings for staff (venue, travel, refreshments etc.)	4 000
Trainings for contractors (venue, travel, refreshments, etc.)	6 000
Printing of awareness raising materials	500
Preparation of site-specific ESMPs and other site-specific plans	3 000
Implementation of site-specific ESMPs and other site-specific plans	4 000
PIU Environmental and Social Safeguard Specialists	18 000
	35 500

Note: The Borrower (MEF) and IA (UTG) must ensure that the budget for ESMF implementation is adequate.

6. Stakeholder Engagement, Disclosure, and Consultations

128. A separate Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. SEP includes mapping affected communities and vulnerable groups, disclosing project scope and E&S instruments (ESMF/ESMPs, LMP, GRM, SEA/SH), conducting inclusive consultations before and during works, maintaining site-level communication channels, operating a confidential, survivor-centered GRM and engaging workers through inductions, toolbox talks, briefings, and a worker GRM. The SEP will be reviewed regularly and after material changes, then updated, re-disclosed (website and worksites), and re-consulted with affected stakeholders, with version control and notifications to stakeholders and the World Bank as needed. The SEP can be found here: https://www.utg.uz/en/open-information/.

129. This ESMF, as well as the SEP and the Environmental and Social Commitment Plan (ESCP) that have been prepared for this project, have been disclosed in draft form for stakeholder consultations on the following website https://www.utg.uz/en/open-information/ on November 6, 2025. Conducted Stakeholder Engagement meeting is listed here.

- On October 3, 2025, a public consultation was held in Yangi Toshkent, Yukori Chirchik, Tashkent region, and on November 27, 2025 in Gazli city of Bukhara region, organized by Uztransgaz JSC with support from the World Bank. The purpose of the meeting was to introduce the Uzbekistan Gas Leak Repair Facility project, outlining its objectives, scope, and the expected environmental and social impacts. Representatives from various ministries, regulatory agencies, and technical departments participated in the event. During the consultation, the project team presented key information and engaged with stakeholders to address their questions and concerns, ensuring that feedback from relevant government agencies and other interested parties was collected and considered in the project's planning and implementation.

130. **Grievance Mechanism:** GRM include a description of the grievance mechanism available to affected persons and other interested parties, traditional and other conflict resolution mechanisms that will be integrated, the description of the arbitration procedures defined in the ESF and the national laws, and to what extent are they operational and the detailed process, the detailed institutional, and administrative procedures setting out the length of time users can expect to wait for acknowledgement, response and resolution of their grievances; as well as the mediation process (if any) or an appeals process (including the national judiciary) to which unsatisfied grievances may be referred when resolution of grievance has not been achieved. A summary of the Mechanism will be in English however, the overall process of the mechanism will be provided in the Uzbek language, where the subproject is being implemented. The GRM available for affected parties and other interested parties is presented in the SEP, while the GRM for Workers, including SEA/SH cases, are presented in the LMP.

Annex 1: Screening Form for Potential Environmental and Social Issues

This form is to be used by the executing agency and/or the Project Implementation Unit (PIU) and relevant local institutions to screen potential environmental and social risk levels of a proposed subproject under the Project. The screening will determine the relevance of Bank environmental and social standards (ESS), propose its environment and social risk levels, and the instrument to be prepared for the sub project.

Subproject Name	
Subproject Location	
Subproject Proponent	
Estimated Investment	
Start/Completion Date	
Brief Description of the Subproject	

Questions	Answer			Due diligence / Actions if "yes"
	N/A	yes	no	
ESS1 Assessment of Management of Environmental and Social Risks and Impacts				
1. Does the subproject involve civil works that include new/upgrading or rehabilitation of infrastructure				ESIA or ESMP
2.Is there sound regulatory framework, institutional capacity in place the sub-project?				ESMP, SEP[1]
3.Was the sub project analyzed in terms of impacts and risks and using the mitigation hierarchy				ESMP
4. Is the subproject likely to have significant adverse environmental impacts that are sensitive and unprecedented that trigger the 'Ineligible Activities' or other exclusion criteria?				ESMP
5. Will construction or renovation works require new borrow pits or quarries to be opened?				ESMP
ESS 2 Labor and working conditions				
6. Does the subproject area present considerable Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) risks?				Assessment of SEA/SH, SEP, ESMP
7. Does the subproject involve recruitment of workforce including direct, contracted,				ESMP and, SEP

[1] SEP: Stakeholder Engagement Plan

primary supply, and/or community workers?				
8. Does the subproject include an independent unit/or group for accountability and grievance and conflict resolution				ESMP, SEP, GRM[2] procedures
9. Is the project likely to generate solid or liquid waste that could adversely impact soils, vegetation, rivers, streams or groundwater, or nearby communities?				ESMP and, SEP
10. Do any of the construction works involve the removal of asbestos or other hazardous materials?				ESMP and, SEP
11. Are works likely to cause significant negative impacts to air and / or water quality?				ESMP and, SEP
ESS3 Resources Efficiency and Pollution Prevention and Management				
12.Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant for				ESMP, WMP[3], SEP
13.Does the subproject release airborne and/or water borne pollutants with concentration above the WHO / World Bank guidelines or National Guidelines				ESMP, SEP
ESS4 Community health and Safety				
12.Does the subproject have at least the necessary procedures for health and safety of its workers and its project affected people				ESMP, ESMF, SEP
13.Does the sub-project is likely to apply the WHO code of Sexual abuse and exploitation regarding Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) risks				SEA/SH MGT plan,
14. Would any public facilities, such as schools, health clinic, church be negatively affected by construction?				
15. Will the subproject require the government to retain workers to provide security to safeguard the subproject?				

[2] GRM: Grievance and redress Mechanism

[3] WMP: Waste management

ESS8 Cultural Heritage				
16. Is the subproject located within or in the vicinity of any known cultural heritage sites?				ESIA/ESMP, SEP
17. Will the subproject ensure that the that physical cultural resources (PCR) are appropriately preserved and their destruction or damage is appropriately avoided				ESIA/ESMP, SEP
18. Is the subproject to be located adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?				ESIA/ESMP, SEP
19. Locate near buildings, sacred trees or objects having spiritual values to local communities (e.g. memorials, graves or stones) or require excavation near there?				ESIA/ESMP, SEP
ESS10 Stakeholder Engagement and Information Disclosure				
20.Did the proponent of the subproject carry out regular consultation with a wide range of project stakeholders,				ESMP, SEP
21.Can the stakeholders play a significant role in shaping or affecting the subproject, either positively or negatively				SEP
OP7.60 Projects in Disputed Areas				
22.Is there any territorial dispute between two or more countries in the subproject and its ancillary aspects and related activities?				Governments concerned agree
OP7.50 Projects on International Waterways				
23.Will the sub project and its ancillary aspects and related activities involve the use or potential pollution of, or be located in international waterways[4]?				Notification (or exceptions)

A1. All answers to the checklist questions are “No”. There is no need for further action.

Conclusions:

1. **Proposed Environmental and Social Risk Ratings (High, /Substantial, Moderate or Low).**
2. **Proposed environment and social Instruments.**

[4] International waterways include any river, canal, lake or similar body of water that forms a boundary between, or any river or surface water that flows through two or more states.

Annex 2: Environmental and Social Management Plan (ESMP) Template

This is an example template for an ESMP, if relevant for your Project activities.
Environmental and social risks and impacts are strongly linked to subproject location and scope of activities. This ESMP should be customized for each specific subproject location and activities.

1. Subproject Information

Subproject Title:	
Estimated Cost:	
Start/Completion Date:	

2. Site/Location Description

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

3. Subproject Description and Activities

This section lists all the activities that will take place under the subproject, including any associated activities (such as building of access roads or transmission lines, or communication campaigns that accompany service provision).

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

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

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

Another option for the table above

Key Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Responsibility	Timeline	Budget	
					Install	Operate
Planning and Designing Stage						
Construction Stage						

5. Capacity Development & Training

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

6. Implementation Schedule and Cost Estimates

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

7. Attachments

ESCOPs, site specific SEP etc.

8. Review & Approval

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

Annex 3: Chance Find Procedures

If relevant for your Project, below is an example of simple Chance Find Procedures.

Cultural heritage encompasses tangible and intangible heritage which may be recognized and valued at a local, regional, national or global level. *Tangible cultural heritage*, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water. *Intangible cultural heritage*, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith— that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

In the event that during construction, sites, resources or artifacts of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents. These procedures take into account requirements related to Chance Finding under national legislation including [list relevant cultural heritage legislation in country].

- Stop the construction activities in the area of chance find temporarily.
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a guard shall be arranged until the responsible local authorities take over. These authorities are [list the responsible authorities under national legislation].
- Notify the relevant [implementing agency field staff] and the relevant [list the responsible local authorities under national legislation] immediately. [Implementing agency field staff] will inform the [implementing agency management].
- The relevant [list the responsible local authorities under national legislation] shall promptly carry out the necessities and inform the [national level cultural heritage or archeology ministry] immediately from the date on which the information is received.
- The [national level cultural heritage or archeology ministry] would be in charge of evaluation /inspection of the significance or importance of the chance finds and advise on appropriate subsequent procedures.
- If the [national level cultural heritage or archeology ministry] determines that chance find is a non-cultural heritage chance find, the construction process can resume.
- If the [national level cultural heritage or archeology ministry] determines chance find is an isolated chance find, [national level cultural heritage or archeology ministry] would provide technical supports/advice on chance find treatment with related expenditure on the treatment provided by the entity report the chance find.

Annex 4. Environmental and Social Codes of Practice (ESCOP)

These are examples of ESCOPs, if relevant for your Project activities. ESCOPs are pre-prepared environmental and social risks management measures for standard construction, livelihood or household support activities. The ones below are examples. Depending on the activities in your Project, you can include and exclude certain sections, as well as add new ones. For more detailed examples of standard environmental and social risk management measures refer to the World Bank Group Environmental, Health and Safety (EHS) Guidelines, which offer general and industry-specific measures.

You should fill out the "Responsibility" column with the relevant party responsible to implement the actions in the ESCOP, such as the project implementation unit, the local implementing unit, the contractor, or project beneficiaries (in certain community infrastructure or livelihoods activities).

To manage and mitigate potential negative environmental impacts, the project applies Environmental Codes of Practice (ESCOPs); outlined in this document. The ESCOPs contain specific, detailed and tangible measures that would mitigate the potential impacts of each type of eligible subproject activity under the project. They are marked as relevant for the planning phase, the implementation phase, or the post-implementation phase of activities. They are intended to be simple risk mitigation and management measures, readily usable to the Borrower and contractors.

The ESCOPs in this section are divided into:

a. ESCOPs for infrastructure subprojects (general guidelines and technical guidelines)
b. ESCOPs for livelihood support subprojects
c. ESCOPs for delivery of food and non-food items

a. ESCOPs for Infrastructure Subprojects

General ESCOP for Infrastructure Subprojects

Issue	Environmental Prevention/Mitigation Measures	Responsible Party
1. Noise during construction	a) Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance. (Planning phase) b) Use when needed and feasible noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees). (Implementation phase) c) Minimize project transportation through community areas. Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the project site and residential areas to lessen the impact of noise to the living quarters. (Implementation phase)	UTG, PIU
2. Soil erosion	a) Schedule construction during dry season. (Planning phase) b) Contour and minimize length and steepness of slopes. (Implementation phase) c) Use mulch, grasses or compacted soil to stabilize exposed areas. (Implementation phase) d) Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed. (Post-Implementation phase) e) Design channels and ditches for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.). (Post-Implementation phase)	UTG, PIU
3. Air quality	a) Minimize dust from exposed work sites by applying water on the ground regularly during dry season. (Implementation phase)	UTG, PIU

	b) Avoid burn site clearance debris (trees, undergrowth) or construction waste materials. (Implementation phase) c) Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. . (Implementation phase) d) Reduce the operation hours of generators /machines /equipment /vehicles. (Implementation phase) e) Control vehicle speed when driving through community areas is unavoidable so that dust dispersion from vehicle transport is minimized. (Implementation phase)	
4. Water quality and availability	a) Activities should not affect the availability of water for drinking and hygienic purposes. (Implementation phase) b) No soiled materials, solid wastes, toxic or hazardous materials should be stored in, poured into or thrown into water bodies for dilution or disposal. (Implementation phase) c) Avoid the use of waste water pools particularly without impermeable liners. d) Provision of toilets with temporary septic tank. (Implementation phase) e) The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of river beds or flooding of settlements. (Implementation phase) f) Separate concrete works in waterways and keep concrete mixing separate from drainage leading to waterways. (Implementation phase)	UTG, PIU
5. Solid and hazardous waste	a) Segregate construction waste as recyclable, hazardous and non-hazardous waste. (Implementation phase) b) Collect, store and transport construction waste to appropriately designated/ controlled dump sites. (Implementation phase) c) On-site storage of wastes prior to final disposal (including earth dug for foundations) should be at least 300 metres from rivers, streams, lakes and wetlands. (Implementation phase) d) Use secured area for refuelling and transfer of other toxic fluids distant from settlement area (and at least 50 metres from drainage structures and 100 metres from important water bodies); ideally on a hard/non-porous surface. (Implementation phase) e) Train workers on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials. (Implementation phase) f) Collect and properly dispose of small amount of maintenance materials such as oily rags, oil filters, used oil, etc. Never dispose spent oils on the ground and in water courses as it can contaminate soil and groundwater (including drinking water aquifer). (Implementation phase) g) After each construction site is decommissioned, all debris and waste shall be cleared. (Post-Implementation phase)	UTG, PIU
6. Asbestos	a) If asbestos or asbestos containing materials (ACM) are found at a construction site, they should be clearly marked as hazardous waste. (Implementation phase) b) The asbestos should be appropriately contained and sealed to minimize exposure. (Implementation phase) c) Prior to removal, if removal is necessary, ACM should be treated with a wetting agent to minimize asbestos dust. (Implementation phase) d) If ACM is to be stored temporarily, it should be securely placed inside closed containers and clearly labeled. (Implementation phase)	UTG, PIU

	e) Removed ACM must not be reused. (Implementation and post-implementation phase)	
7. Health and Safety	a) When planning activities of each subproject, discuss steps to avoid people getting hurt. (Planning phase) It is useful to consider: • Construction place: Are there any hazards that could be removed or should warn people about? • The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their works safely? • The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely? • Electricity Safety: Do any electricity good practices such as use of safe extension cords, voltage regulators and circuit breakers, labels on electrical wiring for safety measure, aware on identifying burning smell from wires, etc. apply at site? Is the worksite stocked with voltage detectors, clamp meters and receptacle testers? b) Mandate the use of personal protective equipment for workers as necessary (gloves, dust masks, hard hats, boots, goggles). (Implementation phase) c) Follow the below measures for construction involve work at height (e.g. 2 meters above ground (Implementation phase): • Do as much work as possible from the ground. • Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem; certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson's disease; certain medications – sleeping pills, tranquillisers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc. • Only allow people with sufficient skills, knowledge and experience to perform the task. • Check that the place (eg a roof) where work at height is to be undertaken is safe. • Take precautions when working on or near fragile surfaces. • Clean up oil, grease, paint, and dirt immediately to prevent slipping; and • Provide fall protection measures e.g. safety hardness, simple scaffolding/guard rail for works over 4 meters from ground. d) Keep worksite clean and free of debris on daily basis. (Implementation phase) e) Provision of first aid kit with bandages, antibiotic cream, etc. or health care facilities and enough drinking water. (Implementation phase) f) Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas. (Implementation phase) g) Ensure adequate toilet facilities for workers from outside of the community. (Implementation phase) h) Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs including at unsafe locations. Do not allow children to play in construction areas. (Implementation phase) i) Ensure structural openings are covered/protected adequately. (Implementation phase) j) Secure loose or light material that is stored on roofs or open floors. (Implementation	UTG, PIU

	phase) k) Keep hoses, power cords, welding leads, etc. from laying in heavily traveled walkways or areas. (Implementation phase) l) If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours, if needed. (Implementation phase) m) Control driving speed of vehicles particularly when passing through community or nearby school, health center or other sensitive areas. (Implementation phase) n) During heavy rains or emergencies of any kind, suspend all work. (Implementation phase) o) Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning. (Post-Implementation phase)	
8. Other	a) No cutting of trees or destruction of vegetation other than on construction site. [Implementing agency] will procure locally sourced materials consistent with traditional construction practices in the communities. (Planning phase) b) No hunting, fishing, capture of wildlife or collection of plants. (Implementation phase) c) No use of unapproved toxic materials including lead-based paints, un-bonded asbestos, etc. (Implementation phase) d) No disturbance of cultural or historic sites. (Planning and implementation phases)	UTG, PIU

Specific ESCOPs for Infrastructure Subprojects

Subproject Type	Environmental Prevention/Mitigation Measures	Responsible Party
Buildings		
Shelters, community centers, schools, kindergartens.	a) Design of schools, community centres, markets should follow relevant requirements on life and fire safety required by National Building Codes and relevant guidelines from the concerned Ministries. (Planning phase) b) Schools: Maximise natural light and ventilation systems to minimise needs for artificial light and air conditioning; use large windows for bright and well-ventilated rooms. (Planning phase)	UTG, PIU
Electrification		
Solar power supply	a) Tidy wiring for easy maintenance and reduces the risk of accidents. (Implementation phase) b) Need to raise community awareness on electrical hazards and health and safety concerns, as well as proper maintenance of solar panels (Implementation and post-implementation phases) c) Need to raise community awareness on proper disposal of solar panels, specifically avoiding disposal of panels near water bodies (Post-implementation phase)	UTG, PIU
minimize emergency risks	a) Build appropriately designed infrastructure safe from natural hazards. (Planning and implementation phases) b) Avoid areas prone to natural hazard events (flooding, spring tides, etc.), steep slopes and vulnerable to erosion and landslides, etc. (Planning and implementation phases)	UTG, PIU
To secure the safety	a) Proper use and management of hazardous materials and waste. (Implementation phase) b) Awareness of dangers on working area, occupation, health and safety equipment through signage where applicable. (Implementation phase) c) Lock storage of fuels, paints, and chemicals. (Implementation phase)	UTG, PIU