



Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 01/10/2023 | Report No: ESRSA02329



BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Bangladesh		P179009	
Project Name	Gas Sector Efficiency Improvement and Climate Mitigation Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Energy & Extractives	Investment Project Financing	1/23/2023	4/10/2023
Borrower(s)	Implementing Agency(ies)		
Peoples Republic of Bangladesh	Petrobangla, Titas Gas T&D Company Limited, Pashchimanchal Gas Company Limited (PGCL), Bangladesh Energy Regulatory Commission (BERC)		

Proposed Development Objective

To improve efficiency of gas distribution and end-use, and support decarbonization of the gas sector

Financing (in USD Million)	Amount
Total Project Cost	300.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The project is designed to support the Government of Bangladesh's efforts to meet its Nationally Determined Contributions (NDCs) in the gas sector by helping to increase efficiency of the retail gas networks of two gas companies and reduce gas leakages and emissions



D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The Project locations are determined as greater Dhaka, Bogra, Sirajgonj and Pabna. The project does not expect any major civil works, other than very minor and basic works associated with installation of prepaid meters at existing consumer connection points. About 1,100,000 and 128,000 residential prepaid meters will be installed by Titas Gas Transmission and Distribution Company Limited (TGTDCCL or Titas), and Pashchimanchal Gas Company Limited (PGCL) respectively. In addition, few smart meters connections will be provided as a pilot to a number of Titas’ and PGCL’s industrial customers to demonstrate the viability of smart meters for better management of gas usage by industrial customers and improved monitoring of gas use. Supervisory Control and Data Acquisition (SCADA) system will be installed for PGCL to monitor real time pressure and flows. The Project will build awareness about more efficient residential and industrial gas consumption.

The Project will also include TA activities targeting mid- and upstream de-carbonization efforts, which would consist of a detailed assessment of decarbonization opportunities. Although the Project is not designed to finance downstream investments resulting from the proposed TA activities, assessment of related environmental and social risks are prepared to be included in the Terms of Reference (TORs) of these studies and TA products. The TA will largely focus on increasing upstream/downstream gas consumption and transportation efficiencies, reducing fugitive gas emissions and gas venting/flaring, reducing gas leaks, etc. To mitigate the potential E&S risks Borrower prepared an ES code of practices (ESCoP) based on the proposed major activities of the project.

D. 2. Borrower’s Institutional Capacity

Although Titas and PGCL do not have any direct experience working with the World Bank, both IAs have experience working with development organizations such as the Asian Development Bank (ADB) and the Japanese International Cooperation Agency (JICA). They have experience in preparing Initial Environmental Examination (IEE), Environmental Impact Assessment (EIA) and Resettlement Action Plan (RAP) for donor-funded and Government of Bangladesh (GoB) projects. They also have experience managing OHS-related issues through dedicated health and safety units.

Titas has two permanent in-house E&S focal points managing E&S-related aspects. Titas has recently implemented a similar JICA-financed project (namely “Installation of 3.2 lakh prepaid gas meters in Dhaka Metropolitan area”). Titas is also implementing a project financed by ME Climate A/S (NEAS) through the Clean Development Mechanism (CDM) based on guidelines of the United Nations Framework Convention on Climate Change (UNFCCC). This project is being implemented by Titas’s CDM cell.

Titas provides call numbers on its website for emergencies and complaints. Customers can also send written complaints. Titas’ team responds to resolve complaints based on these calls and written letters. Titas follows the Grievance Redress System Guidelines, 2015 (revised in 2018) of GoB.

PGCL, has safety officials and they normally engage consultants to prepare E&S documents and maintains a grievance redress system spread across one central and four district level local offices.

Both PGCL and Titas provide regular training to employees and contractors on emergency preparedness and response.

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Petrobangla is the apex institution of these two agencies. Through the TA component, E&S capacity building and advisory support will be provided to Petrobangla as well.

Each IA will host a dedicated Project Implementing Unit (PIU) for the successful implementation of its activities/sub-components under the Project. The proposed operation will consider the possibility of appointing a coordinating PIU at Petrobangla, which will act as a central focal point for project management. One E&S focal will be recruited in each PIU. Significant coordination with several institutions and Project IAs across the country will be needed, which may pose challenges to ensuring the full and proper management of environmental and social (E&S) issues, as well as Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks and impacts. To mitigate these challenges, IA’s E&S management capacity will be enhanced through training and continuous fostering and strengthening of institutional monitoring mechanisms, to implement the Project in accordance with the Bank’s Environmental and Social Framework (ESF)

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Moderate

Environmental Risk Rating

Moderate

The Project’s physical activities involve procurement, installation and commissioning of metering solutions for residential consumers; some industrial consumers will be included on a pilot basis. The TA component will support preparing decarbonisation and investment action plan. Based on the nature of these activities, it is expected that the E&S impacts will be localized and minor, entailing primarily added noise and dust associated with installing meters, which will be addressed through adequate mitigation measures and related guidelines incorporated in the E&S Code of Practices (ESCoP). There will be no significant civil works under the Project, only minor/basic works involved in installation of meters. Minor OHS risks related to installing the meters can be expected (e.g. potential exposure to gas leakage, fires/ explosions if leaky connections are fixed without closing the check valve, accidents during installations). Adequate safety measures must be put in place to avoid accidents from gas leaks. Communities need to be consulted on the environmental impacts and workers must be trained about safety measures during the minor works. The Project generates environmental benefits related to improved energy efficiency, reduced greenhouse gas emissions, and leakages/waste in gas fields. According to the Government of Bangladesh’s Department of the Environment (DoE), installing meters is classified as a “Green” category. Although there are low/minor environmental risks associated with the the Project’s activities, the Project’s environmental risks are rated as “Moderate” at the appraisal stage because the IAs do not have sufficient experience with or track record implementing the ESF. As such, capacity enhancement of the IAs is required to manage the E&S risks.

Social Risk Rating

Moderate

The overall social risk is rated as “moderate” taking into account the risks related to the potential exclusion of residential customers of titas (project will support 1.1 million customers which will increase coverage upto 54%) and industrial customers of titas and PGCL, (as the Project will install limited numbers of meters for the industrial customers as pilot); community and worker health and safety (CHS and OHS), and SEA/SH risks and ESF’s novelty to the IAs. The IAs will need guidance on Labor management, stakeholder engagement, gender, CHS, OHS and SEA/SH

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risks and issues. PGCL will install 128,000 prepaid gas meters for residential end users within their Rajshahi, Sirajgonj, Bogura, Pabna, Ishwardi, Baghabari & Bera-Santhiya to achieve 100% metering coverage for all of their residential customers. Titas has already installed 320,000 meters where 60% of the relevant beneficiaries confirmed that the installment of these new meters resulted in reduced gas costs. Hence, the new meters seem to be the preferred option now for many customers. The meters will ensure that the gas bill will be directly related to usage for residential and industrial customers under the coverage of the project. Customers who consume a volume of gas below the current estimation of the flat rate billed to all residential customers, more likely to be part of low-income groups, will benefit more from this fairer and more equitable system of billing. But broadly, all customers could benefit from the elimination/suppression of costs that would now be obsolete, such as the cost of disconnection and reconnection. The risk of exclusion within a localised area is small as Titas usually applies an area/block/street based plan covering households connected to main feeder lines. Usually, a technical reason/explanation is provided if a customer is left out (e.g., connected to a different feeder line).

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

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

The standard is relevant to the Project. The installation of gas meters will allow residential and selected industrial consumers to have accurate gas readings, a more immediate response from suppliers to gas leaks, and more efficient and cost conscious approach to gas usage. Furthermore, the Project is expected to include TA activities to identify, assess, and prioritize decarbonization opportunities in the value chain of gas and oil that are expected to yield major environmental co-benefits which would contribute to reduce global warming. While the Project will not finance any investments identified from this TA, there might be E&S impacts resulting from these investments, if and when they move forward, depending on the choice of technologies used. The TA will be limited to preparation of an Action Plan for the development of a policy, legal, institutional, regulatory and contractual framework for decarbonization of sector operations and capacity building and advisory support to the MPEMR, BERC and Petrobangla for the implementation of the Action Plan.

The IAs have carried out an E&S assessment of the proposed activities and developed an ESCoP to mitigate the estimated risk and impacts. The IAs have included scope of ES requirements to mitigate and minimize related E&S risks in the ToRs for the envisaged TA to assess and prioritize decarbonization opportunities. An Environmental and Social Commitment Plan (ESCP) has been prepared and agreed with the Bank that spells out the measures and actions required to ensure compliance with the Environmental and Social Standards (ESSs).

In summary, the following documents has been prepared by the IAs i) an E&S code of practices (ESCoP) based on the proposed Project activities, ii) Stakeholder Engagement Plans (SEP) by Titas and PGCL, iii) Labor Management Procedure (LMP) by Titas and PGCL, iv) TOR including the Scope of E&S requirements associated with decarbonization TA activities.

The above E&S documents will be reviewed and updated, as and when required in consultation with the World Bank and disclosed in country and on the Bank system. The ESCP includes time-bound commitments concerning the



preparation of E&S instruments and adequate organizational structure and capacity building measures for effective Project implementation.

ESS10 Stakeholder Engagement and Information Disclosure

In consultation with the World Bank, Titas and PGCL have prepared SEPs which are consistent with the nature and scale of the Project and its associated risks and impacts. All stakeholder’s engagement/citizen engagement (SE/ CE) activities will comply with COVID-19 protocols in place in Bangladesh. Virtual consultations may be carried out depending on social distancing requirements and other applicable measures in the COVID-19 protocols. As part of the SEP preparation process the IAs have consulted six meetings with potential Project beneficiaries in Dhaka, Bogra, Sirajgonj and Pabna physically and virtually and informed them about the importance of gas metering, SCADA and TA activities. The selection criteria and methodology for coverage has been carefully explained to avoid any risk of social unrest emanating from exclusion related grievances. The SEPs provide information showing that metered homes and industries have seen a reduction on their bills. The stakeholders showed positive opinion on the installation of the gas meters. The SEPs include measures for strong communication and mobilization strategies focused on relevant stakeholders, particularly vulnerable and disadvantaged groups including women, minority groups in remote areas, disabled people, LGBTQ+, etc. The SEP also lays out the GRM set-up for Petrobangla, Titas and PGCL which are designed to be accessible to all stakeholders including those belonging to vulnerable groups. As part of the SEPs, a local and Project-level GRM, which is accessible to all stakeholders (including vulnerable groups), has been incorporated. The Project level GRM will also address incident related to SEA/SH along with other grievances. The Project will record all grievances and include them in the quarterly monitoring reports. The SEPs are living documents which will be updated as necessary. The process of stakeholder engagement has begun during preparation and will continue throughout the Project’s life.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The standard is relevant given that the Project is expected to engage direct and contracted workers to i) install the metering system for the residential and industrial consumers, and ii) install the SCADA system. As there are minor civil works, it is expected that the number of contracted workers will be minimal. The PIU will hire direct workers as consultants in the PIU, though the number is expected to be small (e.g., E&S specialist, procurement, financial management and, M&E specialists) and the relevant provisions of the ESS2 will apply. The Project will also explore the possibility of hiring people with different abilities, if and as feasible. No issues regarding the Workers Union are expected. Skilled contractors and sub-contractors on potential OHS risks will be hired and trained on relevant ESHS guidelines so they will be aware of potential risks and prepared for emergency response, if and when needed.

LMPs have been developed by Titas and PGCL to define and frame the management of workers (working conditions, occupational health and safety (OHS) and terms and conditions of employment, measures to prevent and address harassment(including SEA/SH), provisions for non-discrimination and equal opportunity in the workplace, OHS for workers including exposure to COVID-19, etc.). The LMPs also include dedicated GRMs responsive to SEA/SH



incidents, apart from the Project level GRM. The LMPs also consider the OHS aspects when working in urban/pre-urban environments.

ESS3 Resource Efficiency and Pollution Prevention and Management

The standard is relevant. Given there is transfer of gas through pipeline, chances of leakages are possible and also occurrence of noise and dust emissions, solid waste generated from gas line replacement / minor construction waste / refuse. However, adequate preventive and mitigation measures has been included in the ESCoP to monitor the gas lines regularly to reduce the risk of leakage and ensure efficient utilization of the gas resource. The project is designed to directly contribute to improving resource efficiency and reducing air emissions (greenhouse gases) through the installation of monitoring devices, including leak/fugitive emissions detection systems through the TA activities. Although not implemented as part of the project, the designed TA on decarbonization opportunities will result major environmental co-benefits in terms of helping to reduce global warming and also probable adverse E&S effects depending strongly on alternative technology choices. A Terms of Reference (TORs) has been prepared for assessing E&S risks in de-carbonization opportunities during appraisal to identify necessary mitigation measures to be taken at implementation.

ESS4 Community Health and Safety

This standard is relevant. The Project is providing support for the installation of gas meters to households during an ongoing COVID-19 pandemic, where the potential beneficiaries and surrounding communities are already facing health and safety risks associated with COVID-19. The Project is not proposing any new gas lines to be constructed and no confined space work is involved. The likelihood of gas leaks occurring due to the proposed Project activities are minimal, nevertheless, workers/supervisors will be trained to deal with and mitigate risks and impacts associated with any gas leaks no matter how low the probability of such incidents occurring. CHS issues associated with possible accidents and incidents, and those emanating from gas connections, COVID-19 and SEA/SH, will be managed under relevant provisions in the ESCoP and LMPs which has been prepared and will be disclosed. according to the provisions in the ESCoP. The ESCoP follows the WB ESF, World Health Organization (WHO) standards, national circulars, E&S Good International Industry Practices (GIIP), WBG Environmental, Health, and Safety Guidelines for gas distribution systems etc.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is not relevant. As previously noted, no land acquisition or involuntary resettlement under the Project are expected. The Project is also not expected to lead to restrictions of land use or impacts on livelihoods from such restrictions/acquisition.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is not relevant given the pipelines for gas connection are already installed and there will be no further land conversions that could impact natural habitats. All project activities (installation of gas meters) will take place within existing private and industrial properties.



ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

This standard is not relevant as the Project will install meters in established homes / industry in an urban setting and there are no ethnic minorities/indigenous peoples (SECs/IPs) in Project’s geographic scope.

ESS8 Cultural Heritage

The standard is not relevant, given the urban setting of Project activities. However, the ESCoP will have a specific section on Chance Find Procedures, and ensure that if meters are installed in protected sections of the city, homes / buildings of historical/ cultural value, these activities will comply with applicable GIIP and local ordinances/regulations.

ESS9 Financial Intermediaries

The standard not relevant, as there are no Financial Institutions involved in the project.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

OP 7.60 Projects in Disputed Areas No

B.3. Reliance on Borrower’s policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework? No

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

Borrower Framework will not be used

IV. CONTACT POINTS

World Bank

Contact:	Sameh I. Mobarek	Title:	Senior Energy Specialist
Telephone No:	+1-202-725-6520	Email:	smobarek@worldbank.org
Contact:	Carlos Alberto Lopez Quiroga	Title:	Senior Oil and Gas Specialist
Telephone No:	+1-202-473-4039	Email:	clopezq@worldbank.org

Public Disclosure



Borrower/Client/Recipient

Borrower: Peoples Republic of Bangladesh

Implementing Agency(ies)

Implementing Agency: Petrobangla

Implementing Agency: Titas Gas T&D Company Limited

Implementing Agency: Pashchimanchal Gas Company Limited (PGCL)

Implementing Agency: Bangladesh Energy Regulatory Commission (BERC)

V. FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

VI. APPROVAL

Task Team Leader(s):	Carlos Alberto Lopez Quiroga, Sameh I. Mobarek
Practice Manager (ENR/Social)	Christophe Crepin Cleared on 06-Dec-2022 at 12:48:24 GMT-05:00

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