



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 07/12/2022 | Report No: ESRSC02852



BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Bangladesh	SOUTH ASIA	P179009	
Project Name	Gas Sector Efficiency Improvement and Decarbonization Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Energy & Extractives	Investment Project Financing	11/23/2022	4/3/2023
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 location will be greater Dhaka, Bogra, Sirajgonj and Pabna. Project beneficiaries (residential and industrial) will be selected within these districts. The project does not expect any civil works, other than very minor and basic works associated with installation of prepaid meters at consumer’s existing connection point. For residential consumers, up to 1,100,000 and 86,000 prepaid meters would be installed respectively by Titas in greater Dhaka area and PGCL in its service territory. The number of meters to be installed for industrial consumers and SCADA system are still in discussion.

This project will build up awareness of domestic customers as well as industrial customers to become more efficient in the usage of gas.

The installation of gas meters will allow domestic consumers to have accurate gas readings, a more immediate response from the supplier to gas leaks, and more efficient and cost conscious approach to gas use. As part of the project design, Titas Gas Transmission and Distribution Company Limited (TGTDC) and Pashchimanchal Gas Company Limited (PGCL) will be expected to ensure its stakeholder communications are robust and efficient, so that customers are aware of the transition and any potential disruptions; ensure its grievance mechanism is enhanced to gather complaints related to the project; and ensure contractors adhere to national labor codes. It is expected that PGCL and TGTDC will work with the Bank to identify appropriate pro-poor and gender mainstreaming activities to ensure greater opportunities for women as customers and amongst the workforce in PGCL and TGTDC as an additional development objective of this program.

None of the activities will require any construction related work. However, during installation of the gas meters and application of the Supervisory Control and Data Acquisition (SCADA) system, some minor OHS related risks are anticipated, adequate safety measures have to be ensured to avoid accidents from gas leakage.

The project will also entail technical assistance (TA) activities targeting midstream de-carbonization efforts, which would consist of a detailed assessment of decarbonization opportunities, including (i) completing a study on repurposing of depleted gas fields for CCS, (ii) identifying opportunities of future use of existing gas networks for hydrogen transportation, and (iii) testing innovative techniques and equipment to increase gas recovery and eliminate flaring. Although the Project is not designed to finance the downstream investments of the proposed TA activities, the environmental and social risks will be considered in the TORs of these studies and TA products. However, the TA is still being designed and the ES impacts and mitigation measures will be better defined by the appraisal. The TA focus will be on (i) upstream/downstream efficiencies/fugitive emission capture/ leak reduction and (ii) it is not expected to result in any major infrastructure interventions that could imply having to elaborate the ESRS of this operation to Substantial or High.

Prior to appraisal, to mitigate the potential E&S risks Borrower will prepare an ES code of practices (ESCoP) based on the proposed activities of the project, along with a negative list to screen out ineligible activities, those pose substantial to high adverse impact on the environment and social. Borrower also prepare and disclose a stakeholder engagement plan (SEP), which will also outline the project level GRM and labor management procedures (LMP) as well as Terms of Reference (TORSCADAs) for assessing E&S risks associated with de-carbonization opportunities by appraisal.

D. 2. Borrower’s Institutional Capacity

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Although TGTDC and PGCL do not have any direct experience working with the World Bank, both IAs have experience working with development organizations such as ADB and JICA. They have experience preparing IEE, EIA and RAP for donor funded and GoB projects. They also have experience on OHS and manage OHS related activities through their unit and include relevant clauses in bidding documents of contractors.

Though TGTDC does not have any E&S unit, they have two permanent in-house E&S focal officials managing the safeguards aspects. TGTDC has recently implemented a similar JICA financed project namely "Installation of 3.2 lakh prepaid gas meters in Dhaka Metropolitan area". TGTDC provided call numbers on its website for emergencies and raising any complaints. Customers can also send written complaints. The team responds to resolve any unwanted situation or complaints based on the calls and written letters submitted. TGTDC does not have any framework-document on grievance redress mechanism, but it follows the Grievance Redress System Guidelines, 2015 (revised in 2018) of GoB. On the other hand, PGCL does not have any in-house E&S specialist. They normally engage third party/consultant to prepare E&S documents. PGCL has central and local office based grievance management system. Both PGCL and TGTDC provide regular training of employees and contractor personnel in emergency preparedness and response.

TGTDC has Clean Development Mechanism (CDM) Project that is being implemented with the financial and technical support of NE Climate A/S (NEAS) as per the guideline of United Nations Framework Convention on Climate Change (UNFCCC). This Project is being implemented by the CDM cell of TGTDC. As per the Project Design Document (PDD) and part of baseline study, identification, measurement and repairing of gas leakages have been accomplished in 2017. Under the baseline study of this project, 5,65,952 nos. of residential and commercial risers were inspected and 35,252 nos. of leakage risers were repaired, and 4,06,703.3 litres per minute or 20.68 Millions of Cubic Feet Per Day (MMCFD) leakage has been stopped. To monitor the gas leakage in repaired risers, inspection has been carried out every year. Under first, second and third monitoring in 2018, 2019 and 2020, 19.24 MMCFD, 19.66 MMCFD and 20.83 MMCFD gas leakage were stopped respectively. The monitoring of this project of TGTDC has been verified by UNFCCC and as per the CER (Certified Emission Reduction) of UNFCCC in 2018 and 2019, it had 33,78, 611 unit: CO2e and 34, 81, 722 unit: CO2e respectively. Currently, 4th monitoring is ongoing and monitoring and verification activities as per the UN-methodology will be accomplished by 2025.

E&S management capacity of IAs will be enhanced through training and continuous fostering and setup of institutional monitoring mechanism to implement the project according to the requirements of the Bank's ESF. Significant coordination with several institutions and project implementation bodies across the country also pose challenges when ensuring that environmental and social (E&S) issues, SEA/SH risks and impacts are properly mitigated. To mitigate these impacts, project will support establishing coordination mechanisms with all relevant stakeholders at the local level, including joint meetings on a regular basis to assess and provide solutions to demand and supply issues.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Moderate

Environmental Risk Rating

Moderate

Based on the nature of proposed activities, it is expected that the E&S impacts will be localized and minor, entailing primarily the generation of noise and dust associated with the installation of the meters, which will be addressed

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through adequate mitigation measures and related guidelines to be incorporated in the ESCoP. The activity mainly includes procurement and installation of meters at consumer’s existing connection point. There will be no civil works under the project. While improving distribution network infrastructure to address fugitive gas and network weaknesses leading to gas leakages (subcomponent 1.2) may also have OHS risks. Minor OHS related risks related to the installation of meters can be expected (e.g. potential exposure to gas in confined spaces, working in open trenches, fires/ explosions if fixing leaky connections without closing the check valve , accident during machinery operation, falling from heights, among other relevant risks). Adequate safety measures must be ensured to avoid accidents from gas leakage, if any. Communities need to be consulted on the environmental impacts, and workers must be trained about safety measures during construction, awareness of health, sexually transmitted diseases, safe sex, etc. An E&S checklist and negative list will be prepared to screen out any activities with potential to cause adverse impacts on the environment. The project poses Environmental benefits related to improved energy efficiency, reduced , greenhouse gas emissions, and seepage in gas fields. In accordance with the Department of Environment (DoE), the installation of meter is classified as Green category. Although the environmental risks of the project are low, the environmental risk for this project is rated as “Moderate” at concept stage since the agencies are new to the ESF, and capacity enhancement of the implementing agency is required to manage E&S risks. However, this risk classification will be revisited when more details of the project activities become available during appraisal. Any change to the classification will be disclosed on the Bank’s website.

Social Risk Rating

Moderate

The overall social risk is rated as “moderate” given the potential social risks related to the exclusion of intended beneficiaries as the Project will install 1,186,000 meters under Component 1 while TGTDCI’ and PGCL’s customer base exceeds that number, potential community and worker health and safety (CHS and OHS) and SEA/SH risks (which is low) and the newness of the ESF to the IAs. The IAs will need guidance on mitigating Labor management, stakeholder engagement, gender, CHS, OHS and SEA/SH risks and issues. With regards to the exclusion risk, TGTDCI has already installed 320,000 meters where 60% beneficiaries confirmed that metering system reduces the energy cost, so this is a preferred option for many people now. The beneficiary selection criteria are not prepared yet and will be completed before appraisal. The risk of exclusion, however, is small as TGTDCI usually applies an area/block/street based plan for coverage, covering households connected to the main feeder line, and there is normally a technical reason/explanation if someone is left out (e.g. connected to a different feeder line). The project will support installing the meters and Supervisory Control and Data Acquisition (SCADA) system, with no adverse livelihood related impacts expected. Any activity that can have substantial or higher adverse impacts will be screened out using the E&S checklist and negative list . This project will not allow any activities that require land acquisition, resettlement or negative impacts on livelihood or restriction to land use. To manage the labor and worker OHS risks related to the installation of meters, labor management procedures (LMP) will be prepared and disclosed by appraisal. CHS concerns such as incidents and accidents associated with gas connections,SEA/SH and spread of COVID-19 etc., among project workers and communities will be managed throug the inclusion of OHS, CHS (including SEA/SH and COVID provisions) in the LMPs and ESCoP, respectively. The LMP will also outline the GRM for project workers. TGTDCI and PGCL will prepare a SEP before the appraisal stage of the project. As part of the SEP, a local and project level GRM will be put in place that can be accessed by all stakeholders including vulnerable groups and IPs (if identified). The project will record all grievances and submit with the quarterly monitoring reports. TGTDCI and PGCL will conduct a stakeholder mapping and analysis exercise to ensure that all vulnerable groups, including women, and those differently abled, are well consulted and well informed about the project benefits.

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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 domestic consumers to have accurate gas readings, a more immediate response from the supplier to gas leaks, and more efficient and cost conscious approach to gas use. Although not implemented as part of the project, there might be a TA on decarbonization opportunities. Although decarbonization pathways yield major environmental co-benefits in terms of helping to reduce global warming, there might be adverse E&S effects depending strongly on alternative technology choices.

Prior to appraisal, the Borrower as part of the project preparation will carry out an Environmental and Social assessment on the project activities and develop an ES Code of Practices (ESCoP) to mitigate the estimated risk and impacts and a negative list to screen out any ineligible activities with substantial or higher adverse E&S impacts as well as Terms of Reference (TORs) for assessing E&S risks associated with de-carbonization opportunities. An Environmental and Social Commitment Plan will be prepared and agreed with the Bank spelling out the measures and actions required to ensure compliance with the Environmental and Social Standards (ESSs).

The ESF documents will be reviewed and updated as and when required in consultation with the World Bank and disclosed in country and in the Bank system. ESCP will entail time bound commitments concerning the preparation of E&S instruments and adequate organizational structure and capacity building measures for effective implementation of the Project.

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

Borrower Framework will not be used

ESS10 Stakeholder Engagement and Information Disclosure

In consultation with the WB, TGTDC and PGCL will prepare a Stakeholder Engagement Plan (SEP) proportional to the nature and scale of the project and associated risk and impacts. All SE/CE activities will be conducted adhering to the COVID-19 protocols in place in Bangladesh. Consultations may be carried out through virtual formats based on social distancing requirements. Both IAs will conduct consultation with potential beneficiaries of the project and inform them about the importance of gas metering. It would also be important to consult with those who may be left out, if at all, explaining to them the reasons why and describing next steps to extend the coverage as and where appropriate. The selection criteria and methodology would need to be carefully explained to avoid any risk of social unrest emanating from exclusion related grievances. The SEP will provide information on track record to ensure that metered homes have seen a reduction on their bill. The SEP will include measures for communication with relevant stakeholders paying attention to the identification of vulnerable and disadvantaged groups including women, minority groups in remote areas, differently abled people, LGBTQ+ etc. The SEP will also include a grievance redress mechanism (GRM) set up by TGTDC and PGCL that is accessible by all stakeholders including those belonging to vulnerable groups. The SEP is a living document and will be updated as necessary during implementation. The SEP will outline a) who the key stakeholders are; b) how they are to be engaged; c) how often the engagement will occur throughout the project; d) how feedback will be solicited, recorded and monitored over the project; e) who will be charged/responsible with this engagement; f) timeline for this engagement, and so on. The Bank will review



the adequacy of the SEP, and that must be prepared as soon as possible and cleared by appraisal. The process of stakeholder engagement will begin during preparation and continue throughout the life of the project.

As stakeholder engagement is critical to the Project's success through uptake and utilization of services, IAs will undertake a strong communication and mobilization strategy which will facilitate the access of vulnerable beneficiaries to Project benefits.

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 will engage direct and contracted workers for i) Installing the metering system for the domestic and industrial consumers; ii) connecting the metering system installed to the SCADA systems. As there are no civil works, it is expected that the number of contracted workers will be minimum. The PIU will hire direct workers as consultants in the PIU, however the number will be few (including procurement specialist, financial management specialist, M&E specialist) and the relevant provisions of the ESS2 will apply. The project will also explore possibility to include hiring of 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 procured and they will also be trained following the relevant EHS guidelines so that they will be aware of any potential risk and have the knowledge to emergency response.

A Labor Management Procedure (LMP) will be developed that sets out and document the way workers will be managed (working conditions, 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, occupational health and safety (OHS) for workers including exposure to COVID-19, etc.). The LMP will also include a dedicated Grievance Redress Mechanism (GRM) that is responsive to SEA/SH incidents separate from the Project level GRM. Further to that, LMP will consider the occupational health and safety aspects when working in remote rural areas and/or challenging urban/pre-urban environments.

ESS3 Resource Efficiency and Pollution Prevention and Management

The standard is not relevant. However, 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.

ESS4 Community Health and Safety

This standard is relevant. The project is providing support to installation of gas meters in 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. An SOP will be prepared in line with WHO standards, national circulars and follow E&S Good International Industry Practices (GIIP) in the WBG Environmental, Health, and Safety Guidelines for GAS DISTRIBUTION SYSTEMS. The team shall use these guidelines to ensure key EHS issues are covered



during appraisal. in relation to protection from COVID-19. CHS risks emanating from SEA/SH will also need to be mitigated as per measures mentioned above. Moreover, CHS issues associated with potential accidents and incidents due to Gas leakage during installation and handling among project workers and communities will be managed through the inclusion of SEA/SH and COVID provisions in the LMPs and ESCoP, respectively. Any potential CHS risks and subsequent guideline will be addressed in the ESCoP that will be prepared and disclosed for the project by appraisal.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is not relevant. There will be no land acquisition or involuntary resettlement under the project, nor will it lead to restrictions of land use or impacts on livelihoods from such restrictions/acquisition. The project is enabling beneficiaries connect with the gas metering system to already existing gas connection services.

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

ESS7 is not relevant at this stage as the project will install meters in established homes / industry in an urban setting and as there is no presence of small ethnic minorities/indigenous peoples (SECs/IPs) in the project locations of Dhaka, Sirajganj, Bogura, Rajshahi and Pabna. However, during preparation if any SECs/IPs meeting the ESS7 criteria are found in the project intervention areas, the concerned SECs/IPs will be fully consulted to ensure that they can participate in the preparation of the project and benefit from it.

ESS8 Cultural Heritage

The standard is not relevant given the urban setting, but that the ESCoP will have a specific section on Chance Find Procedures and ensure that if meters are being installed in old sections of the city, homes / buildings of historical/ cultural value will be protected by the application of GIIP and local ordinances/regulations will be respected / complied with, etc.

ESS9 Financial Intermediaries

The standard not relevant, as there are no FIs 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

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?

No

Financing Partners

Only WB

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

- i. Preparation of the Stakeholder Engagement Plan (SEP)
- ii. Preparation of the ES Code of Practices (ESCoP) including: The list of activities not eligible for funding, and E&S checklist with measures for addressing the ES risks identified in the project.
- iii. Preparation of the Environmental and Social Commitment Plan (ESCP)
- iv. Preparation of Labor Management Procedures (LMP)
- v. Preparation of Terms of Reference (TORs) for assessing E&S risks in de-carbonization opportunities

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

Regular Reporting on the environmental, social, health and safety (ESHS) performance

Exclude the activities as mentioned in the negative list

The PMU will be functioned by engaging ES experts

Follow the ESCoP and other documents to be prepared.

The PMUs, staff consultants will be given capacity building training on ESF and environmental, social, health and safety (ESHS) management

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

15-Sept-2022

IV. CONTACT POINTS

World Bank

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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

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VI. APPROVAL

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Practice Manager (ENR/Social)	Christophe Crepin Recommended on 27-Jun-2022 at 16:57:40 GMT-04:00
Safeguards Advisor ESSA	Pablo Cardinale (SAESSA) Cleared on 12-Jul-2022 at 08:42:2 GMT-04:00

Public Disclosure