



# Appraisal Environmental and Social Review Summary

## Appraisal Stage

### **(ESRS Appraisal Stage)**

Date Prepared/Updated: 05/11/2024 | Report No: ESRSA03502



I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P173258	Program-for-Results Financing (PforR)	GH Energy Sector Recovery Program	2024
Operation Name	Ghana Energy Sector Recovery Program		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Ghana	Ghana	WESTERN AND CENTRAL AFRICA	Energy & Extractives
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Ministry of Finance	Electricity Company of Ghana (ECG) , GRIDCo, Ministry of Energy	06-May-2024	15-Jun-2024
Estimated Decision Review Date	Total Project Cost		
02-May-2024	1,234,000,000.00		

Proposed Development Objective

The Program’s Development Objective (PDO) is to improve the financial viability of the electricity distribution sector in Ghana and to increase access to clean cooking solutions.

B. Is the operation 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 Activities

[Description imported from the PAD Data Sheet in the Portal providing information about the key aspects and components/sub-components of the project]

The IPF component will finance priority investments needed to reduce electricity losses of the main distribution utility, ECG (mainly meters and commercial and meter management systems, and critical commercial loss reduction activities). It will also finance technical assistance to support capacity building of key stakeholders, sectoral studies, and operational costs. The PforR component will fund improvements in the methodology for economic dispatch of power



plants, transparency and strengthening of ECG's financial management processes, and operational improvements, along with the rollout of clean cookstoves under the National LPG Protection Program.

## D. Environmental and Social Overview

### D.1 Overview of Environmental and Social Project Settings

*[Description of key features relevant to the operation's environmental and social risks and opportunities (e.g., whether the project is nationwide or regional in scope, urban/rural, in an FCV context, presence of Indigenous Peoples or other minorities, involves associated facilities, high-biodiversity settings, etc.) – Max. character limit 10,000]*

Overall, the program will be financed through a Program-for-Results Financing (PforR) with some components to be financed under Investment Project Financing (IPF). The scope of the proposed PforR program and IPF component of the program is a subset of the broader Energy Sector Recovery Program (ESRP) of the Government of Ghana. This Environmental and Social Review Summary (ESRS) covers components of the program that will be financed under IPF. The proposed project IPF activities will be implemented at the national level and will provide support to the sector institutions such as Ministry of Energy (MoEn), Energy Commission (EC), Public Utilities Regulatory Commission (PURC). However, some specific activities will be implemented at the regional and sub-regional levels within urban settings. While the ECG's jurisdiction covers the southern part of the country, the northern parts are covered by NEDCo.

Significant electrical and electronic waste (e-waste) would be generated under the IPF through the procurement and installation of smart pre-payment meters (which are meant to replace old, faulty, and expired meters as well as non-smart meters) and disposal of mobile tablets at their end-of-usage stage. In Ghana, most e-waste is managed under poor environmental, health and safety conditions. Open burning of cables and manual disassembly of lead-acid batteries are still widely used practices, causing significant environmental pollution and damage to human health. In 2011, an estimated 171,000 tons of e-waste was generated, with a mere 0.2% processed by formal e-waste recyclers. The remaining 99.98% was handled by an informal sector consisting of a widespread network of unlicensed collectors, intermediaries, scrap dealers and dismantlers specializing in the manual disassembly and trading of post-consumer electronics. A lack of proper environmental, health and safety safeguards among these actors results in massive environmental pollution and negatively affects the physical well-being of thousands of people. The Bank-funded Africa Environmental Health and Pollution Prevention Programme (P167788) aims to improve the management of e-waste in Ghana to help address the many associated issues.

According to the UNDP, the electrical and electronic equipment (EEE) industry in Ghana is confronted with many illegal imports. In 2019, Ghana imported 0.215 million tonnes of e-waste although the overall e-waste generated by the country was 47,173Metric tonnes. In April 2017, the failure of the ECG to provide shade for its meters installed outside homes was identified as the major cause of fire outbreaks at Weija and its surrounding communities in Accra. According to the Weija Municipal Fire Office, more than 80% of all fire outbreaks recorded within Weija and surrounding communities emerged from the ECG's electric poles. The Office explains that when the sun shines directly on the prepaid meters, it exposes them to danger. The problem becomes worse during the rainy season, since the meters installed outside lack protective shading; water easily gets inside, leading to fires and posing significant health and safety challenges to the population. The office noted that unless ECG developed a strategy to protect its prepaid meters erected on electric poles, the situation would persist.



The National Electricity Distribution Metering Code, referred to as “the Metering Code”, sets out the minimum acceptable standards and technical and operational rules for entities involved in the procurement, installation, operation, and maintenance of metering systems for the electricity distribution sector in Ghana. Although not considered a regular pattern, In November 2021, aggrieved residents of Yilo and Manya Krobo municipalities of the Eastern Region of Ghana hit the streets against plans by the ECG to introduce prepaid meters in Somanya, Odumase, and their surrounding areas. Protests were led by the United Krobo Foundation, a youth group in the area, demanding the power distributor to halt its intended plans. Over the years, residents of the two municipalities had opposed what they claimed were exorbitant electricity tariffs, accusing the ECG of deliberately attempting to short-change them. Four years earlier, a protest against unfair billing had turned violent as aggrieved customers destroyed a refurbished Somanya ECG office, vandalized the Somanya Police station, and freed some inmates. Amid these protests, the ECG (using engineers from the national security agencies) managed to install 9,000 out of an estimated 27,000 electric prepaid meters in the Manya and Yilo Krobo Municipalities despite strong resistance and opposition from a section of the community on the prepaid meter installation exercise. Risks of conflicts resulting from smart-metering exercises and fire risks associated with use of unprotected meters installed outside of homes are real and must be mitigated.

In the wider West African region, Ghana is often seen as an energy success story with over 80% of the population having access to grid electricity. Yet, 50% of rural areas live without this access while ‘dumsor’ (load shedding) poses an ongoing challenge for those connected. Similarly, energy access policies in Ghana fail to encourage gender inclusivity in identifying the energy needs of men and women for productive purposes. An estimated 75% of the Ghanaian economy is informal, with women constituting the bulk of the sector. This means they are not connected into the national energy related development framework, leaving energy needs unmet. This systemic structural issue has been exacerbated during the COVID19 pandemic and is a key barrier to equitable energy access and economic recovery. Rural women and those living in urban slums tend to face additional spatial energy inequalities. They are more likely to have lower incomes and face greater challenges in physically accessing energy, e.g. having to travel larger distances to charge phones, limited access to mobility and living beyond grid infrastructure. Yet, energy policies demonstrate little recognition of these spatial inequalities. Consequently, energy cannot be used in a way that meets the needs of women, for example to use refrigeration for income generation (Anne Schiffer and Amos Nkpeebo Yesutanbul, authors of Energy Access and Gender in Ghana: Policy Brief).

Gender inequalities also persist across all pillars mentioned in the World Bank Group (WBG) Gender Strategy, 2023: (i) human endowments (access to basic services, health outcomes); (ii) economic opportunities and jobs; (iii) asset control and ownership (business ownership, finance); and (iv) voice and agency (decision making bodies). For instance, women are less likely than men to be enrolled in tertiary education; the rate of economic opportunity and participation of women worsened over the past years and as result men earn US\$4,889 per year on average while women only receive US\$3,287.

The WBG through this operation and its portfolio in Ghana is supporting Ghana bridge the identified gender gaps by targeting on women’s economic empowerment focused on skills diversification and employment while addressing social norms to promote women leadership and agency.

## **D.2 Overview of Borrower’s Institutional Capacity for Managing Environmental and Social Risks and Impacts**

*[Description of Borrower’s capacity (i.e., prior performance under the Safeguard Policies or ESF, experience applying E&S policies of IFIs, Environmental and social unit/staff already in place) and willingness to manage risks and impacts and of*



*provisions planned or required to have capabilities in place, along with the needs for enhanced support to the Borrower – Max. character limit 10,000]*

The Ministry of Energy (MoEn) has implemented a few World Bank Group financed projects with successful outcomes, including the Ghana Energy Development and Access Project (P074191) and the Ghana Energy Sector Transformation Initiative Project (P163984). The MoEn Program Coordination Unit (PCU) will be responsible for the overall management of the PforR including the IPF component by facilitating procurement of consulting services under the TA, and coordinating activities of the ECG and GRIDCo Project Implementation Units (PIUs), and managing consultants providing services including strategic analysis, capacity building and policy advice.

At the MoEn PCU, Environmental and Social focal persons have been assigned to lead, coordinate, and manage the E&S risks and impacts of the program. The Environmental Management Specialist for instance, is a NEBOSH-certified Health, Safety and Environment (HSE) professional with more than 15 years experience in the energy sector. He has a good grasp of Integrated Management Systems and how the different components (especially risk assessment and management commitment) help companies to excel beyond legal compliance. He represents the MoEn on the Environment Protection Agency's technical review teams for reviewing energy sector-related Environmental Impact Statements and this has strengthened his understanding and implementation of environmental management systems including stakeholder engagement and continuous environmental impact monitoring. His work at the Ministry's Materials Management Unit has improved his field supervisory and project risk management skills.

The main implementing agencies under the Program are ECG and GRIDCo, though only ECG will be undertaking IPF activities. ECG has a Division at the national level with the responsibility of assessing and managing environmental and social risks and impacts. In terms of institutional capacity, the Officers within the Division have the requisite qualifications and experience to prepare Terms of Reference (ToR) for environmental and social safeguards instruments, guide consultants in the preparation and review of the instruments and oversee their implementation. For example, ECG's E&S Specialist took the most recent Environmental and Social Risk Management (ESRM) course which is being co-facilitated by the World Bank's E&S Team and facilitators from the Ghana Institute for Management and Public Administration (GIMPA), to further strengthen his capacity in managing E&S risks associated with ECG's work.

Stakeholder engagement is a core part of ECG's activities prior to implementing any project. ECG undertakes stakeholder engagement as part of the environmental and social due diligence process and in some instances conducts citizen's survey to seek feedback from customers to improve service delivery. ECG has Stakeholder Engagement Policies and a round-the-clock Customer Complaint Redress System. This system makes room for verification and follow-ups and allows for anonymous reporting and for aggrieved parties to provide further particulars to present grievance. ECG has launched numerous initiatives aimed at promoting gender equality by boosting the participation of women. One such recent initiative is the "Fempower" a mentoring program designed to cultivate leadership skills among female staff. Additionally, ECG has adopted a 50:50 female-male recruitment quota for new engineers. Consequently, there has been an increase in the number of female enrollees at the ECG Training Center.

However, under the TA component of the IPF, there would be further E&S capacity building, especially in relation to the ESF and including strengthening ECG's existing structures and capacity for stakeholder engagement and for resolving project related complaints and gender mainstreaming.



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

A. Environmental and Social Risk Classification (ESRC)

Moderate

A.1 Environmental Risk Rating

Moderate

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The environmental risk classification for the proposed IPF activities is moderate, since the proposed IPF will mainly finance the procurement, supply and installation of equipment: smart meters, metering systems and software, IT hardware while the TA will support and finance capacity building of key stakeholders, key sectoral studies, communication strategies and operational costs. The IPF/TA will not support activities that will generate adverse environmental risks or impacts. Potential environmental risks associated with the IPF/TA will include (i) solid and e-waste generation from obsolete old meters and rugged mobile tablets at their end-of-usage stage; (ii) occupational health and safety hazards to civil workers/contractors replacing meters; (iii) noise and air pollution from heavy duty vehicles that will be used in operations; (iv) electrical and fire hazards to homes / communities during connection of customers to distribution transformers and feeders. The impacts associated with these risks will be localized and will not be significant and there is low probability of serious adverse effects to human health and/or the environment. The impacts can easily be prevented and/or mitigated in a predictable manner and the capacities of the implementing entities in managing these risks are assessed to be satisfactory.

A.2 Social Risk Rating

Moderate

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The social risk classification for the proposed IPF activities is moderate, since the proposed IPF will mainly finance the procurement, supply and installation of equipment: smart meters, metering systems and software, IT hardware while the TA will support capacity building of key stakeholders, key sectoral studies, communication strategies and operational costs. The IPF/TA will not support activities that will generate adverse social impacts on human population. There is little possibility of displacement of the people as upgrading the existing distribution will be done at the existing homes, offices and business premises only, and no land acquisition is required. However, labor will be hired to carry out the replacement and installation of equipment. Potential social risks associated with the IPF/TA may include ESS2 related risks if consultants and other agencies are hired under the TA to perform capacity building activities, labor related risks, health and safety of workers hired for meter installation works, risk of use of child labor, etc. Other social risks are that of exclusion of women and persons with disabilities in technical trainings or access to smart meters, therefore widening the gender and social inclusion gaps equitable energy access and in the sector in general. Other key social risks in relation to the TA activities include the potential for conflict emanating from ECG customers protesting installation of pre-paid meters for fear of potential increase in tariffs, and community health and safety issues due to exposed ECG meters. Furthermore, TA activities may present low risk of elite capture in the distribution of the smart meter leading to potential of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH). However, the IPF activities present an opportunity to ensure inclusive access to electricity, gender and disability inclusion by supporting initiatives that promote inclusion and seeks to close gender gaps in technical capacity in the sector.. The potential social risks associated with the IPF activities will be localized and will not be significant and can be prevented and/or mitigated in a predictable manner.

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*[Summary of key factors contributing to risk rating. This attribute is only for the internal version of the download document and not a part of the disclosable version – Max. character limit 8,000]*

## **B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered**

### **B.1 Relevance of Environmental and Social Standards**

**ESS1 - Assessment and Management of Environmental and Social Risks and Impacts**

Relevant

*[Explanation - Max. character limit 10,000]*

The IPF will not support actions having risks or direct, indirect, cumulative or induced adverse impacts on the environment and human population. Potential positive environmental impacts of the Project will include reduction in energy consumption via monitoring through smart meters; increased system efficiency; and reduction in risk of electrical fires resulting from use of faulty or defective meters. The potential adverse E&S risks and impact will include (i) solid and e-waste generation from obsolete old meters and rugged mobile tablets at their end-of-usage stage; (ii) occupational health and safety hazards to workers/contractors replacing meters, (iii) noise and air pollution from heavy duty vehicles that will be used in operations; (iv) electrical and fire hazards to homes / communities during connection of customers to distribution transformers and feeders; (v) tensions and conflicts arising from customers objection to meter change; (vi) elite capture and exclusion of vulnerable groups from distribution of meters (vii) inadequate stakeholder engagement and weak conflict resolution mechanism and (viii) sexual harassment (SH) and sexual exploitation and abuse during capacity building activities and/or during replacement of meters and connection of customers to transformers. However, these risks will be localized, can be prevented and/or mitigated, and the capacities of the implementing entities in managing these risks are assessed to be satisfactory. The main social risks are associated with potential increase in electricity tariffs and its impact on the poorer households as they may have to devote an increasingly larger share of their household budget to electricity bills. There are also risks of exclusion of women, persons with disabilities (PWDs) and other vulnerable groups in the technical trainings under the project therefore widening the gender and social inclusion gaps in the sector; and exposure to communicable diseases To guide the assessment and management of the potential E&S risks, the Borrower has prepared a draft Environmental and Social Management Framework (ESMF) that outlines appropriate mitigation measures which will be implemented to address identified potential risks. The draft ESMF which will be finalized and disclosed by Board approval, includes a section on e-Waste management and an annex of Labor Management Procedure. The Borrower has also prepared and will implement a Stakeholder Engagement Plan (SEP). The SEP outlines the characteristics and interests of the relevant stakeholder groups and individuals including measures to remove barriers to ensure participation of vulnerable individuals or groups in the project; and provides information on timing, places, methods of engagement, implementation arrangements and budget to support its implementation. The project will encourage adherence to WHO and government protocols to minimize exposure to communicable diseases under the TA activities. To address potential complaints, the program will develop and operationalize a robust Grievance Mechanism or reinforce existing mechanisms, to enable beneficiary stakeholders to submit complaints and feedback. MoEn and ECG will continually assess the functionality of the mechanism and its compliance with the World Bank standards and make sure it is consolidated and effective to process grievances related to the program. To ensure maximum participation of women, PWDs and other vulnerable groups in technical trainings, consultants would be required to define in their approach of work, strategies to systematically identify and ensure participation of women from the sector in such

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trainings. And finally, the Borrower equally prepared an Environmental and Social Commitment Plan (ESCP) with clear commitments for addressing the environmental, social and labor risks identified as well as indications for producing specific documents with clear timelines.

**ESS10 - Stakeholder Engagement and Information Disclosure**

Relevant

*[Explanation - Max. character limit 10,000]*

The Borrower, through the Stakeholder Engagement Plan (SEP) which has been reviewed and cleared by the Bank, will engage in meaningful consultations on policies, procedures, processes, and practices (including grievances) with all stakeholders throughout the project life cycle, and provide them with timely, relevant, understandable, and accessible information, including information on project-related risks. Some of these risks include sexual exploitation and abuse (SEA) as well as sexual harassment (SH), risks of increase of communicable diseases and the proposed reporting and response measures, with a particular focus on vulnerable groups, including the elderly and those with limited mobility such as Persons with Disability, as well as women and children. The overall objective of the SEP is to provide the roadmap for project communications and active consultations with stakeholders to engage them in the design and delivery of the IPF component of the Program. The key laws or regulations in Ghana that mandate public consultation and engagement regarding this IPF activities include the 1992 Constitution of Ghana, Persons with Disability Act, 2006 (Act 715), Commission on Human Rights and Administrative Justice (CHRAJ) Act, 1993 (Act 456), the Right to Information (RTI) Act, 2019 (Act 989), the Environmental Protection Agency (EPA) Act, 1994 (Act 490), the Environmental Assessment (EA) Regulations, 1999 (LI 1652). Considering the scope of the project to be undertaken, the stakeholders can be categorized as follows: (A) Project Affected-Parties (PAPs) referring to institutions or groups or individuals who are impacted or likely to be impacted directly or indirectly, positively or adversely, by the Project activities, and who need to be closely engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures. Stakeholders under this category include: Special Load Tariff (SLT) consumers in affected locations (i.e., consumers above the threshold of 100kVA; Non-Special Load Tariff (Non-SLT) consumers in affected locations (i.e., consumers below the threshold of 100kVA; Small and Micro Enterprises (SMEs) and their employees; Non-strategic Ministries, Departments, and Agencies in affected locations; Metropolitan, Municipal District Assemblies (MMDAs) affected locations; Association of Ghana Industries (AGI), and the Public. The Project Affected Parties also include vulnerable groups or persons who may be disproportionately impacted or further disadvantaged by the Project activities as compared with any other groups due to their vulnerable status and may require special engagement efforts to ensure their equal representation in the consultation and decision-making processes under the Project. Identifiable vulnerable persons and groups under this Project include: People living with disability (PwDs), Lifeline Power Consumers, Women, Aged/elderly, Youth, Widows, People living in remote/ less accessible areas, and People with low or no formal education. (B) Other Interested-Parties referring to institutions, groups, or individuals who may not experience direct impacts from the Project activities, but whose interests may be affected by the Project activities. Interested Parties could also influence the process of the Project's implementation in various ways. These stakeholders include the following: Ministry of Energy (MoEn), Energy Commission (EC), Public Utility Regulatory Commission (PURC), Environmental Protection Agency (EPA), Electricity Company of Ghana (ECG), Northern Electricity Distribution Company (NEDCo), Meter Suppliers/Vendors/Installers, World Bank (WB), Metropolitan, Municipal, and District Assemblies (MMDAs), Ghana National Fire Service (GNFS), Commission on Human Rights and Administrative Justice (CHRAJ), Domestic Violence and Victims Support Unit (DOVVSU), State Interest and Governance Authority (SIGA), Civil society Organizations (CSOs)/ Non-Governmental Organizations (NGOs) in the energy sector (e.g., African Center for Energy Policy (ACEP), the Media, Law enforcement agencies (e.g.,

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police), Traditional Authorities and Association of Ghanaian Industries (AGI). The SEP has described a Grievance Mechanism (GM) which will enable a broad range of stakeholders to channel concerns, questions, and complaints to the implementation agencies and prescribes channels/procedures for SEA/SH complaints including multiple and accessible entry points, referral to GBV service providers, and management of complaints in confidential and survivor centered manner. The TA implementing agencies (i.e., MoEn and ECG) will employ transparent procedures to deal with inquiries and complaints received from stakeholders, while deploying a monitoring and reporting framework to measure specific Key Performance Indicators.

**ESS2 - Labor and Working Conditions**

Relevant

*[Explanation - Max. character limit 10,000]*

Labor risks will be posed as consultants and other agencies would be hired under the TA to perform capacity building and related services / activities. The TA activities will be implemented by direct workers involving staff from the Ministry of Energy (MoEn) and Electricity Company of Ghana (ECG) with several benefiting agencies such as the Northern Electricity Distribution Company (NEDCo), Energy Commission (EC) and Public Utilities Regulatory Commission (PURC). Risks associated with this category of workers include road accidents and insecurity, unfair or discriminatory hiring practices, and Gender Based Violence (GBV). Other staff of consulting firms and contractors might also be hired (contracted workers) by the government to provide support to the MoEn’s PCU and ECG’s PIU as needed. Risks associated with this category of workers include labor issues arising from overtime without pay, forced labor and unsafe working conditions. A third group of workers is made up of primary supply workers (staff of smart meter suppliers) who would be responsible for supplying and installing the meters and other ICT-related equipment. Risks associated with this category of workers include lack of awareness of occupational health and safety protocols, SEA/SH and gender risks, and risks of opposition and aggression arising from communities which may have apprehensions switching to smart prepaid meters. Government staff working in connection with the project full-time or part-time will remain subject to the terms and conditions of their existing public sector employment or agreement, unless there has been an effective legal transfer of their employment or engagement to the project. Government will reflect appropriate occupational health and safety and other measures in contracts of other Consultants/workers to be hired as per ESS2. The Borrower has prepared appropriate occupational health and safety (OHS) measures including Labor Management Procedures (LMP) as part of the draft ESMF in line with national laws that govern labor and working conditions related to IPF activities under the program (administrative-related tasks not requiring civil work) and will be applied to all types of project workers. The OHS strategy will include specific measures to ensure the safety of workers travelling to project sites, including (1) project cars to be driven by professional drivers only; (2) measures to monitor, anticipate and avoid potential security risks while travelling, including liaising with local police and authorities and encouraging project workers to share any concerns they may have. Project workers in remote project areas will receive health and safety training including prevention of infection through contaminated food and / or water and or through vector-borne diseases and avoidance of sexual misconduct. Site-specific risks will be assessed as part of C-ESMPs to be developed by the contractors which will include plans for emergency evacuation and identification of emergency health facilities.

**ESS3 - Resource Efficiency and Pollution Prevention and Management**

Relevant

*[Explanation - Max. character limit 10,000]*

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This standard is relevant since the IPF activities will finance procurement and transportation of equipment: smart meters, metering systems and software, and IT hardware. Replacement of large volumes of faulty, expired and non-smart meters will generate significant hazardous electronic waste and solid waste streams. Improper disposal of hazardous waste could lead to soil or water contamination with detrimental effects on downstream communities and dependent industries. The Borrower has prepared an e-waste management plan as part of the draft ESMF. The plan sets out procedures for activities such as sorting, collection, reusing, recycling, transporting, containment, final disposal, etc. The Agbogbloshie Scrapyard was formerly the hub of most of the informal e-waste handling, primarily involving manual dismantling of WEEE, as well as burning of cables to isolate metals such as copper and aluminum for sale. Additionally, repairing and refurbishing have emerged as important segments of e-waste management. Refurbishing transforms old/non-functioning products by replacing defective components. The ESMF adopts the Technical Guidelines on Environmentally Sound E-Waste Management for Collectors, Collection Centres, Transporters, Treatment Facilities and Final Disposal in Ghana (2018) which addresses the various target groups of the reverse supply chain of electronic and electric equipment becoming e-waste. The guidelines are mandatory in compliance with The Hazardous and Electronic Waste Control and Management Act, 2016 (Act 917), and the Hazardous, Electronic, and Other Wastes (Classification), Control and Management Regulations, 2016 (LI 2250). The guidelines specifically address the following: Collectors (Tier 1); Collection centres (Tier 2); Transporters (Tier 3); Treatment facilities (Tier 4); and Final disposal (Tier 5). The guiding principles for Tier 1 apply to any person that collects, sorts, or consolidates e-waste. Tier 2 refers to centres where e-waste is temporarily stored before transported to treatment facilities or for final disposal. The guiding principles for Tier 3 apply to an entity that transports e-waste (in accordance with Regulation 56 of LI 2250) from a collection point to a recycler, between collection centres (from a collector to collector), or from a recycler to a recycler (between treatment facilities). Tier 4 are treatment facilities that dismantle (Section 49), recycle (Section 50), prepare for reuse or repair/refurbish (Section 46) and recover (Section 58) e-waste under LI 2250. The guiding principles for Tier 5 apply to the final disposal of certain hazardous fractions at landfills, incineration and other technologies approved by EPA. Resource efficiency is relevant since the procurement of installation of equipment will involve manufacturing process that consume significant resources. Air conditioning is required for maintaining ICT systems and hence energy-efficient equipment will be procured and installed.

**ESS4 - Community Health and Safety**

Relevant

*[Explanation - Max. character limit 10,000]*

This standard is relevant because the E&S screening has identified traffic management and road safety as a potential community health and safety risk as the IPF/TA activities will finance transportation of equipment across the length and breadth of the country. Other risks include electrical and fire hazards to homes / communities during connection of customers to distribution transformers and feeders; and tensions and conflicts arising from customers objection to meter change. Violent behavior towards women is rampant globally with more than one out of three women having experienced some kind of physical or sexual violence in their lives. This includes intimate partner violence such as physical, sexual and/or emotional violence. The case is no different in Ghana where an estimated 13% to 61% of every partnered women having experienced some violence from current or previous partners; strangers, teachers, schoolboys, other family members and acquaintances. Social (negative norms), economic (poor economic empowerment) and legal factors have been found to render women powerless and unable to reject inappropriate advances without facing intimidation or violence. There could be incidents of sexual exploitation and abuse (SEA)/sexual harassment (SH) during the distribution and installation of meters in homes and offices, extension of



power to underserved areas and localities. This could especially be when a couple of power sector workers or contractor’s workers migrate into the project communities and localities, where the pool of technical expertise required may not be available in beneficiary communities. The uneducated women who lack the necessary project information in these communities might be lured into undesired sexual activities by the ECG/NEDCo technicians/contractor’s workers, who might ask for sexual favours before the meters are installed in their homes. Replacement of obsolete prepayment and post-paid could be met with resistance from customers. This could reach a tipping point and result in agitations. Aggrieved youth could prevent personnel for ECG from entering their communities or town resulting in potential confrontation. This could also lead to sabotage of the project and cause harm to personnel and destruction of public properties such as new pre-paid meters. The project will institute and implement throughout the project life measures to manage traffic and road safety risks, which have been set out in the ESMF. The ESMF has additionally addressed a range of other health and safety risks and measures (such as noise and air pollution), GBV and SEA/SH, etc. The project will also promote adherence to WHO and government protocols that minimize exposure to communicable diseases at the workplace.

**ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement** Not Currently Relevant

*[Explanation - Max. character limit 10,000]*

This standard is not relevant at this stage. The outcome of E&S screening did not identify any potential risks and/or impacts relevant to ESS5 as the IPF/TA will not finance activities that involve land acquisition, potential disruption/loss of livelihoods or pose restrictions on land use.

**ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources** Not Currently Relevant

*[Explanation - Max. character limit 10,000]*

This standard is not relevant at this stage. The outcome of E&S screening did not identify any potential risks and/or impacts relevant to ESS6 as the TA activities will not finance activities that will impact biodiversity.

**ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities** Not Currently Relevant

*[Explanation - Max. character limit 10,000]*

This standard is not relevant since there are no known indigenous people in Ghana.

**ESS8 - Cultural Heritage** Not Currently Relevant

*[Explanation - Max. character limit 10,000]*

This standard is not relevant at this stage. The outcome of E&S screening did not identify any potential risks and/or impacts relevant to ESS8 as the TA activities will not finance activities that will impact cultural heritage.

**ESS9 - Financial Intermediaries** Not Currently Relevant

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[Explanation - Max. character limit 10,000]

This standard is not relevant. TA activities will not involve financial intermediaries.

**B.2 Legal Operational Policies that Apply**

**OP 7.50 Operations on International Waterways**

No

**OP 7.60 Operations in Disputed Areas**

No

**B.3 Other Salient Features**

**Use of Borrower Framework**

No

[Explanation including areas where "Use of Borrower Framework" is being considered - Max. character limit 10,000]

The project will not rely on the borrower's framework and the implementation of the IPF section of this operation will be guided by the relevant and applicable Environmental and Social Standards pursuant to the objects of the ESF.

**Use of Common Approach**

No

[Explanation including list of possible financing partners – Max. character limit 4,000]

Not Applicable

**B.4 Summary of Assessment of Environmental and Social Risks and Impacts**

[Description provided will not be disclosed but will flow as a one time flow to the Appraisal Stage PID and PAD – Max. character limit 10,000]

The overall Environmental and Social (E&S) risk and impacts of the proposed IPF operation are adjudged to be Moderate. The risk classification takes into consideration the E&S risks associated with the proposed activities as well as the institutional capacity of the implementing agencies in managing E&S risks on Bank funded projects. The overall E&S risk management responsibility of the program will rest with the PCU to be hosted at MoEn. This unit has been staffed with an E&S Specialist and a Gender Specialist deputed from the MoEn with significant experience in managing WB financed projects e.g., GEDAP and GESTIP. MoEn and ECG are the main entities responsible for the management of E&S risks and impacts. The metering activities that NEDCo will benefit from will be implemented by ECG through a Memorandum of Understanding. Hence, potential E&S risks associated with project activities will be managed by ECG under the MOU to be developed. In addition to the PCU to be hosted at MoEn, ECG PIU has assigned an E&S specialist. To ensure adequate management of E&S risks envisaged for this project, ECG would need to fully resource the E&S team. To further strengthen the implementing agencies E&S risk management capacity, the MoEn would need to provide training to enhance the application of the relevant ESSs and the relevant WBG Environmental, Health and Safety (EHS) Guidelines during project implementation.

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Overall, the project is expected to have positive social and environmental impacts as the interventions will improve the reliability of power supply and increase access to clean cooking solutions for households. Some of the key benefits include: (i) reduced reliance on environmentally unfriendly power sources, such as kerosene lanterns, petrol-powered and diesel-powered generators; (ii) reduced use of charcoal and fuelwood through increased access to clean cooking solutions; (iii) reduced GHG emissions and improved air quality; (iv) reduced household air pollution and improved health; (v) better management of energy use, money-saving and cost-reduction efforts, which will increase income for households; (vi) improved metering to minimize social conflicts that usually arise during the sharing of electricity bills among tenants that share a meter; (vii) gender-specific benefits from the time saved in not using traditional biomass; and related areas. No major civil works are anticipated under the IPF. It is envisaged that key activities will involve replacement of obsolete and post-paid meters with prepayment meters, acquisition and deployment of rugged mobile tablets and android handheld units, establishment of metering control centers, linking of customers to distribution transformers and feeders. The potential E&S risks and impact may include (i) solid and e-waste generation from obsolete old meters and rugged mobile tablets at their end-of-usage stage; (ii) occupational health and safety hazards to civil workers/contractors replacing meters, establishment of metering control centers, and installation of stove testing equipment in laboratories; (iii) noise and air pollution from heavy duty vehicles that will be used in operations; (iv) electrical and fire hazards to communities during connection of customers to distribution transformers and feeders; (v) tensions and conflicts from customers objection to meter change; (vi) elite capture and exclusion of vulnerable groups from distribution of meters; and (vii) sexual harassment (SH) and sexual exploitation and abuse during replacement of meters and connection of customers to transformers. However, these risks will be localized, can be prevented and/or mitigated, and the capacities of the implementing entities in managing these risks is assessed satisfactory.

As the specific locations where meter replacements and establishment of meter control centers are unknown, the client has prepared a draft combined Environmental and Social Management Framework and Labor Management Procedure (ESMF / LMP) which presents procedures and tools for assessing and addressing E&S risks and impacts. The draft ESMF/LMP includes an assessment of e-waste to identify hazardous waste that will be generated by the project (directly or indirectly) and borrower's capacity to manage it. The draft ESMF/LMP will be reviewed and cleared by the Bank and disclosed prior to appraisal. The Program has prepared an Environmental and Social Commitment Plan (ESCP), to outline the Client's commitments to screen all sub-projects and preparation of associated Environmental and Social Management Plans (ESMPs) during implementation. The client has prepared a draft Stakeholder Engagement Plan (SEP) with specific strategies for engaging all relevant stakeholders on various IPF activities all through the project lifecycle. The SEP will be approved by the World Bank, consulted upon, and disclosed by the client prior to appraisal. As part of the SEP, the program has developed a Grievance Redress Mechanism which provides avenues for project-affected persons and stakeholders to raise concerns, questions, and complaints about the project for redress.

## C. Overview of Required Environmental and Social Risk Management Activities

### C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

*[Description of expectations in terms of documents to be prepared to assess and manage the project's environmental and social risks and by when (i.e., prior to Effectiveness, or during implementation), highlighted features of ESA documents, other project documents where environmental and social measures are to be included, and the related due diligence process planned to be carried out by the World Bank, including sources of information for the due diligence - Max. character limit 10,000]*



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

1. Report on the implementation of the ESMF on a semiannual basis as part of an E&S performance report;
2. Report on the implementation of the E-Waste Management Plan as part of the E&S performance report;
3. Establish a functioning E&S risk management system including deployment of qualified staff to manage E&S risk on the TA activities in ECG and MoEn;
4. Report on the implementation of the LMP as part of the E&S performance report;
5. Report on the implementation of the SEP as part of the E&S performance report;
6. Report on the operationalization of the Grievance Redress Mechanism as part of the E&S performance report;
7. Report on the inclusion of gender and disability considerations in the IPF activities as part of the E&S performance report;
8. Report on the development and implementation of SEA/SH prevention protocols and measures as part of the E&S performance report; and
9. Report on the development and implementation of a Gender Action Plan as part of the Project Implementation.

**III. CONTACT POINT**

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**V. APPROVAL**

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