ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT

APRIL 2024

PROGRAM-FOR-RESULTS FINANCING GHANA ENERGY SECTOR RECOVERY PROGRAM-FOR-RESULTS (P173258)

DRAFT

ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT REPORT

April 2024

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ACRONYMS & ABBREVIATIONS

ACEP	:	African Centre for Energy Policy
AGI	:	Association of Ghana Industries
AOMC	:	Association of Oil Marketing Companies
ASSI	:	Association of Small-Scale Industries
BC	:	Black Carbon
BPA	:	Bui Power Authority
CAP	:	Country Action Plan
CEESD	:	Centre for Energy, Environment, and Sustainable Development
	•	Chamber of Independent Power Producers, Distributors and Bulk
CIPDiB	:	Consumers
СР	:	Core Principles
CPA	:	Consumer Protection Agency
CRM	:	Cylinder Recirculation Model
CSO		Civil Society Organisation
DISCO	•	Distribution company
DISCO	:	Disbursement Linked Indicators
DoC		Department of Children
DRIC	:	-
	:	Directorate of Research Innovation and Consultancy
DSD	•	Department of Social Development
DSM	:	Demand-Side Management
DVS	:	Domestic Violence Secretariat
EA	:	Environmental Assessment
EC	:	Energy Commission
ECG	:	Electricity Company of Ghana
ECOWAS	:	Economic Community of West African States
ECREEE	:	ECOWAS Centre for Renewable Energy and Energy Efficiency
EIA	:	Environmental Impact Assessment
EIS	:	Environmental Impact Statement
EMP	:	Environmental Management Plan
EPA	:	Environmental Protection Agency
EPC	:	Environmental Protection Council
EPD	:	Environmental Permitting Decision
ERERA	:	ECOWAS Regional Electricity Regulatory Authority
ESMP	:	Environmental and Social Management Plan
ESRP	:	Energy Sector Recovery Program
ESRPTF	:	ESRP Ministerial Task Force
ESSA	:	Environmental and Social Systems Assessment
FDMP	:	Forest Development Master Plan
GBV	:	Gender Based Violence
GCMC	:	Ghana Cylinder Manufacturing Company
GDLI		Global Disbursement Linked Indicator
GDP		Gross Domestic Product
GEA	•	Ghana Employers Association
GHACCO	:	Ghana Alliance for Clean Cookstoves and Fuels
GHG	•	Green House Gases
GMMB	:	Ghana Museum and Monuments Board
	•	Gas Master Plan
GMP	:	Gas master Plan

CNICCI		
GNCCI	:	Ghana National Chamber of Commerce and Industry
GNFS	:	Ghana National Fire Service
GNGC	:	Ghana National Gas Company
GNHR	:	Ghana National Household Registry
GNPC	:	Ghana National Petroleum Corporation
GOG	:	Government of Ghana
GPSNP 2	:	Ghana Productive Safety and Net Project 2
GRIDCo	:	Ghana Grid Company Limited
GRM	:	Grievance Redress Mechanism
GSFP	:	Ghana School Feeding Program
GTC	:	Ghana Technology Chamber
HSEP	:	Health, Safety, and Environmental Policy
HSSE	:	Health, Safety, Security, and Environment
HTS	:	Human Trafficking Secretariat
ILO	:	International Labour Organisation
IPF	:	Investment Project Financing
IPP	:	Independent Power Producers
IPSMP	:	Ghana Integrated Power Sector Master Plan
IRRP	:	Integrated Resource and Resilience Planning
ISSER	:	Institute of Statistical, Social, and Economic Research
KfW	:	Kreditanstalt für Wiederaufbau
KITE	:	Kumasi Institute of Technology, Energy, and Environment
LC	:	Land Commission
LEAP	:	Livelihood Empowerment Against Poverty
LI	:	Legislative Instrument
LIPW	:	Labour-Intensive Public Works
LPG	:	Liquefied Petroleum Gas
LPG4Dev	:	LPG for Development
LPGMC	:	Liquefied Petroleum Gas (LPG) Marketing Companies
LPGMCAG	:	LPG Marketing Companies Association of Ghana
LUSPA	:	Land Use and Spatial Planning Authority
LVD	:	Land Valuation Division
MCC	•	Millennium Challenge Corporation
MDA		Ministries, Departments, and Agencies
MELR	:	Ministry of Employment and Labour Relations
MESTI	:	Ministry of Environment Science, Technology, and Innovation
MLNR	:	Ministry of Lands and Natural Resources
MMDA	:	Metropolitan, Municipal, and District Assemblies
MoE		Ministry of Energy
MoGCSP	:	Ministry of Gender, Children and Social Protection
MOUCON	•	Ministry of Information (MOI)
MW	•	Mega Watts
NCC	•	National Commission on Culture
	:	National Commission for Civic Education
NCCE	:	
NCPD	:	National Council for Persons with Disability
NDC NEAD	:	Nationally Determined Contributions
NEAP	:	National Environmental Action Plan
NED	:	Northern Electricity Distribution

NEDCO	:	Northern Electricity Distribution Company of Ghana
NEP	:	National Environmental Policy
NG	:	Natural Gas
NGO	:	Non-Governmental Organisation
NITS	•	National Interconnected Transmission System
NLPGPP		National Liquefied Petroleum Gas (LPG) Promotion Program
NOC	:	National Oil Company
NPA	•	National Petroleum Company
NSP	:	National Social Protection
OASL	•	Office of the Administrator of Stool Lands
OMC	:	Oil Marketing Companies
PAP	:	Program Action Plan
PCB	:	Polychlorinated biphenyl
PDO	:	Program Development Objectives
PEF	:	Private Enterprise Federation
PER	· :	Preliminary Environmental Report
PIP		Program Implementation Plan
PIU	:	
PIU PM	:	Program Implementation Unit Particulate Matter
PSI	:	Power Sector Institutions
PURC	:	
PVLMD	:	Public Utilities Regulatory Commission
PWD	:	Public and Vested Land Management Division
	:	Persons with Disability
RCC	:	Regional Coordinating Council
REMP	:	Renewable Energy Master Plan
RET	:	Renewable Energy Technologies
RLPGPP	:	Rural LPG Cooking Fuel Promotion Program
SDG	:	Sustainable Development Goals
SE4ALL	•	Sustainable Energy for All
SEA	:	Sexual Exploitation and Abuse
SGGL	:	Sigma Gas Ghana Ltd
SH	:	Sexual Harassment
SIGA	:	State Interest and Governance Authority
SLCP	:	Short-lived Climate Pollutants
SNEP	:	Strategic National Energy Plan
SOE	:	State-Owned Enterprises
SWOT	:	Strengths, Weaknesses, Opportunities, and Threats
TA	:	Technical Assistance
TICO	:	Takoradi International Power Company
TOC	:	Theory of Change
TOR	:	Terms of Reference
TRC	:	Technical Review Committee
TUC	:	Trades Union Congress
UCC	:	University of Cape Coast
UN	:	United Nation
UNIDO	:	United Nations Industrial Development Organisation
USAID	:	United States
USAID	:	United States Agency for International Development

VRA	:	Volta River Authority
WAPP	:	West African Power Pool
WB	:	World Bank
WRC	:	Water Resources Commission

EXECUTIVE SUMMARY

The World Bank (WB) is planning to support the Government of Ghana (GoG) to achieve tangible results related to the financial recovery of the energy sector and the increase of access to clean cooking solutions. The proposed Program is a subset of the Government's ESRP program and the National Liquefied Petroleum Gas (LPG) Promotion Program (NLPGPP) and supports results in four areas: (i) Improved methodology and processes for achieving economic dispatch; (ii) Improved financial management systems and processes at Electricity Company of Ghana (ECG); (iii) Improved operational performance of ECG; and (iv) Increased access to clean cooking solutions.

Program Description

The ESRP is the Government of Ghana's (GoG) roadmap to restore and sustain governance and financial viability of the energy sector, as well as to attract competitive private sector investments. The objectives of Ghana's ESRP are: (a) (i) reducing costs of electricity purchases through improved economic dispatch, and (b) increasing revenue collection of the distribution utilities through supporting measures for reducing electricity losses; and (iii) improving the financial management system of ECG.

The Clean Cooking Component of the Program will support Phase 1 of the GoG's NLPGPP to increase LPG access to the population for domestic and commercial usage. The NLPGPP focuses on expanding the supply and reach of Liquefied Petroleum Gas (LPG) to substitute wood fuel use in homes and small businesses for cooking. The NLPGPP is GoG's program to help achieve 50 percent access to LPG by Ghanaians by 2030. The overall objective of the NLPGPP is to ensure access to LPG as a cleaner, safer, and healthier cooking fuel to improve the health and lives of people and create jobs. It will target prospective LPG end-users for domestic, commercial, and industrial purposes in rural, urban, and peri-urban areas – by reducing or eliminating the initial or operational bottlenecks impeding easy adoption of LPG as their primary choice of fuel.

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 IPF component of the Program will involve the procurement and installation of meters. ECG will be the implementing agency and will be responsible for the management of funds and procurement and installation of the equipment. The IPF component will also involve technical assistance support, through consultancy, operational costs, and capacity building activities.

The Program-for-Results Financing Program (hereafter, the PforR Program) will support a subset of the ESRP, excluding gas sector activities and the institutional framework of the energy sector, and Phase 1 of the NLPGPP related to the demand side of the LPG market for cooking. The PforR Program will implement the current ESRP through the following Disbursement Linked Indicators (DLIs) or Results Areas (RAs): RA1/DLI 1 – Improved methodology and processes for achieving economic dispatch, RA2/DLI 2 – Improved financial management systems and processes at ECG, RA3/DLI 3 - Improved operational performance of ECG, and RA/DLI 4 – Increased access to clean cooking solutions.

Institutional and Implementation Arrangement

The Ministry of Energy (MoEn), Ghana Grid Company Limited (GRIDCo) and the Electricity Company of Ghana (ECG) are the implementing agencies for the PforR Program. Northern Electricity Distribution Company (NEDCo) is a beneficiary agency.

A Project Coordination Unit (PCU) will be established at the Ministry of Energy (MoEn) to provide the necessary support to implement the ESRP and NLPGPP related activities and monitor the results and indicators. The MoEn PCU will manage implementation of the NLPGPP, and non-ECG ESRP indicators under the PforR component. The PCU will have a PforR coordinator, an M&E Specialist and fiduciary and Safeguards Specialists, as well as a clean cooking focal point. GRIDCo's and ECG's investments will be mainstreamed and implemented by project implementation units (PIUs) within GRIDCo and ECG. GRIDCo and ECG will therefore be the implementing agencies that are responsible for the management of funds, as well as for the procurement and installation of the equipment and for management of environmental and social risks. Dedicated PIU coordinators, procurement specialists, safeguards specialists will be part of the PIUs at GRIDCo and ECG.

The ESRP and NLPGPP (i.e. the Government programs) are being implemented by the ESRP Working Group and staff of the Ministry of Energy respectively and both will be responsible for verifying the results of the DLRs with the support of Independent Verification Agencies (IVAs). The ESRP Inter Ministerial Task Force (ESTF) provides political ownership at the highest level and oversight for the duration of the ESRP implementation. The ESTF is chaired by the Vice President and its members are MoEn, MoF and Minister of Public Enterprises. The ESRP Working Group Board is responsible for the implementation, monitoring and evaluation of the ESRP. It is also responsible for conducting the required analytical work to update the ESRP and coordinate the necessary reporting to the ESTF. The NLPGPP is led by the Ministry of Energy and the key stakeholders are NPA (in charge of the CRM), Energy Commission (EC) and the Ministry of Local Government, Decentralisation and Rural Development (MLGDRD) that provide support with local authorities. The implementation of the NLPGPP is overseen by the Steering Committee, chaired by the Minister of Energy and its members are NPA, EC and MLGDRD.

Environmental and Social Systems Assessment (ESSA)

The ESSA for the Ghana Energy Sector Recovery Program-for-Results (PforR) was conducted in compliance with the World Bank's (WB) requirements. The purpose of the ESSA is to evaluate the adequacy and effectiveness of the legal and regulatory framework of the energy sector to guide environmental and social impact assessments, as well as institutional set-up and capacity to plan, implement, monitor, and report on the environmental and social measures. The specific objectives of the assessment were to: identify the potential direct and indirect environmental and social impacts/risks applicable to the Program interventions; evaluate the national policy and legal framework related to management of environmental and social impacts of the Program interventions; evaluate the institutional capacity for environmental and social impact management within the Program system; prescribe institutional arrangements for the identification, planning, design, preparation, and implementation of projects under the Program to adequately address environmental and social sustainability issues; evaluate the national policy and legal framework and institutional capacity with respect to the core principles (CPs) of the PforR instrument; and describe actions to fill the gaps that will input into the Program Action Plan (PAP).

The ESSA is undertaken to ensure consistency with the six core principles outlined in paragraph 9 of the World Bank Policy for Program-for-Results Financing to effectively manage Program risks and promote sustainable development. These six principles are:

- i. Environment and Social: Promote environmental and social sustainability in the Program design; avoid, minimize, or mitigate adverse impacts, and promote informed decision-making relating to the Program's environmental and social impacts.
- ii. Natural Habitats and Cultural Resources: Avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program.
- iii. Public and Worker Safety: Protect public and worker safety against the potential risks associated with: (i) construction and/or operations of facilities or other operational practices under the Program; (ii) exposure to toxic chemicals, hazardous wastes, and other dangerous materials under the Program; and (iii) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.
- iv. Manage Dislocation: Manage economic displacement due to land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards. The Program is not directly responsible for land acquisitions but should ensure that institutions responsible for implementing the activity have the required systems to manage land acquisitions.
- v. Vulnerable Groups: Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups.
- vi. Social Conflict: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

Assessment of Program Consistency with Core Principles

The applicability of each of the six PforR Environmental and Social Core Principles to the PforR is outlined as follows:

Core Principle	Applicability	Rationale
Overarching Core	Applicable	The overarching core principle is considered
Principle 1: Environmental		relevant since the PforR would require
and social management		environmental and social management
procedures and processes are		procedures and processes to manage E&S risks
designed to (a) promote		that would be associated with project activities
environmental and social		relating to all the program areas. The main social
sustainability in the program		risks will be associated with: (i) the strengthening of a critical transmission line to remove
design; (b) avoid, minimize, or mitigate against adverse		constraints of economic dispatch, involving
impacts; and (c) promote		replacing compromised towers, fittings, and
informed decision-making		substation terminal equipment, may potentially
relating to a program's		incur some minor economic displacement
environmental and social		affecting people's livelihoods, (DLI 1); (ii)
effects.		potential increase in tariff to improve financial
		sustainability of ECG and its impact on poorer
		households, (DLI 3); (iii) potential tensions and
		conflicts from customers objection to meter
		change (DLI 3); (iv) discrimination and social conflicts relating to the distribution and use of
		LPG stoves (DLI 4); (v) elite capture and
		exclusion of vulnerable groups from distribution
		of meters and LPG cooking stoves (DLI 3 and DLI
		4); and (vi) potential sexual harassment (SH) and
		sexual exploitation and abuse (SEA) during
		replacement of meters and connection of
		customers to transformers (DLI 3) and during
		distribution of cookstoves to beneficiaries
Cono Principlo or give to	Not Applicable	(DLI4).
<i>Core Principle 2:</i> aims to avoid, minimize, or mitigate	Not Applicable	This core principle is considered not relevant since the PforR does not support any activities
adverse impacts on natural		that may affect natural habitats and physical
habitats and physical cultural		cultural resources. The strengthening of ECG
resources resulting from the		distribution network and upgrade of an existing
Program.		GRIDCo transmission network would not entail
5		new land clearing affecting any natural habitats
		and physical cultural resources. However, as part
		of subproject screening, activities will avoid sites
		of archaeological, cultural, religious, and historic
		value. For the possibility of "chance finds" for
		unknown cultural heritage, the Program will
		follow the standard chance find procedure and
		GoG's law on cultural resources, which will be included in contractor's contract.
Core Principle 3: aims to	Applicable	This core principle is considered relevant since
protect public and worker	rippileable	the PforR activities on the upgrade of an existing
safety against the potential		GRIDCo transmission line (DLI 1), strengthening
risks.		of ECG distribution network, procurement and
		installation of smart consumer and distribution

		meters (DLI 3), and production, distribution and use of LPG stoves (DLI 4) would have potential public and accumptional health and acfety issues
Core Principle 4: Manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards.	Partially Applicable	public and occupational health and safety issues. This core principle is considered partially relevant since the PforR does not support any activities that may require land acquisition and loss of access to natural resources. However, the upgrade of an existing GRIDCo transmission line (DLI 1) and strengthening of ECG distribution network (DLI 3) may occasion some minor economic displacement affecting the livelihoods of persons who may have encroached within the existing corridors of the transmission and distribution infrastructure.
Core Principle 5: Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups.	Partially Applicable	There are no groups in Ghana that meet the World Bank's criteria for Indigenous Peoples. However, this core principle is considered partially relevant since there are marginalised and vulnerable groups including women, youths, the elderly and PWD that would be impacted by the Program. There is a possibility of elite capture and the exclusion of vulnerable groups in Program activities. It is important that the Program gives attention to groups vulnerable to hardship or disadvantage, including as relevant the poor, the disabled, women and children, the elderly, or marginalized ethnic groups. If necessary, special measures are taken to promote equitable access to Program benefits. There is also possibility of GBV, sexual exploitation and abuse and SH existing meters are replaced within communities.
Core Principle 6: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.	Partially Applicable	Generally, the proposed Program areas will not exacerbate social conflict, nor will it operate in a fragile state context, a post-conflict area or in areas subject to territorial disputes. However, this core principle is considered partially relevant since the potential increases in the cost of electricity could lead to citizen unrest and demonstrations, as it can fuel general price increases. There could also be conflicts due to disconnection of customers that are owing or those that may have tampered with meters. Workers of ECG may protest issues such as change of management. Current managers may not agree with new performance management systems and may organise their constituency to agitate against its implementation. Discrimination in the production and distribution of LPG stoves could result in social conflict.

The ESSA evaluates the environmental and social management system considering each of the applicable core principles for environmental and social management in the Bank Policy and Directive for Program-for-Results financing. This informed the remaining analysis of the ESSA as related to: (i) the assessment of E&S benefits, risks and impacts policy, (ii) the legal and regulatory framework, (iii) the assessment of institutional E&S systems, and (iv) the recommendations and actions for improving capacity for Program implementation. Further, the ESSA identified gaps and subsequent actions to fill those gaps directly to contribute to the Program's anticipated results to enhance institutional structures related to the Program activities. The ESSA analysis presents a detailed description of the Program activities and the baseline conditions for existing environmental and social management systems. The ESSA also presents a Program Action Plan (PAP) that will be incorporated into the overall Program loan documentation.

Description of Expected Program Environmental and Social Effects

Overall, the Program 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. The benefits include: (i) reduced reliance on environmentally unfriendly power sources, such as kerosene lanterns, petrol-powered and diesel-powered generators, firewood, and candles; (ii) reduced use of charcoal and fuelwood, which are key contributors to deforestation and negatively impacts climate change; (iii) increased access to clean cooking solutions; (iv) reduced GHG emissions and improved air quality; (v) reduced household air pollution and improved health; (vi) increased awareness on the importance of environmental management at the institutional level that has an effect outside of the Program investments; (vii) genderspecific benefits from the time saved in not using traditional biomass; (viii) increased distribution efficiency and reliability, which increases the number of hours that electricity is available and thus increases opportunities for children to study, thereby enhancing educational outcomes; (ix) reliable power supplies to boost economic growth and facilitate the creation, or growth, of jobs – especially small (or one-man operated) businesses, which largely employs, and empowers, women; and, (x) strengthened local capacity to deliver on the Program activities.

The Program is also expected to generate negative environmental and social impacts and risks including: (i) increasing electricity share of household budget as electricity becomes increasingly unaffordable for many residential consumers, which would significantly impact poor households; (ii) potential exposure of first-time LPG users to household accidents, explosions, and fatalities; (iii) occupational health and safety hazards to civil workers/contractors replacing transmission and distribution cables and accessories, and meters; (iv) upgrade of a GRIDCo transmission network, will potentially lead to solid and e-waste generation; (v) strengthening ECG distribution networks will also potentially lead to solid waste generation; (vi) potential elite capture when program benefits are skewed more to high and middle income earners to the detriment of low income earners and communities; (vii) economic displacement affecting the livelihoods of persons who may have encroached unto the right-of-way of the GRIDCo transmission line earmarked for upgrade and ECG distribution infrastructure earmarked for strengthening to farm and/or to run their livelihood activities; (viii) potential incidents of sexual exploitation and abuse (SEA)/sexual harassment (SH) as large numbers of contractors' workers move into various areas along the transmission and distribution corridors to undertake the strengthening of transmission and distribution lines, and in the distribution of cookstoves to beneficiary households.

Assessment of Borrower's Environmental and Social Management System

Following the identification of the environmental and social risks, the E&S management systems in place to manage the identified risks were assessed. The assessment was done in line with the following criteria: strengths of the system, or where it functions effectively and efficiently and is consistent with the Bank Policy and Directive for Program-for-Results Financing; inconsistencies and gaps between the principles espoused in the Bank Policy and Directives for Program-for-Result Financing and capacity constraints; and actions to strengthen the existing system. Based on the review of the Borrower's E&S system, in line with the six core principles espoused in the Bank Policy and Directives for Program-for-Results Financing, we found that five of the six core principles will be applicable to the program¹. The findings of the assessment of national and institutional systems in line with the applicable principles are summarized as follows:

Core Principle 1 (General Principle of Environmental and Social Management): Ghana has comprehensive and adequate policies, regulations, and laws in place for environmental assessment (EA) that is consistent with the core principle 1. The current procedures and sectoral guidelines provide the framework to (i) screen subprojects for potential environmental and social impacts; (ii) determine the level of environmental and social analysis and specific plan to be prepared based on the outcomes of the screening; (iii) review the results of the assessment and plan and clear environmental permitting process; (iv) monitoring and follow-up; and (v) determine penalty and sanctions for violations and infractions to the system. The EA Regulations of 1999 (LI 1652) is considered an important tool both at the central government and local/district government levels. The EA regulatory framework aligns well with the WB's PforR Environmental and Social (E&S) CP.

Ghana has strong institutions in place for environmental assessment. Ghana's EPA is one of the oldest and experienced environmental agencies in Africa. EPA has over 35 years of experience. It is an energetic and experienced organisation and has maintained a leadership position in EA. It generally obtains good cooperation from both the private sector and government agencies, and it has and uses its enforcement authority when developments proceed without following the regulations.

The Power Sector Institutions (PSI), MoEn, ECG, NEDCo, GRIDCo, VRA and Bui Power have corporate environmental and social policies and environmental frameworks that guide their operations. For instance, ECG has an Environmental and Social Management System (ESMS) comprising of Environment and Social

¹ Principle 2 (Natural Habitats and Physical Cultural Resources) is considered not applicable since the rehabilitation of ECG distribution network and upgrade of an existing GRIDCo distribution network would not entail new land clearing affecting any natural habitats and physical cultural resources.

Management Frameworks for Construction Projects, System Operations and Maintenance, Safety and Health Policy Guidelines and Procedures Manual, Emergency Preparedness and Response Plan, Stakeholder Engagement Plan, and Land Acquisition and Compensation Framework. The institutions involved in the ESRP require environmental compliance (from the EPA) and technical compliance (from the EC) when implementing projects that are likely to have an impact on the environment. The policies, frameworks, and plans guide the institutions in the planning and implementation of projects as required by the national regulations and policies and standards of development partners. For instance, there is evidence of Environmental and Social Impact Assessments for projects funded by development partners. The NPA has developed guidelines and standards for the implementation of the CRM. These includes guidelines for establishing LPG bottling plant, licence framework for LPG cylinder transportation, guidelines.

Core Principle 2 (Natural Habitats and Physical Cultural Resources): *This CP is not considered applicable for the activities to be supported under the Program*

Core Principle 3 (Public and Worker Safety and Workers Right): Ghana's legal/regulatory system includes provisions for protecting worker, community and public safety. Some legislation to ensure worker protection includes the Labour Act 2003 (Act 561), the Public Health Act, 2012 (Act 851), the Factories, Offices and Shops Act 1970, (Act 328). There is also the Workmen's Compensation Law 1987 (PNDC 187) which relates to compensation for personal injuries caused by accidents at work and hence, indirectly impacts on monitoring worker and workplace safety.

EPA requires that as part of the EIA process, attention be paid to public and worker safety. But these are very limited in scope given the multifaceted nature of public health and occupational health and safety within the Ghanaian setting. The existing Factories, Offices and Shops Act, 1979 (Act 328) limits occupational health and safety issues to only factories, offices, and shops to the exclusion of other workplaces.

Generally, Power Sector Institutions (ECG, NEDCo, GRIDCo, VRA, Bui Power and NPA) have systems and measures that promote community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or remedial works incorporated as needed. In addition, GRIDCo and ECG do provide its workers with Personal Protective Equipment (in the form of overalls, helmets, goggles, gloves).

Core Principle 4: Land Acquisition and Loss of Access to Natural Resources: The PforR does not support any activities that may require land acquisition and loss of access to natural resources. However, the upgrade and strengthening of transmission and distribution networks may occasion some minor economic displacement affecting the livelihoods of people who have encroached within the transmission and distribution corridors. The Ghana Land Act, 2020 (Act 1036) consolidated the laws on land and compensation, with the view to harmonising those laws to ensure sustainable land administration and management and effective

land tenure. While the Act addresses many challenges with the previous laws (including the lack of clarity where there is physical displacement requiring resettlement planning, including livelihood restoration), it does not recognize rights for compensation for persons without legal title to the land they occupy. There is also a limited history of application of the new Act to assess its effectiveness and the record of agencies charged with enforcing its provisions. In addition, Regulations which would have provided the operational rules and procedures to implement the Act, are now at the drafting stage.

ECG and GRIDCo both have internal systems (including policies, plans and procedures) and departments/units for addressing impacts on livelihoods of persons who are affected by their transmission and distribution infrastructure upgrading and strengthening works. GRIDCo just recently adopted a new Land Acquisition and Resettlement Policy and a new Right-of-way Management Policy. Both entities have had recent experience of successfuly completing works that are similar to the proposed upgrade and strengthening works under this program.

Core Principle 5 (Social Considerations - Indigenous Peoples and Vulnerable Groups): There are no groups in Ghana that meet the 'World Bank's criteria for Indigenous Peoples. However, this core principle is considered partially relevant since there are marginalised and vulnerable groups including women, youths, the elderly and PWD that would be impacted by the Program. There is a possibility of elite capture and the exclusion of vulnerable groups in Program activities. It is important that the Program gives attention to groups vulnerable to hardship or disadvantage, including as relevant the poor, the disabled, women and children, the elderly, or marginalized ethnic groups. Ghana has a fairly good number of legislations and policies to support the needs or concerns of vulnerable groups. The Disability Policy and the Persons with Disability Act, 2006 (Act 715) seek to mainstream the needs of persons with disabilities into the national development process. The Domestic Violence Act, 2007 (Act 732) provides for the protection of women and children from domestic violence including Gender-Based Violence (GBV) and the Children's Act, 1998 (Act 560), as amended and the Labour Act, 2003 (Act 651), provides for the rights of the children, maintenance, and adoption, regulate child labour and apprenticeship. The National Social Protection Policy provides a framework for holistic and proper targeting of vulnerable households for rehabilitative, restorative, protective, and facilitative support. There is multiple government effort to mainstream interest of underserved or marginalised people and vulnerable groups in development projects. However, more effort is needed to ensure such support is well structured to provide sustainable and balanced benefits to vulnerable people.

The PSIs undertake free, prior, and informed consultations if people are potentially affected (positively or negatively) to determine whether there is broad community support for the program. They also ensure that project-affected persons participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, with the consent of the affected persons. **Core Principle 6 (Social Conflict):** The Ghana Constitution, policies and laws largely provide for distributional equity and cultural sensitivity in all aspects of national actions to avoid conflicts. Ghana has a fairly good system for handling social conflicts. The few conflict-prone areas are localised incidents. The implementing agencies have varied extents of stakeholder engagement protocols, multiple mechanisms for communication with the populace, and a variety of internal and external grievance redress mechanisms available. ECG, NEDCo, and GRIDCo have Human Resource Management Units/Directorate/Departments and procedures for handling issues relating to labour management and community concerns, with the help of the national police force when necessary. The public also have recourse to the implementing agencies' internal complaints and grievances systems or recourse to the Public Utility Regulations Commission (PURC) to lodge any complaints or grievances for redress.

Recommendations and Program Action Plan

For the effective implementation of the Program, the ESSA provides a breakdown of actions to be included in the Program Action Plan (PAP) with indicative timeline, responsibility for implementation and indicators for measuring the completion of such actions. These actions may be further refined and adjusted during the consultation process during appraisal and at the midline review during implementation of the Program.

No.	Action Description	Responsibility	Timing	Completion Measurement
Envir	conmental and social due diligence			
1.	Support ECG to develop an organizational change management plan to proactively engage employees before, during and after the change in top Management.	ECG's PIU	During program implementation	Change Management Plan Prepared
2.	The Program should support MoEn and NPA to adopt and implement the Communication Strategy for the National LPG Promotion Program.	MoEn's PCU and NPA	During program implementation	Final report on implementation of the communication strategy submitted to the Bank
3	The program should prepare a procedure for livelihood restoration to guide implementation of the upgrade and strengthening of transmission and distribution infrastructure under the PforR program.	MoEn's PCU and ECG and GridCo's PIUs	Before the start of the upgrade and rehabilitation activities	Procedure for Livelihood Restoration prepared and submitted to the World Bank
4.	The PforR should support ECG to update its Gender Action Plan with the objective to increase women participation in Program activities.	MoEn's PCU & ECG's PIU	During program implementation	Gender Action Plan revised and approved by ECG's Management

			- •	
5.	The PforR should support NPA and EC to undertake a Strategic Environmental and Social Assessment (SESA) for the National LPG Promotion Program.	MoEn's PCU	During program <u>implementation</u>	Final SESA report submitted to the Bank
6	The PforR should support NPA to prepare a Communication and Stakeholder Engagement Plan (CSEP) for the National LPG Promotion Program.	MoEn's PCU	During program implementation	Final CSEP report submitted to the Bank
Instit	tutional Capacity Enhancement:			
7.	The PCU and PIU should recruit Safeguards Specialists at the PCU and PIU to support the program in planning, managing and reporting on environmental and social issues and compliance. The Specialists at the PCU should ensure coordination on E&S performance among the implementing agencies.	MoEn's PCU and ECG and GridCo's PIUs	Before start of program implementation	Safeguards Specialists recruited and at post
8.	The PforR should support ECG to develop a staff development policy and Plan to direct staff development programmes and promote and strengthen women in leadership roles especially at the regional and district level offices of ECG.	ECG's PIU	During program implementation	Staff Development Policy and Plan developed and approved by ECG Management
9.	The PforR should support ECG's Training Centre to incorporate environmental and social risk management into its courses to improve the capacity of its staff in all its agencies. Develop relevant educational modules and organize regular training on environmental and social management.	ECG's PIU	During program implementation	Training manuals developed and training conducted. Training reports submitted to the World Bank
10.	The PforR should support MoEn, PURC & EC to enhance the capacity of its staff on environmental and social management. Conduct the necessary number of professional training and develop appropriate technical guidelines on environmental procedures and management.	MoEn's PCU	During program implementation	Training completed and reports submitted to the World Bank

E&S I	Training staff in dealing with complaints from customers or stakeholders and reducing complaint response and resolution time. Monitoring and Verification:			
11.	The Independent Verification Agency	MoEn through the	Throughout	Completed report
	(IVA) should conduct quarterly monitoring of progress and performance on environmental and social issues, especially regarding the compliance of the Program activities.	IVA	project implementation	with, recommendations about E&S issues, including the progress of the implementation of actions shared with the World Bank and other relevant stakeholders
12.	The PforR should include E&S monitoring and verification as part of the responsibilities of the Independent Verification Agency (IVA). In this regard, the PforR should ensure that the IVA has expertise and staff on E&S management.	MoEn	Before start of program implementation	Terms of reference for the IVA include requirements on E&S monitoring
Stake	cholder Engagement, Grievance mec	hanism and Informa	tion Disclosure	
13.	The PforR should ensure that all implementing institutions have a fully-	MoEn's PCU and ECG and GridCo's	Before start of program	Grievance Mechanisms of
	functional grievance redress mechanism for receiving and resolving complaints within a stipulated time.	PIUs	implementation	implementing institutions fully functional.
				Report on grievances
14.	The PforR should ensure that all implementing institutions disclose relevant E&S policies, frameworks, plans and reports	MoEn's PCU and ECG and GridCo's PIUs	Before start of program implementation	All relevant E&S instruments duly disclosed in a timely manner.
15.	The PforR should support PURC to undertake a diagnostic Poverty and	MoEn's PCU	Throughout project	Lifeline Program for Low-Income
	Social Impact Assessment (PSIA) to identify life-line customers likely to be affected by the tariff increases for support.		implementation	Consumers and vulnerable groups developed and implemented.

Environmental and Social Risk Rating

Potential E&S risks associated with the PforR will include (i) economic displacement affecting the livelihoods of persons who may have encroached within the existing corridors of the transmission and distribution infrastructure, occasioned by the

upgrade of an existing GRIDCo transmission line and strengthening of ECG distribution network respectively. As already highlighted, both ECG and GRIDCo have frameworks and systems (such as GRIDCo's Right of Way Management Policy and Land Acquisition and Compensation Policy, and ECG's Land Acquisition and Compensation Framework) in place to design and implement livelihood restoration programs to minimize impact, and to restore the livelihoods of all persons whose livelihoods may be adversely impacted by the proposed works. (ii) Potential OHS risks for workers who will be carrying out the network upgrade and strengthening works respectively. However, both ECG and GRIDCo also have satisfactory OHS procedures and manuals to mitigate these potential risks. (iii) On the Clean Cooking component, there is the risk of potential exposure to household accidents, explosions, and fatalities, especially of first-time LPG users. Part of the fire risk mitigation measures include the provision of fire blankets as part of the accessories in the stove packs to be distributed. The fire blankets will enable LPG users to easily douse fires in the unfortunate case that fire starts during the use of LPG stoves, and prevent them from spreading. Also, under the program, NPA is implementing the Behavioural Change Strategy which is already in place, to educate LPG users on the observation of safety protocols. The impacts associated with these risks will be localized, and can easily be prevented and/or mitigated in a predictable manner. Based on these findings from the national and institutional assessments, the ESSA recommends that the Environmental and Social Risk is rated Moderate mainly due to a good regulatory and institutional frameworks and systems on E&S that are able to manage environmental and social risks from the defined types of activities under the program, and the measures in place to mitigate risks when they occur.

SECTION 1 – BACKGROUND, PROGRAM DESCRIPTION AND SCOPE

1.1 Program Background and Context

The World Bank (WB) is planning to support the Government of Ghana (GoG) to achieve tangible results related to the financial recovery of the electricity sub-sector and the increase of access to clean cooking solutions. The proposed Program is aligned to Ghana's Energy Sector Recovery Program (ESRP) and the National Liquefied Petroleum Gas (LPG) Promotion Program (NLPGPP) and supports results in four areas: (i) Improved methodology and processes for achieving economic dispatch; (ii) Improved financial management systems and processes at Electricity Company of Ghana (ECG); (iii) Improved operational performance of ECG; and (iv) Increased access to clean cooking solutions. These result areas are complementary and include measures to support key financial, operational/technical, governance, and policy interventions of the ESRP and the NLPGPP.

In the past decade, Ghana's economy has been generally robust with an annual average GDP growth rate of 5.6 percent recorded between 2013 and 2023. However, the pace of economic growth has slowed in recent years with the COVID-19 pandemic, and the war in Ukraine. Weak revenues, expenditure overruns, and significant energy sector financial shortfalls, were compounded by the shocks of the COVID-19 pandemic and Russia's invasion of Ukraine. This resulted in a macroeconomic crisis in 2022, with the fiscal deficit and public debt becoming unsustainable. Inflation rose to over 50 percent, and the balance of payments was affected adversely. The impact of the fiscal crisis has been felt disproportionately by the vulnerable segments of the population. The inflation shock alone is estimated to have pushed over 800,000 Ghanaians into poverty. Food insecurity has also worsened².

Ghana's public finances have been characterized by repeated imbalances linked to high spending, political cycles, and large financial shortfalls in the energy and financial sectors (particularly following the Dumsor – widespread power outages – episode of 2015) along with low collection of taxes. These imbalances grew under the GoG's fiscal expansion policy in response to the COVID-19 crisis. Although revenues recovered in 2021, expenditures remained almost unchanged as a share of GDP and the deficit remained at over 12 percent of GDP (on a commitment basis). This was partly due to shortfalls in the energy sector (up to 2.2 percent of GDP). Restoring fiscal and debt sustainability, reducing the energy sector deficit, and curbing inflation are urgent policy priorities. The IMF's Board approved a three-year Extended Credit Facility (ECF) program of about US\$3 billion equivalent on May 17, 2023, with emphasis on frontloaded fiscal consolidation and tight monetary and exchange rate policies, complemented by reforms in the areas of tax policy, revenue administration, public financial management (PFM), and the energy and cocoa sectors. Despite these measures, growth is expected to remain constrained during 2024 by fiscal

² Programme Appraisal Document

consolidation, macroeconomic uncertainty, high interest rates, and financial and energy sector weaknesses.³

Despite Ghana's status as an emerging middle-income country, around 54.3 percent of its households still relied on solid biomass (31.1% rely on firewood while 23.2% rely on charcoal) in 2021, as primary fuel used in inefficient rudimentary stoves for cooking. The GoG has been promoting the adoption of efficient biomass cookstoves and clean cooking fuels since the early 1990s and is aiming to reach adoption of 2 million efficient biomass cookstoves and 50 percent LPG access by 2030. Currently, an estimated 36.9% of households have access – according to the 2021 population and housing census. Improving access to LPG and efficient biomass cookstoves is a priority of Ghana's Sustainable Energy for All (SEforALL) Country Action Plan (2012), Nationally Determined Contributions (NDCs- 2015), Renewable Energy Master Plan (2019) and recent revisions to the National Energy Policy (2022). The Government has also instituted a new LPG supply policy, the Cylinder Recirculation Model (CRM), effective since 2017, for the marketing and distribution of LPG cylinders to complement the National LPG Promotion Program. These interventions are expected to encourage private sector participation and investments in the market (on bottling plants, cylinder manufacturing, and cylinder exchange points) thereby, increasing LPG accessibility and adoption⁴.

Ghana has excess generation capacity largely based on fossil fuels. In response to the 2013-2016 "dumsor", non-competitive procurement of emergency power and IPPs were fast-tracked culminating in expensive excess thermal generation capacity.⁵ In the absence of a least-cost power sector plan during the 2012-2016 power crisis, GoG contracted three Emergency Power Producers (EPPs) and ECG signed 15 thermal and 17 renewable energy PPAs through direct negotiation at expensive prices and above the electricity demand needs of the country. This has resulted in an accumulation of excess thermal generation capacity estimated at 758 MW in 2022 with corresponding take-or-pay capacity charges of about US\$171 million, not recognized in tariff determination and therefore an explicit liability for GoG to ensure the financial viability of the sector. The quality of electricity supply has also deteriorated, combined with a low collection rate, and below cost recovery tariffs thereby undermining utility operational and financial performance. Reducing system losses and increasing revenue collection will be key to improving the operational and financial performance of power sector utilities in Ghana. In 2022, total distribution losses of ECG were around 28.4 percent with revenue collection rates at 80 percent, and tariffs not covering the cost-of-service. These high losses, low collection rates and below costrecovery tariffs have affected the financial performance of ECG and it is threatening

³ Ibid.

⁴ Ibid.

⁵ Ghana has about 4,846 MW of installed power generation capacity comprising of 69 percent natural gas based thermal generation, 4 percent heavy fuel oil based thermal generation, 22 percent hydropower, and 5 percent other renewable energy. Peak demand is however 3,566 MW (2022) (14 percent growth from 2020 in line with growing economic activities and population) thereby leading to excess generation capacity. In 2022 the total electricity generated was about 23,579 GWh (28 percent from hydropower and 72 percent from thermal generation). In the last decade, the average annual growth rate in electricity was around 9 percent.

ECG's commercial viability and the quality of service delivery. GoG's immediate priority is to reduce ECG's commercial losses and improve collection efficiency. The specific design of ECG's revenue protection program shall be improved under the PforR with critical investments in ECG's commercial management system, and meter management system along with investments in new meters⁶.

Ghana has a high electricity access rate. The electricity access rate was estimated at 86.3 percent, with an urban access rate of 95 percent⁷. Ghana was one of the first countries in Sub-Saharan Africa to unbundle its electricity sector and host IPPs. Generation is owned by public utilities and by IPPs with the latter accounting for about 3.347 MW of installed generation capacity, representing 69 percent of the total installed capacity of 4,846 MW. The transmission system (6,640 circuit km) is owned and operated by the state owned transmission utility GRIDCo, while power distribution is carried out by three utilities including the Electricity Company of Ghana (ECG) representing 4.7 million customers (i.e. 88 percent of retail power sales in the southern and central parts of the country), the Northern Electricity Distribution Company (NEDCo) (representing 10 percent of electricity sales in the northern distribution zone), and Enclave Power Company (EPC) (representing 2 percent of electricity sales in the industrial Tema free zone area). Ghana's transmission network is interconnected with neighboring countries (Côte d'Ivoire, Togo, Benin, and Burkina Faso) and Ghana is a member of the West African Power Pool (WAPP). In 2022, Ghana exported 1,953 GWh to neighboring countries, representing about 9 percent of the total energy supplied in the country. The Ministry of Energy (MoEn) is responsible for energy sector policy, while the Energy Commission (EC) and the Public Utilities Regulatory Commission (PURC) are the technical and economic regulators respectively.

1.2 Government Programs

1.2.1 Energy Sector Recovery Program (ESRP)

The ESRP, adopted by the Cabinet on May 9, 2019, is the Government of Ghana's (GoG) roadmap to restore and sustain governance and financial viability of the energy sector, as well as to attract competitive private sector investments. The three primary objectives of the ESRP are: (a) full restoration of the financial and commercial viability of the sector; (b) curtailment of further accumulation of arrears; and (c) payment of outstanding sector arrears. Under the ESRP, the GoG committed about 1 percent of GDP (around US\$0.7 billion) of fiscal revenues to close the projected financial gap in the sector. This also included the establishment of the Delta Fund that Is funded through the new Energy Sector Recovery Levy that imposes 20 pesewas (about 3.5 US cents) per liter on petrol and diesel, generating about US\$120-150 million of revenues per year. It also earmarked US\$1 billion from the 2020 Eurobond issuance (ESLA

⁶ Programme Appraisal Document.

⁷ 2021 Population and Housing Census

bond) to lower IPP capacity charges under PPAs although these resources were used instead to fund priority financial obligations during the fiscal crisis⁸.

The ESRP actions resulted in the reduction of the energy sector shortfall, however the target of achieving financial equilibrium was not met. Under the ESRP, the projected US\$ 14.3 billion sector shortfall (through end 2023 under a Business-as-Usual scenario) was reduced by US\$ 4.9 billion to US\$ 9.4 billion through May 2023, and the shortfall was expected to reach US\$ 8.3 billion by end 2023. In addition, while 18 of 30 ESRP action items (AIs) were completed, the implementation of the ESRP had suffered delays and 12 of the 30 AIs were still under implementation by mid-2023. The ESRP was subsequently extended in June 2023 through December 31, 2025, with seven additional AIs for a total of 19 AIs to be implemented by the new closing date. The impact of the key ESRP actions would be a further reduction of the sector financial shortfall to US\$ 5.4 billion by end 2025 without Government transfers. With annual Government transfers of US\$ 1 billion as agreed under the IMF ECF the same is expected to be reduced further to US\$ 2.4 billion with no further running annual shortfalls⁹.

1.2.2 National Liquefied Petroleum Gas (LPG) Promotion Program (NLPGPP)

The GoG's program to help achieve 50 percent access to LPG by Ghanaians by 2030 is the National LPG Promotion Program (NLPGPP). As part of its efforts to reduce fuelwood consumption, GoG launched the Rural LPG Cooking Fuel Promotion Program (RLPGPP) in 2013, ending in 2017. While 151,500 rural households have benefited from the program (7.7 percent rural household uptake in 2016 compared to 5.5 percent in 2013), adoption remains limited mainly due to high LPG refill cost, long distances from filling stations and unfavourable user perceptions about the safety of LPG. Upon reviewing the RLPGPP effectiveness, GoG is seeking to scale up the RLPGPP into the proposed NLPGPP, which together with the LPG Cylinder Recirculation Model (CRM), are expected to increase the populations LPG access from 25 percent in 2019 to 50 percent by 2030 in rural, urban, and peri-urban areas. The overall objective of the NLPGPP is to ensure access to LPG as a cleaner, safer, and healthier cooking fuel to improve the health and lives of people and create jobs. It will target prospective LPG end-users for domestic, commercial, and industrial purposes in rural, urban, and peri-urban areas - by reducing or eliminating the initial or running bottlenecks impeding easy adoption of LPG as their primary choice of fuel.

1.2.3 Government Program Stakeholders and Institutional Context

1.2.3.1 Power Sector

Policy makers: The Ministry of Energy (MoEn) is responsible for formulating, monitoring, and evaluating policies, plans, programs, and projects for the power sector

⁸ Programme Appraisal Document

⁹ Ibid.

in Ghana with financial support from the Ministry of Finance (MOF). The Ministry is also directly responsible for the implementation of the National Electrification Scheme in various parts of the country.

Regulators: The Energy Commission (EC) and Public Utilities Regulatory Commission (PURC) are responsible for regulating the activities of the power sector. The EC is responsible for technical regulation of the power sector, including licensing of operators and also advising the Minister of Energy on matters relating to energy policy and planning. The PURC, on the other hand, is an independent regulatory agency responsible for economic regulation of the power sector, specifically approving rates for electricity sold by distribution utilities to the public. PURC is also responsible for monitoring the quality of electricity services delivered to consumers.

Generators: Power generation in Ghana is carried out by three major groups: the Volta River Authority (VRA), Bui Power Authority (BPA), and Independent Power Producers (IPP). The sources of generation include hydro power plants, thermal power plants and solar photovoltaic power plants.

Transmitters: The transmission of electricity from the generation companies to the distribution companies is done through the National Interconnected Transmission System (NITS) owned and operated by the state-owned Ghana Grid Company Ltd (GRIDCo). Under the Program, GRIDCo will be the entity responsible for receiving funds upon implementation of the milestones under DLR1 to improve methodology and processes for achieving economic dispatch and strengthening of a critical transmission line to remove constraints of economic dispatch. When DLR1 is successfully completed by GRIDCo, this will result in IDA disbursements into a GRIDCo dedicated account. PforR proceeds will be disbursed upon verification by an independent auditor, to be procured by the PCU.

Distributors: Distribution of electricity to final consumers is the responsibility of two state owned companies, the ECG and NEDCo, and a private company, Enclave Power Company. ECG distributes electricity to the southern sector of Ghana while NEDCo distributes electricity to the northern sector. Under the Program, ECG will be the entity responsible for receiving funds upon implementation of the milestones under DLR2 and DLR3 to improve corporate governance and operational performance of ECG (including improvement of the LV network (involving supply and installation of transformers and Low Voltage network equipment and materials to enhance the existing network infrastructure) in selected regions, procurement and installation of MMS compliant prepayment meters for customers, supply and installation of meters at ECG Bulk Supply Points (BSPs) and supply and installation of an online IPP Invoicing System). DLRs successfully completed by ECG will result in IDA disbursements into an ECG dedicated account. PforR proceeds will be disbursed upon verification by an independent auditor, to be procured by the PCU. In addition, the IPF component of the Program will involve the procurement of additional meters and upgrades of the distribution systems for ECG. ECG will be the implementing agency

and will be responsible for the management of funds and procurement and installation of the equipment. Both NEDCo and ECG will benefit from reduced energy losses, improved revenue, and improved corporate governance.

Consumers: Electricity consumers in Ghana are classified into bulk, industrial, residential, and non-residential consumers. A bulk customer in respect of electricity consumption is any consumer of electricity with a Maximum Demand of at least 500KVA consistently for a consecutive period of 3 months OR a minimum annual energy consumption of 1 million kilowatt-hours (kWh). Industrial, sometimes referred to as Special Load Tariff (SLT), consumers are those who use electricity for industrial purposes including VALCO, the mining companies and other production and manufacturing facilities. Residential consumers refer to homes in both rural and urban sectors of the country whereas non-residential consumers are mostly commercial facilities. The electricity consumed by streetlights across the country is captured under the street lighting class. Figure 1 presents the different stakeholder groups in Ghana's power sector.

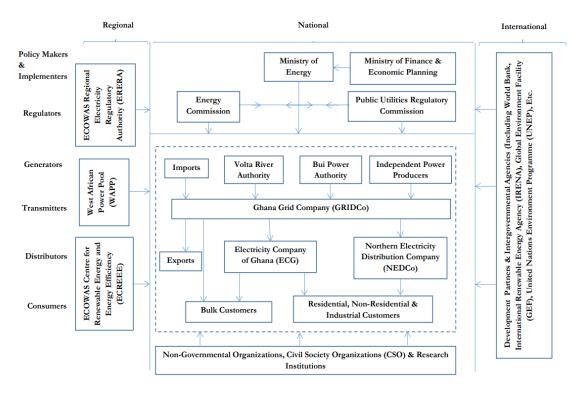


Figure 1: Stakeholders in Ghana's Power Sector

1.2.3.2 LPG Sector

Policy makers: The Ministry of Energy (MoEn) is responsible for formulating, monitoring, and evaluating policies, plans, programs, and projects for LPG and natural gas sector. The Ministry is also directly responsible for promoting some LPG programs.

Regulators: The National Petroleum Authority (NPA) is responsible for regulating the petroleum downstream industry in Ghana. As a Regulator, NPA ensures that the industry remains efficient, profitable, fair, and at the same time, ensuring that consumers receive value for money. The NPA is responsible for the LPG Cylinder Recirculation Model (CRM). It has developed guidelines and standards for the implementation of the CRM. These includes guidelines for establishing LPG bottling plant, licence framework for LPG cylinder transportation, guidelines for cylinder exchange points, and standards for LPG cylinder transportation vehicles. Table 1 presents the key stakeholder groups in Ghana's LPG value chain.

Table 1: Stakenoiders Groups in the LPG value Chain				
Group	Institutions/Organizations			
Producers of LPG	Ghana National Gas Company (GNGC); Tema Oil Refinery; Sentuo Oil Refinery			
Producers of	Ghana Cylinder Manufacturing Company (GCMC); Sigma Gas Ghana Ltd			
Cylinder	(SGGL); Appeb Cylinder Manufacturing Company; & Awarrior Cylinder Manufacturing Company			
Distributors of LPG	Liquefied Petroleum Gas (LPG) Marketing Companies (LPGMCs) /Oil Marketing Companies (OMCs); Ghana LPG Operators Association (GLiPGOA)			
Transporters	Gas Tanker Drivers; Cylinder Transporters			
Industry	LPG Marketing Companies Association of Ghana (LPGMCAG); Ghana			
Associations	Alliance for Clean Cookstoves and Fuels (GHACCO); Ghana LPG Operators Association (GLiPGOA)			
Advocacy and	Ghana LPG Operators Association			
Policy				
Bottling Plants	Ghana Gas; The Quantum Group Limited; PUMA Energy and Blue Ocean Investments; GOIL;			
Bulk LPG Storages	Total Energies; Bulk Oil Storage and Transportation Company Limited (BOST); Matrix Energy Group; Tema Oil Refinery			
Cylinder Exchange Points	Different outlets			

Table 1: Stakeholders Groups in the LPG Value Chain

1.2.4 Governance of State-owned Enterprises

State Interests and Governance Authority (SIGA) seeks to facilitate performance management in State-owned enterprises (SOEs) and other prescribed bodies, within the framework of Government policy, to ensure that they operate efficiently, effectively and profitably thereby contributing towards the socio-economic development of Ghana. The objects of SIGA are to:

- a) promote within the framework of Government policy, the efficient or where applicable profitable operations of specified entities;
- b) ensure that specified entities adhere to good corporate governance practices;
- c) acquire, receive, hold and administer or dispose of shares of the State in stateowned enterprises and joint venture companies;
- d) oversee and administer the interests of the State in specified entities; and ensure that:
 - i. State-owned enterprises and joint venture companies introduce effective measures that promote the socioeconomic growth of the country

including, in particular, agriculture, industry and services in accordance with their core mandates; and

ii. other State entities introduce measures for efficient regulation and higher standard of excellence.

1.3 Program-for-Results Scope

1.3.1 Boundaries of PforR Program

The ESRP sets out the immediate, near-term, and medium- to long-term actions needed to achieve the Government's aim to bring energy sector finances into balance by the end of 2025. This is to be achieved through a two-pronged approach, which will simultaneously reduce costs and raise revenues. The ESRP formalises the commitment of GoG to fund the annual sector financial shortfall (by means of sector stabilisation payments from the Budget), beginning in 2021 until the sector is in balance, to prevent further accumulation of arrears. The NLPGPP aims to achieve 50 percent access to LPG by Ghanaians by 2030.

The Program-for-Results Financing Program (hereafter, the PforR Program) will support a subset of the ESRP, excluding gas sector activities and the institutional framework of the energy sector, and Phase 1 of the NLPGPP related to the demand side of the LPG market for cooking (Table 2).

Table 2:	: Pfork boundaries			
	Government program	Program supported by the PforR	Reasons for non-alignment	
Objective	Improve the performance of the energy sector and increase access to clean cooking solutions	Improve the financial viability of ECG by reducing its revenue shortfall; and increase access to clean cooking solutions.	The PForR Program will focus on the electricity sector and on the main utility, ECG. This is because the Government has requested the Bank's help with the electricity sector's financial recovery; because ECG is the single- largest distribution utility in the sector where significant improvements are possible; and because there is a separate Bank TA program supporting natural gas reform.	
Duration	ESRP 2019- 2025 NLPGPP 2022- 2030	2024-2027	ESRP was extended till end of 2025 in 2023, with the assumption that it may achieve its intended targets. However, given significant macro-economic pressures (Fx depreciation, high inflation), the sector turnaround is expected to take longer. Further, actions supported under the PforR Program for distribution utility turnaround are expected to achieve results over at least 3 years	
Geographic coverage	Nationwide	Nationwide		

Table 2:PforR boundaries

Results areas	ESRP: 19 reform actions NLPGPP	RA1-3 RA4	The PforR represents only a part contribution to the Government program, ESRP, concentrating on actions to reduce the electricity sector's financial shortfall and improve stakeholder coordination and transparency.
Overall Financing	US\$867 million for PIP of ECG; and US\$196 mn for GRIDCo's efficiency improvement - US\$95 million to support implementation of the NLPGPP (2022 - 2030)	US\$ 400 million for priority areas of PIP of ECG; and US\$60 million for GRIDCo's efficiency improvement - US\$95 million to support implementation of the NLPGPP (2022 - 2030)	The Program boundary shall be a sub-set of the PIPs of ECG, and expenditure for improving dispatch efficiency of GRIDCo.

1.3.2 Result Areas, Activities and Disbursement Linked Results

The proposed PforR Program seeks to address the shortcomings of the current ESRP and NLPGPP through the following support areas and Disbursement Linked Results (DLRs):

Results Area #1: Improved methodology and processes for achieving economic dispatch

This result area includes DLRs that incentivize a change in methodology for economic dispatch to (i) strengthen the role of institutions, especially the system operator, as already envisaged in the grid code; (ii) provide economic benefits by scheduling and dispatching cheaper generation plants (with a possible change in fuel allocation policy if required); and (iii) improve transparency in scheduling and dispatch, through public disclosures and increased regulatory oversight. The result area also includes strengthening of a critical transmission line to remove constraints of economic dispatch.

As power purchases constitute more than 80% of the costs of ECG, inefficient scheduling and dispatch of power plants leads to significant increase in costs, which are not passed through in tariffs (tariffs are already below cost of service provision). Further, according to the Ghana Grid code and also best practice, economic dispatch is managed by the power system operator, GRIDCo¹⁰. However, given non-standard PPAs signed by ECG and further modifications to the PPAs through negotiations, the implementation of merit order is being done by ECG. This is in contradiction to the Grid Code and makes the system of scheduling and dispatching non-transparent.

¹⁰ Defined as ETU or Electricity transmission utility as per the grid code.

Results Area #2: Improved financial management systems and processes at ECG

The objective of this Results Area (RA) is to improve the financial management systems and processes of ECG, to ensure timely publication of audited Annual and Financial reports. ECG relies on Ministry of Finance (MoF) for paying for a large portion of costs associated with power procurement and it is important that the IPP bills are reconciled between ECG and MoF before finalization of ECG accounts. Lastly, the audit of ECG's annual statements is conducted by the Auditor General which gets delayed (2021 and 2022 <u>audited</u> AFS are still not available). The DLR support timely completion of all activities required for publication of annual audited financial statements.

Results Area #3: Improved operational performance of ECG

The objective of this Results Area (RA) is to support the urgent actions that ECG needs to implement to reduce commercial losses and increase collection efficiency required for financial turnaround (as envisaged under the ESRP). ECG currently has a homegrown non-standard commercial management system with limited capability for generating meaningful management information systems (MIS) to identify areas with high losses or to run targeted revenue protection programs. Even though ECG bills over half of its customers on a post-paid basis, its collection from these customers is very poor leading to an overall collection efficiency of only ~80%. The DLRs support ECG to improve its commercial management and information systems to ensure better revenue management. Further, the DLRs shall support ECG to generate energy accounting reports starting with regions and further refining them to districts to allow ECG to run targeted revenue protection programs. The result area will also support strengthening of some ECG networks (LT-ABC cabling in high loss areas, distribution transformer upgrade, LT line rehabilitation), and the procurement and installation of smart consumer and distribution transformer metering.

Lastly, the retail electricity tariffs have increased by 72 percent in Ghana since September 2022; however, it is not clear whether there has been a commensurate increase in quality of electricity supply and other commercial services that are being offered to the citizens. Thus, a DLR supports the very important aspect related to receiving customer feedback on services offered by ECG, and publication of the results by the sector's commercial regulator, PURC. The feedback will be disaggregated by gender, opening future opportunities for women to participate in decision making. The improvement of ECG's operational performance will be measured through the result indicators of reduction in ECG's technical and commercial losses from the current 28.4% (2022) to xx% in 2027 and improvement in collection efficiency from 80% (2022) to xx% in 2027 (including both pre-paid and post-paid). ECG's commitment to enhancing accountability and transparency is also demonstrated by its objective to boost female participation in the workforce, which is anticipated to be an outcome of this result area.

Results Area #4: Increased access to clean cooking solutions

The objective of this RA area is to address the constraints to accelerating household (including female-headed households), commercial caterers' (including those run by

women) and schools' access to clean cookstoves and fuels, by providing partial funding to improve affordability of LPG stoves and accessories. This will impact firstly, through end-user cost savings from switching to LPG from charcoal and firewood. This would in turn lead to higher level impacts such as improved health, gender equality (reduction in women's time poverty, better economic opportunities, and reducing exposure to risks, including violence and health issues), climate and environmental benefits due to a reduction in time spent gathering biomass fuels, reduced exposure to cooking smoke and reduced deforestation from fuel harvesting as a result of displaced traditional cookstoves and use of polluting fuels. This results area will also support the development of an enabling environment for cleaner cooking through policy, advocacy and regulatory development, business development support to ICS producers, improved data collection, improved stove testing services, as well as consumer education and behavioural change communications.

This DLI / DLRs will support the implementation of Phase 1 of the NLPGPP, which is expected to benefit 450,000 households by giving them access to use LPG for cooking, including a strategy to target female-headed households, women and women-owned businesses, reducing health issues and CO2 emissions. It will also benefit 7,000 commercial caterers (including secondary schools. The NLPGPP will provide 70% subsidy to the cost of the cookstove pack (LPG cookstove and accessories). Support for cylinder acquisition will not be included in the scope of the DLR. The program will be rolled-out in areas where CRM has been piloted and in areas where low-risk LPG filling stations are situated – and will be progressively scaled-up nationwide as the CRM implementation expands. Selection of HHs and other beneficiaries (favouring women) will be based on GLSS/PHC quintile of populations ready to switch from charcoal and firewood to LPG and based on guidance in the NLPGPP Operations Manual on gender and safeguard considerations.

Item	Program Results Area	Activities	DLIs
1	Improved methodology and processes for achieving economic dispatch	 Development and regulatory approval of methodology for security-constrained economic dispatch (SCED) Implementation of approved SCED Daily publication of the day ahead schedules and deviations after actual dispatch strengthening of a critical transmission line to remove constraints of economic dispatch 	• DLI 1 - Improved methodology and processes for achieving economic dispatch
2	Improved financial management systems and processes at ECG	 System developed to review ECG IPP invoices jointly with MoF Implementation of processes to ensure timely publication of audited financial statements 	• DLI 2 - Improved financial management systems and processes at ECG
3	System in place for improved operational performance of ECG	 Improvement of the LV network (including Supply and Installation of transformers and Low Voltage network equipment and materials to enhance the existing network infrastructure) in selected regions, Procurement and Installation of MMS compliant prepayment meters for customers, Supply and Installation of meter at ECG Bulk Supply Points (BSPs) and Supply and Installation of an online IPP Invoicing System 	• DLI 3 – Improved operational performance of ECG
4	Phase 1 of the NLPGPP implemented	 Provide technical assistance to promote clean cooking solutions Provision of subsidies to domestic and industrial users for the acquisition of LPG stoves and accessories Implementation of behaviour changes communication strategy Approval of NLPGPP and budget for implementation by Parliament 	• DLI 4 – Increased access to clean cooking solutions

Table 1: Program Result Areas, Activities and DLIs

1.3.3 The PforR's Theory of Change and Results Framework

The proposed PforR Program's Theory of Change (TOC) outlines how the WB and GOG intend to achieve the program's development objectives (PDOs) of improving economic dispatch at GRIDCo, improving the financial viability of ECG and increasing access to clean cooking solutions (Box 1).

According to the TOC, the PforR will implement four sets of interrelated activities leading to a set of intermediary and long-term outcomes. The four interrelated set of activities have been outlined in Box 1, which presents the PforR's TOC. **Error! Reference source not found.1** indicates that if these four sets of activities are implemented then the power sector's arrears will reduce, revenue will increase, and cost will decrease; ECG's corporate governance will improve, and access to clean cooking energy will improve. These outcomes will in turn lead to the achievement of the long-term outcomes: improved sector efficiency, achievement of financial sustainability of the power sector, and increased access to modern energy services reducing deforestation and improving household health and gender impacts.

Box 1: PforR's Theory of Change

Result Area	Activities	Outpu	uts	Intermediate Outcomes	PDO	Longer term Outcomes
Result Area 1 Reduced power system costs through economic dispatch	 Development and regulatory approval of methodology for security-constrained economic dispatch (SCED) Implementation of approved SCED Upgrade of coastal transmission line 	 Improved meth processes for an economic dispape Implementatio Settlement Mee Upgraded costa transmission lin transfer capacit 	chieving atch [DLI 1] n of chanism al ne with higher	 Improved reliability in transmission network Reduced transmission network losses Reduced System Cost Reduced energy generated using liquid fuels Transparent dispatch 		 Reduction in power sector shortfall Reduced payment of MoF to close financial gap in sector Improved operational performance in power sector Increased private
Result Area 2 mproved operational performance of ECG	 Installation of smart prepayment meters Enhancement of meter management systems Installation of standard CIS and associated ICT systems Implementation of customer satisfaction survey Installation of feeder meters and district 	 Postpaid meters smart prepayme Upgraded CIS Enhanced MMS 	nent meters	 Process Improved collection efficiency [DLI 2] 	→	
		Energy accounti implemented fo Operational Dist Customer Satisfa	r ECG	Improved revenue protection and operational performance	Improved financial viability of DISCOs	 sector investment in the power sector Reduced emissions
_	 boundary meters System developed to review of ECG IPP invoices jointly with MoF Implementation of process to ensure timely publication of audited financial statements Institutional Strengthening 	results published upon		Improved customer services [DLI 4]		generated by the electricity sector
Result Area 3 Improved financial management systems and processes at		 IPP Invoice syste Audited financia of ECG for CY24, CY26 published 	al statements	 Improved financial management systems and processes [DLI 5] 		Improved household
Result Area 4 Increased access to clan cooking solutions	 Technical assistance to promote clean cooking solutions and build institutional capacity on clean cookstoves Distribution of 457,000 subsidized LPG and accessories Implementation of behavior changes communication strategy 	 Completion of t Implementation phase of NLPGP Households, cai school feeding j provided with c solutions suppor government-sp incentives 	n of the first P terers, and programs are lean cooking orted by	LPG access expanded for domestic, institutional and commercial users	Increased access to clean cooking solutions	livelihood and economic productivity • Reduced rate of deforestation • Improved health and gender outcomes

<u>Assumptions</u>
 Compliance of payment under the CWM to ensure sector entities receives allocated revenues to implement PIPs

1.3.4 Results Monitoring and Evaluation

The collection of performance data, verification, and reporting of DLI completion will be done by the PCU with support from an independent verification agency. In addition, the Program will also provide capacity building support to PURC and EC through the TA budget. As the sector regulators, PURC and EC will be monitoring the implementation of the PIPs for ECG. The EC will also be supported to strengthen its monitoring capacity for the implementation of the clean cooking program and measure gender, health, and climate impacts.

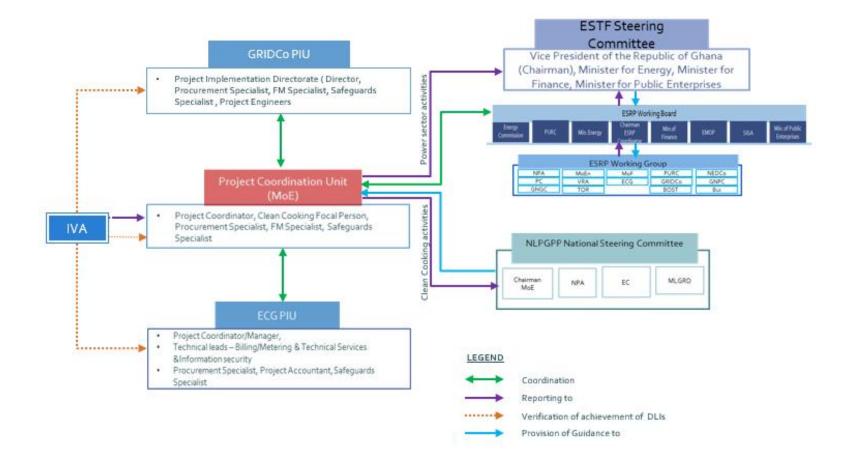
1.3.5 PforR Program Implementing Arrangements

The ESRP Inter Ministerial Task Force (ESTF) provides political ownership at the highest level and oversight for the duration of the ESRP implementation. The ESTF is chaired by the Vice President and its members are MoEn, MoF and Minister of Public Enterprises. The ESRP Working Group Board is responsible for the implementation, monitoring and evaluation of the ESRP. It is also responsible for conducting the required analytical work to update the ESRP and coordinate the necessary reporting to the ESTF. The NLPGPP is led by the Ministry of Energy and the key stakeholders are NPA (in charge of the CRM), Energy Commission (EC) and the Ministry of Local Government, Decentralisation and Rural Development (MLGDRD) that provide support with local authorities. The implementation of the NLPGPP is overseen by the Steering Committee, chaired by the Minister of Energy and its members are NPA, EC, Environmental Protection Agency (EPA), Ghana Standards Authority (GSA), Council for Scientific and Industrial Research (CSIR), Ministry of Education (MoE) and MLGDRD.

The Ministry of Energy (MoEn), Ghana Grid Company Limited (GRIDCo) and the Electricity Company of Ghana (ECG) are the implementing agencies for the PforR. A Project Coordination Unit (PCU) will be established at the Ministry of Energy (MoEn) to provide the necessary support to implement the ESRP and NLPGPP related activities and monitor the results and indicators. The MoEn PCU will manage implementation of the NLPGPP, and non-ECG ESRP indicators under the PforR component. The PCU will have a PforR coordinator, an M&E specialist and fiduciary and Safeguards Specialist, as well as a clean cooking focal point. GRIDCo's and ECG's investments will be mainstreamed and implemented by project implementation units (PIUs) within GRIDCo and ECG. GRIDCo and ECG will therefore be the implementing agencies that are responsible for the management of funds, as well as for the procurement and installation of the equipment and for management of environmental and social risks. Dedicated PIU coordinators, procurement specialists, safeguards specialists will be part of the PIUs at GRIDCo and ECG.

The ESRP and NLPGPP (i.e. the Government programs) are being implemented by the ESRP Working Group and staff of the Ministry of Energy respectively and both will be responsible to verify the results of the DLRs with the support of Independent Verification Agencies (IVAs). Figure 2 presents the PforR implementation arrangements within the ESRP and NLPGPP organizational structure.





1.3.6 Excluded Activities

The PforR Program will exclude activities that do not meet the World Bank's Policy on eligibility for PforR financing (September 2020).

The PforR Program excludes any activity (for example civil works for construction of distribution sub-stations and construction of other distribution infrastructures) which will require a new right of way or which, in the opinion of the World Bank, are likely to have significant adverse impacts that are sensitive, diverse or unprecedented on the environment and/or requires significant land acquisition / large resettlement of affected people or economic impact, as defined in the World Bank policy on PforR financing (March 25, 2022).

Activities that require significant land acquisition / large resettlement of affected people or economic impact, cannot be financed under the PforR Program as this is deemed high risk.

The PforR Program will not include distribution of Liquefied Petroleum Gas (LPG).

1.4 The Investment Project Financing (IPF)

The Program includes an IPF component which will involve the procurement and installation of meters. ECG will be the implementing agency and will be responsible for the management of funds and procurement and installation of the equipment. The IPF component will also involve technical assistance support, through consultancy, operational costs, and capacity building activities. The IPF will support the following:

IPF Component 1: Distribution utilities' Commercial Loss Reduction Investments

This component will finance priority investments defined in ECG's and NEDCo's Performance Improvement Programs (PIPs) aimed at the reduction of technical and commercial losses. Specifically, this component will finance:

- a) the procurement and installation of smart pre-payment meters (along with associated software);
- b) enhancement to meter management systems (existing systems deployed under MCC financing);
- c) a standard commercial information system (CIS); and
- d) Other associated ICT systems for improving operational efficiency of ECG and NEDCo.

IPF Component 2: Technical Assistance

This component will finance TA to support project implementation as well as the implementation of the ESRP and NLPGPP with the aim of filling the gaps identified in the technical, fiduciary and safeguards assessments of the Project. Specifically, the TA will support:

a) Capacity building, including training and study tours for sectoral institutions such as Ministry of Energy (MoEn), Energy Commission (EC), Public Utilities Regulatory Commission (PURC), GRIDCo, ECG, and others;

- b) Operational support to the Program Coordination Unit (PCU), including project management support, support for the preparation of safeguards and fiduciary action plans, and financing operational costs as well as the costs of independent verification;
- c) Consultancy services to (i) undertake key sectoral studies, (ii) provide technical and transaction advisory support to ECG, PURC, SIGA; (iii) Support key institutions such as MoEn, EC, NPA, GHACCO, KNUST-TCC and the KHRC on project coordination, clean cooking policy development, gender action plan design and implementation, promoting the NCCS&IP, deploying consumer education and behavior change communication strategies with a gender focus, give business development services to clean cooking enterprises through GHACCO, acquisition of ISO certification for the KNUST-TCC Stove testing lab, and independent verification of deployed stove-packs; and
- d) E&S capacity building, including strengthening existing structures and capacity for stakeholder engagement and for resolving project related complaints, and gender mainstreaming.

1.5 Scope and Objectives of the Environmental and Social System Assessment (ESSA)

The ESSA examines the environmental and social management systems applicable to the Program with a view to assessing their compliance with the provisions of the World Bank Policy on Program-for-Results Financing (March 25, 2022), World Bank Directive on Program-for-Results Financing (June 20, 2019), and World Bank Guidance on Program-for-Results Financing - Environmental and Social Systems Assessment (September 18, 2020). The ESSA has been prepared to ensure consistency with the "core principles" outlined in the World Bank's policy for Program-for-Results Financing to effectively manage Program risks and promote sustainable development (Box 2). The ESSA thereafter identified gaps, defined measures to strengthen the system and recommended measures that will be integrated into the overall Program.

The ESSA examines the adequacy and effectiveness of the national legal and regulatory framework and institutional system to guide environmental and social impact assessments, mitigation, management and monitoring of E&S risks and impacts of the PforR Program.

It evaluated how the systems incorporates recognized elements of good practice in environmental and social assessment and management, via due diligence, including:

Box 2: PforR Environmental and Social Core Principles

- **Core Principle 1:** General Principle of Environmental and Social Impact Assessment and Management. Program E&S management systems are designed to (i) promote E&S sustainability in the Program Design, (ii) avoid, minimize, or mitigate adverse impacts, and (iii) promote informed decision-making related to a Program's E&S effects
- **Core Principle 2:** Environmental and social management procedures and processes are designed to avoid, minimise, and mitigate against adverse effects on natural habitats and physical cultural resources resulting from Program.
- **Core Principle 3:** Program procedures ensure adequate measures to protect public and worker safety against the potential risks associated with: (i) construction and/or operations of facilities or other operational practices developed or promoted under the Program; (ii) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials.
- **Core Principle 4:** Land acquisition, displacement, and loss of access to resources is avoided or minimised; and affected people are assisted in improving, or at least restoring, their livelihoods and living standards.
- **Core Principle 5:** Due consideration is given to cultural appropriateness of, and equitable access to, Program benefits, with special emphasis provided to rights and interests of Indigenous Peoples, as well as the needs or concerns of vulnerable groups.
- **Core Principle 6:** Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

(i) early screening of potential impacts; (ii) the consideration of strategic, technical, and site alternatives (including the "no action" alternative); (iii) explicit assessment of potential induced, cumulative, and transboundary impacts; (iv) the identification of measures to mitigate adverse environmental or social risks and impacts that cannot be otherwise avoided or minimized; (v) clear articulation institutional of responsibilities and resources to support implementation of plans; and (vi) responsiveness accountability and through stakeholder consultation, timely dissemination of the PforR Program information, and responsive grievance redress mechanisms; among others.

The specific objectives of the ESSA are to:

1. identify the potential direct

and indirect environmental and social impacts/risks applicable to the Program interventions,

- 2. evaluate the national policy and legal framework related to management of environmental and social impacts of the Program interventions,
- 3. evaluate the institutional capacity for environmental and social impact management within the Program system, in accordance with the country's own requirements under the proposed Program,
- 4. Prescribe institutional arrangements for the identification, planning, design, preparation, and implementation of the projects under the proposed Program to adequately address environmental and social sustainability issues,
- 5. evaluate the national policy and legal framework and institutional capacity with respect to the core principles of the Program-for-Results (PforR) instrument, and
- 6. recommend actions to fill the gaps that will input into the Program Action Plan (PAP) to strengthen the Program's performance with respect to the core principles of the PforR instrument.

1.5.1 Applicability of Core Environmental and Social Principles (CP) to the PforR

The applicability of each of the six core principles to the PforR program areas is summarized in Table 4.

Core Principle	Rationale
Overarching Core Principle 1: Environmental and social management procedures and processes are designed to (a) promote environmental and social sustainability in the program design; (b) avoid, minimize, or mitigate against adverse impacts; and (c) promote informed decision-making relating to a program's environmental and social effects.	The overarching core principle is considered relevant since the PforR would require environmental and social management procedures and processes to manage E&S risks that would be associated with project activities relating to all the program areas. The main social risks will be associated with: (i) the strengthening of a critical transmission line to remove constraints of economic dispatch may potentially incur some minor economic displacement affecting people's livelihoods, (DLI 1); (ii) potential increase in tariff to improve financial sustainability of ECG and its impact on poorer households, (DLI 3); (iii) potential tensions and conflicts from customers objection to meter change (DLI 3); (iv) discrimination and social conflicts relating to the distribution and use of LPG stoves (DLI 4); (v) elite capture and exclusion of vulnerable groups from distribution of meters and LPG cooking stoves (DLI 3 and DLI 4); and (vi) potential sexual harassment (SH) and sexual exploitation and abuse (SEA) during replacement of meters and connection of customers to transformers (DLI 3) and during distribution of cookstoves to beneficiaries (DLI4).
Core Principle 2: aims to avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program.	This core principle is considered not relevant since the PforR does not support any activities that may affect natural habitats and physical cultural resources. The strengthening of ECG distribution network and upgrade of an existing GRIDCo distribution network would not entail new land clearing affecting any natural habitats and physical cultural resources. However, as part of subproject screening, activities will avoid sites of archaeological, cultural, religious, and historic value. For the possibility of "chance finds" for unknown cultural heritage, the Program will follow the standard chance find procedure and GoG's law on cultural resources, which will be included in contractor's contract.
<i>Core Principle 3:</i> aims to protect public and worker safety against the potential risks.	This core principle is considered relevant since the PforR activities on the upgrade of an existing GRIDCo transmission line (DLI 1), strengthening of ECG distribution network, procurement and installation of smart consumer and distribution meters (DLI 3), and production, distribution and use of LPG stoves (DLI

 Table 4: Applicability of Core Environmental and Social Principles (CP) to the PforR

 Core Principle

 Rationale

	4) would have potential public and occupational health and safety issues.
Core Principle 4: Manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards.	This core principle is considered partially relevant since the PforR does not support any activities that may require land acquisition and loss of access to natural resources. However, the upgrade of an existing GRIDCo transmission line (DLI 1) and strengthening of ECG distribution network (DLI 3) may occasion some minor economic displacement affecting the livelihoods of persons who may have encroached within the existing corridors of the transmission and distribution infrastructure.
Core Principle 5: Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups.	There are no groups in Ghana that meet the World Bank's criteria for Indigenous Peoples. However, this core principle is considered partially relevant since there are marginalised and vulnerable groups including women, youths, the elderly and PWD that would be impacted by the Program. There is a possibility of elite capture and the exclusion of vulnerable groups in Program activities. It is important that the Program gives attention to groups vulnerable to hardship or disadvantage, including as relevant the poor, the disabled, women and children, the elderly, or marginalized ethnic groups. If necessary, special measures are taken to promote equitable access to Program benefits. There is also possibility of GBV, sexual exploitation and abuse and SH existing meters are replaced within communities.
Core Principle 6: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.	Generally, the proposed Program areas will not exacerbate social conflict, nor will it operate in a fragile state context, a post-conflict area or in areas subject to territorial disputes. However, this core principle is considered partially relevant since the potential increases in the cost of electricity could lead to citizen unrest and demonstrations, as it can fuel general price increases. There could also be conflicts due to disconnection of customers that are owing or those that may have tampered with meters. Workers of ECG may protest issues such as change of management. Current managers may not agree with new performance management systems and may organise their constituency to agitate against its implementation. Discrimination in the purchase and distribution of LPG stoves could result in social conflict.

1.6 ESSA Approach

Data Collection: The objectives of the ESSA were addressed through a review of national policies, legislations and regulations, Program Appraisal Document, available technical literature, and policies of stakeholder institutions. This was followed by interviews and consultations with government staff working with stakeholder

institutions, non-governmental organisations, regulatory agencies, civil society organisations, sector experts, and consumer groups, including vulnerable groups. Technical documents reviewed include ESRP safeguards frameworks; the 2006 Safeguards Diagnostic Report for the Piloting of the Use of Ghanaian Systems to Address Environmental Safeguard Issues under the Ghana Energy Development and Access Project (GEDAP), Ghana's Environmental, Social and Health and Safety Laws and Regulations, Ghana's Environmental Impact Assessment (EIA) Procedures and Environmental Assessment (EA) Sectoral Guidelines and environmental, social and resettlement frameworks of existing WB-financed projects in Ghana.

The first stage of data collection involved reviewing national legal frameworks and policies to establish their adequacy in demanding and/or guiding environmental and social impact assessments required by the WB's PforR Environmental and Social Core Principles (E&S CPs). The analyses of data collected led to the identification of the gaps and formulation of recommendations for improvements. The second stage of data collection began with the listing and mapping of all relevant institutions and stakeholders in the power subsector.

A matrix of the six WB's PforR E&S CPs and the relevant mandates of the stakeholders that align with the CPs was developed. The WB's indicators or guidelines listed in Paragraph 30 of the Bank Directive for PforR Financing were also aligned with the CPs. Questions that addressed the indicators were developed to establish the effectiveness and functionality of the stakeholder institutions' environmental and Social Risk Management mandates. Questions sought to determine if the collaborations, coordination, or synergies expected among similar institutions or institutions with related mandates – as outlined in legislative instruments, policies – are adhered to, or if there are Memorandum of Understanding (MoUs) that regulate these collaborations.

One-on-one interviews with follow-ups – virtual and in-person – were held with the contacts at the stakeholder institutions. In addition to the direct questioning, a review of institution-specific policies, plans, strategies, and guidelines, to confirm data received was also conducted. Data collection took place from May 10 to May 28, 2021 and from March 25 to March 30, 2024. Consultations were carried out in line with the WB's guideline on consultation during the COVID-19 pandemic. The list of stakeholders interviewed is provided in Annex 1.

Data Analyses: Data analyses were conducted at two levels: institutional level and national level analyses. At both levels, Gap Analysis was conducted by comparing the data collected from each institution and/or gleaned from national policies and legislations with a set of standards required to effectively deliver on each of the WB PforR E&S CPs. The gap becomes the "recommendations" needed to strengthen the institution's systems to implement environmental and social impact assessment.

The national level analyses focused on a review of the legal and policy framework that governs the environmental and social risks identified under each of the WB's six PforR

E&S CPs (Table 4). The institutional level analyses focused on the institutional capacity of the implementing entities to manage the environmental and social risks identified under each of the WB's six PforR E&S CPs (**Error! Reference source not found.**). The study assessed the environmental and social systems of the Ministry of Energy (MoEn), ECG, GRIDCo, NEDCo, Energy Commission (EC), Public Utilities Regulatory Commission (PURC), National Petroleum Authority (NPA), and other Power Sector Agencies (PSA) (i.e. Bui Power Authority (BPA), Volta River Authority (VRA)).

Limitations: The following are a few limitations encountered during the assessment:

- 1. The initial assessment was done during the COVID-19 pandemic and its social distancing requirements limited in-person meetings and interviews. This affected the depth of interactions and follow-ups needed in such semi-structured interviews.
- 2. In some cases, the individuals responsible for the E&S issues in the agencies were not those who responded to questions. This affected, to some extent, the responses received. The individuals interviewed had knowledge of the requested information; however, their responses were bereft of the richness of information needed to assess the institution's track record in addressing E&S issues.

Table 5: Method of Analyses				
No.	Level	Objectives	Method of Analyses	Tool of Analyses & Deliverables
1	Level	Evaluate the national policy and legal framework and institutional capacity with respect to the core principles of the Program-for- Results (PforR) instrument.	• Content analyses of national policies and legal framework relative to the Core Principles to identify strengths and gaps that must be addressed to achieve optimal performance.	• A matrix of national policy and legal framework and how they align with the core principles of the PforR
2	National Level	Describe actions to fill the gaps that will input into the Program Action Plan (PAP) in order to strengthen the Program's performance with respect to the core principles of the PforR instrument	• SWOT Analysis of "Strengths, Weaknesses or Gaps, Risks, and Opportunities" approach of the national and institutional assessments relative to Core Principles.	 A PAP addressing gaps at the national level identified. Development of a set of viable actions to strengthen the systems and improve environmental and social performance outcomes of the Program.
3		Identify the potential direct and indirect environmental and social impacts/risks applicable to the Program interventions	 Review of the baseline environmental and social information to understand the context under which the Program activities are undertaken. Analysis of environmental and social benefits and risks of the Program activities 	• A matrix of identified environmental and social risks under each of the WB's six PforR E&S CPs
4	Institutional Level	Evaluate the national policy and legal framework related to management of environmental and social risks and impacts of the Program interventions	 Analysis of the national level systems for environmental and social management for planning and implementing the Program activities for consistency with the applicable Core Principles. Map the identified environmental and social risks under each of the WB's six PforR E&S CPs (deliverable from 1 above) to the relevant stakeholder organisation. 	 A matrix of the relevant mechanisms or policies addressing each of the WB's six PforR E&S CPs for each stakeholder organisation. Analyses of such mechanism/policies or documented plans based on a set of indicators relevant to the mechanism/policy or documented plans. The indicators were obtained from the country's own requirements, the WB's guidelines, and from international standards when no such requirements are available. Gaps identified in the indicators feed into the PAP.
5		Evaluate the institutional capacity for environmental and social impact management within the Program	• Identification of procedural and policy gaps with Bank Policy (November 10, 2017) and Directive (September 17, 2020) for Program-for-Results	• Matrix of assessment on all indicators (see 2 above) for mechanisms/policies or documented plans for each of the WB's six PforR E&S CPs.

No.	Level	Objectives	Method of Analyses	Tool of Analyses & Deliverables
		system, in accordance with the country's own requirements under the proposed Program	 Financing¹¹ as well as performance constraints in carrying out environmental and social management processes. Assess institutions (stakeholder organisations) based on the indicators identified in 2 above (see deliverables). 	• Results of the evaluation leading to the development of a PAP matrix. The PAP matrix contains the recommended actions for capacity improvement, responsibilities, timelines, and milestones. It is grouped into environmental issue and social issue.
6		Assess institutional arrangements for the identification, planning, design, preparation, and implementation of the projects under the proposed Program to adequately address environmental and social sustainability issues	• Assessment of implementing entities' (stakeholder organisations) institutional capacity including performance to date to manage the likely direct and indirect environmental and social impacts and risks in accordance with Ghana's own requirements and recommend specific actions for improving counterpart capacity for Program implementation complying with applicable standards.	

¹¹ In particular, the assessment shall systematically consider all the applicable aspects listed in paragraph 30 of the Directive.

SECTION 2 – DESCRIPTION OF EXPECTED PROGRAM ENVIRONMENTAL AND SOCIAL EFFECTS

The section provides an overview of the assessment of the environmental and social benefits and potential risks and impacts of the PforR Program activities.

2.1 Assessment of Environmental Benefits

The Program will deliver significant environmental benefits since an enhanced financial viability of the power sector will increase the reliability of electricity supply, which will reduce reliance on other power sources that are not environmentally friendly, such as kerosene lanterns, petrol-powered and diesel-powered generators, firewood, and candles. These sources generate high volumes of pollutants as they emit fine particulate matter (PM), including black carbon, which affects the air quality in homes and neighbourhoods. Again, the PforR will provide environmental benefits since the program will reduce the use of charcoal and fuelwood which are key contributors to deforestation and impacts climate change, negatively making them unsustainable options.

Reduce Deforestation: More than 90 percent of the original 8.22 million hectares of natural forest in Ghana has been lost to logging and fuel wood production. Increasing access to clean cooking solutions by promoting LPG use will reduce deforestation.

Improve Air Quality: As a gaseous fuel, LPG burns cleaner than most solid and liquid alternatives, and therefore it helps address air pollution in residential areas. An estimated 20.5 million Ghanaians, over 70 percent of the population, burn solid fuels such as fuelwood, charcoal, and dung in their homes for cooking and heating. Households use open fires or inefficient cook stoves, often in confined, poorly ventilated spaces.

The short-lived climate pollutants (SLCP) inventory estimates total black carbon emission in Ghana to be 16.5 kilotons (kt) in 2017. Residential cooking with inefficient wood/charcoal stoves are the largest source of black carbon (BC) contributing 78 percent of Ghana's total black carbon emissions in 2017. Of the total BC emissions from cooking, 74 percent were from rural households, particularly those in the forest region and the remaining 26 percent were from urban cooking (mainly from peri-urban communities).

Use of LPG stoves are a feasible and effective way to reduce household air pollution and improve health. Particulate Matter can lead to respiratory and cardiopulmonary disease which in turn can result in more hospital visits and a higher risk of premature death. Air pollution is responsible for eight percent of total mortality with approximately 16,000 Ghanaians dying prematurely each year: 8,500 in urban areas and 7,600 in rural areas.

Reduce Greenhouse Gas Emissions: The Program would help to significantly reduce GHG emissions and improve air quality, which is aligned to Ghana's Nationally Determined Contributions (NDC) goals submitted under the 2015 Paris Climate Agreement. The GoG will seek to reduce GHG emissions by at least 15 percent below the "business as usual" baseline scenario, which projects national emissions to be 73.95 MtCO2eq in 2030. Targets are to be achieved broadly, but primarily focused on the energy.

2.2 Assessment of Environmental Risks and Impacts

Overall, the potential adverse environmental impacts of the PforR Program are expected to be consistent with the provisions of PforR operations as it does not support construction of new infrastructure or major physical works. The environmental risks and potential impacts of the proposed Program activities are expected to be moderate, sitespecific, and amenable to mitigation by standard good practices and other wellunderstood mitigation measures and technologies.

Environmental, Health, and Safety: The PforR activities on clean cooking will not involve the purchase, distribution, transport, and disposal of LPG cylinders. However, activities to promote the use of LPG stoves and development of enabling environment for the Improved Cook Stove (ICS) producers could trigger indirect impacts associated with the stove production (emissions from manufacturing process, energy consumption, waste generation and transportation). Also, many possible hazards can arise because of the use of LPG. Careless handling combined with unsecured storage can cause gas cylinders to tip over, with the escape of high-pressure gas turning these containers into veritable projectiles. If LPG leaks, it can form an explosive fuel and air mixture. If there is an ignition source, this mixture can then explode and injure, or even kill, the driver and any passengers. The PforR activities will also include transmission and distribution network improvements. These activities could pose occupational health and safety hazards to workers/contractors replacing the transmission and distribution cables and accessories, and meters.

Generation of Waste: The strengthening and upgrade of transmission and distribution networks which will involve the removal of solid waste (i.e., old cables and retired tower parts) will potentially lead to solid generation.

2.3 Assessment of Social Benefits

The Program is expected to have overall positive social impacts as the interventions will improve the reliability of power supplies and improved access to clean cooking, which in turn will improve the health and livelihood of the people and provide significant gender benefits. It will also facilitate economic growth and poverty reduction as access to electricity significantly improves. This will greatly improve the poverty rate in Ghana which is currently estimated at 30.4 percent from 27 percent in 2019 due to the COVID-19 crisis. The anticipated social benefits include:

Monetary Savings: An effective metering is one with the capacity to get tenants, property managers, and owners involved in energy-efficiency measures which could bring about monetary savings.

Energy Savings: The ability to identify and quantify energy use is often sufficient to bring about energy-saving changes in practices and behaviours, such as use of more energy efficient technology, reducing waste, and avoiding peak utility rate periods when possible.

Educational Benefits: Increased distribution efficiency and reliability will increase the number of hours that electricity is available and thus increase opportunities for children and adults to study, thereby enhancing educational outcomes.

Improved Businesses and Economic Growth: Businesses report that electricity is a major constraint by businesses. Reliable power supplies will boost economic growth and facilitate the creation, or growth, of jobs – especially small (or one-man operated) businesses, which largely employs women – and empower women. Interventions under the program will also be beneficial to women as studies have shown that profits are higher for women using electricity for enterprises.

Improved and affordable access to electricity: Unreliable access to electricity due to the persistent, irregular, and unpredictable electricity power outages in the country has led to reliance on alternative power supply systems such as candles, flashlights, lanterns, inverters, generators etc for households and businesses that can afford these alternative power supply systems to compensate for the frequent outages. The activities will improve access to reliable and affordable electricity and improve generation cost will reduce the outages and ensure affordable supply of electricity to household and business thereby reducing household and business expenditure on inefficient, harmful, and often expensive alternative power supply systems.

Time savings and improved quality of life for women and girls: The gendered division of household labour makes women and men, and girls and boys have different energy needs and priorities. There can be significant gender-specific benefits from the time saved in not using traditional biomass. The principal time saving comes from eliminating the drudgery of collecting and preparing biomass for use as a cooking fuel. Women and girls are often primarily responsible for household activities – such as searching for or ensuring the availability of fuelwood, which becomes less time-consuming with an easy and reliable access to LPG (Practical Action, 2016).

Comparatively, LPG, which has higher energy density than biomass, can be collected or delivered quicker than collecting fuelwood. Time may also be saved in cooking with LPG, depending on the type of traditional-fuel cook stove that is being replaced¹². Therefore, increased access to clean cooking solutions under DLI 4 will address the constraints women and girls face in accessing clean cook stoves and stable and reliable fuels in urban and rural communities in Ghana.

Besides, switching from solid fuels and kerosene to LPG would greatly improve the quality of lives and bring far-reaching health and social benefits. LPG produces virtually no particulate matter and, relative to most other non-renewable fuels, low carbon monoxide emissions. Thus, comparatively LPG minimises the contaminants produced in the cooking environment leading to an eventual improvement in the health conditions of women. In social terms, these benefits would take the form of improved quality of life because of reduced drudgery. This can improve households' standards of living as resources saved on health expenditures could be used for other activities. There is also increased productivity because of reduced days lost to sickness and fewer deaths.

2.4 Assessment of Social Risks and Impacts

Impacts of Electricity Tariff Increases: Electricity is becoming increasingly unaffordable for many residential consumers. Potential tariff increases under the Program would significantly impact poor households as they will have to devote a larger share of their household budget to pay their electricity cost. Poor households in urban areas are likely to be impacted directly by the tariff increases, while their rural counterparts would see an anticipated similar impact from the rise in prices of alternative energy sources. An increase in tariffs, without any mitigation measures for the poor, will lead to a substantial increase in electricity poverty – defined as households that spend 10 percent or more of their total budget or more on electricity.

An increase in their electricity bill will negatively impact on women and other vulnerable groups that need power to facilitate their economic activities. Again, the installation of these infrastructure result in long hours of power outages in beneficiary communities.

Impact on Small businesses: A hike in electricity bills or the cost of LPG will increase the overhead cost of operations for small businesses (both in the industrial and sales sectors), especially in the informal sector of the economy. Small-scale businesses are one of the largest employers of labour in the country. These businesses could either lay off their workers to stay afloat or fold up when there is an increase in the overhead cost of

¹² World LPG Association (WLPGA) (2008) The Socioeconomic Impact of Switching to LPG for Cooking, A report to the World LPG Association; <u>https://www.wlpga.org/wp-content/uploads/2018/10/WLPGA-Socioeco-Impact-Update-2018-V1-PbP.pdf</u>, accessed on May 2, 2021

operations. The retrenchment of workers or collapse of businesses would worsen the unemployment rate in the country.

Elite Capture: The implementation of ESRP and NLPGPP could lead to an increment in electricity tariffs and the cost of LPG. Due to the issue of affordability, there is a tendency for the project-related infrastructure and services to be located in the middle class and high-income earners' communities. The siting of project-related infrastructure and services in middle-class and high-income earners' communities will deprive lowincome populations of access to social amenities. The potential disparities in the siting of the project-related infrastructure and services will also be skewed to urban areas against rural settings, which low-income earners mostly occupy. Similarly, there is the possible exclusion of vulnerable groups (such as the physically, visually and hearing impaired) in the designing and procurement of appropriate meters to meet their challenges.

Community Health and Safety: The support for the expansion of LPG to first time users, particularly in rural areas needs to be accompanied with safety education on the use of LPG and placement of LPG cylinders. The absence of such education will mean exposure to household accidents, explosions, and fatalities. In addition, due to culinary preferences or habits, some individuals may prefer food cooked with fuel wood or charcoal and a change to LPG could face resistance. Success will require behavioural changes by beneficiaries. Low-income households may devote more income to purchase gas or abandon its use if additional LPG retail price leads to significant cost increase. The NPA's pilot of the CRM involved the education on the recall process for both consumers and LPG attendants. LPG attendants were educated on the CRM, cylinder exchange process and minor maintenance of recalled cylinders as well as registration during exchange. Thus, the education component of the CRM was skewed towards the model and not towards addressing the safety concerns of users at home.

The PforR activities on the upgrade of an existing GRIDCo transmission line, strengthening of ECG distribution network, and procurement and installation of smart consumer and distribution meters would have potential community and occupational health and safety issues.

Economic Displacement and Livelihood Impacts: The PforR activities on the upgrade of an existing GRIDCo transmission line, and strengthening of ECG distribution network would not entail new land acquisition as the anticipated works would largely occur within the existing right-of-way of the affected transmission and distribution infrastructure. However, the activities may involve some economic displacement affecting the livelihoods of persons who may have encroached unto the right-of-way to farm and/or to operate their livelihood activities.

Sexual Exploitation and Abuse/Sex Harassment for Women: 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, upgrade of a transmission line and strengthening of distribution networks. 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 technicians/contractor's workers, who might ask for sexual favours before the meters are installed in their homes.

Risk of Potential Poor Consultation and/or Limited Information Disclosure:

Relevant stakeholders (both institutional and local) must be comprehensively consulted to voice their opinions and concerns to influence project decisions and implementations. A systematic approach must be established to identify all relevant stakeholders and build and maintain a constructive relationship with them. Comprehensive stakeholder consultation will offer the stakeholders an opportunity to provide their views and feedback on project design and identify potential bottlenecks that could affect the program implementation at the early stage. Failure to identify all relevant stakeholders for comprehensive consultations and engagement could result in poor project implementation (e.g., sabotage, resistance and apathy), which could affect the program's overall objectives.

SECTION 3 – ASSESSMENT OF BORROWER'S ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM RELEVANT TO THE PROGRAM

The section provides an overview of the national policies, regulations and the institutional framework which constitutes an important aspect of the environmental and social management system. An assessment of the national and institutional E&S systems and its consistency with bank policy and the directive for program-for-results financing with PforR core principles are presented in this section. The system's strengths, or where it functions effectively are outlined. Further, the section outlines some gaps between the principles espoused in Bank Policy and Directive for Program-for-Results Financing and program's E&S system. A detail institutional environmental and social systems assessment is presented in Annex 5.

3.1 Overview of Policies and Laws

There are several policies and regulations, which support environmental and social management and a few sectoral policies which provide directives to integrate environmental and social considerations in the decision-making process to avoid or minimise impacts associated with program implementation. A matrix of the WB's six core environmental and social principles vis-a-viz the applicable national environment and social policies, laws and regulations are presented in **Error! Reference source not found.**6.

Core Principle		National Policies, Laws and Regulations
1.	General Principle of Environmental and Social Management	 The 1992 Constitution of Ghana The National Environmental Policy, 2012 Environmental Sanitation Policy (Revised, 2010) Climate Change Policy, 2013 Environmental Protection Act, 1994 (Act 490) Environmental Assessment Regulations, 1999 (LI 1652)
2.	Natural Habitats and Physical Cultural Resources	This CP is not considered applicable for the activities to be supported under the Program
3.	Public and Worker Safety	 The 1992 Constitution of Ghana Ghana National Fire Service Act, 1997 (Act 537) The Fire Precaution (Premises) Regulations, 2003 (LI 1724) The Labour Act, 2003 (Act 651) Workmen's Compensation Law 1987 (PNDC 187) Factories Offices and Shops (Amendment) Act, 1991 (Act 275)

Table 6: Core Principles Consistency with National Environment and Socia	l Policies,
Laws, and Regulations	

Co	re Principle	National Policies, Laws and Regulations
		 Ghana Building Code (GhBC) GS 1207:2018 Public Health Act, 2012 (Act 851) Ghana Disability Act, 2006 (Act 715) Fair Wages and Salaries Commission Act, 2007 (Act 737)
4.	Land Acquisition	 Note that no land acquisition will be occasioned. However, some economic displacement affecting livelihoods of affected persons may occur. The policies and laws applicable in this instance are: The 1992 Constitution of Ghana The Land Act, 2020 (Act 1036)
5.	Indigenous Peoples and Vulnerable Groups	 Note that there are no groups in Ghana that meet the World Bank's criteria for Indigenous Peoples. However, there are policies and laws that protects vulnerable groups such as: The Children's Act, 1998 (Act 560) National Social Protection Policy, 2015 National Gender Policy, 2015 National Child and Family Welfare Policy, 2015 Justice for Children's Policy, 2015 The National Disability Policy 2006 Persons with Disability Act, 2006 Act 715 Domestic Violence Act, 2007 (Act 732) Ghana AIDS Commission Act, 2002 (Act 613)
6.	Social Conflict	 Alternative Dispute Resolution Act, 2010 (Act 798) Public Utilities (Complaints Procedure) Regulations, 1999 (L.I. 1665)

Environmental Assessment Regulations, 1999 (LI 1652)

The Environmental Assessment Regulations, LI 1652, provides the framework and gives comprehensive legal cover to the Ghana Environmental Impact Assessment procedures. These Regulations require that all developmental activities likely to impact adversely on the environment must be subject to environmental assessment. The objective of the LI is to ensure that such development activities are carried out in an environmentally sound and sustainable manner. It generally outlines the various procedures to be followed prior to the granting of environmental permits during the Program life cycle and procedures for filing complaints, offences, and penalties. The regulations prohibit commencing an "undertaking" without prior registration and environmental permit.

The LI defines environmental assessment and environmental impact (**Error! Reference source not found.**). The Legislative Instrument (LI 1652) is in three parts:

- Part 1 describes the environmental permit process, the registration of new and
- existing undertakings, The screening, and fees. regulation enjoins any proponent or person to register an undertaking with the agency and obtain an Environmental Permit prior to commencement of the project. It then allows the EPA place proposed to undertakings at the appropriate level of environmental assessment.
- Part 2 describes the various types and levels of EA Reports - Preliminary Environmental (PER). Report Scoping Environmental Report, Impact Statement (EIS) - and prescribes actions to be taken by the EPA upon submission of such reports within specified deadlines. This part also provides for public participation during the EIS study as well as review of environmental reports.
- Part 3 contains miscellaneous provisions dealing with the submission of annual environmental reports; suspension, cancellation or revocation of permits and certificates; complaints by aggrieved persons; gazette publication; offenses and penalties; appeals; interpretation and schedules.

Box 2 Definition of environmental Assessment and Impact

LI 1652 defines EA as "the process for the orderly and systematic evaluation of a proposal including its alternatives and objectives and its effect on the environment including the mitigation and management of those effects: the process extends from the initial concept of the proposal through implementation to completion, and where appropriate, decommissioning."

Environmental impact is given a wide definition under LI 1652. It includes any direct or indirect, positive, or negative change in the environment caused by manmade works or activity when such changes affect life in general, biodiversity, the quality, or a significant quantity of natural or environmental resources and their use, well-being, health, personal safety, habits, customs, cultural heritage, or legitimate means of livelihood. This implies that any assessment should cover the above definition in its entirety and hence make provision for socio-economic and health impact assessments as an integral part of the EA process.

Box 3 Environmentally Sensitive Areas

- 1. Parks, reserves, and sanctuaries declared by law, including sacred groves.
- 2. Areas with potential tourist value.
- 3. Habitat of endangered or threatened species of indigenous flora or fauna.
- 4. Areas of unique historic, archaeological, or scientific interest.
- 5. Areas traditionally occupied by cultural communities.
- 6. Areas prone to natural disasters.
- 7. Areas prone to bushfires.
- 8. Hilly areas with critical slopes.
- 9. Areas classified as prime agricultural lands.
- 10. Recharge areas of aquifers.
- 11. Water bodies used for domestic supply, or located in protected areas, or supporting wildlife or fishery activities; and
- 12. Mangrove areas.

The LI has Five Schedules:

- Schedule 1: lists and describes the scale of the undertakings that require registration with EPA and issuance of an environment permit.
- Schedule 2: lists undertakings for which EIA is mandatory.
- Schedule 3: outlines the EIA Scoping Notice.
- Schedule 4: outlines the EIA Notice.
- Schedule 5: lists twelve (12) Environmentally sensitive areas for which all activities in these areas require an EIA (**Error! Reference source not found.**).

Environmental Impact Assessment Procedures, 1995

In June 1995, the Ghana EPA established procedures for EIAs, which involved graduated phases depending upon the nature, complexity, and location of the undertaking. Although the document predates LI 1652, its relevance and consistency with the regulations, kept it operational.

Procedure	Description
Registration	Registration of proposed and existing undertakings with the EPA.
Screening	 EPA determines whether any proposed activity under the PforR should be subjected to further assessment, and if so, the level of assessment that will be required. A site inspection by EPA officers is conducted and a screening report presented to a cross-sectoral Environmental Assessment/Technical Review Committee (EA/TRC) for decision-making within 25 days of registration. The decision can be one of four: Environmental permit declined (objection to the project), Environmental permit issued (no objections), Preliminary Environmental Report (PER) required, or Environmental Impact Assessment required. Consultations with relevant stakeholders, particularly institutions responsible for land-use zoning, fire, planning permits, and persons and communities likely to be affected
Scoping	are important ingredients in the screening decision. Whenever the result of the screening or the review of a PER (submitted as the result of screening) indicates that significant adverse environmental impacts may result from the PforR activity, EPA will require the Program to prepare an EIA and submit an
	Environmental Impact Statement (EIS). In this instance, the PCU will first commission or undertake a scoping exercise. This involves widespread consultations with interested and/or affected parties, to identify all key environmental and social issues and to determine how the concerns of all parties will be addressed. As a part of the scoping process, the PCU is expected to: (a) give notice of the proposed undertaking to the
	relevant Ministries, Department, and Agencies (MDAs) as well as Metropolitan, Municipal, or District Assemblies (MMDAs); (b) advertise in at least one national newspaper and a newspaper circulating in the locality where the proposed project is to be located; and (c) make available for inspection by the general public in the locality of the proposed undertaking, copies of the scoping report. The PCU prepares a Scoping
	Report, which includes a draft Terms of Reference (TOR) for the EIA and submits it to EPA, which reviews it with the assistance of the EA/TRC and provides comments within 15 days. The draft TOR can be rejected or approved, or revisions/modifications

Table 7: Procedures for Incorporating EIA into Programs or Activities

Procedure	Description
	may be required. The PCU is also expected to make copies of the Scoping Report
Droponation of	available for inspection by the public in the locality of the proposed undertaking.
Preparation of EIA and	When the TOR for the EIA is accepted by EPA, the PCU will proceed to conduct an EIA. During the study, the PCU will be required to initiate a public information and
submission of	consultation program for the area likely to be affected by the undertaking. The PCU will
EIS	submit the draft EIA report (EIS) to EPA. LI 1652 specifies the required content of an
	EIS. Copies of all reports of the study shall be made available to EPA and relevant
	stakeholders. Public concern shall be recorded and must be addressed by the EIS. The PCU will submit the final draft EIS to EPA.
EPA Review	The draft EIS is reviewed by the EA/TRC, which is composed of representatives of
	various MDAs, among which are the Ministry of Environment and Science, Ministry of
	Mines, Ministry for Works and Housing, Town and Country Planning Department,
Public	Factories Inspectorate Department and Centre for Scientific and Industrial Research.
Consultation	Public consultation is inherent in the EA process from screening to permit issuance. According to LI 1652 and the EIA Procedures, the concerns of the public, if any, and, in
constitution	particular, concerns of immediate residents of the project site, must be taken into
	account at the screening stage. If the PCU is required to prepare an EIS, it must notify
	relevant MDAs and MMDAs of the proposed undertaking and advertise it in at least
	one national and one local newspaper. Scoping reports must be made available for public inspection in the locality of the proposed project. The TOR for an EIS must
	provide for consultation with members of the public that might be affected by the
	proposed project. During the review of a draft EIA, copies are placed at vantage points
	including the EPA Library, relevant MMDA, EPA regional offices, and the sectoral
	ministry responsible for a particular undertaking. EPA posts a public notice in the
	national and local newspapers about the EIS publication and its availability for public comments for a 21 -day period.
Public	Regulation 17 of LI 1652 specifies three conditions that oblige EPA to hold a public
Hearings	hearing on a proposed project:
	• When a notice issued under Regulation 16 of LI 1652 results in great public
	reaction to the commencement of the proposed undertaking.
	• When the undertaking will involve the dislocation, relocation, or resettlement of communities.
	• When EPA considers that the undertaking could have extensive and far-
	reaching effects on the environment.
	Where a public hearing is held, the processing of an application may be extended
D : 1	beyond the prescribed timelines required for EPA's actions and decision-making.
Environmental Permitting	Once the draft EIS is found acceptable by the EPA, the PCU will be notified to finalise the report and submit eight hard copies and an electronic copy. Within 15 working days
Decision	after submission, EPA issues the environmental permit and publishes an official notice
(EPD)	of the approval in the Gazette within three months after issuance.
Fees	An amendment to the EA Regulations, LI 1703 of 2002, specifies two separate fees that
	they will pay to EPA for processing applications and issuing permits. The amounts vary
	with project sector and size. A portion of the fees goes into the National Environment
	Fund that was established by the EPA Act. Fund proceeds may be spent on environmental education of the public, research, studies and investigations, human
	environmental eutration of the public, research, studies and investigations, numan

Procedure	Description
	resources development, and other purposes agreed in consultation between the
	Minister of Environment and the Board of EPA.
Appeals	A person aggrieved by a decision or action of the Agency, including a decision not to hold a public hearing, may submit a complaint in writing to the Minister of Environment. The complaint shall be submitted to the Minister within 30 days of the complainant becoming aware of the decision. The Minister has 14 days in which to appoint a panel with members as specified in LI 1652. The panel reports its findings to the Minister within 60 days from the date the matter was referred to it.

Environmental Impact Assessment Sector Specific Guidelines

The EPA developed an energy sector EA guideline to guide screening of sector projects, preparing relevant assessments and plans, and processing environmental permit application over a decade ago. The key objectives of the sector guidelines are:

- 1. Defining the screening criteria for environmental assessment for Energy sector investments.
- 2. Determining the scope of Environmental Impact Assessment (EIA) for the sector.
- 3. Providing systematic procedures on Environmental Impact Statement (EIS) preparations for the sector.
- 4. Providing guidelines on common potential impacts and mitigation measures.

3.2 Overview of Institutional Framework

Environmental and Natural Resources Management

The National Environmental Action Plan (NEAP) was the strategy through which the key issues for the protection of the environment and better management of renewable resources were to be pursued. The NEAP proposed an environmental resource management system and defined a set of policy actions, related investments, institutional mandates, and strengthening activities to make Ghana's development approaches environmentally sustainable. The adoption of the NEAP in 1991 led to several significant developments including facilitating the establishment of the EPA with enhanced mandate than its predecessor EPC, to regulate, set and enforce standards, among others. Other key institutions that have mandates on Environmental and Natural Resources Management includes Ministry of Environment Science, Technology, and Innovation (MESTI), Ministry of Lands and Natural Resources (MLNR), Forestry Commission, Water Resources Commission (WRC).

Social Risk Management

Responsibilities for social risk management cut across several MDAs with some overlapping mandates. This is largely because social issues are cross-cutting and includes: gender mainstreaming, community engagement and empowerment, sustainability, equity and inclusion and social accountability, sexual exploitation, and harassment, etc. Key institutions that have mandates on social risk management include Ministry of Gender, Children and Social Protection (MoGCSP), Ministry of Employment and Labour Relations (MELR), Department of Gender (DoG), Department of Children (DoC), Department of Social Development (DSD), Domestic Violence Secretariat (DVS), National Council for Persons with Disability (NCPD), Ministry of Information (MOI) and National Commission for Civic Education (NCCE).

Role of Civil Society in Environmental and Social Awareness

Civil society and the media play a strong role in environmental and social awareness, and in influencing to the extent possible, the decision-making process related to environmental and social risk management issues. Ghana has CSOs and NGOs actively participating in the environment and social risk management space, on issues ranging from public awareness and environmental education to waste collection and community self-help programs, land governance, SEA/SH issues etc. CSOs and NGOs have been increasingly involved in project implementation, public debate, hearings/consultations on EA, and monitoring compliance with environmental laws. The media have contributed to increased awareness and to changes in behaviour.

3.3 Assessment of Environmental and Social Systems

A matrix of the assessment of applicable national environment and social systems are presented in **Error! Reference source not found.**8.

Table 8: Assessment of National Environment and Social Systems

Core Principle 1: General Principle of Environmental and Social Impact Assessment and Management.
Bank Policy for Program-for-Results Financing: Environmental and social management procedures and
processes are designed to (a) promote environmental and social sustainability in Program design; (b) avoid, minimize or mitigate against adverse impacts; and (c) promote informed decision-making
relating to a program's environmental and social effects.
Bank Directive for Program-for-Results Financing: Program procedures will:
• Operate within an adequate legal and regulatory framework to guide environmental and social
impact assessments at the program level.
• Incorporate recognized elements of environmental and social assessment good practice, including:
 Early screening of potential effects;
• Consideration of strategic, technical, and site alternatives (including the "no action" alternative);
 Explicit assessment of potential induced, cumulative, and trans-boundary impacts;
 Identification of measures to mitigate adverse environmental or social impacts that cannot be otherwise avoided or minimized;
• Clear articulation of institutional responsibilities and resources to support implementation of
plans; and
• Responsiveness and accountability through stakeholder consultation, timely dissemination of
program information, and responsive grievance redress measures.
Applicability

- The Network Improvements may lead to the loss of vegetation due to network expansion, waste generation from minor construction activities, and effects on soil and water quality resulting from excavation for cable laying and pole installation, among others.
- Increase in tariff may negatively impact poorer households and women
- The production, distribution and use of LPG stoves will have potential environmental and social risks.
- The strengthening of a critical transmission line to remove constraints of economic dispatch may potentially incur some minor economic displacement affecting people's livelihoods.
- Potential tensions and conflicts from customers objection to meter change.
- Discrimination and social conflicts relating to the distribution and use of LPG stoves.
- Potential sexual harassment (SH) and sexual exploitation and abuse (SEA) during rehabilitation of distribution network, replacement of meters and connection of customers to transformers.
- There could be possibility of elite capture and the exclusion of vulnerable groups.
- The production, distribution and use of LPG stoves could be associated with public and occupational health and safety risks.

Systems Assessment – Strengths

National Assessment

- Ghana has comprehensive and adequate policies, regulations, and laws in place for environmental assessment consistent with the core principle 1. The current procedures and sectoral guidelines provide the framework to (i) screen subprojects for potential environmental and social impacts; (ii) determine the level of environmental and social analysis and specific plan to be prepared based on the outcomes of the screening; (iii) review the results of the assessment and plan and clear environmental permitting process; (iv) conduct monitoring and follow-up; and (v) determine penalty and sanctions for violations and infractions to the system. The EA Regulations of 1999 (LI 1652) is considered an important tool both at the central government and local/district government levels. Indeed, the EA regulatory framework aligns well with this Core Principle. EPA should consider reviewing the Energy Sector EA guideline to be consistent with recent developments and latest technology within the sector.
- Ghana has strong institutions in place for environmental assessment. Ghana's EPA is one of the oldest and most experienced environmental agencies in Africa. EPA has over 35 years of experience. It is an energetic and experienced organisation and has maintained a leadership position in EA. It generally obtains good cooperation from both private sector and government agencies, and it has and uses its enforcement authority when developments proceed without following EA Regulations (LI 1652). At the national and regional level, EPA's capacity has increased, and the quality of its personnel has improved over the years to strengthen compliance with the EIA regulations. As the lead agency responsible for administering and enforcing EIA regulations, the Agency has spearheaded efforts over the past decade that include decentralising, automating, and making the EIA system more efficient.
- EPA has a Grievance Redress Mechanism (GRM) that registers public concerns and ensures their resolution in a timely, efficient, and transparent manner.
- ECG also has a call centre to receive and address customer complaints. It is accessible 24 hours a day throughout of the week.
- Civil society and the media play a strong role in environmental and social awareness, and in influencing to the extent possible, the decision-making process related to environmental and social risk management issues. Ghana has CSOs and NGOs actively participating in the environment and social risk management space, on issues ranging from public awareness and environmental education to waste collection and community self-help programs, land governance, SEA/SH issues

etc. CSOs and NGOs have been increasingly involved in project implementation, public debate, hearings/consultations on EA, and monitoring compliance with environmental laws. The media have contributed to increased awareness and to changes in behaviour.

Institutional Assessment

- The Power Sector Institutions (PSI), MoEn, ECG, NEDCo, GRIDCo, VRA and Bui Power have corporate environmental and social policies and environmental frameworks that guide their operations and consistent with core principle 1. For instance, ECG has an Environmental and Social Management System (ESMS), comprising of Environment and Social Management Frameworks for Construction Projects, System Operations and Maintenance, Safety and Health Policy Guidelines and Procedures Manual, Emergency Preparedness and Response Plan, Stakeholder Engagement Plan, and Land Acquisition and Compensation Framework. The institutions involved in the ESRP require environmental compliance (from the EPA) and technical compliance (from the EC) when implementing projects that are likely to have an impact on the environment. The policies, frameworks, and plans guide the institutions in the planning and implementation of projects as required by the national regulations and policies and standards of development partners. For instance, there is evidence of Environmental and Social Impact Assessments for projects funded by development partners.
- The NPA has developed guidelines and standards for the implementation of the CRM. These includes guidelines for establishing LPG bottling plant, licence framework for LPG cylinder transportation, guidelines for cylinder exchange points, and standards for LPG cylinder transportation vehicles.
- The energy sector institutions use LI 1652 (Schedule 1, Schedule 2, and Schedule 3) and various EA Sectoral Guidelines issued by the EPA. All subprojects are subjected to environmental and social screening to decide if a proposed subproject requires a full EIA, preliminary environmental report with ESMP, or no environmental assessment is needed.
- SIGA has facilitated the development of a Code of Conduct and Guidelines for Good Corporate Governance to effectively and collaboratively identify, escalate, mitigate and resolve risk and compliance related matters of SIGA as well as the state interest entities; and ensuring adherence to the highest standards of excellence and compliance with relevant policies, processes and regulations. SIGA also provides capacity-building support for the specified entities in the implementation and evaluation of governance, risk and compliance processes.

Institutionalisation of E&S Planning and Management

• There are Units/Directorate/Departments or Officers within MoEn, ECG, VRA, GNPC, GRIDCo, NEDCo and NPA with the responsibilities to integrate environment and social issues into institutional activities and projects. 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 qualification and experience to prepare Terms of Reference (ToR) for the environmental and social safeguards instruments, guide consultants in the preparation and review of the instruments and oversee their implementation.

Stakeholder Engagement and Grievance Mechanisms

- Stakeholder engagement is a core part of the activities of ECG, NEDCo, GRIDCo, Bui Power and NPA, prior to implementing any project. These institutions undertake stakeholder engagement as part of the environmental and social due diligence process and in some instances conduct citizen's survey to seek feedback from customers to improve service delivery.
- ECG and GRIDCo have Stakeholder Engagement Policies and round-the-clock Customer Complaint Redress System. This mechanism makes room for verification and follow-ups. It allows for anonymous reporting and for aggrieved parties to provide further particulars to present grievance. It also

encourages consumers/lay people affected by the project to report. ECG also has active social media pages for engaging stakeholders and customers.

Social Inclusion

• ECG and GRIDCo have Gender and Social Inclusion Policy with the objective of improving organisational culture and operational performance in line with international best practices and standards by advancing gender equality, diversity, and social inclusion. According to the ECG, the policy commits to having a workforce comprising 40 percent women (currently 24.4 percent), with 40 percent of women in leadership positions (currently 11 percent) in the company by 2035. The policy also commits to zero tolerance of sexual harassment in the workplace, more gender equitable recruitment and hiring practices, and maternity and paternity leave. The Millennium Challenge Corporation (MCC) also supported the development of a gender action plan and the establishment of a Gender Unit in ECG to implement the newly designed policy and plan. ECG has launched numerous 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. Moreover, there has been an increase in the number of female enrollees at the ECG Training Center.

All of these commitments signal a more intentional effort on the part of the ECG and GRIDCo to create an enabling work environment for women. The Power Queens' Club of ECG, a female workforce club of the power distribution company, has been urged to develop themselves in order to be equipped for higher positions in the company.

Systems Assessment – Gaps

National Assessment

- Provisions to address Program-related social risks are fragmented in various laws. The legislations are too many and overlapping in some instances. This can be attributed to the fact that social risk management cuts across several institutions such as land administration, education, labour management, social development, among others. In practice, the EPA ensures that environmental risks encompass general social risks as part of the EIA process. However, the social impact assessment and risk management are limited. EPA focuses more on environmental requirements and do not provide adequate checks on the social impacts of the regulatory requirements. For example, the EIA regulation does not specifically require the need to address impacts on vulnerable people.
- EPA has resource limitation challenges to adequately monitor and enforce compliance to the EIA regulations and social risk management. Effective enforcement of environmental and social legislation is contingent upon the availability of adequate staff and financial resources, the administrative and political will of the enforcement agencies and the level of awareness of environmental laws.
- EPA's enforcement and compliance system, monitoring and evaluation, and knowledge management systems needs to be strengthened. Regional offices would be a valuable resource for monitoring implementation of EISs in the field. Realigning staff resources, providing adequate operating budgets in the regional offices to permit more emphasis to be placed on EIS and EMP compliance monitoring (including promotion of self-monitoring by project developers), and providing the staff assigned with additional training and necessary equipment would improve this situation. EPA maintains a website that provides information about the agency but could be better utilised for posting documents for public access, such as recently issued permits, EA scoping reports, draft and final EISs, and EMPs. EPA currently do not have offices and staff at the district level to supervise and promote their activities

at that level. EPA should engage the public to highlight their activities and to collaborate with them to report projects with consequential environmental effects to the agency.

Institutional Assessment

- There are issues of nondisclosure of institutional E&S policies and frameworks since these are not readily available or accessible on the websites of the institutions. Individuals and groups are required to write formally to request them and there is no indication whatsoever on how long this process might take.
- Within the energy sector broadly, planning processes are still fragmented along institutional lines, although efforts are being made to integrate environmental and social concerns into the development process. To bring environmental and social risk management planning into the mainstream of the planning process, effective mechanisms for coordination and integration of roles amongst relevant institutions is required.
- At the regional and district level, ECG's Technical Officers with limited capacity on Safeguards are required to take up responsibilities for E&S management which results in limited commitment, dedication, and availability to institutionalise safeguards implementation and enforcement at the subnational level. For example, Maintenance Officers also serves Safety Officers and District Engineers double as Safety Representatives at the District Level.
- Institutions involved in the ESRP mostly do not have a permanent or institutionalised collaborative arrangement (MOU, MOA) with other organisations in the sector for environmental and social assessments. This gap situates environmental and social assessments and implementation of mitigation measures within silos and hinders effective coordination of the assessments.
- ECG'S Environment, Health and Safety Unit are understaffed. ECG's Technical Officers with limited capacity on Safeguards are required to take up responsibilities for E&S management which results in limited commitment, dedication, and availability to institutionalise safeguards implementation and enforcement at the subnational level. ECG's district level officers have limited capacity on monitoring and supervising the procedures and processes to assess the potential impacts of project activities.
- A gap identified in ECG's grievance redress mechanism is the non-inclusion of specific timelines to guide resolution of the complaint at every level of the mechanism. For instance, the complaints reporting framework of ECG does not indicate how many hours or days it takes to resolve specific issues and beyond which the complaint could be escalated to the next level. Also, the framework is generic and not tailored for workers or sub-contractors.
- ECG's commitment to ensure social inclusion has been sporadic.

Core Principle 3: Public and Worker Safety

Bank Policy for Program-for-Results Financing: Environmental and social management procedures and processes are designed to protect public and worker safety against the potential risks associated with (a) construction and/or operations of facilities or other operational practices developed or promoted under the program; (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials; and (c) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.

Bank Directive for Program-for-Results Financing:

- Promotes community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or remedial works incorporated as needed.
- Promotes use of recognized good practice in the production, management, storage, transport, and disposal of hazardous materials generated through program construction or operations; promotes use of integrated pest management practices to manage or reduce pests or disease vectors; and provides

training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions.

• Includes measures to avoid, minimize, or mitigate community, individual, and worker risks when program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.

Applicability

The upgrade of an existing GRIDCo transmission line, strengthening of ECG distribution network, procurement and installation of smart consumer and distribution meters, and production, distribution and use of LPG stoves could be associated with public and occupational health and safety risks. Inadequate knowledge on LPG safety precautions could endanger users, properties, and the public at the household level.

Systems Assessment – Strengths

National Assessment

• Ghana's legal/regulatory system includes provisions for protecting worker, community and public safety. Legislation to ensure worker protection includes the Labour Act 2003 (Act 561), the Public Health Act, 2012 (Act 851), the Factories, Offices and Shops Act, 1970 (Act 328). There is also the Workmen's Compensation Law 1987 (PNDC 187) which relates to compensation for personal injuries caused by accidents at work and hence, indirectly impacts on monitoring worker and workplace safety. The Radiation Protection Board of the Ghana Atomic Energy Commission also regulates companies with radiation exposure hazards.

Institutional Assessment

- Generally, Power Sector Institutions (ECG, NEDCo, GRIDCo, VRA, Bui Power and NPA have systems and measures that promote community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or remedial works incorporated as needed. In addition, GRIDCo and ECG do provide its workers with Personal Protective Equipment (in the form of overalls, helmets, goggles, gloves). In 2018, ECG launched its Code of Conduct for staff and third-party contractors to guide their behaviour, attitude, and conduct in the discharge of their responsibilities. The Code of Conduct outlines rules for social norms, rules, and responsibilities of proper practice for an individual worker, a party, or an organisation to ensure professionalism, objectivity, transparency, and effectiveness in service delivery.
- There is evidence on the use of recognised good practice in the production, management, storage, and transport of hazardous materials and electronic wastes generated through program construction or operations. ECG, NEDCo and GRIDCo provide training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions.
- Generally, ECG, NEDCo and GRIDCo promote use of integrated pest management practices to manage or reduce or prevent weed growth as part of the process for maintaining Right of Way (RoW). GRIDCo has recently (2024) adopted a new right of way management policy to facilitate sustainable management of its RoW.
- The Ghana Cylinder Manufacturing Company Ltd and other private institutions have processes for refitting or recycling old LPG cylinders.

Systems Assessment – Gaps

National Assessment

• Ghana does not have an explicit national policy on occupational health and safety management. All available policies indirectly address some aspects of this.

- Even though EPA requires that as part of the EIA process, attention be paid to public and worker safety, these requirements are very limited in scope given the multifaceted nature of public health and occupational health and safety within the Ghanaian setting. The existing Factories, Offices and Shops Act, 1970 (Act 328) limits occupational health and safety issues to only factories, offices, and shops to the exclusion of other workplaces.
- Also, the focus of legislation is more on OHS than public safety.

Institutional Assessment

- ECG, NEDCo, GRIDCo, VRA and Bui Power have challenges regarding the final disposal of electronic waste since there are no formal e-waste processing and recycling plants in Ghana. There are situations where meters have been disposed of at Agbogbloshie, Ghana's largest e-waste graveyard.
- ECG, NEDCo, GRIDCo, VRA, Bui Power and NPA lacks institutional arrangements in the sector responsible for, or dedicated to, enhancing the knowledge, and understanding, of comprehensive risk management approaches, including for example causal links between climate change and renewable energy generation (e.g., hydropower production and distribution). Most of the responsibility related to data, information and knowledge sharing is implemented by national-level bodies (e.g., Ghana Statistical Service), which produce data, information, and advice and bring national stakeholders together. Much work is being done to strengthen data collection and management at the sub-national level; however, the ESSA found little evidence of communication or links between the institutions involved. All national arrangements mapped that focus on data and knowledge management offer capacity-building for the ESRP partners. Apart from the ESRP platform, few institutional arrangements exist in the sector to strengthen dialogue, coordination, coherence, and synergies among energy sector stakeholders at the national level to systematically assess and address environmental and social risks in the energy sector.

Core Principle 4: Land Acquisition and Loss of Access to Natural Resources

Bank Policy for Program-for-Results Financing: Land acquisition and loss of access to natural resources are managed in a way that avoids or minimizes displacement, and affected people are assisted in improving, or at least restoring, their livelihoods and living standards.

Bank Directive for Program-for-Results Financing: As relevant, the program to be supported:

- Avoids or minimizes land acquisition and related adverse impacts;
- Identifies and addresses economic and social impacts caused by land acquisition or loss of access to natural resources, including those affecting people who may lack full legal rights to assets or resources they use or occupy;
- Provides compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid prior to taking of land or restricting access;
- Provides supplemental livelihood improvement or restoration measures if taking of land causes loss
 of income-generating opportunity (e.g., loss of crop production or employment); and
- Restores or replaces public infrastructure and community services that may be adversely affected.
 Applicability (Partial)
- This core principle is considered partially relevant since the PforR does not support any activities that may require land acquisition and loss of access to natural resources. However, the upgrade of an existing GRIDCo transmission line (DLI 1) and strengthening of ECG distribution network (DLI 3) may occasion some minor economic displacement affecting the livelihoods of persons who may have encroached within the existing rights-of-way of the transmission and distribution infrastructure.

Systems Assessment – Strengths

National Assessment

• The Ghana Land Act, 2020 (Act 1036) seeks to revise and consolidate the laws on land and compensation, with the view to harmonising those laws to ensure sustainable land administration and management and effective land tenure. The Act provide easy access to legislation on land and help remove the overlaps and inconsistencies associated with land legislation.

• While the Act addresses many challenges with the previous system (including the lack of clarity where there is physical displacement requiring resettlement planning, including livelihood restoration), there is a limited history of application of the new Act to assess its effectiveness and the record of agencies charged with enforcing its provisions. The risk is low.

Institutional Assessment

• ECG and GRIDCo both have internal systems (including policies, plans and procedures) and departments/units for addressing impacts on livelihoods of persons who are affected by their transmission and distribution infrastructure upgrading and rehabilitation works. GRIDCo just recently adopted a new Land Acquisition and Resettlement Policy and a new Right-of-way Management Policy which makes progressive attempts to accommodate certain uses (by encroachers) within their RoW, provided those uses are compatible with GRIDCo's RoW management practices thereby minimizing potential livelihood impacts. Both entities have had recent experience of successfully completing similar activities.

Systems Assessment – Gaps

The Ghana system does not recognize the rights to compensation for persons and entities who do not have a legal title to the land they occupy (including squatters and encroachers who may lose assets and/or their livelihoods).

Compensation is focused on cash payments for replacement of land and assets, not restoration of livelihoods. The legal framework (1992 Constitution and Act 1036) does not explicitly state that livelihoods should be restored to previous levels or better.

Inadequate technical capacity of the Program staff on the preparation and implementation of RAPs / ARAPs, livelihood restoration plans and other social management instruments. These are mainly outsourced to external consultants.

In some cases, there is a history of physical works having started without fully implementing the RAPs/ARAPs and livelihood programs.

Core Principle 5: Indigenous Peoples and Vulnerable Groups.

Bank Policy for Program-for-Results Financing: Due consideration is given to cultural appropriateness of, and equitable access to, program benefits giving special attention to rights and interests of Indigenous Peoples and to the needs or concerns of vulnerable groups.

Bank Directive for Program-for-Results Financing:

- Undertake free, prior, and informed consultations if Indigenous Peoples are potentially affected (positively or negatively) to determine whether there is broad community support for the program.
- Ensures that Indigenous Peoples can participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, the latter (indigenous knowledge) to include the consent of the Indigenous Peoples.
- Gives attention to groups vulnerable to hardship or disadvantage, including, as relevant, the poor, the disabled, women and children, the elderly, or marginalized ethnic groups. If necessary, special measures are taken to promote equitable access to program benefits.

Applicability (Partial)

There are no groups in Ghana that meet the World Bank's criteria for Indigenous Peoples. However, this core principle is considered partially relevant since there are marginalised and vulnerable groups including women, youths, the elderly and PWD that would be impacted by the Program.

- There is a possibility of elite capture and the exclusion of vulnerable groups.
- Tariff increases would impact poor households as they will have to devote an increasingly larger share of their household budget to electricity.
- Most small businesses will be affected by electricity price increases.

- Women may be marginalised during appointments of top management members. There is also possibility of GBV, sexual exploitation and abuse and SH within communities due to interaction with program workers and contractors' employees, and also as employees strive to appoint persons into managerial positions.
- Low-income households may have to devote more income to purchase of gas or abandon its usage if additional LPG retail fees leads to significant increase in the cost of LPG.

Systems Assessment – Strengths

National Assessment

- Ghana has a number of laws and policies to support the needs or concerns of vulnerable groups. Legislation and regulations on vulnerable groups are governed by a number of Acts e.g.: (i) Persons with Disability Act, 2006 (Act 715) that provides for consideration of persons with disability in design and implementation of infrastructure, including provision of access for individuals with physical disability; (ii) Domestic Violence Act, 2007 (Act 732) that provides for the protection of women and children from domestic violence including Gender-Based Violence (GBV); (iii) Children's Act, 1998 (Act 560) to reform and consolidate the law relating to protection of children, to provide for the rights of the children, maintenance and adoption, regulate child labour and apprenticeship; (iv) Ghana AIDS Commission Act, 2002 (Act 613) that establishes a commission to formulate a national HIV/AIDS policy, develop programs for the implementation of the policy and direct and co-ordinate the programs and activities in the fight against HIV/AIDS; and, (v) Juvenile Justice Act, 2003 (Act 653) to provide a juvenile justice system, to protect the rights of juveniles, ensure an appropriate and individual response to juvenile offenders, among others.
- The National Disability Policy of 2004 and the Persons with Disability Act, 2006, (Act 715), sought to mainstream the needs of persons with disabilities into the national development process. One key aspect is the amendment of the building code to make offices and public buildings accessible to persons with disabilities. The main policy challenge for vulnerable people particularly persons with disabilities is how to improve their training and skills development, increase their productivity and employability, and ensure adequate provision of medical and psychological support whenever development project inadvertently displace or impact on them.
- The National Social Protection Policy provides a framework for holistic and proper targeting of vulnerable households for rehabilitative, restorative, protective, and facilitative support. There is multiple government effort to mainstream interest of underserved / marginalised people and vulnerable groups in development projects. However, more effort is needed to ensure such support is well structured to provide sustainable and balanced benefit to vulnerable people.

Institutional Assessment

- The PSIs (ECG, NEDCo and GRIDCo) undertake free, prior, and informed consultations if people are potentially affected (positively or negatively) to determine whether there is broad community support for the program. They also ensure that project-affected persons participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, with the consent of the affected persons. Furthermore, the ESSA established that they give attention to groups vulnerable to hardship, including, as relevant, the poor, the disabled, women and children, the elderly, or marginalised ethnic groups. If necessary, these institutions take special measures to promote equitable access to program benefits. For instance, the ECG considers lifeline tariff users who are predominantly poor, when fixing tariffs.
- In Section 7 of the Collective Bargaining Agreement (CBA) of ECG, the company has commitment to addressing Gender-Based Violence (GBV) and Sexual Harassment (SH) in its operations. The section details an action plan, assigning responsibilities for the management of GBV and SH. Additionally, the document includes an annex that specifies a complaint procedure for GBV and SH.

Systems Assessment – Gaps

There is lack of data on consumers' vulnerability profile (e.g., income levels, access to electricity,) and how vulnerable groups are considered in tariff adjustments. ECG and NEDCo have limited capacity to adequately engage with vulnerable groups and ensure inclusion of gender equity in Programs.

Core Principle 6: Social Conflicts

Bank Policy for Program-for-Results Financing: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

- Bank Directive for Program-for-Results Financing:
- Considers conflict risks, including distributional equity and cultural sensitivities.

Applicability (Partial)

The proposed Program will not exacerbate social conflict nor will it operate in a fragile state context, a postconflict area or in areas subject to territorial disputes. However, conflicts and grievances may arise during the execution of this Program which could arise from disagreements related to:

- Increases in the cost of electricity could lead to citizen unrest and demonstrations, as it can fuel general price increases.
- There could be conflicts due to disconnection of customers that are in arrears in the payment of their bills, or those that may have tampered with meters.
- There could be discrimination against the appointment of women into higher positions. These could create barriers to greater gender equality and may affect the social performance of the Program.
- Workers of ECG may protest issues such as change of management.
- Current managers may not agree with new performance management systems and may organise their constituency to agitate against its implementation.
- There could be resistance by customers who refuse for the old meters to be changed to smart meters.

• Discrimination in the production and distribution of LPG stoves could result in social conflict

Systems Assessment – Strengths

National Assessment

- The Ghana Constitution, policies and laws largely provide for distributional equity and cultural sensitivity in all aspects of national actions to avoid conflicts.
- The Public Utilities (Complaints Procedure) Regulations, 1999 (L.I. 1665) outlines procedures for complaints and resolution.
- Ghana has a fairly good system for handling social conflicts. The few conflict-prone areas are localised incidents. The risk is low.

Institutional Assessment

- The implementing agencies have varied extents of stakeholder engagement protocols, multiple mechanisms for communication with the populace, and a variety of internal and external grievance redress mechanisms available. ECG, NEDCo, and GRIDCo have Human Resource Management Units/Directorate/Departments and procedures for handling issues relating to labour management and community concerns with the help of the national police force when necessary.
- The Public Utilities (Complaints Procedure) Regulations, 1999 (L.I. 1665) set forth a framework for addressing complaints related to utility services. The public therefore have recourse to the implementing agencies' internal complaints and grievances systems or recourse to the Public Utility Regulations Commission (PURC) to lodge any grievances for redress.
- The staff have an opportunity to be unionised and belong to the Public Utility Workers' Union (PUWU) of the Trades Union Congress (TUC). As members, they enjoy a Collective Bargaining Certificate (CBC) from the Labour Department.

Systems Assessment – Gaps

• The existing conflict avoidance and management systems are not standardized across all implementing agencies and the verdict on adherence or application of the existing systems is mixed. The Public Utilities (Complaints Procedure) Regulations, 1999 (L.I. 1665) set forth a framework for addressing complaints related to utility services. The Public Utility Companies should adopt this common platform for grievances management.

3.4 Environment and Social Risk Ratings of the Program

Based on the findings, as shown in the section on the analysis of the consistency of the Program's Environmental and Social Management System with the Program for Results Financing Core Principles, the ESSA recommends that the *Environmental and Social Risk* is rated Moderate mainly due to the existence of good regulatory and institutional frameworks and systems on EA in the country that are able to manage environmental risks from the types of investments and scale and magnitude of anticipated impacts from subprojects supported by the Program.

SECTION 4 – RECOMMENDATIONS AND ACTIONS

The section recommends measures to be undertaken to strengthen system performance in line with the gaps identified in the system assessment section to ensure that the Program interventions are aligned with the Core Principles of Bank Policy for Programfor-Results financing. Following the recommendations, the breakdown of actions to be included in the Program Action Plan (PAP) with indicative timeline, responsibility for implementation and indicators for measuring the completion of such actions are outlined. These actions may be further refined and adjusted during the consultation process appraisal and at the midline review during implementation of the Program.

4.1 Recommendations

Core Principle 1: General Principle of Environmental and Social Management

Although there are adequate policies and legal and regulatory framework at the national and institutional levels for environmental and social assessments that aligns with the core principle on environmental assessment, some gaps remain. For example, the EIA process in Ghana does not cover the range of social aspects as it should. Again, the monitoring of EIA implementation is weak as there is no tracking system to monitor environmental and social risks management performance. Table 8 presents a set of recommendations to address the identified risks and ensure effective delivery on the environmental and social performance mandate of the Program.

Assessment	
Gap	Recommendation
Measures to address Program-related social risks are fragmented in different laws and the EA process may not adequately cover social issues.	The ESSA recommends that issues such as social inclusion, gender mainstreaming, labour management, sexual exploitation and abuse and sexual harassment, among others should be adequately incorporated in PforR environmental and social (E&S) assessment processes. Again, negative social impacts (e.g., potential unrests and demonstrations), especially due to tariff increases, will require more attention. The ESSA recommends that impacted vulnerable groups are given special attention and consulted during the E&S assessment process, and they are included during the review and approval process thus, their concerns are reflected in the EA document. Ensure Gender Mainstreaming: GRIDCo has updated its gender policy this year. The ESSA recommends that ECG and NEDCo update their Gender Action Plans with the objective of:

Table 8: Gaps and Recommendations for Effective Environmental and Social Assessment

Gap	Recommendation
	 (i) implementation of institution-wide service rules to increase women participation in workforce development, and (ii) establishment and effective functioning of Internal Complaints Committees to ensure safe and sensitive workspace.
	The ESSA also emphasises a need for the development and adoption of: (a) tools for seeking citizen feedback (gender disaggregated) and (b) women safety audit to track career progression of women employees and labour hired (grade wise disaggregated data).
	Facilitate Social Inclusion: A key pillar of improved energy sector service delivery is the outreach to the most vulnerable. The institutions must ensure mapping of stakeholders with a focus on specific concerns of the vulnerable, challenges they face in accessing benefits; available or required subsidies. It is recommended that the tariff structure should be improvement based on disaggregated data on vulnerable groups. The tariff structure must integrate universal design principles to facilitate access to differently abled, senior citizens, women, and other vulnerable groups.
	Adopt Labour welfare measures: The PSI and NPA have a mix of permanent and temporary staff who are either hired and managed directly or are contracted through third-party agencies. Improvement in services such as transportation, health, and safety measures are warranted. The PforR implementing entities must ensure that all employees and contractor staff have duly signed work contracts outlining the conditions of employment. Though the national labour law requirements are embedded in the contracting structure, it is recommended to have systems to monitor compliances by each ESRP and NLPGPP stakeholder. In addition, contracts should be performance based.
	Safeguard communities against GBV, SEA and SH abuses: Communities may become susceptible to these abuses by program workers and contractor employees as they interact to carry out program activities. It is recommended to institute GBV, SEA and SH prevention and conflict awareness orientation as part of the induction processes for new workers and contractor employees. Every program worker or contractor employee should be made to sign a code of conduct following the orientation. The program should institute measures to monitor GBV, SEA and SH abuses and provide structured referral paths for victims as necessary.
Update and strengthen national and institutional environmental assessment procedures.	The ESSA recommends that that EPA should review and update the Energy Sector Environmental Assessment guideline to ensure it is consistent with recent developments and latest technology within the sector.

Gap	Recommendation
	The ESSA recommends that ECG, GRIDCo and NEDCo should review and update their environmental and social management systems in line with the potential risks and impacts of this program.
Resource limitations to adequately monitor and enforce compliance to the EIA regulations	The program should strengthen the implementing agencies and collaborations with the EPA (with monitoring equipment, vehicles, and skills development) to adequately monitor environmental and social compliance performance at the national and sub-national level.
	The program should conduct quarterly monitoring of progress and performance on environmental and social issues, especially regarding the compliance of the Program activities with the environmental and social standards and procedures.
Capacity improvement of regional EPA and implementing agencies staff to effectively plan and manage E&S risks	Capacities needs to be improved to enable regional EPA and implementing agencies staff carry out their tasks as effectively as possible. The program should encourage EPA to provide adequate operating budget in the regional offices and ensure that emphasis is placed on EIS and EMP compliance monitoring (including promotion of self-monitoring by project developers). In addition, providing the assigned staff with additional training and the necessary equipment will improve this situation.
E&S units are under-staffed and the lack of training of existing staff obstructs effective integration of environmental and social issues	The ESSA recommends that the implementing and PSI beneficiary agencies should improve their E&S staffing. It is recommended that all program implementing agencies designate E&S specialists at their respective implementation units to support the program in planning, management and reporting on environmental and social issues and compliance. The Specialists should ensure coordination on E&S performance among the implementing agencies. The Specialists should also build the capacity of staff of the different agencies. The E&S Specialist should have dedicated budget for monitoring and supervision.
	The Program should support the ECG's training school to improve capacity of key implementing agencies on environmental and social management. Alternatively, it is recommended that all program E&S staff (from all implementing agencies) should be enrolled in the certificate program on Environmental and Social Risk Management being run by GIMPA and TRECK with support from the World Bank.
Information Disclosure	The Program should encourage the institutionalisation of information disclosure to ensure beneficiary agencies publicly disclose their E&S policies and frameworks.

Recommendation

The Program should also ensure that program related E&S documents are publicly disclosed.

Poor institutionalised cooperation or

coordination: Since there are several institutions working on environmental and social management, it is important to have strong coordination and collaboration mechanisms. The lack of coordination can lead to not only discord and delays, but also cost overruns in the implementation of Program.

Inter-agency coordination arrangements between the authorities regarding the management of environmental and social aspects of the Program is poor at the national level and deficient at the local level. Enforcement of environmental regulations and compliance across the levels of governance does not take account of capacity constraints faced by local authorities.

There are also problems of horizontal organisation as institutionalised cooperation and coordination mechanisms are either limited or lacking. Additionally, inconsistencies remain in the vertical segregation of mandates for inspection.

Grievance mechanisms:

Appeal/grievance systems are burdened with unsolved cases and the avenues for receiving such appeals and complaints are few, limited to the institution's emergency phone line and eThe ESSA recommends the energy sector institutions to have an interagency Environmental and Social Safeguards Advisory Committee.

Enforcement of regulations and compliance will require effective inter and intra-institution coordination. In addition, the expertise required at the local authority level should not be different from that of similar experts at the national level. Experts at local authorities should be given same training as their counterparts at the national level.

Seek citizens' feedback and Grievance Redress Mechanism to benchmark services: One of the pillars for this program is establishing the vision, governance, and institutions necessary for citizen-responsive service delivery. This requires systems and capacities for citizen interface with stakeholders and a responsive and accessible grievance redress mechanism for resolving the complaints within a stipulated time. The Program should support

Gap	Recommendation
mail. The media and interested	strengthening of systems for energy sector consumer satisfaction,
CSOs/NGOs have also been	social audits, and grievance redress to close the loop for citizen
relied on to share the grievances	feedback. Some Institutions (e.g., ECG) have robust grievance
of affected individuals or parties	redress system with real time reporting while others require
with the public.	strengthening and improvement. In all agencies, it is recommended
	that the GRM protocol includes complainant's satisfaction as a
	precondition for closure. To strengthen energy service delivery,
	annual citizens satisfaction surveys, social audits, and regular citizen
	interface through social behaviour change communication is also
	recommended.

Core Principle 3: Public and Worker Safety

The ESSA identified that there are national policies and legislations and guidelines addressing public and worker safety. These cover a range of important aspects including environmental pollution control; labour laws; occupational health safety policies; and standards for workplace environmental emissions and discharges. Again, MoEn, GRIDCo, ECG, and NEDCo have put in place measures that promote community, individual, and worker safety. Potential public and works safety risks can occur in the PforR. This will be evaluated and mitigated through environmental and social impact assessment and strict implementation of site-specific Environmental, Social, Health, and Safety (ESHS) management plans. Particular attention will be paid to the proper management of electronic and hazardous wastes. The following key actions for the protection of Public and Worker Safety are recommended (Table).

Table 9. Gaps and Recommendations for the Protection of Public and Worker Safety

Gap	Recommendation
Ghana does not have a national policy on occupational health and safety management and there is also the need to strengthen OHS procedures for implementing agencies	The ESSA recommends that ECG, NEDCo and NPA to update their OHS procedures and manuals to cover all the issues to facilitate safety of workers and the general public. ECG, GRIDCo, NEDCo and NPA should include GBV/SEA/SH prevention and conflict awareness in their collective bargaining agreements, workers code of conduct and third-party contractor workers contracts.
	Contractors selected for the various rehabilitation works should be required to prepare Contractor's ESMP (C-ESMP) based on the country system and internal E&S polices and frameworks of the relevant implementing agency, before works begin. The C-ESMP will include a Labor Management Procedure (with a dedicated section for GBV/SEA/H risk mitigation measures), Electronic Waste Management Plan and an OHS plan. The requirement to prepare a C-ESMP should be incorporated into the bidding documents.

Core Principle 4: Land Acquisition and Loss of Access to Natural Resources

The program will not entail new land acquisition. The ESSA identified that the Land Act, 2020 (Act 1036) revised and consolidated the laws on land and compensation, with the view to harmonising those laws to ensure sustainable land administration and management and effective land tenure. While the Act addresses many challenges with the previous system (including the lack of clarity where there is physical displacement requiring resettlement planning, including livelihood restoration), it does not recognize rights to compensation for persons and entities who do not have legal title to the land they occupy (including squatters and encroachers who may lose assets and/or their livelihoods). Also, there is a limited history of application of the new Act to assess its effectiveness and the record of agencies charged with enforcing its provisions. The following key actions for the protection of livelihood of affected persons who have encroached or squatting on the rights-of-way of transmission and distribution infrastructure are recommended (Table).

Table 2. Gaps and Recommendations for the Protection of Livelihoods of ROW Encroachers and Squatters

Gap	Recommendation		
Ghana law does not recognize	The ESSA recommends that ECG and GRIDCo update their land		
rights to compensation for	acquisition and resettlement policies and right-of-way		
persons and entities who do	management policies to make exception to accommodate		
not have legal title to the land	livelihood restoration for all categories of persons and entities		
they occupy (including	(including encroachers and squatters) who may lose assets and/or		
squatters and encroachers	their livelihoods due to ECG and GRIDCo operational activities		
who may lose assets and/or	under the PforR program.		
their livelihoods)			
	The program should develop a procedure for livelihood restoration		
	to guide GRIDCo and ECG implementation of the upgrade and		
	rehabilitation of transmission and distribution infrastructure		
	under the PforR program.		

Core Principle 5: Indigenous Peoples and Vulnerable Groups

There are no ethnic minorities/indigenous peoples in Ghana. However, the assessment identified that there are likely to be marginalised and vulnerable groups including women, youths, the elderly and PWD that would be impacted by the Program. It is expected that vulnerable people will be impacted given that the Program involves a utility, electricity, that everyone uses or needs and for the fact it will involve strengthening of transmission and distribution infrastructure, establishment of new connections, installation of smart meters, among others, which will involve people of different categories. The following key actions for inclusion of vulnerable groups are recommended (Table 3).

Table 3. Gaps and Recommendations for Inclusion of Vulnerable Groups

Gap	Recommendation
Lack of clear guidance and procedures to manage inclusion of vulnerable groups. Inadequate provisions and procedures for dealing with issues that can limit women and youth access to the program.	The ESSA recommends that the Program gives attention to groups vulnerable to hardship or who are disadvantaged, including the poor, the disabled, women and children, the elderly, or marginalised ethnic groups. If necessary, special measures should be taken to promote equitable access to program benefits. Assign Social Development and Gender focal persons to the main implementing agencies, and train them to follow up planning, implementation, and monitoring of Gender equality and social inclusion issues.
Poor and vulnerable will be impacted by electricity tariff increases.	The ESSA recommends the Program to include Targeted Social Assistance such as lifeline tariffs. Within the context of addressing pre-existing barriers to registration and access to services by poor and vulnerable people, service improvements and potential adjustments to tariff increases and broader power sector reforms, ESRP will also need to strengthen its public communication capacity.
	The PURC or the designated government agency should estimate the poverty impacts of tariff increases each year of the Program implementation. This will allow PURC to provide timely inputs as part of the tariff planning process. The Program should provide the required support to MoGCSP (and other organs responsible for the development and protection of women, children, elderly and PWD as well as identified marginalized groups) in carrying out poverty impact assessment of proposed tariff increases and estimation of the cost of mitigation. Given the importance, this step is included in the PAP.

Core Principle 6: Social Conflict

The Program will not exacerbate social conflict, nor will it operate in a fragile state context, a post-conflict area or in areas subject to territorial disputes. There is the need to strengthen stakeholder engagement and grievance redress mechanisms and increased transparency and provide information and communication avenues for complaints and their resolutions and also to correct the negative impression about the utility agencies.

Table 4. Gaps and Recommendations for Social	d Conflicts
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Gap	Recommendation
The existing conflict avoidance and management systems are not standardized across all implementing agencies and the verdict on adherence or application of the existing systems is mixed.	 Institute standard protocols for analysis of social implications of program activities (e.g., potential tariff increases). Prepare and implement a comprehensive communications and consumer outreach and education strategy and activities. Ensure a standardized comprehensive complaints and grievance redress system at all program levels.

4.2 Program Action Plan

The Table 13 below indicates the breakdown of actions to be included in the Program Action Plan with indicative timeline, responsibility for implementation and indicators for measuring the completion of such actions.

Table 5: Inputs into the Program Action Plan

No.	Action Description	Responsibility	Timing	Completion Measurement
Envir	conmental and social due diligence			
1.	Support ECG to develop an organizational change management plan to proactively engage employees before, during and after the change in top Management.	ECG's PIU	During program implementation	Change Management Plan Prepared
2.	The Program should support MoEn and NPA to adopt and implement the Communication Strategyfor the National LPG Promotion Program.	MoEn's PCU and NPA	During program implementation	Final report on implementation of the communication strategy submitted to the Bank
3	The program should prepare a procedure for livelihood restoration to guide implementation of the upgrade and strengthening of transmission and distribution infrastructure under the PforR program.	MoEn's PCU and ECG and GridCo's PIUs	Before the start of the upgrade and rehabilitation activities	Procedure for Livelihood Restoration prepared and submitted to the World Bank
4.	The PforR should support ECG to update its Gender Action Plan with the objective to increase women participation in Program activities.	MoEn's PCU & ECG's PIU	During program implementation	Gender Action Plan revised and approved by ECG's Management

5.	The PforR should support NPA and EC to undertake a Strategic Environmental and Social Assessment (SESA) for the National LPG Promotion Program.	MoEn's PCU	During program implementation	Final SESA report submitted to the Bank
6	The PforR should support NPA to prepare a Communication and Stakeholder Engagement Plan (CSEP) for the National LPG Promotion Program.	MoEn's PCU	During program implementation	Final CSEP report submitted to the Bank
Insti	tutional Capacity Enhancement:			
7.	The PCU and PIU should recruit Safeguards Specialists at the PCU and PIU to support the program in planning, managing and reporting on environmental and social issues and compliance. The Specialists at the PCU should ensure coordination on E&S performance among the implementing agencies.	MoEn's PCU and ECG and GridCo's PIUs	Before start of program implementation	Safeguards Specialists recruited and at post
8.	The PforR should support ECG to develop a staff development policy and Plan to direct staff development programmes and promote and strengthen women in leadership roles especially at the regional and district level offices of ECG.	ECG's PIU	During program implementation	Staff Development Policy and Plan developed and approved by ECG Management
9.	The PforR should support ECG's Training Centre to incorporate environmental and social risk management into its courses to improve the capacity of its staff in all its agencies. Develop relevant educational modules and organize regular training on environmental and social management.	ECG's PIU	During program implementation	Training manuals developed and training conducted. Training reports submitted to the World Bank
10.	The PforR should support MoEn, PURC & EC to enhance the capacity of its staff on environmental and social management. Conduct the necessary number of professional training and develop appropriate technical guidelines on	MoEn's PCU	During program implementation	Training completed and reports submitted to the World Bank

	environmental procedures and management. Training staff in dealing with complaints from customers or stakeholders and reducing complaint response and resolution time.			
E&S I	Monitoring and Verification:			
11.	The Independent Verification Agency (IVA) should conduct quarterly monitoring of progress and performance on environmental and social issues, especially regarding the compliance of the Program activities.	MoEn through the IVA	Throughout project implementation	Completed report with, recommendations about E&S issues, including the progress of the implementation of actions shared with the World Bank and other relevant stakeholders
12.	The PforR should include E&S monitoring and verification as part of the responsibilities of the Independent Verification Agency (IVA). In this regard, the PforR should ensure that the IVA has expertise and staff on E&S management.	MoEn	Before start of program implementation	Terms of reference for the IVA include requirements on E&S monitoring
Stake	eholder Engagement, Grievance med	chanism and Informa	tion Disclosure	
13.	The PforR should ensure that all implementing institutions have a fully- functional grievance redress mechanism for receiving and resolving complaints within a stipulated time.	MoEn's PCU and ECG and GridCo's PIUs	Before start of program implementation	Grievance Mechanisms of implementing institutions fully functional. Report on grievances
14.	The PforR should ensure that all implementing institutions disclose relevant E&S policies, frameworks, plans and reports	MoEn's PCU and ECG and GridCo's PIUs	Before start of program implementation	All relevant E&S instruments duly disclosed in a timely manner.
15.	The PforR should support PURC to undertake a diagnostic Poverty and Social Impact Assessment (PSIA) to identify life-line customers likely to be affected by the tariff increases for support.	MoEn's PCU	Throughout project implementation	Lifeline Program for Low-Income Consumers and vulnerable groups developed and implemented.

SECTION V – SUPPORTING ANNEXES AND REFERENCE DOCUMENTS

Annex 1: Stakeholder Analyses and Consultation

A1.1 Stakeholder Identification

The WB recognises that the first and important step in the stakeholder engagement process is the identification of the stakeholders, who they are, and their groupings and sub-groupings. Table A13 presents detailed roles and responsibilities of the stakeholders.

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Policy Makers and Implement ers	The Cabinet	The Cabinet is the Executive Branch of the GoG. Pursuant to Article 76 (1) of the 1992 Constitution of Ghana, it takes responsibility for making key government decisions. Cabinet is the apex authority that takes national decisions on environmental, natural resource management, and social policies and planning. The Program will be submitted to Cabinet for approval before it is sent to Parliament.	1, 2, 3, 4
	The Parliament of Ghana	The Parliament of Ghana is the legislative body of the GoG with the basic function to make laws. Its financial oversight responsibilities of the executive include authorising the granting or receiving of loans (cf. Article 181). Parliament will have to approve the loan for the financing of the Program.	1, 2, 3, 4
	Office of the Attorney General	The Attorney General is the Principal Legal Advisor for the Executive and will lead the negotiation of the Program.	1, 2, 3, 4
	Ministry of Energy (MoE)	The Ministry of Energy is the Government of Ghana ministry responsible for energy policy formulation, implementation, monitoring and evaluation, as well as supervision and coordination of activities of Energy Sector Agencies.	1, 2, 3, 4
	Ministry of Finance (MoF)	Ministry of Finance exists to ensure effective economic policy management for the attainment of macroeconomic stability and sustainable economic growth through sound fiscal policy and efficient public financial management,	1, 2, 3, 4

Table A <u>6</u>. Stakeholders for all Program Areas

¹³ PRA: Program Results Area

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
oroup		competent staff, and robust systems for the development of Ghana.	
	Environmenta	and Natural Resources Management	
	Ministry of Lands and Natural Resources (MLNR)	 The Ministry is mandated to ensure sustainable management and utilisation of the nation's lands, forests, wildlife, and mineral resources for socio-economic growth and development. Specific responsibilities of the Ministry and its authorities/agencies/commissions are: Facilitate equitable access, benefit-sharing from and security to land, forest, and mineral resources. Facilitate the acquisition of land on behalf of the Government for all projects. Undertake land and land-related valuation services. Promote community participation and public awareness at all levels in sustainable land management and development practices to ensure the highest and best use of land. Develop and maintain effective institutional capacity and capability at the national, regional, district and community levels for land, forest, wildlife, and mineral service delivery. Ensure efficient and equitable land service delivery. Promote public awareness and local communities' participation in a sustainable forest, wildlife, and land use management and utilisation. Negotiations with Development Partners in connection with the land and natural resources. 	1, 2, 3
	Ministry of Environment Science, Technology, and Innovation (MESTI)	MESTI is at the top of the hierarchy for environmental and natural resource management. MESTI formulates and directs policy under a mission "to ensure accelerated socioeconomic development of Ghana through the formulation of sound policies and a regulatory framework to promote the use of science and technology that is not harmful to the environment." The Ministry's main functions are protection of the environment through policy formulation; economic, scientific, and technological interventions to mitigate harmful impacts caused by development activities; and standard setting and regulatory	1, 2, 3, 4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Group		 activities to apply science and technology to manage the environment for sustainable development. With its agencies/authorities and departments, the Ministry is mandated to: Protect and manage the environment for sustainable development. Provide leadership and guidance for the environment through sound policy formulation and implementation. Ensure the establishment of the regulatory framework and set of standards for the management of the environment for sustainable development. Ensure coordination, supervision, monitoring, and evaluation of activities of the environment. Initiate, simulate, and coordinate research including the continuous development and reviews of policies, laws, rules, and regulations in the environment sector of the economy. Ensure effective environmental management and governance. 	
	Social Risk and	l Management	
	Ministry of Local Government, Decentralisatio n and Rural Development	The Ministry of Local Government, Decentralisation, and Rural Development is responsible for the establishment and development of a vibrant and well-resourced decentralised system of local government for the people of Ghana to ensure good governance and balanced rural based development.	1, 2, 3, 4
	Ministry of Gender, Children and Social Protection (MoGCSP)	 The Ministry is mandated to. Coordinate and ensure gender equality and equity, promote the survival, social protection, and development of children, vulnerable and excluded and persons with disability and integrate fulfilment of their rights, empowerment, and full participation into national development. Formulate gender, child development, and social protection policy. Improve the socio-economic status of the vulnerable and the excluded through targeted interventions. Co-ordinate gender, child, and social protection-related programs and activities at all levels of development. Develop guidelines and advocacy strategies for use by all Ministries, Departments, and Agencies (MDAs) 	1, 2, 3, 4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Group		 and in collaboration with Development Partners and civil society organisations, (CSOs) to ensure effective gender and social protection mainstreaming. Ensure compliance with international protocols, conventions, and treaties concerning children, gender, and social protection. The ministry oversees the work of the following agencies 	
		 and departments: Department of Gender (DoG) Department of Children (DoC) Department of Social Development (DSD) Human Trafficking Secretariat (HTS) 	
		 Domestic Violence Secretariat (DVS) Ghana National Household Registry (GNHR) Ghana School Feeding Program (GSFP) National Council for Persons with Disability (NCPD) Livelihood Empowerment Against Poverty (LEAP) 	
	Ministry of Employment and Labour Relations (MELR)	 Livelihood Empowerment Against Poverty (LEAP) The Ministry is responsible for the following: Formulate, plan, coordinate, monitor and evaluate policies, programs/projects, and the performance of the Employment and Labour Relations Sector towards accelerated employment generation for national development. Promote harmonious industrial (labour) relations and ensure workplace safety. Create an enabling- policy environment and opportunities for profitable job creation, career, and professional development. Develop strategies and mechanisms to ensure and promote industrial peace and harmony. Develop and periodically review all legal and policy instruments for the sector. Ensure the monitoring and evaluation of sector policies, programs, and projects concerning gainful employment-generation and the promotion of industrial harmony. Ensure fair and equitable wages and salaries for employees in all sectors of the economy. Ensure all workplaces conform to labour laws through labour inspection; and 	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
oroup		• Facilitate the development of vibrant co-operatives, medium and small-scale enterprises for employment generation and poverty reduction.	
		 The key departments /directorates directly involved in the management of social issues under the Ministry are: Labour Department Fair Wages and Salaries Commission Youth Employment Agency Department of Factories Inspectorate National Labour Commission 	
	Ministry of Information (MOI)	The goal of the Ministry is to empower the citizens of Ghana through information dissemination to ensure transparency and accountability in public policy cycles. MOI exists to ensure citizens take ownership of programs, policies, and activities necessary for the social and economic transformation of the country by building a two –way communication channel between the people and government.	1, 2, 3, 4
		The Ministry's goal is to champion information sharing to empower the citizens to ensure transparency and accountability in public policy cycles.	
Regulatory	Environmenta	l and Natural Resources Management	
Agencies	Environmental Protection Agency (EPA)	The EPA is the leading public body for protecting and improving the environment in Ghana. The mission of the EPA of Ghana is to co-manage, protect, and enhance the country's environment, in particular, as well as seek common solutions to global environmental problems. According to its mandate, the EPA is Ghana's main agency for environmental governance and management. Core functions include formulating environmental policy; promoting environmentally-conscious planning; coordinating and collaborating with domestic and international agencies/institutions as well as decentralised offices on environmental governance issues; developing standards and guidelines related to pollution including discharge of waste and control of toxic substances; issuing environmental permits and compliance enforcement; conducting investigations and research focused on environmental education; and developing a comprehensive environmental database for public use.	1, 2, 3, 4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
		The EPA also serves as a technical secretariat, interfacing with sectoral agencies and acts as a clearinghouse through a number of inter-sectoral networks. To execute its mandate, the EPA partners with stakeholders from all branches of Government and society.	
	Forestry Commission	 The Commission is responsible for the regulation of the utilisation of forest and wildlife resources, the conservation and management of those resources and the co-ordination of policies related to them. The Commission regulates the utilisation of forest and timber resources, manage the nation's forest reserves and protected areas by proper planning for the protection, harvesting and development of forest and wildlife resources in a sustainable manner. The following agencies form the divisions under the commission: Forest Service Division Wildlife Division Timber Industry Development Division Resource Management Support Centre The Forest Service Division and the Wildlife Division have Regional and District offices. 	1, 2, 3
	Water Resources Commission (WRC)	Water Resources Commission is the agency responsible for the regulation and management and the utilisation of water resources and for the co-ordination of any policy in relation to them. WRC has Basin offices in Koforidua (Densu Basin Office), Bolgatanga (White Volta Basin Office), Tarkwa (Ankobra Basin Office), Kumasi (Pra Basin Office), Sunyani (Tano Basin Office).	1, 2, 3
	Energy Sector		
	Energy Commission (EC)	The Energy Commission is required by law to regulate and manage the development and utilisation of energy resources in Ghana as well as to provide the legal, regulatory, and supervisory framework for all providers of energy in the country, specifically by granting licences for the transmission, wholesale, supply, distribution, and sale of electricity and natural gas, and related matters.	1, 2, 3, 4
		The Commission was set up by an Act of Parliament, the Energy Commission Act, 1997 (Act 541) with functions relating to the regulation, management, development, and	

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Stakeholder Group		 utilisation of energy resources in Ghana. The EC's regulatory mandates are: Serving as the Government's energy policy adviser by making national energy policy recommendations to the MoE. Formulating national policies for developing and utilising indigenous energy resources, in particular solar, wind, and biomass. Preparing, reviewing, and updating indicative national plans to ensure that all reasonable demands for energy are met. Prescribing legislative instruments, standards of performance, and technical and operational rules of practice for supplying, distributing, and selling electricity and Natural Gas (NG). Enforcing legislative instruments uniformly throughout the country. Promoting competition in the supply, marketing, and sale of renewable energy products and other forms of energy. Promoting energy efficiency and productive uses of electricity, NG, and petroleum products. Licensing public utilities for transmission, wholesale supply, distribution, and sale of electricity and NG. 	
	Public Utilities Regulatory Commission (PURC)	PURC was set up as a multi-sectorial regulator by the Government of Ghana in October 1997 under the Public Utilities Regulatory Act, 1997 (Act 538) as part of the utility sector reform process to regulate the provision of utility services in the electricity and water sectors. PURC is an independent body and is not subject to the control of any authority in the performance of its functions. The Office of the President exercises administrative oversight for the Commission. By virtue of the Energy Commission Act, 1997 (Act 541), PURC also has regulatory responsibility over charges for transportation of natural gas services.	1, 2, 3, 4
	Petroleum Commission	The Petroleum Commission was established by an Act of Parliament, 2011 (Act 821) as a result of hydrocarbon discoveries in commercial quantities, to regulate and manage the utilisation of petroleum resources and coordinate the policies in the upstream petroleum sector.	4
	National Petroleum Authority (NPA)	The National Petroleum Authority was established by an Act of Parliament (NPA Act 2005, ACT 691) to regulate the petroleum downstream industry in Ghana. As a Regulator, the Authority ensures that the industry remains efficient,	4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
oroup		profitable, fair, and at the same time, ensuring that consumers receive value for money.	
	Ghana National Petroleum Corporation (GNPC)	The Ghana National Petroleum Corporation (GNPC) is Ghana's National Oil Company (NOC), established in 1983 by PNDC Law 64, to support the government's objective of providing adequate and reliable supply of petroleum products and reducing the country's dependence on crude oil imports, through the development of the country's own petroleum resources.	4
		The Petroleum (Exploration and Production) Act, 2016 (Act 919) repealed PNDCL 84. It is acknowledged as a major milestone in the legislative history of the upstream oil and gas industry in Ghana. The purpose of the Act is to ensure safe, secure, sustainable and efficient petroleum activities to achieve optimal long-term petroleum resource exploitation and utilization for the benefit and welfare of the people of Ghana.	
		Section 74 of Act 919 supports the case of GNPC being an entity mandated to ensure supply of petroleum products in Ghana	
	Chamber for Bulk Oil Distributors	The Chamber of Bulk Oil Distributors (CBOD) has been operational since 2012 but was formally incorporated in January 2014. CBOD serves as the advocacy, lobby and representative body of Bulk Import, Distribution and Export Companies (BIDECs), Storage Depots and other affiliated Petroleum Service Providers (PSPs) in the downstream petroleum industry. CBOD also function as an industry research and strategy unit committed to enhancing the industry's commercial viability and sustainability. The CBOD operates as an active and responsible industry player, partnering allied agencies for national development while coordinating and facilitating healthy cooperation and competition amongst our members. The Chamber currently has a membership of 46 made up of 36 BIDECs, 7 Storage Depots and 3 other PSPs.	4
	Ghana LPG Operators Association (GLiPGOA)	The Ghana Liquefied Petroleum Gas Operators Association is an industry association and a private initiative by the Liquefied Petroleum Gas Operators in Ghana. It is an advocacy institution established to help direct downstream policy, legislation and regulation and pursue research towards the development of the LPG downstream sector. GLiPGOA has a membership of 713. The LPGMCs purchase LPG in bulk from the Bulk Importers, Distribution and	4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
		Export Companies (BIDECs) and supply to their branded refilling outlets. In most cases the ownership of the outlet is separate from the LPGMC ownership, and in almost all cases separate from the BIDEC ownership. The Ghana Liquefied Petroleum Gas Operators Association is an industry association and a private initiative by the Liquefied Petroleum Gas Operators in Ghana. It is an advocacy institution established to help direct downstream policy, legislation and regulation and pursue research towards the development of the LPG downstream sector.	
	Standards		
	Ghana Standards Authority	Set safety and measurement standards	4
Civic Education	Authority National Commission for Civic Education (NCCE)	 The NCCE educates the citizens on their rights and responsibilities. Among other things, they are to inform the communities about their rights as found in the legislation concerning the right to information and stakeholder engagement. The Functions of the NCCE: Create and sustain within the society the awareness of the principles and objectives of the 1992 fourth Republican Constitution as the fundamental law of the people of Ghana. Educate and encourage the public to defend the Constitution at all times, against all forms of abuse and violation. Formulate, implement, and oversee programs intended to inculcate in the citizens of Ghana awareness of their rights and obligations as free people; and To assess for the information of Government, the limitations to the achievement of true democracy arising from the existing inequalities between different strata of the population and make recommendations for addressing these inequalities. The Commission has 16 Regional Offices headed by Regional Directors who coordinate the Commission's work in our Regional and 260 District offices across the country. It is also instructive to note that the local offices of the NCCE are autonomous and do not come under the local government system. 	1, 2, 3, 4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Local Governmen t Manageme nt and Leadership	The Regional Coordinating Councils (RCC)	 Each region has an RCC established, in line with Article 255 of the Constitution. Section 188 of Act 936 sets out the functions of the RCC. The RCCs has the following functions: Monitor, coordinate, and evaluate the performance of the District Assemblies in the region. Review and co-ordinate public services generally in the region. Responsible for the approval of the by-laws of the District Assemblies in the region subject to their consistency with national legislation. Provide back-stopping support for the performance of any function assigned to the District Assemblies in the region in respect of which a particular District Assembly is deficient in terms of skills and workforce. Monitor and evaluate the implementation of the programs and projects of the District Planning Authorities within the region. 	1, 2, 3, 4
		ministries are responsible for policy and standards but the enforcement and monitoring are the responsibility of the Metropolitan, Municipal, and District Assemblies (MMDAs) who are in turn supervised by the RCCs.	
	MMDAs	These are the local level governments responsible for the day-to-day administration of the districts. There are currently 260 ¹⁴ MMDAs across the country. The MMDAs are involved in the approval, implementation, and oversight duties relating to most of the identified environmental and sanitation concerns. They are also the authority to carry out and execute at the local level the provisions of some legislation ¹⁵ .	1, 2, 3, 4
Power Generators	Volta River Authority	The VRA, established in 1961 by the Volta River Development Act (Act 46), is the state-owned electricity company responsible for generating electricity in Ghana and supplying electricity in bulk to Ghana Grid Company Limited (GRIDCo). VRA owns and operates the Akosombo	1, 2, 3

¹⁴ 6 Metropolitan, 109 Municipal and 145 District across the 16 Regions

¹⁵(a) the Auction Sales Act, 1989 (P.N.D.C.L. 230); (b) the Liquor Licensing Act, 1970 (Act 331); (c) the Control and Prevention of Bushfires Act, 1990 (P.N.D.C.L. 229), and (d)Criminal Offences Act, 1960 (Act 29)

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
		hydro power station, the Kpong hydro power station, the Aboadze T1 plant, the Tema TT1PP plant, and the Takoradi Thermal Power Plant (T3) located at Aboadze. VRA is also a minority joint partner with TAQA, which owns and operates the Takoradi International Power Company (TICO) thermal power plant also located at Aboadze. In addition to the plants that VRA owns, VRA also operates the Tema TT2PP plant and Mine Reserves plant for their respective owners. In May 2012, VRA restructured its distribution department, Northern Electricity Distribution (NED), into a semi- independent, wholly owned subsidiary company of VRA, known as Northern Electricity Distribution Company of Ghana (NEDCo).	
	Bui Power Authority (BPA)	 BPA was established by the Act of Parliament, BPA Act 740, in 2007 with a mandate to plan, execute and manage the Bui Hydroelectric Project which includes: Construction of dam and powerhouse, installation of a 400MW generating plant and other infrastructure forming an integral part of the project. Generation of electrical power for general industrial and domestic use. Construction of a transmission system linked to the national grid. Supply of electrical power to certified and licensed utility companies. Promotion of activities consistent with the provision of facilities for multipurpose uses such as agro-businesses, fisheries, and tourism. 	1, 2, 3
	Independent Power Producers	Independent Power Producers (IPPs) are private entities which own and or operate facilities to generate electricity and then sell it to a utility, central government buyer and end users. IPPs may be privately held facilities, cooperatives, or non-energy industrial concerns capable of feeding excess energy into the system. IPPs invest in generation technologies and recover their cost from the sale of electricity.	1, 2, 3
Distributor s	Electricity Company of Ghana (ECG)	ECG is a limited liability company wholly owned by the Government of Ghana and operating under the Ministry of Energy. Known as the Electricity Department when it was founded in 1947, it was converted into the Electricity Corporation of Ghana by Decree 125 in 1967 and incorporated under the Companies Code in February 1997.	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Group		ECG is responsible for distributing electricity in the southern part of Ghana. This includes the Ashanti, Central, Eastern, Greater Accra, Volta, and Western regions. Within those regions, ECG has 1.8 million customers and distributes 90 percent of all electricity sold in Ghana.	
	Northern Electricity Distribution Company of Ghana	NEDCo is a wholly owned subsidiary of VRA responsible for the distribution of electricity in the northern part of Ghana. NEDCo serves the Northern, Upper West, Upper East, Savannah, Bono East, Ahafo regions.	1, 2, 3
	Ghana Grid Company Limited (GRIDCo)	GRIDCo was established in accordance with the Energy Commission Act, 1997 (Act 541) and the Volta River Development (Amendment) Act, 2005 Act 692, which provided for the establishment and exclusive operation of the National Interconnected Transmission System (NITS) by an independent Utility and the separation of the transmission functions of the Volta River Authority (VRA) from its other activities within the framework of the Power Sector Reforms.	1, 2, 3
		The establishment of GRIDCo is intended to develop and promote competition in Ghana's wholesale power market. This is through the provision of transparent, non- discriminatory, and open access to the NITS for all the participants in the power market; particularly, power generators and bulk consumers and thus bring about efficiency in power delivery.	
Industry Association s	Association of Ghana Industries	 The Association of Ghana Industries (AGI) is a voluntary business association of over 1200 members, made up of small, medium, and large-scale manufacturing and services industries in agro-processing (food and beverages), agribusiness, pharmaceuticals, electronics and electrical, telecommunications, information technology, utilities, service industries, transport, construction, textiles, garments and leather, banking, and advertising. As the leading voice of manufacturing industries in the country, AGI is dedicated to: Advocating policies that advance the growth and development of industries. Facilitating international trade through exhibition of member products in countries across the sub-region. Strengthening national industry associations through the sharing of knowledge, experience, and critical information. 	1, 2, 3, 4

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Group		 Providing members with a vast network of contacts, especially in the West African sub-region. Hosting the industry and technology exhibition to promote members' goods. 	
	Trade Union Congress	The Trades Union Congress (TUC) of Ghana is the main umbrella organisation for trade union activities in Ghana. It is made up of eighteen affiliated national unions. These are autonomous bodies which pursue their own activities but within the framework of their constitutions and their areas of legally accepted jurisdiction.	1, 2, 3, 4
		 The TUC is the official mouthpiece of unionised labour in its dealing with government and with the employers' association. It is non-political. Its 1992 constitution debars all elected officials from identifying with any political party. It has its headquarters at the Hall of Trade Unions in Accra and currently has a membership of about five hundred thousand (500,000). The objectives of TUC are: To unionise all workers in Ghana under a united trade union movement. 	
		 To secure social, political, and economic justice in Ghana and ensure that works benefit from these through collective action. To support efforts of affiliated unions to improve wages, shorten hours of work and create better conditions of service at workplaces. 	
		 To assist affiliated unions to undertake collective bargaining on behalf of workers. To support the promotion of work efficiency and improve productivity at workplaces. To protect, strengthen, preserve, and develop traditions and institutions of democracy and to secure fully the 	
		 rights and liberties of workers. To promote national freedom, human rights, and world peace. To ensure the ratification and application of International Labour Organisation (ILO) and other international conventions with the view of harmonising world labour practices sensitising public opinion, both locally and worldwide in favour of acceptable trade union practices. 	
	Ghana Technology Chamber (GTC)	The Ghana Technology Chamber is a voluntary group of technology companies that have come together to pursue common interest of shaping the technology industry	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
		 agenda of Ghana for now and future generations. The goals of GTC are: Work with Government, regulators, and other relevant stakeholders to formulate policies and strategies to shape and speed up growth in the industry. Promote the interest of the technology industry players in Ghana. Stimulate an enabling environment for technology companies in Ghana. Advocate and improve technology standards in Ghana. Advocate and push for open systems. Build the capacity of technology enterprises to be more relevant to the market. Build an industry to ensure the dominance of technology enterprises. Positively expose the industry and technology enterprises in general to the market. Make Ghana the most prominent technology hub of Africa. Make Ghana a virtual free zone for tech businesses. Influence procurement laws and policies in favour of indigenous tech businesses. Educate Ghanaians on relevant technology issues. Build strong relationships with other sectors of the Ghanaian economy. Promote Cross-border business engagements for Ghanaian Technology Companies. 	
	Private Enterprise Federation (PEF)	The Private Enterprise Foundation (now Federation) was established in 1994 as the apex institution to forge consensus and provide the leading voice for advocacy, on the initiative of the Association of Ghana Industries, Ghana National Chamber of Commerce and Industry, Ghana Employers' Association, and the Federation of Associations of Ghanaian Exporters; with the support of the United States Agency for International Development (USAID). PEF as a non-profit, non-political, autonomous institution and a Company Limited by guarantees under the Ghana Companies Code, Act 179, has its membership open to all private businesses and trade associations from both the formal and informal sectors of the economy.	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
		The mission of PEF is to service the development needs of the private sector through advocacy for efficient allocation of the country's resources, provision of requisite business development support services and capacity building for a sustainable private sector led national economic development.	
	Consumer Protection Agency (CPA)	CPA was born out of the need for Ghana's consumers to be represented. As the economy has become increasingly industrialised and products and services more diverse the national system of standards, checks, and balances is being tested. CPA is here to increase public awareness and enhance the appropriateness and effectiveness of this system while facilitating enforcement. CPA's goal is to solicit the aid of Ghana's policymakers in the enforcement, management, and measurement of basic standards. The objective of CPA is to provide a forum for individuals, communities, and businesses to present concerns and an opportunity for mediation and resolution to consolidate issues to develop consensus.	1, 2, 3. 4
	Chamber of Independent Power Producers, Distributors and Bulk Consumers (CIPDiB)	The CIPDiB is a private initiative aimed at uniting and acting as the voice of Independent Power Producers, Distributors and Bulk Consumers of electricity. The Chamber was incorporated in February 2019 and was duly launched on June 18, 2019, at the College of Physicians and Surgeon, Accra. The membership of the Chamber currently stands at 11 which are made up of nine IPPs who account for over 57 percent of dependable electricity capacity, one Power Distributor, and one Bulk Consumer. The mission of CIPDiB is to promote a reliable and sustainable electricity industry for socio-economic development in Ghana and West Africa.	1, 2, 3
	Association of Oil Marketing Companies (AOMC)	The AOMC is an industry association and a private initiative by the oil marketing operators in Ghana. It is an advocacy institution established to help direct downstream policy, legislation and regulation and pursue research towards the development of the downstream sector.	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
	Tanker Owners Union	The Tanker Owners Union (TOU) of Ghana is the main umbrella organisation for tanker owners in Ghana. It is an autonomous body affiliated with the TUC. It pursues its own activities but within the framework of their constitution and the TUC charter.	
		The TOU is the official mouthpiece of unionised tanker owners in its dealings with other energy sector players.	
	Ghana Chamber of Mines	The Ghana Chamber of Mines is the main minerals industry association in Ghana. The Chamber represents the collective interests of companies involved in mineral exploration, production, and processing in Ghana. Its activities are entirely funded by its member companies, which produce majority of Ghana's mineral output. The Chamber has represented the industry's interests since 1928. The Chamber's mission is to represent the Mining Industry in Ghana using the resources and capabilities of its members to deliver services that address members,	1, 2, 3
		government, and community needs, in order to enhance development	
	Ghana National Chamber of Commerce and Industry (GNCCI)	The Ghana National Chamber of Commerce and Industry (GNCCI) is an association of business operators, firms, and industries with interests spanning every sector of private enterprise in Ghana. As an advocacy organisation, the GNCCI was established with the prime objective of promoting and protecting commercial and industrial interests in the country (Legislative Instrument 611 of 1968).	1, 2, 3
		The Chamber represents the voice of the business community with total commitment to playing a leadership role towards propelling Ghana's economy to higher heights. As an autonomous business support organisation, it serves as a link between established businesses, the emerging sector, and government at the various levels while offering its members a myriad of business support services.	
	Association of Small-Scale Industries (ASSI)	The ASSI was established on the initiative of the National Board for Small Scale Industries and some individual small-scale entrepreneurs. The initiative was taken in 1986 and ASSI was established.	1, 2, 3, 4

Stakeholder Group	Organisation	Stakeholder Role and Interest	
		ASSI is an apex body or umbrella association for several small-scale industries associations throughout the country. Thus, different private sector industry associations constitute ASSI and not individual small-scale entrepreneurs. ASSI is a non-profit making, autonomous, non-political, and private sector umbrella body of trade associations in Ghana.	
	Ghana Employers Association (GEA)	 GEA is a national Employers' Organisation whose membership comprises enterprises operating in all sectors of the economy. Ghana Employers' Association (GEA) advocates for real changes to the policies that matter most to businesses. Policy is shaped by the diverse membership, comprising of both local and international, large, medium, and small enterprises. Ghana Employers' Association (GEA) communicates the Ghanaian business voice to key stakeholders locally and internationally. The association also provides a wide range of professional services and management training to members in all aspects of human resource management, industrial relations, occupational health and safety, employee relations and employment law. 	1, 2, 3
Regional Players	ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)	In 2010, ECREEE was established in Cape Verde with the support of the ECOWAS Commission, United Nations Industrial Development Organisation (UNIDO) and the Austrian and Spanish Governments. ECREEE works in 15 West African countries including states Cape Verde and Guinea Bissau. ECREEE coordinates and executes regional programs, projects, and activities in the areas of capacity and policy development, information, and data sharing, as well as investment and business promotion. ECREEE aspires to contribute to the sustainable economic, social, and environmental development of West Africa by improving access to modern, reliable, and affordable energy services, energy security and reduction of negative environmental externalities of the energy system (e.g., GHG emissions, local pollution).	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
	West African Power Pool (WAPP)	WAPP is a specialised institution of ECOWAS. It covers 14 of the 15 countries of the regional economic community (Benin, Côte d'Ivoire, Burkina Faso, Ghana, Gambia, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo). An international organisation of public interest, the WAPP is created to ensure Regional Power System integration and realisation of a Regional Electricity Market. It is made up of Public and Private Generation, Transmission and Distribution companies involved in the operation of electricity in West Africa. It has to date, 26 member companies. Created by Decision A/DEC.5/12/99 of the 22nd Summit of the Authority of ECOWAS Heads of State and Government, WAPP has the aim of promoting the power supply in the West African sub-region.	1, 2, 3
	ECOWAS Regional Electricity Regulatory Authority (ERERA)	ERERA is the regulator of regional cross-border trade of electricity in West Africa and the regional regulator of cross border electricity interconnections in West Africa. Within the framework of the Energy Protocol and the West African Power Pool Program (WAPP), the Member States of ECOWAS in January 2008 established the ECOWAS Regional Electricity Regulatory Authority (ERERA) by Supplementary Act A/SA.2/1/08 as a specialised institution of ECOWAS. ERERA's main objective is to ensure the regulation of interstate electricity exchanges and to give appropriate support to national regulatory bodies or entities of the Member States. ERERA's governance structure is provided by Council Regulation C/REG.27/12/07 of 15th December 2007 on the Composition, Organisation, Functions and Operations of the Authority.	1, 2, 3
Consumers	Bulk Consumers	A bulk consumer, in respect of electricity consumption, is any consumer of electricity with a Maximum Demand of at least 500KVA consistently for a consecutive period of 3 months or a minimum annual energy consumption of 1 million kilowatt-hours (kWh).	1, 2, 3
	Residential, Non- Residential and Industrial Customers	Domestic, non-residential, and industrial consumers of electricity and LPG	1, 2, 3

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³
Developme nt Partners	KfW Development Bank	KfW Development Bank has been helping the German Federal Government to achieve its goals in development policy and international development cooperation for more than 50 years.	1, 2, 3
		On behalf of the German Government, KfW has been promoting development in Ghana since 1961, with a total commitment of close to EUR 1 billion up to date. KfW Development Bank currently focuses on three areas in Ghana, namely agriculture, sustainable economic development, and governance.	
		Efforts in the agricultural sector aimed at supporting smallholders through tripartite agreements between off- takers, rural banks, and out-growers, while the focal area sustainable economic development intends to strengthen the Ghanaian financial sector, for example, by funding e- zwich, a branchless banking system in rural areas. Furthermore, KfW supports the Ghanaian government to actively promote decentralisation by empowering districts to autonomously implement smaller infrastructure projects. In addition, KfW by supporting the Ghana Audit Service and the Ghana Revenue Authority helps the Government of Ghana to improve public financial management.	
		Beyond the focal areas, KfW finances (renewable) energy- sector projects and an innovative pilot project in the field of e-waste.	
NGOs, CSOs, and Research Institutions		NGOs, CSOs and research institutions play an important role in promoting sound management of electricity, oil and gas resources and mitigating negative socio-economic, political, and environmental impacts. They facilitate the involvement of grassroots communities, and assess and monitor the impact of government policies, the performances of government agencies, among others. Some of the NGOs and research institutions in the power sector include:	1, 2, 3, 4
		NGOs: 360 Ghana, Centre for Energy, Environment, and Sustainable Development (CEESD), Energy Foundation, KITE, etc.	
		Research Institutions: Kintampo Health Research Centre, University of Energy and Natural Resources,	

Stakeholder Group	Organisation	Stakeholder Role and Interest	PRA ¹³	
oroup		University of Mines and Technology, Oil and Gas Management (of University of Cape Coast), among others		
Political Parties/ Unions/ Associations		Political parties, unions, and associations have often vehemently opposed tariff increases in the public press.		
Producers of LPG	Ghana National Gas Company (GNGC)	 Ghana National Gas Company (GNGC) is the nation's premiere mid-stream gas business company that owns and operates infrastructure required for the gathering, processing, transporting, and marketing of natural gas resources in Ghana and internationally. GNGC although incorporated in July 2011, started official production in November 2014. The company is responsible for producing and prospecting of lean gas, condensate, LPG and isopentanes and further, plays a key role in accelerating the nation's industrial sector. Ghana Gas operates on a business model and thus, obtains 	4	
		revenue through the processing, transportation and sale of natural gas and natural gas liquids. GNGC currently supplies gas to Volta River Authority (VRA) for power generation.		
	Tema Oil Refinery	Established in 1963, and being the premier and stellar refinery in Africa, TOR has been the engine of growth for the economy. TOR strives to achieve the President's vision of reforming and transforming the country's oil and gas sector to ensure efficiency while meeting the energy demands of Ghana and the sub-region.	4	
Producers of Cylinder	Ghana Cylinder Manufacturing Company (GCMC), Sigma Gas Ghana Ltd (SGGL) Appeb Cylinder Manufacturing Company and Awarrior Cylinder Manufacturing Company)	LPG cylinders used in Ghana are either produced locally or imported second-hand. There are two LPG cylinder manufacturing companies in Ghana. These are the Ghana Cylinder Manufacturing Company (GCMC) and the Sigma Gas Ghana Ltd (SGGL), both located in Accra. The cylinders are sold through agencies and dealers to the public. Ghana Cylinder Manufacturing Company Limited (GCMC) manufactures good quality LPG cylinders and stoves designed to meet the specific needs of its target market.	4	

Stakeholder Group	Organisation	Stakeholder Role and Interest	
Distributors of LPG	Liquefied Petroleum Gas (LPG) Marketing Companies (LPGMCs) /Oil Marketing Companies (OMCs)	The LPGMCs and OMCs oversee the distribution and marketing of petroleum products in Ghana.	4
Transporte rs		The Transporters serve as the link between the LPGMCs/OMCs and the retailers. The Transporters haul LP Gas from the TOR to the various retail outlets across the country on behalf of the LPGMCs/OMCs. Some LPGMCs/OMCs own a fleet of LPG tank trucks and thus double as transporters of the product as well. The OMCs mostly deal directly with industrial clients while the LPGMCs focus on retailers.	4
Industry Associations	LPG Marketing Companies Association of Ghana (LPGMCAG)	LPG Marketing Companies Association of Ghana (LPGMCAG) is an industry association and a private initiative by the LPG Marketing Companies in Ghana. It is an advocacy institution established to help direct policy, legislation, and regulation on LPG.	4
	Ghana Alliance for Clean Cookstoves and Fuels (GHACCO)	The Ghana Alliance for Clean Cookstoves and Fuels (GHACCO) was initiated in March 2012 by twenty-three (23) stakeholder representatives of Civil Society Organisations (CSOs), NGOs, Private Producers, Distributors, Financial Institutions, Researchers, Grass root practitioners, Marketers, Donor Agencies and Partners to promote coordination, information sharing and enhance capacity development among stakeholders, particularly actors in the cookstove sector in Ghana.	4
		The Ghana Alliance for Clean Cook stoves and Fuels (GHACCO) has been established as a strong stakeholder platform to lead the front to catalyse a revolution in the cookstove sector and mobilise high level national and donor commitments towards the goal of universal adoption of clean cook stoves and fuels in Ghana. The network has an overriding target to foster the adoption of clean cook stoves and fuels by 4 million households in Ghana and distributing 5 million cook stoves by 2020.	

A1.2 Stakeholder Analysis

Stakeholder analysis is necessary in determining the extent of each stakeholder's influence on the Program. It allows for identifying stakeholders likely to be affected by the Program, and how the Program should work with stakeholders with different levels of interest and influence.

KEEP SATISFIED	MANAGE CLOSELY
Environmental Protection Agency (EPA) Petroleum Commission Ghana Standards Authority Ghana National Petroleum Corporation (GNPC) National Petroleum Authority (NPA) Energy Commission (EC) Public Utilities Regulatory Commission (PURC)	Volta River Authority Bui Power Authority Electricity Company of Ghana (ECG) Northern Electricity Distribution Company of Ghana (NEDCo) Ghana Grid Company Limited (GRIDCo) Independent Power Producers (IPPs) Ghana National Gas Company (GNGC) Tema Oil Refinery Ghana Cylinder Manufacturing Company (GCMC) Ministry of Energy (MoEn) Ministry of Finance World Bank
MONITOR	KEEP INFORMED
ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) West African Power Pool (WAPP) ECOWAS Regional Electricity Regulatory Authority (ERERA) Oil Marketing Companies (OMCs) Transporters	Association of Ghana Industries Trade Union Congress Ghana Technology Chamber Private Enterprise Federation Consumer Protection Agency Chamber of IPPs Association of Oil Marketing Companies (AOMC) Ghana Chamber of Mines Ghana National Chamber of Commerce and Industry Association of Small-Scale Industries Ghana Employers Association LPG Marketing Companies Association of Ghana (LPGMCAG) Ghana Alliance for Clean Cook stoves and Fuels (GHACCO) Bulk Consumers Non-Governmental Organisations, Civil Society Organisations (CSO) and Research Institutions Residential, Non-Residential and Industrial Consumers LPG Marketing Companies (LPGMCs) Ghana LPG Operators Association (GLIPGOA) Political Parties/Unions/Associations

presents the analyses of stakeholders by dividing them into four groups, each occupying one space in the quadrant. The matrix helps us to understand the influence each stakeholder has on the Program and/or the process and potential success of the Program. This involves plotting stakeholders on a graph in terms of their influence over the Program and their interest in the Program. This, in turn, helps to identify the kind and level of engagement needed with them. The subsequent paragraphs present a description of the stakeholders and their corresponding location within the quadrants.

High influence-highly interested (manage closely): These stakeholders must be kept close and managed with the utmost care. These stakeholders are likely to be decision makers and have the biggest impact on the Program success. They must be kept close to manage their expectations. These stakeholders can/will exert major influence over the Program on a regular basis. These stakeholders are found in the upper-right corner of the

grid. These stake holders include MoEn, Ministry of Finance, World Bank, VRA, BPA, ECG, NEDCo, GRIDCo, Independent Power Producers (IPPs), Ghana National Gas Company (GNGC), Tema Oil Refinery, Ghana Cylinder Manufacturing Company (GCMC).

High influence-less interested (keep satisfied): Provide sufficient information to these stakeholders to ensure that they are up to date but not overwhelmed with data. These stakeholders need to be kept in loop with what is happening on the Program and must be ensured that their needs are fulfilled. Even though they may not be interested in the outcome, they yield power. These types of stakeholders should be dealt with cautiously because they could use their power in a negative way if they become unsatisfied. They may not be particularly interested in the outcome of the Program, but still wield significant power over your ability to execute on time and budget. The stakeholders reside in the upper left-hand corner of the grid. Examples of this type of stakeholders include Environmental Protection Agency (EPA), Petroleum Commission, Ghana Standards Authority (GSA), Ghana, National Petroleum Corporation (GNPC), National Petroleum Authority (NPA), EC, Public Utilities Regulatory Commission (PURC).

Low influence-highly interested (keep informed): Keep these stakeholders adequately informed, talk to them to ensure that no major issues arise. These stakeholders can often be very helpful with the detail of the Program. Because of their relatively low influence abilities, they can do little harm to the Program, but still are interested in the progress or ultimate result. Typically, just keeping them informed and updated on the Program is sufficient. For example, ensuring they have access to relevant information on the Program's website and then updating the page regularly is enough interactions. Also, the implementers can periodically send out newsletters or press releases to these types of stakeholders. Examples of these stakeholders include AGI, Trade Union Congress (TUC), Ghana Technology Chamber, Private Enterprise Federation (PEF), Consumer Protection Agency, Chamber of IPPs, AOMC, Ghana Chamber of Mines, Ghana National Chamber of Commerce and Industry, ASSI, Ghana Employers Association, LPG Marketing Companies Association of Ghana (LPGMCAG), Ghana Alliance for Clean Cook stoves and Fuels (GHACCO), Bulk Consumers, Non-Governmental Organisations, Civil Society Organisations (CSO) and Research Institutions, Residential, Non-Residential and Industrial Consumers and political parties/associations.

Low influence-less interested (monitor): Provide these stakeholders with minimal communication. Monitor these stakeholders, but do not spend time and energy with excessive communication. Often, simply periodically monitoring them is sufficient i.e., primarily to ensure that neither their power nor interest levels have materially changed. These stakeholders include ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), West African Power Pool (WAPP), ECOWAS Regional Electricity Regulatory

Authority (ERERA), LPG Marketing Companies (LPGMCs), Oil Marketing Companies (OMCs), LPG Marketing Companies (LPGMCs), Transporters.

	KEEP SATISFIED		MANAGE CLOSELY
High	Environmental Protection Agency (EPA) Petroleum Commission Ghana Standards Authority Ghana National Petroleum Corporation (GNPC) National Petroleum Authority (NPA) Energy Commission (EC) Public Utilities Regulatory Commission (PURC)	Volta River Authority Bui Power Authority Electricity Company of Ghana Northern Electricity Distributi Ghana Grid Company Limited Independent Power Producers Ghana National Gas Company Tema Oil Refinery Ghana Cylinder Manufacturing Ministry of Energy (MoEn)	on Company of Ghana (NEDCo) (GRIDCo) (IPPs) (GNGC)
Influence		Ministry of Finance World Bank	
Iuc	MONITOR		KEEP INFORMED
Inf	ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) West African Power Pool (WAPP) ECOWAS Regional Electricity Regulatory Authority (ERERA) Oil Marketing Companies (OMCs)	Association of Ghana Industrie Trade Union Congress Ghana Technology Chamber Private Enterprise Federation Consumer Protection Agency	25
Low	Transporters	Chamber of IPPs Association of Oil Marketing C Ghana Chamber of Mines Ghana National Chamber of Co Association of Small-Scale Ind	ommerce and Industry
Ľ		Ghana Employers Association	sociation of Ghana (LPGMCAG)
		Non-Governmental Organisati Institutions Residential, Non-Residential a LPG Marketing Companies (LI Ghana LPG Operators Associa)	PGMCs)
		Political Parties/Unions/Association	
	Low	Interest	High

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A2.3 Summary of Feedback from Stakeholders Consultations

Energy Commission (EC): The EC currently has no grievance mechanism in place, although it recognises that it is imperative to institute such a mechanism. They do not conduct training needs assessment and neither do they have an occupational health and safety manual for staff. The EC does not have the full complement of human resources with the preferred technical capabilities to fully deliver on its mandate. One of the causes of the latter was attributed to undue political influence. The commission has integrated continuous professional development and training programs in its action plan for staff to acquire the core competencies and skills-set required to effectively undertake its regulatory functions.

Public Utilities Regulatory Commission (PURC): Some of the issues that have defined the energy sector include the historical antecedents of pricing from free, to subsidised, and to market pricing; tariff adjustment during election years; inability of the utility to collect the approved tariffs; industry paying more than the cost of their service; and load shedding as a precursor to tariff increases. The PURC has a digitalised consumer complaints unit for addressing internal and external grievances. To ensure that the PURC delivers on its regulatory mandate and assert the autonomy granted it by legislative instruments, staff should have the required education and undergo training and internships with international regulators, such as the Ontario Energy Board.

National Petroleum Authority (NPA):

The National Petroleum Authority (NPA) plays a crucial role in ensuring safety and efficiency within the petroleum downstream industry in Ghana. It was established by an Act of Parliament (NPA Act 2005, Act 691) to regulate the petroleum downstream industry in Ghana. As a regulator, the NPA ensures that the industry remains efficient, profitable, fair, and at the same time, ensures that consumers receive value for money. It oversees various commercial activities, including importation, exportation, refining, storage, distribution, marketing, and sale of petroleum products.

The NPA has implemented the CRM to enhance safety and convenience. By promoting the use of cylinders that are recirculated, it aims to reduce the risks associated with LPG usage. The CRM ensures safer access to LPG and aims to increase its adoption rate to 50 percent. The NPA emphasizes adherence to safety measures in LPG usage to prevent gas-related explosions and resultant injuries and deaths. It enhances capacity and safety standards through measures such as: ensuring compliance with laws, regulations, and guidelines governing petroleum activities, including health, safety, and environmental standards; addressing safety concerns related to LPG cylinders; de-commissioning of High-Risk Refilling Plants by ensuring safe operations; and capacity building through training and outreach to industry players.

The NPA protects the interests of consumers by ensuring fair practices, quality products, and transparent pricing. It monitors prices of petroleum products in accordance with prescribed pricing formulas. The NPA's commitment to safety, regulatory oversight, and

consumer protection contributes significantly to Ghana's petroleum industry while safeguarding public well-being.

Ghana National Petroleum Company (GNPC): GNPC considers environmental and social issues important. Its occupational safety, health, and environment (OSHE) policy has been approved by the board. GNPC ensures low environmental footprints by enforcing compliance with the required environmental and social safeguards. The institution takes education, economic empowerment, which includes livelihoods (compensations and employment) and social and environmental needs into consideration when providing support for vulnerable groups.

Electricity Company of Ghana (ECG): ECG demands transparency in tariff setting and expects tariffs to reflect cost. The environmental components of ECG activities are approved by the management board and the department in charge of occupational safety, health, and environment (OSHE). ECG reviews the works of its independent contractors, who are required to comply with its OSHE requirements. It has a grievance mechanism in place, though PURC is mandated to receive complaints on ECG's behalf. The complaints reporting guideline of the ECG does not explicitly indicate specific timelines within which complaints are addressed and what should necessitate escalation to the next level. Land acquisition is integral to its activities and with government support, it meets their right of way payment requirement. Compensation mechanisms are in place, but resettlement is not common; when it occurs, the government provides the necessary assistance. The LVD is required to relocate PAPs on suitable alternative land with due regard for the economic well-being and social and cultural values of the inhabitants concerned; however, on linear development projects¹⁶, compensation is generally cash only.

Ghana Grid Company Limited (GRIDCo): GRIDCo's Corporate Social Responsibility (CSR) covers three (3) main areas: education, health, and environment and community development. Appropriate attention is given to the control of vegetation within the Right-of-Way (ROW) of the transmission corridors in close collaboration with the relevant stakeholders and communities. GRIDCo is committed to safety standards and environmental practices. Besides financial challenges, gas supply issues in the power system, power outages and loss of transmission have been the major challenges in its operations in 2021. Technical faults on some of the major transmission lines have on occasion culminated in overloads on adjacent transmission lines, leading to a sequence of

¹⁶ Linear development project means a land-disturbing activity that is linear in nature such as, but not limited to, (i) the construction of electric and telephone utility lines, and natural gas pipelines; (ii) construction of tracks, rights-of-way, bridges, communication facilities and other related structures of a railroad company; (iii) highway construction projects; (iv) construction of stormwater channels and stream restoration activities; and (v) water and sewer lines. Private subdivision roads or streets shall not be considered linear development projects.

trips and an eventual power system shutdown in the country. Sometimes, shutdowns result from systems maintenance.

Northern Electricity Distribution Company (NEDCo) of Ghana: NEDCo covers about 64 percent of the geographical area of Ghana but the customer density of the operating area is low with access to electricity in the NEDCo operating areas put at 65 percent at the end of 2017 (as against 84 percent for the entire country). NEDCo has an environmental and social compliance regime, which guides all their operations. The office of Health, Safety and Environment has the responsibility to ensure that the NEDCo and its third-party contractors strictly adhere to the required environmental assessment regulations. All staff receive training on the identification and mitigation of Program-specific environmental and social risks. Just like VRA, stakeholder engagement is an intrinsic component of its institutional arrangements for good governance and social conflict reduction. There is an internal mechanism for addressing grievances and customers' complaints.

Volta River Authority: VRA has contributed immensely to the rate of electrification in the country. As a result, Ghana has one of the highest electrification rates in sub-Saharan Africa, at 85 percent. As of September 2019, Ghana had installed grid-connected generation of approximately 5 gigawatts (GW), although only 4.4 GW is considered "dependable capacity" due to technical limitations (i.e., maintenance) and fuel supply limitations (i.e., transportation related and financial). The system is comprised of approximately one-third hydro and two-thirds thermal resources, with solar photovoltaic (PV) contributing less than one percent. The authority has an environmental and social regime that guides all their operations. The office of Health, Safety and Environment has the responsibility to ensure that VRA and its third-party contractors strictly adhere to all required environmental assessment regulations. All staff receive training on the identification and mitigation of Program-specific environmental and social risks. Stakeholder engagement is intrinsic to its institutional arrangement aimed at good governance and minimisation of social conflict. There is an internal mechanism for redressing grievances and addressing customers' complaints.

Bui Power Authority: The energy portfolio of Bui power is renewables. About 50MW hydro is in operation currently and another 100MW each is planned for Bolgatanga and Bui. In addition, BPA operates a solar farm and 54kw mini hydro plant. The authority has secured four land banks in the northern part of Ghana and maintains a vibrant afforestation program. This is consistent with its renewable energy mandate. BPA operates responsive environmental and social policies. Health, safety, and environmental issues feature prominently in its management meetings and program. BPA does not have direct tariff approval from the PURC unlike the VRA and ECG, given that it does not directly sell power. However, it has a power purchase bilateral agreement with the VRA and ECG. One of the main challenges it faces is compensation for the Bui lands acquired

by government. Bui power compensates for crops on the land whereas government is responsible for the compensation of the land. BPA encountered operational challenges when Burkina Faso dammed the Black Volta upstream.

Ghana National Gas Company (GNGC): The portfolio of the GNGC consists of 95 percent to the power sub-sector and 5 percent to the non-power sub-sector. The office of Health, Safety and Environment has the mandate to ensure that the GNGC and third-party contractors strictly adhere to the environmental assessment regulations of Ghana. In addition, there is a community relations department, which maintains rapport between the company and the communities in which their activities could potentially impact. GNGC has benefitted immensely from the natural gas sub-group and the Cash Waterfall Mechanism particularly in terms of debt payment and revenue allocation. Unlike the VRA and ECG, GNGC does not deal directly with the PURC. Although activities are predominantly offshore, there are onshore installations, which require environmental regulatory compliance and sustained community engagement.

Ghana Alliance for Clean Cooking (GHACCO): This is an alliance of over 240 organisations and individual members established in 2013. Members are producers, distributors, and marketers of clean cooking technologies – including brickets, ethanol, and LP – in Ghana. SNV provided initial support to GHACCO, and later together with the EC and the *Gesellschaft für Internationale Zusammenarbeit* (GIZ), supported its social enterprise initiative. The support included technical, research, and equipment. To build a groundswell of support for clean cooking stoves, SNV also supported the Voice for Change Advocacy, which ended in 2020. GHACCO did advocacy on bioenergy to engage government to approve the draft bioenergy policy, in collaboration with the MoE, MESTI, NPA, EC, and the Ministry of Local Government. GHACCO is also active in the development of the National Clean Cooking Strategy. As a member of the Pan African Bioethanol Platform, GHACCO proposes the inclusion of biogas, ethanol, and micro-digesters for households.

Kintampo Health Research Centre (KHRC): KHRC is one of the three health research centres of the Research and Development Division (RDD) of the Ghana Health Service (GHS). KHRC offers a unique platform for the conduct of public health and biomedical research that influences policy direction and program implementation to improve well-being and reduce ill health in Ghana and globally. The centre collaborated with Global Alliance for Clean Cookstoves to conduct the Household Air Pollution and Adult Respiratory Health: Evidence from GRAPHS, which ended in 2018¹⁷.

LPGMCs: This is an apex body of marketing companies consisting of over 100 institutional and individual members. There is a groundswell of support for stakeholder engagement in the energy sector to elicit better decision-making and policy outcomes.

¹⁷ https://kintampo-hrc.org/solar-eclipse-eye-health-warning/ accessed on June 24, 2021.

The use of both LPG and charcoal is highest in the Greater Accra Region. This situation requires research and policy attention. Due to recent accidents involving LPG explosions, there has been a ban on land development. Members are concerned about encroachment on lands for which compensations have been paid. LPGMC has petitioned Cabinet to intervene, through the Minister of Energy. Government is pushing for the introduction and integration of CRM in their operations. Although this is laudable from environmental and health perspectives, members of the association claim they will encounter immense infrastructure challenges during the transition. Petrol is relatively more expensive than LPG therefore commercial drivers often convert their combustion system from petrol to LPG creating higher demands on the product. Sometimes, the retrofitting is not properly done, leading to potentially lethal hazards such as explosion. The number of LPG users may be increasing but there is the need to ascertain if the increase is due to new users or existing users who are purchasing more gas cylinders.

Association of Ghana Industries (AGI): The AGI indicated that Ghana's electricity tariffs are among the highest in West Africa, and that any upward adjustment will be detrimental to the fortunes of industry, particularly small and medium-scale enterprises (SMEs). AGI indicated the need for reliable and efficient service delivery and for a tariff regime that is structured in a manner so the utility service providers can recover cost in order to remain viable. It added that the current arrangement wherein residential consumers are subsidised by industry is counterproductive because it burdens manufacturers and affects business competitiveness. The association also indicated that for its members to adequately compete under the Africa Continental Free Trade Area (AfCFTA), electricity tariffs would have to be revised downwards.

Africa Centre for Energy Policy (ACEP): The revenue losses from illegally connected meters worsens the already high commercial losses being experienced in the power sector, which has manifested in the financial distress the sector is currently faced with. This raises the need for quick reforms in addressing the challenge of illegally connected SHEP meters and the wider problem of illegal connections and non-payment for power consumption. Government's action on renewable energy has been negatively impacted by the excess capacity burden it faces. As a result, the government has extended its suspension of renewable energy Power Purchase Agreements (PPA) to licences for embedded generation (private arrangements between renewable energy suppliers and consumers). This is aimed at sustaining demand for grid electricity to account for the excess capacity over time even though increasingly, renewable energy is becoming a more competitive option for small businesses.

Annex 2: List of Stakeholders Interviewed

Stakeholder	Contact Person	Position
Power Generators		
Volta River Authority	Kojo Sanule	Area Manager, Accounts
	Clement Boakye	Principal Finance Officer, office of
		CEO
Bui Power Authority (BPA)	George Tettey	Dep. Chief Executive Officer (Finance and Services)
Independent Power Producers (IPPs)	Theophilus Sackey	Director and Chief Executive,
		CenPower
Transmission and Distributors of Power		
Electricity Company of Ghana (ECG)	Moses Okley	Finance Manager/Head of Treasury
	Muhammed A. Abdul-Quadir	Design Engineer
Electricity Company of Ghana (ECG)	Smith Graham	General Manager, Health, Safety and Environment
Northern Electricity Distribution Company of Ghana (NEDCo)	Noble Dormenu	Director, Commercial
Ghana Grid Company Limited (GRIDCo)	Samuel Nkansah	Finance Director
Producers of LPG		
Ghana National Gas Company (GNGC)	Stephen Jomo	Senior Manager, Commercial Operations
	Riverson Oppong	Manager, Commercial Operations
Tema Oil Refinery	Francis Adu Tutu Boateng	Director
Producers of Cylinder		
Ghana Cylinder Manufacturing Company (GCMC)	Frances Asiam	Chief Executive Officer
Sigma Gas Ghana Ltd (SGGL)	Information Desk	
Policy Makers and Implementers		
Ministry of Energy (MoE)	James Demitrus	Director, Revenue Monitoring
	Francis Addo Baffoe	Head, Public Investment
Ministry of Finance	Eric Okumko	Senior Budget Officer
	Joseph Sarpong	Head, Energy and Petroleum Unit
		(ESRP)
Development Partners		
World Bank	Justice Odoi	Environment Specialist

Stakeholder	Contact Person	Position
	Nneka Okereke	Senior Social Development Specialist
KfW Development Bank	Jochen Sinn	Environment Specialist
Regulatory Agencies		
Environmental Protection Agency (EPA)	Ebenezer K. Appah-Sampong	Deputy Executive Director
Petroleum Commission	Vincent Yankey	Director, Finance and Administration
Ghana Standards Authority	Benjamin Otoo	Director, Finance and Administration
Ghana National Petroleum Corporation (GNPC)	Joseph Dadzie	Deputy Chief Executive, Commercial
National Petroleum Authority (NPA)	Sheila Abiemo	Director, Projects M&E
Energy Commission	Vitus Tankpa	Senior Program Officer, Social, Environmental Impact and Technology Assessment (SEITA)
Public Utilities Regulatory Commission (PURC)	Simons Yao Akorli	Director, Regulatory Economics and Research
Regional Players		
ECOWAS Centre for Renewable Energy and Energy Efficiency	Kofi Adu Agyarko	Deputy Director
(ECREEE)	Kwabena Ampadu Otu-Danquah	Head, Renewable Energy Division
West African Power Pool (WAPP) ECOWAS Regional Electricity Regulatory Authority (ERERA)	Vitus Tankpa Vitus Tankpa	Senior Program Officer, Social, Environmental Impact and Technology Assessment (SEITA) Senior Program Officer, Social,
	·	Environmental Impact and Technology Assessment (SEITA)
Distributors of Oil and Gas		
LPG Marketing Companies (LPGMCs)	Kwaku Agyemang Duah	Chief Executive Officer
Oil Marketing Companies (OMCs)	Kwaku Agyemang Duah	Chief Executive Officer
Industry Associations		
Association of Ghana Industries	Nathaniel O. Quarcoopome	Director, Finance and Administration
Trade Union Congress	Anthony Yaw Baah	Secretary General
Ghana Technology Chamber	Kwabena Frimpong	Program Officer
Private Enterprise Federation	Nana Osei Bonsu	Chief Executive Officer
Consumer Protection Agency	Benjamin Akoto	Chief Executive Officer
Chamber of IPPs	Elikplim Kwabla Apetorgbor	Chief Executive Officer
Association of Oil Marketing Companies (AOMC)	Kwaku Agyemang Duah	Chief Executive Officer

Stakeholder	Contact Person	Position
Ghana Chamber of Mines	Sulemanu Koney	Director
Ghana National Chamber of Commerce and Industry	Benedicta Mensah	Program Officer
Association of Small-Scale Industries (ASSI)	Saeed Bawah Moomen	Chief Executive Officer
Ghana Employers Association	Alex Frimpong	Chief Executive Officer
LPG Marketing Companies Association of Ghana (LPGMCAG)	Kwaku Agyemang Duah	Chief Executive Officer
Ghana Alliance for Clean Cookstoves and Fuels (GHACCO)	Mohammed Aminu Lukumanu	Executive Director
	Eva Larko	Program Officer
Non-Governmental Organisations, Civil Society Organisat	ions (CSO) & Research	
Africa Centre for Energy Policy	Benjamin Boakye	Executive Director
	Charles Ofori	Policy Lead, Climate and Energy
		Transition
Kintampo Health Research Centre	Kwaku Poku Asante	Research Fellow
CSIR-Institute of Industrial Research	Gabriel Laryea	Principal Research Scientist
Consumers		
Bulk Consumers-Cirrus Oil	Ivy Apea Owusu	Chief Executive Officer
Residential, Non-Residential and Industrial Consumers		

	Bank Policy for	Indicators to consider	Questions
-	Program-for- Results Financing:		
Core PrincipleEnvironmental and1: Generalsocial managementPrinciple ofprocedures andEnvironmentaprocesses are designed1 and Socialto (a) promoteManagementenvironmental andsocial sustainability inProgram design; (b)avoid, minimise, orsocial	• Operate with a framework to guide environmental and social assessments at the program level	 Does the institution have a corporate environmental policy? Evidence of this? Is there an environmental framework that guides the environmental and social assessments of the institution's activities? Can you give a recent example of when this was done (state the year of the most recent one)? Does your institution have a permanent collaborative arrangement (MOU, MOA) with other organisations in the sector for environmental and social assessments? 	
	mitigate against adverse impacts; and (c) promote informed decision-making relating to a program's environmental and social effects.	 Incorporate recognised elements of environmental and social assessment good practice, including: early screening of potential effects. consideration of strategic, technical, and site alternatives (including the "no action" alternative). explicit assessment of potential induced, cumulative, and trans- boundary impacts. identification of measures to mitigate adverse environmental or social impacts that cannot be 	 Is there a unit in the institution responsible for managing the impact of the institution's activities on the environment and the people or conducting environmental due diligence? Are the positions in the unit filled? Can you share the job descriptions of these positions? Describe the activities the individuals are responsible for? What are the official titles of the position? Is the environmental unit (if it exists) a core part of every project implementation? If there is no such a unit, is there someone with this responsibility written into their job responsibilities? Does the institution conduct an environmental and social impact assessment for every project they implement? Can you share a list of projects for which ESIA were carried out? (IF No Environmental Unit: how is this done?) If the institution conducts ESIA, do they update the ESIA if the implementation strategy changes or any other aspects/parts/ of the projects changes or new aspects are introduced?

Annex 3: Questions and Indicators

Core Principles	Bank Policy for Program-for- Results Financing:	Indicators to consider	Questions
	otherwise avoided or minimised. v. clear articulation of institutional responsibilities and resources to support implementation of plans	 Does s/he conduct frequent (monthly) environmental monitoring of the Environmental and Social Impact Assessment of the institution's projects and provide reports on them? Which institution approves the ESIA? What compliances are necessary when implementing a project that are likely to have an impact on the environment? Has the institution ever sought compliance certificates/permits from these institutions? Does the institution conduct ESIA for all projects irrespective of the source of funding (self, government, or donors)? Describe the typical activities that go into conducting an environmental assessment? What are the considerations when such a source of the typical activities that go into conducting an environmental assessment? What are the considerations when such a source of the typical activities that go into conducting an environmental assessment? What are the considerations when such a source of the typical activities that go into conducting an environmental assessment? What are the considerations when such the source of the typical activities that go into conducting an environmental assessment? What are the considerations when such the source of th	
		• Responsiveness and accountability through stakeholder consultation, timely dissemination of program information, and responsive grievance redress measures.	 activities are being implemented? Is stakeholder engagement a core part of the institutions activities prior to implementing any project? How often are stakeholders engaged once a project is underway Does the institution have a Grievance redress mechanism for stakeholders? (IF yes, can you describe it?) [Things to verify/follow ups: anonymous reporting; who constitutes the panel; does the panel allow for aggrieved parties to provide further particulars to present grievance; how many levels exist; who is the final arbiter; does it allow consumers/lay people affected by the project to report?] How often do the panel members of the GRM sit? How often is this mechanism used? When was the last time it was used? What was the outcome? If a mechanism does not exist, what measures do the institution have to address complaints What is the extent of collaboration between your institution and allied organisations in terms of project implementation?

Core Principles	Bank Policy for Program-for- Results Financing:	Indicators to consider	Questions
			• How often does your institution meet with other relevant organisations regarding implementation of your programs, policies, plans and projects?
			• Is there a grievance mechanism for staff and subcontractors?
Core Principle 3: Public and	Environmental and social management	• Promotes community, individual, and worker safety through the safe	• Is there a policy on the maintenance of physical infrastructure in public spaces (transmission lines; transformers; pylons; etc.)?
Worker Safety	procedures and processes are designed	design, construction, operation, and maintenance of physical	• Does the institution have a standing agreement with a contractor for maintenance purposes?
	to protect public and worker safety against	infrastructure, or in carrying out activities that may be dependent	• How do you ensure that all your subcontractors follow safety protocols?
	the potential riskson such infrastructure with safetyassociated with (a)measures, inspections, orconstruction and/orremedial works incorporated as	• What regulations or policies are in place to protect the public against accidents from physical infrastructure? Or to warn the public on the dangers of human activities near or under such infrastructure?	
	operations of facilities	needed.	• How are such policies or regulations enforced?
	or other operational practices developed or promoted under the program; (b) exposure	• Is there a regulation/guideline/procedure for individuals negatively affected by the institution's infrastructure either through acts of nature or otherwise to lodge complaints?	
	to toxic chemicals, hazardous wastes, and		• Do you have regulations that ensures the safety of your workers and subcontractors?
	otherwise dangerous materials; and (c)		• Do you have a department responsible for overseeing the safety of workers on the field and off the field?
	reconstruction or rehabilitation of infrastructure located		• Is there an individual whose responsibility it is to ensure all safety protocols are followed? How often are workers trained/refreshed on safety protocols?
	in areas prone to natural hazards.		• Are there regulations/policies that guide the siting of infrastructure? What are some of the guidelines (share a copy with us)
			• How often do you undertake safety assessment both at the office and on the field (where infrastructure is located)

CoreBank Policy forPrinciplesProgram-for-Results Financing	Indicators to consider g:	Questions
	 Promotes use of recognised good practice in the production, management, storage, transport, and disposal of hazardous materials generated through program construction or operations; and promotes use of integrated pest management practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions. 	 (including used transformer oils) in an environmentally friendly manner? (We can get the energy expert to list some examples of potentially hazardous waste) How safe is the storage warehouse for hazardous waste? Can seepage into the soil or underground water occur? Are they placed in above ground storage?

Core Principles	Bank Policy for Program-for- Results Financing:	Indicators to consider	Questions
		• Includes measures to avoid, minimise, or mitigate community, individual, and worker risks when program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.	monitoring plan?
Core Principle 5: Social Consideration s - Indigenous Peoples and Vulnerable Groups	Due consideration is given to cultural appropriateness of, and equitable access to, program benefits giving special attention to rights and interests of Indigenous Peoples and to the needs or concerns of vulnerable groups.	 Undertakes free, prior, and informed consultations if Indigenous Peoples are potentially affected (positively or negatively) to determine whether there is broad community support for the program. Ensures that Indigenous Peoples can participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, the latter (indigenous 	 Refer to the question on stakeholder engagement Follow up to the SE: Are people affected allowed to contribute to project implementation? How? Describe how this is done? Is this a policy/law/regulation requirement?

Core Principles	Bank Policy for Program-for- Results Financing:	Indicators to consider	Questions
		knowledge) to include the consent of the Indigenous Peoples.	
			 in projects that may impact on their lives and on the citizens in particular? Does the institution engage the people before increasing tariffs? Describe how this engagement takes place?
			• Vulnerable Groups: have you ever been contacted for inputs into any power project?
			• Both C & VG: How are you affected by intermittent power supply?
			• Consumers: What factors do you want to see before tariffs are increased?

Core Principles	Bank Policy for Program-for- Results Financing:	Indicators to consider	Questions
			 Consumers: What are your major concerns with the power sector? PURC and CPA (Consumer Protection Agency): their role in tariff setting (describe); is it backed by law? What specific role do they play? Do they engage households to understand the economic and social impact of tariff increases? Including vulnerable groups?
Core Principle 6: Social	Avoid exacerbating social conflict,	• Considers conflict risks, including distributional equity and cultural	• To what degree is staff representative of the population your institution is working with?
Conflict	Conflict especially in fragile sensitivities. states, post-conflict areas, or areas subject to territorial disputes.	sensitivities.	• In areas where one group is in a majority and relations are sensitive, do you consider this in the selection of local staff that implements programming in that region?
			• How and to what degree is all staff aware of the need to be conflict-sensitive?
		• How and to what degree is your institution building capacities for individual practitioners, programs, and the institution to be conflict-sensitive?	
		• How and to what degree is your institution building capacities within the management structures to be conflict-sensitive?	
		• How and to what degree is your institution's hiring and management policies inclusive, equitable and conflict-sensitive?	
		• How and to what degree is your institution's hiring, human resources, and other systems gender-sensitive and equitable?	

Annex 4: Detail Description of Relevant Policies and laws

Environmental and Social Management

Policies on Environmental and Social Management

National Environmental Policy (NEP), 2012

The Ghana National Environmental Policy (NEP) was launched in November 2012 with the vision to sustainably manage the environment to benefit Ghanaians. The objective of the policy is to promote healthy lifestyles and reduce risk factors that arise from environmental, economic, social, and behavioural causes; that is, to promote healthy lifestyles in a healthy environment.

The policy notes that proper management of Ghana's resources requires the redirection of efforts into environmentally sustainable programs and practices. Such programs should protect and preserve the resource base for use by the present and future generations. Assessments of the potential environmental impacts of development projects and planning to mitigate or eliminate these impacts will decrease environmental costs to the economy and ensure cost-effective use of the country's resources. The aim of the NEP is to improve the surroundings, living conditions, and the quality of life of the entire citizenry, both present and future. It seeks to promote sustainable development through ensuring a balance between economic development and natural resource conservation. The policy thus makes a high-quality environment a key element supporting the country's economic and social development.

Environmental Sanitation Policy (Revised), 2010

The Environmental Sanitation Policy was first published in 1999 and revised in 2010 with an updated scope to meet current development objectives and address aspirations of sector actors. The revised policy seeks to refocus the priorities of the sector to make it forward looking and effectively embrace the challenges of changing lifestyles associated with modernisation and improving wealth status. The policy lays the basis for developing a systematic approach and framework for identifying and harnessing resources for value-for-money (economy, effectiveness, and efficiency) services to all. The policy supports building partnership at both international and local levels and with the private sector within an expanded network of actors through effective public sector facilitation and coordination.

Climate Change Policy, 2013

The Ghana National Climate Change Policy provides strategic direction and coordination of issues of climate change in Ghana. The policy aims to make Ghana's economy climate-resilient and seeks to engender sustainable development through equitable low carbon economic development. The objectives of the policy are to achieve effective adaptation, social development, and mitigation of climate impacts. The policy provides thematic areas for adaptation which include energy and infrastructure, natural resource management, agriculture and food security and disaster preparedness and response. The policy indicates that social protection and social safety nets will be provided for the most vulnerable in society – the poor, women, children, and disabled – to build a cohesive society.

National Environmental Action Plan (NEAP), 1991

The NEAP defined a set of policy actions, related investments, institutional mandates, and strengthening activities to make Ghana's development approaches environmentally sustainable. The adoption of the NEAP in 1991 led to several significant developments necessary to ensure sound resource management in the following areas: Land management; Forestry and wildlife; Water management; Marine and coastal ecosystems; Industrial pollution; Mining; Hazardous chemicals control; and Human settlements. The NEAP is the strategy through which key issues regarding the protection of the environment and better management of renewable resources are pursued. Some of the specific resultant developments from the NEAP was the establishment of the Ghana Environmental Protection Agency (EPA) - with an enhanced mandate compared to its predecessor the Environmental Protection Council (EPC) - to regulate, set standards and enforce them, among others; and, the establishment of the Water Resources Commission (WRC), and the subsequent adoption of policy framework for water abstraction for different uses, water law, and control of waste discharges into water bodies.

Laws and Regulations on Environmental and Social Management

The Constitution of Ghana

The 1992 Constitution¹⁸ of Ghana serves as the first source of environmental protection requirements in Ghana. According to Article 36(9) of the Constitution: "the State shall take appropriate measures needed to protect and safeguard the national environment for posterity; and shall seek co-operation with other states and bodies for purposes of protecting the wider international environment for mankind". In addition, Article 41(k) requires that all citizens protect and safeguard the natural environment of the Republic of Ghana. Articles 268 and 269 make provision for the protection of natural resources of the country.

Environmental Protection Act, 1994 (ACT 490)

The Environmental Protection Act, 1994 (Act 490) led to the establishment of the Environment Protection Agency (EPA) as a body for the protection, conservation, and management of environmental resources for the Republic of Ghana. The Act mandates the EPA with the formulation of environmental policies, prescription of standards and guidelines, issuance of environmental permits and pollution abatement notices. Section 2(i) of Act 490 further mandates the EPA to enforce

¹⁸ The 1992 Constitution of the Republic of Ghana sets out the Rights, Freedom, Duties, and Obligation of every citizen of Ghana. These are these are the constitutional rights of Ghanaians. The constitution also defines specific requirements for the protection of the Environment such as provided under: Article 37(3); Article 39(6); Article 41(k); Article 268 and Article 269.

compliance with established Environmental Impact Assessment (EIA) procedures among companies and businesses in the planning and execution of development projects, including existing projects.

Public and Worker Safety

Policies on Public and Workers Safety

National Employment Policy (NEP), 2014

The overall objective of the NEP is to adopt an inter-sectoral and integrated approach toward achieving full, decent, productive, and freely chosen employment for all Ghanaians who are able and willing to work, thereby improving the living conditions within the framework of equity, security, and dignity. The primary focus of the NEP is to address the unemployment situation, and deal with decent work deficits, targeting, in particular, vulnerable groups, the youth, women, and persons with disabilities (PWDs). The policy focuses on employment components such as entrepreneurial development, private sector competitiveness, linking agriculture to the other sectors of the economy, research and innovation, vocational and technical skills development, productivity improvement, harnessing opportunities in labour migration, and the green economy, among others.

National Workplace HIV/AIDS Policy, 2004

The National Workplace HIV/AIDS Policy formulated in 2004 aims at providing broad national guidelines to direct the formulation of workplace policies and program. The policy provides the framework for Ghana's strategy to reduce the spread, and mitigate the impact, of HIV/AIDS on the workforce. The objectives of the policy are to provide protection from discrimination in the workplace to people living with HIV/AIDS, prevent the spread of HIV/AIDS among workers, and provide care, support, and counselling to those infected and affected.

Laws and Regulations on Public and Workers Safety

The Constitution of Ghana

The 1992 Constitution, Article 36(10) requires the State to safeguard the health, safety, and welfare of all persons in employment, and establish the basis for the full deployment of the creative potential of all Ghanaians.

The Labour Act, 2003 (Act 651)

The Labour Act 2003 (Act 651) provides for the rights and duties of employers and workers; legal or illegal strike; guarantees trade unions the freedom of associations; and establishes Labour Commission to mediate and act in respect of all labour issues. Under Part XV (Occupational Health Safety and Environment), the Act explicitly indicates that it is the duty of an employer to ensure the worker works under satisfactory, safe, and healthy conditions.

Fair Wages and Salaries Commission Act, 2007 (Act 737)

The Fair Wages and Salaries Commission (FWSC) was established under the FWSC Act, 2007 (Act 737). The Commission is mandated under section 2 of Act 737 to ensure fair, transparent, and systematic implementation of the Government public service pay policy and develop and advise Government, and ensure that decisions are implemented, on matters related to: salaries, wages, grading, classification job analysis and job evaluation, performance management and indicators, and allowances and benefits (with the ultimate objective of consolidation of allowances and benefits) and undertake negotiations where compensation is financed from public funds.

Ghana National Fire Service (GNFS) Act 1997

The Act re-establishes the GNFS to provide for the management of undesired fires and to make provision for related matters. The objective of the Service is to prevent and manage undesired fire. To achieve its objective, the Service is to organise public fire education programs to create and sustain awareness of the hazards of fire, heighten the role of the individual in the prevention of fire, and provide technical advice for building plans in respect of machinery and structural layouts to facilitate escape from fire, rescue operations and fire management. The GNFS has a rural fire department responsible for the control and management of bushfires.

The Fire Precaution (Premises) Regulations 2003, LI 1724

The Fire Precaution (Premises) Regulations 2003 (LI 1724) requires all premises intended for use as workplaces to have Fire Certificates and confers enforcement powers on the GNFS to demand a fire certificate for premises that are used as a place of work.

Protection of Vulnerable Groups

Policies on Protection of Vulnerable Groups

National Social Protection (NSP) Policy, 2015

The NSP Policy provides a framework for delivering social protection coherently, effectively, and efficiently in a way that is holistic and properly targeted. It defines social protection as "a range of actions carried out by the state and other parties in response to vulnerability and poverty, which seek to guarantee relief for those sections of the population who for any reason are not able to provide for themselves". It provides an institutional framework for coordination and stakeholder collaboration in monitoring and in ensuring accountability. It is linked to a range of legal instruments and policies that provide a framework within which the obligations to various target groups may be justified, implemented, regulated, and advocated. In the short-term, the policy focuses on being rehabilitative, restorative, protective, and facilitative.

National Gender Policy, 2015

The Policy seeks to mainstream gender equality and women's empowerment into the national development processes. The Policy outlines five commitments: women's empowerment and livelihood; women's rights and access to justice; women's leadership and accountable governance; women's economic opportunities; and gender

roles and relations. Embedded in these commitments are the policy objectives to which strategies, institutional framework, and key stakeholders are identified for necessary steps in addressing identified bottlenecks and shortfalls in attaining gender equality and women's empowerment. The GoG considers the Gender Policy as complementary to the implementation of national social protection strategies, the Policy itself having contributed to the successful advocacy for the adoption of the National Social Protection Policy.

National Child and Family Welfare Policy, 2015

Ghana's Child and Family Welfare Policy focusses on the prevention of violence, abuse, and exploitation of children. It underpins a child protection system that will safeguard and respond to children and their families when needed and provide support to mitigate risks for vulnerable families. This Policy recognises a child as a person below the age of 18, in line with the UN Convention on the Rights of the Child, the 1992 Fourth Republic Constitution of Ghana (Article 28), and the Children's Act 1998, (Act 560) (section 1). The policy describes childhood as a period when a person is under the authority, control, and care of some persons considered as adults in society. The Policy defines welfare as guaranteeing the availability of the necessities of life as well as minimising the levels of violence, exploitation, abuse, and neglect.

Justice for Children's Policy, 2015

The Policy aims to promote greater cooperation between the formal and the community justice systems as a cohesive national system that ensures access to justice for all children. The objectives of the policy are to:

- Prevent juvenile offending.
- Strengthen programs for rehabilitation and social reintegration.
- Strengthen formal and community justice systems and link them up to enhance access to justice and protection for children in conflict with the law.
- Protect child witnesses and victims of crimes.
- Provide protection for children involved in family and other civil proceedings.
- Guide the reform of laws, policies, and procedures to improve access to justice for children to inform the necessary changes to the regulatory framework and develop guidelines for handling cases relating to children at all levels.
- Ensure the provision of financial and human resources for implementation of the policy.

Laws and Regulations on Protection of Vulnerable Groups

The Constitution of Ghana

The 1992 Constitution of Ghana serves as the supreme legal document that promote(s) and protects the rights of citizens, especially the vulnerable and the excluded. The Constitution of Ghana ensures:

- **Child's Right:** The Constitution establishes the rights of the child and provides a framework for the enactment of appropriate legislation to protect the rights of children (Article 28).
- **Rights of Persons with Disabilities:** Article 29 of the Constitution spells out the rights of persons with disabilities.
- **Citizen's Right to Information:** The Constitution also acknowledges the right to information under Article 21(1) (f) as a fundamental human right of all citizens. This right will be properly enjoyed where the public is efficiently engaged in the processes and procedures of public institutions. It also sets out the first source of environmental protection requirements in Ghana.

The Children's Act 1998, Act 560

The Act spells out the rights of the child; quasi-judicial and judicial child adjudication; parentage, custody, access, and maintenance; fosterage and adoption; employment of children; and institutionalised care and miscellaneous matters. It protects children from exploitative labour and child marriage and stipulates responsibilities for care and protection of children. The Act defines a child as a person below the age of 18 years. The minimum age for admission of a child to employment is 15 years and the minimum age for the engagement of a person in hazardous work is 18 years. No person shall engage a child in exploitative labour. Labour is exploitative of a child, if it deprives the child of its health, education, or development.

Persons with Disability Act, 2006 Act 715

The Act covers key thematic provisions such as rights, accessibility, employment, education, and transportation for Persons with Disabilities (PWDs), amongst others. Section 6 states that the owner or occupier of a place to which the public has access shall provide appropriate facilities that make the place accessible to, and available for use, by a person with disability. Section 10 of the Act states: (1) The Government shall grant a person who employs a person with disability an annual tax rebate of the taxable income in respect of each person with disability employed as shall be prescribed in Regulations made under this Act; (2) The Government shall grant special incentives to persons with disability engaged in business and to business organisations that employ persons with disability.

Managing Social Conflict

Alternative Dispute Resolution Act, 2010 (ACT 798)

The Act provides for the settlement of disputes by arbitration, mediation, and customary arbitration, and establishes an Alternative Dispute Resolution Centre and to provide for related matters. This Act applies to matters other than those that relate to:

- 1. the national or public interest.
- 2. the environment.
- 3. the enforcement and interpretation of the Constitution; or

4. any other matter that by law cannot be settled by an alternative dispute resolution method.

Institutions	Policies and procedures for environmental and social due	Organizational E&S Capacity	Stakeholder Engagement and Grievance Mechanisms
Ministry of Energy	diligence The MoEn has developed a Health, Safety, Security and Environment (HSSE) manual for the energy sector.	The Ministry of Energy has implemented a number of 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). MoEn has a Safeguards Officer responsible for coordinating E&S risks management for projects. MoEn relies on EPA for advice and guidance on environmental and social assessments.	 Stakeholder Engagement: MoE broadly engages all relevant stakeholders in the development of energy sector policies and as part of project planning and implementation. Grievance Mechanism: MoE has a general process by which stakeholders can lodge complaint by visiting the ministry or through email and phone call. Gap: A well-structured Grievance Mechanism with clear roles and responsibilities was not identified. The non-inclusion of specific timelines to guide resolution of the complaint at every level of the mechanism is a problem.
Public Utilities and Regulatory Commission (PURC)	PURC has systems for managing social risks associated with the Program especially for vulnerable groups. It has a pro-poor policy in place to ensure that tariffs do not unduly exacerbate social risks to vulnerable groups or life-line consumers. However, there is the need to strengthen the policies and enhance capacity for improved social risk planning, monitoring and reporting.	 PURC has trained and qualified personnel that advises the commission on social issues. PURC relies on EPA for advice and guidance on environmental assessments. As part of efforts to ensure a high standard of performance in the provision of energy utility services, officials of the PURC routinely undertake fact finding missions to 	 Stakeholder Engagement: PURC broadly engages all relevant stakeholders in the development of sector regulatory guidelines and as part of project planning and implementation. PURC has prioritized consumer education during the past decade. Statistics from the Consumer Service Bureau of the PURC show that there has been a marked increase in public

Annex 5: Detail Institutional Environmental and Social Systems Assessment

Institutions	Policies and procedures for environmental and social due diligence	Organizational E&S Capacity	Stakeholder Engagement and Grievance Mechanisms
		monitor the performance of the District Offices of ECG and NEDCo. The monitoring covers criteria such as Ambience & Comfort for Consumers, Provision of Suggestion Boxes, Availability of Schedule of Charges, Consumer Education, Use of Complaints and Responses Files, New Service Connection Policy, Metering Policy, Staff Disposition & Attitude towards Consumers, Response Time to Faults, Availability of dedicated telephone line, and Promotion of Payment Options. Owing to the foregoing, a greater number of consumers are finding redress to their energy utility service complaints through their complaints resolution procedures.	 awareness of the Commission and its functions. Grievance Mechanism: The PURC has a digitalised consumer complaints unit for addressing internal and external grievances and is mandated to receive complaints on behalf of the utility companies. Gap: The process and procedures for citizens to engage with the PURC on issues relating to tariff increments and change of meters are unclear. In view of that, increases in the cost of electricity could lead to citizen unrest and demonstrations. Opportunity: Although the PURC has highly trained and qualified personnel, there is opportunity to engage more staff to enhance consumer education and public appreciation of the social issues related to the Program. Recommendation: The ESSA recommends that PURC should identify life-line customers likely to be affected by the tariff increases for support. Social effects, especially due to tariff increases, should be addressed through the PURC. PURC should ensure that impacted communities and vulnerable groups are consulted design and implementation of the program. The PURC should map stakeholders with a focus on specific concerns of the vulnerable, challenges they face in accessing benefits; available or required

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			subsidies. It is recommended that disaggregated data on beneficiaries (women, differently abled, Below Poverty Line, ethnicity, and minorities) is periodically tracked with respect to access to services. Infrastructure and service delivery must also integrate universal design principles to facilitate access to differently abled, senior citizens, women, and other vulnerable groups.
Energy Commission (EC)	The EC has operationalized the Health, Safety, Security and Environment (HSSE) manual for the energy sector.	There is a whole directorate dedicated to environment, climate change and energy efficiency, which ensures decision-making on the environment at the highest level in the EC. EC has personnel that advises the commission on environmental and social issues. The commission also relies on EPA for advice and guidance on environmental issues and assessments. The EC has implemented donor- funded projects with satisfactory outcomes on environmental and social management. The EC is an active player in the ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREEE).	Stakeholder Engagement and Grievance Mechanism: As part of the project planning and implementation, EC engages all relevant stakeholders. EC also has a general process by which stakeholders can lodge complaint. Gap: A well-structured Grievance Mechanism with clear roles and responsibilities was not identified. The non-inclusion of specific timelines to guide resolution of the complaint at every level of the mechanism is a problem.

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		Gap: The environment directorate is quite under-staffed and the lack of training of existing staff obstructs effective integration of environmental and social issues. Training of staff on environmental and social issues is episodic. There is systematic grievance redress mechanism in place. Recommendation: The systems in place for managing E&S and social risks associated with the Program could be improved. In particular, there is opportunity to build capacity of the EC to monitor environmental and social risks of the stakeholders they regulate. There is also the need to strengthen policies and enhance capacity for improved E&S planning and reporting.	
Northern Electricity Distribution Company	It is important to note that, NEDCo is a wholly-owned subsidiary of VRA. Environmental and Social Policies: NEDCo has an Environmental and Social Management System with a Corporate Environmental Policy Statement which commits to ensuring continuous improvement of environmental performance that minimizes potential impacts of all its operations on the environment in accordance with the principles of sustainable development and complying with national and international environmental protection regulations.	<i>Environmental and Social Units</i> <i>and Staffing:</i> NEDCo has an Environment & Sustainable Development Department (E&SDD) with core staff of scientists and engineers, technicians, mechanics, boat crews and administrative support staff, involved in EA, reforestation, dredging, water quality monitoring, etc. Within the Department is an Environment Section which is involved in EA	Stakeholder Engagement and Grievance Mechanism: As part of the project planning and implementation as well as the Environmental Assessment process, NEDCo prepares stakeholder engagement plan and puts in place a Grievance Mechanism. Grievances about NEDCo can also be submitted to the PURC. NEDCo undertakes free, prior, and informed consultations if people are potentially affected (positively or negatively) to determine whether there

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	 Health and Safety Policy: NEDCo has a Health and Safety Policy which outlines the principles of good occupational health and safety practices. It is aimed at promoting the wellbeing of personnel and preventing workplace accidents; an ill Health Policy to promote best practices in ill health prevention and to promote healthy lifestyles and an Environmental Policy to safeguard and mitigate the impact of our operations on the environment through the use of an Environmental Management Plan and an Emergency Preparedness Plan. Corporate Social Responsibility (CSR) Policy: NEDCo's CSR Policy requires the Authority to conduct its business in a socially responsible and ethical manner; protect the environment and guarantee safety in its operations as well as respect and support the impacted communities in their development effort. Safety, Health and Environment Standards for Contractors: NEDCo has a "Safety, Health and Environment Standards for Contractors" to guide the contractors in the execution of their jobs coupled with periodic site visits by our safety personnel. To improve compliance of third-party contractors, NEDCo includes a requirement in the tender documents for contractors to provide an HSE plan before the award of contract. Discrimination and Sexual Harassment: Specified in the Code of Ethics, NEDCo prohibits sexual or any other kind of harassment of employees by others at the 	and audit, and they collaborate on social and environmental management issues with many other units in NEDCo, such as departments of Engineering Planning and Development, Engineering Design and Construction, and Real Estate. The ESD Department oversees preparation of EISs, maintains liaison with EPA, and manages the process of NEDCo's compliance with LI 1652. It prepared the VRA "Corporate Environmental Policy Statement" and the draft "Policy Framework". VRA is very experienced and accustomed to carrying out environmental and social impact assessments to international standards. Its corporate environmental policy is well articulated and commits the agency to follow all EPA Regulations. Its practice is to apply international good practice whether or not there is external financing in a project. Its ESD Department is well staffed and managed, and obviously respected by the VRA workforce and supported by senior management. Notwithstanding the gaps identified, the ESSA concludes	is broad community support for the program. The Authority also ensures that Project-Affected People participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, with the consent of the affected persons.

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	 workplace or while conducting the business of the Authority elsewhere. Sexual harassment includes but not limited to: Unwanted sexual advances and indecent exposure Request for sexual favours as basis for employment, promotion, transfer and loans Unsolicited verbal, audio-visual or physical/sensory conduct of sexual nature Repeated invitations for social relationship when one party has stated these invitations are unwelcome Displaying sexual suggestive visuals or audio material in the workplace Transmitting (texting, emailing) of sexual offensive or suggestive materials Gaps: <i>Health and Safety:</i> A challenge VRA sometimes face is Safety Compliance of thirdparty contractors. <i>Gender Inclusion:</i> Though the management has indicated their preparedness to give more female engineers greater opportunities, the ESSA did not identify any documentary evidence of a specific gender and social inclusion policy or plan. 	that VRA has highly satisfactory Environmental and Social Management System required to manage the E&S risks associated with the Program.	
Ghana Grid Company Limited (GRIDCo)	<i>Environmental and Social Policies:</i> GRIDCo has an Environmental and Social Management System with a Corporate Environmental Policy	<i>Environmental and Social Units and Staffing:</i> GRIDCo has a unit with staff responsible for the	<i>Stakeholder Engagement and</i> <i>Grievance Mechanism:</i> As part of the project planning and implementation as

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	Statement which commits to ensuring continuous improvement of environmental performance to minimize the impacts of all its operations on the environment, in line with the principles of sustainable energy sector development, in addition to complying with National and International Environmental Protection Standards and Regulations and make Environmental considerations a priority in Business Planning.Occupational and Community Health and Safety: GRIDCo has systems and measures that promote community, individual, and worker safety through the safe design, construction, 	development of Environmental and Social Studies with respect to the BHP such as the ESMP, ESIA, Salvage Archaeology, Health Impact Assessment Study, and the acquisition of environmental permits, among others. The ESSA concludes that GRIDCo has satisfactory Environmental and Social Management System required to manage the potential E&S risks and impacts associated with the Program.	 well as the Environmental Assessment process, GRIDCo prepares stakeholder engagement plan and puts in place a Grievance Mechanism. Grievances about GRIDCo can also be submitted to the PURC. Gap: Non-disclosure of E&S Policies and Framework: Key policies and frameworks that guides environmental and social management are not readily available or accessible on their websites. Recommendation: The ESSA recommends that GRIDCo should disclose its corporate environmental and social policies. Plans and reports.
	ESMP will include a Labor		

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	Management Procedure (with a dedicated section for GBV/SEA/SH risk mitigation measures), Electronic Waste Management Plan and an OHS plan. The requirement to prepare a C-ESMP should be incorporated into the bidding documents.		
Electricity Company of Ghana Limited	 Environmental and Social Policies: ECG generally has corporate environmental and social policies and frameworks that guide its operations in the planning and implementation of projects as required by the national regulations and policies and standards of development partners. For instance, ECG has an Environmental and Social Management System (ESMS) and has developed the following E&S frameworks/Manual and Plans: a. Environmental and Social Management System (2018) for Contractor Management, Water and Air Quality Management, Water and Air Quality Management and Cultural Property Protection Management. b. Safety and Health Policy Guidelines and Procedures Manual (2020) which outlines an integrated approach to management of Safety and Health considerations in ECG. The manual has been developed to ensure all major risks and hazards to people, the 	<i>Environmental and Social Units</i> <i>and Staffing:</i> ECG has a Safety Health and Environment (SHE) Division, SHE Officers and SHE Committee at the national level with the responsibility of assessing and managing environmental and social risks and impacts. The Division conducts environmental due diligence and ESIAs. ECG has E&S Officers with the responsibilities to for developing and maintaining programs which promote sound safety, health, and environmental management. The Division is required to take appropriate measures to protect human health and safety and the natural environment. Although the SHE Division is housed under the Operations Directorate, it is a cross cutting area that effectively collaborates and work closely with all Directorates, Divisions, and district offices in all ECG regions.	Stakeholder Engagement and Grievance Mechanism: Stakeholder engagement is a core part of the activities of the institutions involved in the Program, prior to implementing any project. ECG undertakes stakeholder engagement as part of the environmental and social due diligence process and in some instances conduct citizen's survey to seek feedback from customers to improve service delivery. ECG has a Stakeholder Engagement Plan (SEP) which outlines the strategies and approaches to be used in engaging with all stakeholder groups for projects and activities within the Company's operations. The SEP is an integral part of Environmental and Social Management System (ESMS). In accordance with the accepted best practices, the Company uses the SEP to continue the consultative process with key stakeholders throughout the operational areas.

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	 environment or ECG assets have been identified and that suitable mitigations or controls are implemented to assure that the risks associated with ECG operations and activities are eliminated or as low as reasonably practicable. c. Emergency Preparedness and Response Plan (2020) which provides guidelines for identifying, preventing, minimizing, and managing injuries, accidents and risks to all staff and stakeholders. The plan if effectively implemented will steer the company's commitment to eliminating harm to staff, contractors and the general public. The plan ensures that potential emergencies that may impact the health and safety of all staff, contract workers, affected communities, women and children are identified and handled effectively. d. Gender and Social Inclusion Policy (2020) with the objective of improving organisational culture and operational performance in line with international best practices and standards by advancing gender equality, diversity, and social inclusion. According to the ECG, the policy commits to having a workforce comprising 40 percent women (currently 24.4 percent), with 40 percent of women in leadership positions (currently 11 percent) in the 	In terms of institutional capacity, the SHE Officers within the Division have the requisite qualification and experience to prepare Terms of Reference (ToR) for the environmental and social safeguards instruments, guide consultants in the preparation and review of the instruments and oversee their implementation. However, it is important to note that the Division is understaffed. Gaps: <i>Limited E&S Capacity at</i> <i>Subnational Level:</i> At the regional and district level, ECG's Technical Officers with limited capacity on Safeguards are required to take up responsibilities for E&S management which results in limited commitment, dedication, and availability to institutionalise safeguards implementation and enforcement at the subnational level. For example, Maintenance Officers also serves as Safety Officers and District Engineers double as Safety Representatives at the District Level. ECG's district level officers have limited capacity on monitoring and supervising the procedures and processes to assess the	ECG has a web-based inquiry and complaints redress system and round- the-clock customer call centre to receive and address customer complaints. It is accessible 24 hours a day all days of the week. This mechanism makes room for verification and follow-ups. It allows for anonymous reporting and for aggrieved parties to provide further particulars to present grievance. It also encourages consumers/lay people affected by the project to report. ECG also has active social media pages for engaging stakeholders and customers.

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	 company by 2035. The policy also commits to zero tolerance of sexual harassment in the workplace, more gender equitable recruitment and hiring practices, and maternity and paternity leave. <i>Public and Worker Safety:</i> ECG has systems and measures that promote community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or remedial works incorporated as needed. In addition, ECG do provide its workers with Personal Protective Equipment (in the form of overalls, helmets, goggles, gloves). In 2018, ECG launched its Code of Conduct for staff and third-party contractors to guide their behaviour, attitude, and conduct in the discharge of their responsibilities. The Code of Conduct outlines rules for social norms, rules, and responsibilities of proper practice for an individual worker, a party, or an organisation to ensure professionalism, objectivity, transparency, and effectiveness in service delivery. There is evidence on the use of recognised good practice in the production, management, storage, and transport of hazardous materials and electronic wastes generated through program construction or operations. 	 potential impacts of project activities. Staff Development: Staff development policy or plan which should direct staff development programmes and promote and strengthen women in leadership roles was not clearly evident, especially at the regional and district level offices of ECG. The Ad hoc nature of staff development has led to a situation where some few workers have over benefited while other staff have never had the opportunity to be trained. ECG has in place systems for managing E&S and social risks associated with the Program. However, there is the need to strengthen policies and enhance capacity for improved E&S planning, monitoring and reporting. Recommendation: ECG should strengthen its staff to adequately monitor environmental and social compliance performance at the national and sub-national level. 	Grievance Redress Mechanism: A gap in the grievance redress mechanism is the non-inclusion of specific timelines to guide resolution of the complaint at every level of the mechanism. For instance, the complaints reporting framework of the ECG does not indicate how many hours or days it takes to resolve specific issues and beyond which the complaint could be escalated to the next level. Also, the framework is generic and not tailored for workers or sub-contractors. ECG's Grievance Redress Mechanism does not have clear guidance on how issues of Sexual Exploitation, Abuse and Harassment should be addressed. Social Inclusion: ECG's commitment to ensure social inclusion has been sporadic. Sexual Harassment: Even though ECG's Gender and Social Inclusion Policy commits to zero tolerance of sexual harassment strategies for preventing sexual harassment are not very evident. Recommendations:

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	Social Considerations - Indigenous Peoples and Vulnerable Groups: Generally, ECG undertakes free, prior, and informed consultations if people are potentially affected (positively or negatively) to determine whether there is broad community support for the program. The Company ensure that Project-Affected People participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, with the consent of the affected persons. Furthermore, the ESSA established that they give attention to groups vulnerable to hardship, including, as relevant, the poor, the disabled, women and children, the elderly, or marginalised ethnic groups. <i>Social Conflict:</i> ECG has Human Resource Management procedures and mechanism for handling conflicts resolution and appeals. The institutions have the ability to handle (i) labour management, and (ii) potential tensions/conflicts between staff and customers. For project specific activities the institutions usually put in place Grievance Redress Committees and arbitration process. Arbitration only works where the parties to a dispute agree to resolve a difference through arbitration. As required by the Ghana Constitution, the institutions also allow for the right of access to the court of law by any person who has an interest or right over an affected property.		 ECG should disclose environmental and social policies, plans and reports. ECG should enhance its grievance redress mechanism to include specific timelines to guide resolution of the complaint at every level of the mechanism.
	Gaps:		

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	 E&S Policies and Framework: ECG's Environmental and Social Management Framework (ESMF) is generic and largely focuses on the Environmental and Social Performance Standards of the International Finance Corporation (IFC) and does not adequately address the World Bank's requirements for an ESMF. Again, the ESMF does not include sub-projects screening tools or checklist. Recommendation: The ESSA recommends that: ECG should develop environmental and social screening tools and update their E&S instruments in line with the potential risks and impacts of the IPF activities. ECG should update its Environmental and Social Management Framework (ESMF). ECG should develop strategies for preventing sexual harassment. ECG should include sexual exploitation and abuse and sexual harassment prevention measures in the Code of Conduct for workers and third-party contracts. The Contractor to be selected for the rehabilitation works should be required to prepare a Contractor's ESMP (C-ESMP) based on the country system and ECG's internal E&S polices and frameworks , before works begin. The C-ESMP will 		
	include a Labor Management		

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	 Procedure (with a dedicated section for GBV/SEA/H risk mitigation measures), Electronic Waste Management Plan and an OHS plan. The requirement to prepare a C-ESMP should be incorporated into the bidding documents. ECG should update its Gender Action Plan with the objective to increase women participation in Program activities. ECG should develop a staff development programmes and promote and strengthen women in leadership roles especially at the regional and district level offices of ECG. ECG's Training Centre should incorporate environmental and social risk management into its courses to improve the capacity of its staff in all its agencies. 		
National Petroleum Authority	<i>Environmental Policy:</i> National Petroleum Authority follows the Health, Safety, Security and Environmental Policy and Manual developed by the Ministry of Energy. The National Petroleum Authority has developed guidelines and standards for the implementation of the CRM. These includes guidelines for establishing LPG bottling plant, licence framework for LPG cylinder transportation, guidelines for cylinder exchange	<i>Environmental and Social Units</i> <i>and Staffing:</i> NPA, as the regulator, ensures that the petroleum downstream industry remains efficient, profitable, fair, and at the same time, ensures that consumers receive value for money. The Inspections and Monitoring department monitors the operations of Petroleum Service Providers (PSPs) and	Grievance Redress Mechanism: NPA has a complaints redress procedures for external grievances. It has an online complaint form that can be accessed by all stakeholders. Gaps: Disclosure of E&S Policies and Framework: Key policies and frameworks that guides environmental and social management are not readily

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	points, and standards for LPG cylinder transportation vehicles. Environmental and Social Assessments and Compliance: NPA uses LI 1652 (Schedule 1, Schedule 2, and Schedule 3) and various EA Sectoral Guidelines issued by the EPA. All subprojects are subjected to environmental and social screening to decide if a proposed subproject requires a full EIA, preliminary environmental report with ESMP, or no environmental assessment is needed. For instance, there is evidence of Environmental and Social Impact Assessments for projects funded by development partners. NPA requires environmental compliance (from the EPA) and technical compliance (from the EC) when implementing projects that are likely to have an impact on the environment. Gap: <i>Gender Inclusion:</i> The ESSA did not identify any documentary evidence of a specific gender and social inclusion policy or plan.	inspects facilities of PSPs in the petroleum downstream industry. They also ensure that the design, construction, and operation of all petroleum infrastructure are executed to predetermined industry standards. The HSSE unit focuses on Health, Safety and Environmental issues in the industry. The department assists in ensuring that NPA complies with HSE standards. Thus, the IM/HSSE unit of the NPA has the capacity to collaborate with the National Commission for Civic Education (NCCE) to educate first-time LPG users on the dangers and safe use of LPG. Gap: <i>Limited Environmental and</i> <i>Social Staffing:</i> The HSSE unit is under-staffed and the lack of training of existing staff obstructs effective integration of environmental and social issues. The ESSA concludes that NPA has systems in place for managing environmental and social risks associated with the project. However, there is the need to strengthen policies and enhance capacity for improved E&S	available or accessible on their websites. Grievance Redress Mechanism: A gap in the grievance redress mechanism is the non-inclusion of specific timelines to guide resolution of the complaint at every level of the mechanism.

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		planning, monitoring and reporting. Again, the ESSA recommends that NPA should adequately communicate and outline a roadmap or transition plan to the stakeholders for the implementation of the CRM policy.	