

GHANA ECONOMIC TRANSFORMATION PROJECT (P166539)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

April 2019

MINISTRY OF FINANCE P. O. BOX MB 40 ACCRA, GHANA

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LIST OF ABBREVIATIONS AND ACRONYMS

EC	-	Energy Commission
AGI	-	Association of Ghana Industries
ECG	-	Electricity Company of Ghana
EHS	-	Environmental Health and Safety
EIS	-	Environmental Impact Statement
EMS	-	Environmental Management System
EPA	-	Environmental Protection Agency
ES	-	Environmental Statement
ESG	-	Environmental, Social, & Governance
EIA	-	Environmental Impact Assessment
ESIA	-	Environmental and Social Impacts Assessment
ESMF	-	Environmental and Social Management Framework
FC	-	Forestry Commission
FGD	-	Focus Group Discussions
FPS	-	Fire Protection System
GDP	-	Gross Domestic Product
GETC	-	Ghana Investment Promotion Centre
GETP	-	Ghana Economic Transformation Project
GFZB	-	Ghana Free Zones Board
GIPC	-	Ghana Investment Promotion Centre
GNFS	-	Ghana National Fire Service
GoG	-	Government of Ghana
GPRS	-	Growth and Poverty Reduction Strategy
GRM	-	Grievance Redress Mechanism
GSA	-	Ghana Standard Authority
GWC	-	Ghana Water Company
IAP	-	Interested and Affected Parties
IFC	-	International Finance Corporation
IFF	-	Infrastructure Finance Facility
ILO	-	International Labour Organisation
IUCN	-	International Union for Conservation of Nature
LC	-	Lands Commission
LGC	-	Local Grievance Committee
LUPSA	-	Land Use and Spatial Planning Authority
LVB	-	Land Valuation Board
MBD	-	Ministry of Business Development
MDAs	-	Ministries, Departments and Agencies
MESTI	-	Ministry of Environment Science, Technology and Innovation
MLGRD	-	Ministry of Local Government and Rural Development
MLNR	-	Ministry of Lands and Natural Resources
MMDAs	-	Metropolitan Municipal District Assemblies
MoF	-	Ministry of Finance
MoFA	-	Ministry of Food and Agriculture
		-

		Minister of The Lorend Industrian
MoTI	-	Ministry of Trade and Industries
MOU	-	Memorandum of Understanding
MTDPF	-	Medium Term Development Planning Framework
MWRWH	-	Ministry of Water Resources, Works and Housing
NBSSI	-	National Board for Small Scale Industries
NDPC	-	National Development Planning Commission
NEAP	-	National Environmental Action Plan
NEP	-	National Environmental Policy
NEQG	-	National Environmental Quality Guidelines
NGO	-	Non-Government Organisation
NWP	-	National Water Policy
OP	-	Operational Policies
OSHP	-	Occupational Safety and Health Policy
PAP	-	Project Affected Parties
PHC	-	Population and Housing Census
PM	-	Particulate Matter
PPE	-	Personal Protective Equipment
PPP	-	Public Private Partnership
PURC	-	Public Utilities Regulatory Commission
RCC	-	Regional Coordinating Council
RPF	-	Resettlement Policy Framework
SDGs	-	Sustainable Development Goals
SEPP	-	Stakeholder Engagement and Public Participation
TCPD	-	Town and Country Planning Department
VCTF	-	Venture Capital Trust Fund
VRA	-	Volta River Authority
WB	-	World Bank
WHO	-	World Health Organization
WMD	-	Waste Management Department
WRC	-	Water Resources Commission

EXECUTIVE SUMMARY

1. INTRODUCTION

1.1 Project Background

The Government of Ghana (GoG), through the Ministry of Finance, has requested the World Bank for credit support of US\$200 million to implement the Ghana Economic Transformation Project (GETP). The GETP aims at supporting the diversification of the economy to better shock-proof against volatility in primary commodity prices, spur a transition to an economic structure that generates higher growth that is more sustainable over the long term.

The Program Development Objective is to promote sustainable private investments, productive jobs and firm growth in non-resource-based sectors. The guiding principle of the program is to promote and strengthen a growth model that is conducive to economic transformation which will achieve, simultaneously, higher rates and productivity growth across the economy (especially in non-resource - based sectors), with a view to creating quality and raising incomes.

The project has four primary components:

Component 1: Enabling Investments— improving the enabling business environment, investment promotion capacity and quality infrastructure support system

- Component 2: Crowding-in Investments— promoting spatial and industrial planning and development
- Component 3: Accelerating Entrepreneurship and SME growth
- Component 4: Project Management and Monitoring and Evaluation.

The Ghana Economic Transformation Project, according to World Bank's Environmental Assessment Policy (OP 4.01) is a Category B project. The specific project activities under Component 2 subcomponent 2.2 (Spatial development with the establishment of a Viability Gap Fund (VGF) are not known at the time of project preparation and therefore will require the preparation of an Environmental and Social Management Framework (ESMF). The project activities under this sub-component will involve some civil works (i.e. construction and/or rehabilitation and refurbishment of existing infrastructure for private investments).

The objective of the ESMF is to establish a process of environmental and social screening that will assess the environmental and social issues of the project. This will permit the institutions in charge of implementation of the project to identify, assess and mitigate the environmental and social impacts of project-funded activities. The ESMF also determines the institutional measures to be taken during the project implementation, including those relating to capacity building.

2. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORKS

The environmental and social related policies and institutional frameworks as well as the World Bank policies, relevant for consideration during implementation of GET sub-projects among others include the following:

- 1. National Environmental Policy (NEP), 2012
- 2. Medium Term National Development Policy Framework (Ghana Shared Growth and Development Agenda- GSGDA), 2014 to 2017
- 3. Ghana's Sustainable Development Goals (SDGs), 2018
- 4. National Land Policy (NLP), 1999
- 5. Ghana Trade Policy, 2014
- 6. National Workplace HIV/AIDS Policy, 2012
- 7. World Bank's safeguard policies which include guidance on EA requirements Environmental Assessment (OP4.01), and Involuntary Resettlement (OP/BP 4.12).

Other National and Sector Legislations were also considered;

- 1. The 1992 Republican Constitution of Ghana
- 2. Environmental Protection Agency Act 490 of 1994;
- 3. Environmental Assessment Regulations, 1999 (LI. 1652);
- 4. Fees and Charges Amendment Instrument, 2015 (LI 2228);
- 5. National Environmental Quality Guidelines (NEQG)
- 6. Hazardous and Electronic Waste Control Management Act, 2016, Act (917)
- 7. Land Use and Spatial Planning Act, 2016 Act (925)
- 8. Lands Commission Act, 1994 (Act 483)
- 9. State Lands Act 1962, Act 125
- 10. Local Governance Act of 2016, Act 936;

These legal instruments outline compliance requirements that must be observed during the various stages of implementation of the GET project. The ESMF sets out the principles, rules, guidelines, and procedures to assess the environmental & social risks and impacts and propose preventive and mitigation measures to enhance the sustainability of the project.

In line with the World Bank's commitment to sustainable development, three Safeguards policies have been triggered to support the Project Development Objectives. The policies include the Environmental Assessment (OP/BP 4.01), Physical Cultural Resources (OP/BP 4.11), and the Involuntary Resettlement (OP/BP 4.12). In case there is a disparity between the National EPA Regulations and the World Bank Policies, the more stringent standard would apply.

3. OVERVIEW OF THE MAJOR ENVIRONMENTAL AND SOCIAL RISKS

The activities under Component 1 and 3 will have no environmental and social impacts. However, activities under Component 2 will involve provision of infrastructural services (civil works support ranging from rehabilitation of yet-to-be identified existing sites, to new and yet-to-be identified sites). The potential project infrastructure to be provided may involve the following activities:

- Construction, paving or upgrading of access roads to the SEZ site
- Construction of a railroad spur directly to the site
- Upgrading of a nearby, adjacent, or on-site port
- Extension or upgrading of the electric power network to the SEZ site
- Extension or upgrading of the telecommunications network to the site
- Preparation of inland waterways to the site
- Extension or upgrading of the water network to the SEZ site, including pipeline construction or upgrading

The potential environmental & social risks and impacts associated with the specific project component activities as well as the mitigation measures have been summarised and presented in Tables 2 and 3 below.

Sub-project	Potential Impacts/Issues/Risks		Mitigation/Safeguards Measures ¹
Sub-project	Environmental	Social	Mugation/Saleguarus Measures
Activity 1: Off-site, last-mile infrastructure			
 Construction, paving or upgrading of access roads to the SEZ site Construction of a railroad spur directly to the site 	 Site clearing and excavation works Generation and disposal of solid waste Water resources and pollution Vegetation losses Soil disturbance and Erosion Noise and vibration 	 Land and compensation issues Security and Safety Maintaining Livelihoods Occupational health and Safety Conflicts in land claims 	 Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles Allow affected persons to salvage their properties (including crops) before mobilizing to site to start work
 Upgrading of a nearby, adjacent, or on-site port Preparation of inland waterways to the site 	 Disposal of dredged material Alterations in local natural water cycles/ hydrology Generation and disposal of solid waste Noise and vibration 	 Maintaining Livelihoods Occupational health and Safety Land acquisition and compensation issues Established grievance redress options 	 Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies
• Extension or upgrading of the water network to the SEZ site, including pipeline construction or upgrading	 Soil disturbance and Erosion Alterations in local natural water cycles/ hydrology Cutting of roads 	 Inconvenience/Nuisance from relocation of utility lines Possible alternative options 	• Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles
 Extension or upgrading of the electric power network to the SEZ site Extension or upgrading of the telecommunications network to the site 	Visual IntrusionSite clearing and excavation worksVegetation clearance	 Public health and safety, and traffic issues Compensation issues 	• Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies
• Provision of infrastructure and services to surrounding communities (schools, clinics and hospitals, water, electric power, waste treatment and solid waste removal)	 Site clearing and excavation works Transport of construction materials and waste Generation and disposal of solid waste 	 Corporate Social Responsibility Cultural Heritage Resource Access and Possible Restriction 	• Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF

Table 2: Component Activities and Potential Environmental & Social Impacts/Issues/Risks

¹ Details on mitigation measures has been provided in Table 3 below.

Sub ansist	Potential Impacts/Issues/Risks		
Sub-project	Environmental	Social	Mitigation/Safeguards Measures
Activity 2: On-site infrastructure (within the walls of	f or adjacent to the SEZ site)		
 Construction of an electric power plant or the extension of the network throughout the park Construction or upgrading of on-site pipelines 	 Alterations in local natural water cycles/ hydrology Soil disturbance and Erosion Cutting of roads 	 Air pollution Inconvenience/Nuisance from relocation of utility lines 	Air pollution Controls (APC)Land and compensation issuesSecurity and Safety
• Construction of an on-site waste water treatment plant or water purification/storage facility, waste stabilization ponds, storm drainage and capture systems, sewage systems, or creation or upgrading and maintenance of boreholes	 Disposal of treated waste water Generation and disposal of solid waste Site clearing and excavation works Vegetation clearance 	 Compensation issues Public/community health and Safety 	 Maintaining Livelihoods Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies Occupational health and Safety
 Construction or upgrading of on-site customs office and facilities Construction or upgrading of internal zone administration building Construction or upgrading of internal amenities / services / SME building Construction or upgrading of police station 	 Site clearing and excavation works Generation and disposal of solid waste Water resources and pollution Vegetation losses, Soil disturbance and Erosion Noise and vibration 	 Maintaining Livelihoods Occupational health and Safety Land acquisition and compensation issues Established grievance redress options 	 Cultural Heritage Resource Access and Possible Restriction Established grievance redress options Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF.
 Construction of or upgrading on-site training facilities Construction or upgrading of on-site clinic Construction or upgrading of on-site eating facilities 	 Site clearing and excavation works Vegetation clearance Generation and disposal of solid waste Noise and vibration 	 Maintaining Livelihoods Occupational health and Safety Land acquisition and compensation issues 	 Preservation of local cultural identity and heritage Established grievance redress options Resource Access and Possible Restriction
 Construction or upgrading of on-site employee residences Construction or upgrading of on-site day care facilities 	 Site clearing and excavation works Transport of construction materials and waste Generation/ disposal of solid waste 	 Unavailability and poor use of personal protective equipment and limited/ Established grievance redress options 	 Gender Based Violence (GBV) Preservation of local cultural identity and heritage Public health and safety, and traffic issues
• Construction or upgrading of standard factory buildings or office buildings	Traffic management at Industrial sitesAir Pollution	• Unavailability and poor use of personal protective	• Public health and safety, and traffic issues

Table 2: Component Activities and Potential Environmental Impacts/Issues/Risks Cont'

Ministry of Finance, Accra, Ghana

Environmental & Social Management Framework (ESMF)

Ghana Economic Transformation Project

• Preparation of all or part of the land for construction of tenant companies	 Generation/d disposal of solid waste Noise and vibration 	equipment and limited/ no enforcement process	• Consult affected property owners/users/ communities and seek their consent early in the project development process
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Table 3: Environmental and social mitigation measures

Environment, Social and Health Impact Issue/Concern	Proposed Mitigation Action/ Measures
Water Resources and pollution	 <u>Construction stage</u> Works not to be executed under aggressive weather conditions such as rains or stormy conditions. No solid waste, fuels, or oils to be discharged into any section of a waterway. Construction to be done in sections to minimize impacts and exposure of soil. Excavated materials and silt, which cannot be used will be disposed of at appropriate sites as per the Waste Management Plan prepared by contractor and approved by the Assembly. Temporary sediment barriers to be installed on slopes to prevent silt from entering water courses. Maintenance, fueling and cleaning of vehicles and equipment to take place at off-site workshop with adequate leakage prevention measures <u>Operational stage</u> Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies Host communities to be provided with sufficient toilet facilities and sensitized to use these to discourage open defecation
Air quality	 <u>Construction stage</u> Soil/sand and cement loads in transit to be well covered to reduce dust levels rising above acceptable levels. Stockpiles of exposed soil and unpaved access roads to be sprinkled with water to regulate dust levels. Use of good quality fuel and lubricants in vehicles, equipment and machinery. Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles Engines of vehicles, machinery, and other equipment to be switched off when not in use. Regular scheduled maintenance and servicing to be carried out on all vehicles and equipment to minimize exhaust emissions. Construction and civil works to be phased out or controlled to reduce emissions from equipment and machinery in use. <u>Operational stage</u> Adequate road signs to be planted on dust roads to limit vehicular speeds Properly designed and constructed speed ramps on access roads

Table 3: Environmental and social mitigation measures Cont'

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures
Vibration and Noise	 <u>Construction phase</u> Excavation and construction activities to be carried out during daylight hours. Concrete mixer and other construction machines and equipment to be located away from sensitive environmental receptors. Construction equipment and machinery to be regularly maintained and serviced to reduce noise generation when in use. Engines of vehicles, equipment and machinery to be turned off when not in use. Earthworks and other construction activities to be phased out or controlled to reduce noise generation during construction.
Visual intrusion	 Neighboring residents and commercial activities to be notified in advance of the project before contractor mobilizes to site Work will not be carried out during sensitive times/ periods of day/ year to avoid disturbance to fauna Operational phase Visible signs to be provided at suitable locations to warn workers of excessive noise , Public to be well informed of upcoming project using appropriate signage's and display boards prior to contractor accessing sites; Construction activities to be done in sections to reduce impacts of change and visual intrusions to the general public. The construction sites to be hoarded off from public view. Good housekeeping measures, such as regular cleaning, to be maintained at the construction site. Ensure an acceptable post-construction site as per provisions in the contract.
Land acquisition and compensation issues	 Consult affected property owners/users/ communities and seek their consent early in the project development process Allow affected persons to salvage their properties (including crops) before mobilizing to site to start work Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF Obtain the required developmental permits from the respective Assemblies before start of work

Table 3: Environmental and social mitigation measures Cont'

Environment, Social and Health Impact Issue/Concern	Proposed Mitigation Action/ Measures						
Generation and disposal of solid wastes	 Apply the principles of Reduce, Recycle, Reuse and Recover for waste management through the following actions: <u>Construction phase</u> Excavated earth materials will, as much as possible, be re-used for back filling purposes to reduce waste Excavated solid waste from the drain channel that are unsuitable for backfilling will be collected onsite, allowed to drain and collected for disposal at sites approved sites in collaboration by the MMDAs. Ensure that the required amounts of construction materials are delivered to site to reduce the possibility of the occurrence of excess material Provide bins on site for temporary storage of garbage such as lubricant containers, drinking water sachets and carrier bags/packaging materials. Ensure judicious use of construction materials such as pipes, laterites, sand, etc. to reduce waste All metal scrap waste will be disposed of at sites approved by the MMDAs or sold to approved third party agents for use by metal companies. Contractor to work according to a prepared and agreed Solid Waste Management Plan. Operational phase Waste collection bins to be sited at vantage points to serve the general public Warning signs to be posted at suitable locations against littering with possible sanctions Proper arrangement with waste collection companies through the Assembly to regularly collect and dispose of solid waste 						
Maintaining Livelihoods	 Ensure appropriate compensations are paid to PAPs as defined in the RPF; Employment and other opportunities to be given to local communities as much as possible. 						

Environmental & Social Management Framework (ESMF) Ghana Economic Transformation Project

Public Health and Safety,	Construction phase
and Security	• Works on exposed trenches and earth materials will, as much as possible, be completed before new earth dug and trenches are created.
	• Work areas to be hoarded off adequately to avoid inquisitive trespassers especially children
	• Warning signs to be posted around work areas to discourage trespassers
	• Contractors to maintain adequate security at construction sites to avoid pilfering or vandalising of property
	• Visibility to be ensured in the night time by providing adequate lighting
	Operational phase
	• Encourage community leadership to form watch committees to improve security
	• Work with police force to provide police posts at all major industrial sites
	• First aid facilities to be available at all sites with suitable arrangements with local health facilities to deal with emergencies

Table 3: Environmental and social mitigation measures Cont'

Environment, Social and Health Impact Issue/Concern	Proposed Mitigation Action/ Measures				
Traffic management	• Contractors to provide traffic management plans to be approved by relevant authorities				
	• Adequate alternative arrangements to be made to minimize impact on motorist and pedestrians				
	• Works to be completed on time to minimize inconvenience to motorists and pedestrians				
	Operational stage				
	 Adequate road signs to be planted on access roads to limit vehicular speeds 				
	 Construct properly designed speed ramps on access roads 				
	Construction phase				
	• Engage experienced artisans for construction works.				
	• All workers should be given proper induction/orientation on safety.				
Occurational health and	• The contractors will have a Health & Safety Policy and procedures to guide the construction activities.				
Occupational health and safety	• Regularly service all equipment and machinery to ensure they are in good working condition.				
sarcty	• Ensure there are first aid kits on site and a trained person to administer first aid.				
	Operational phase				
	• Workers to be provided with PPEs				
	• First aid facilities to be available at all sites with suitable arrangements with local health facilities to deal with emergencies				
Caltanal Harita as	• Traditional authority responsible for sanctity of local shrines properly identified and consulted				
Cultural Heritage	Necessary cultural rites agreed with community and performed prior to access to sites				

Ministry of Finance, Accra, Ghana

4 FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

4.1 Sub projects' Environmental and Social management Procedures

The Ministry of Trade and Industry (MoTI) and the Ghana Free Zones Authority as well as private sector zones developers are the main institutions implementing Component 2 sub-projects. These entities in collaboration with the Ministry of Finance will appoint an Environmental Officer or Safeguards Specialist to provide safeguards supervision over the projects. The Safeguards Specialist on the project must foremost carry out the preliminary environmental and social screening of proposed sub-projects by using a checklist which has been provided in Annex 1. If significant impacts are anticipated, then the EPA must be consulted and the Ghana Environmental Assessment (GEA) procedures duly followed. Table 3 below shows summary of the screening process and responsibilities.

Table 3: Summary of the Social and Environmental Screening Process and Responsibilities

No	Steps/Stage	Institutional Responsible	Implementation Responsibility	
1.	Identification and/or siting of the sub-project	MoF-PCU	Environmental and Safeguard Specialist	
2.	Environmental and Social screening of proposed project intervention to assist in project formulation using E&S checklist (Annex 1)	MoF-PCU	MoTI Environmental and Safeguard Specialist	
3.	Categorization and identification of the required instrument (use the national EIA procedure)	MoF-PCU	MoTI Environmental and Safeguard Specialist	
4.	Approval of the classification and the selected instrument by the Public EA Agency	MoF-PCU	Environmental and Safeguard Specialist	
	ration of the safeguard document/instrument (ESIA, Environ ne national legislation/procedure (taking into account the Ba			
	Preparation and approval of the ToRs		Environmental and Safeguard Specialist	
_	Preparation of the report	MEDCH	Environmental and Safeguard Specialist	
5.	Report validation and issuance of the permit (when required)	MoF-PCU	MoTI Environmental and Safeguard Specialist	
	Disclosure of the document			
6.	(i) Integrating the construction phase mitigation measures and E&S clauses in the bidding document prior they're advertised; (ii) ensuring that the constructor prepares his ESMP (C-ESMP), gets it approved and integrates the relevant measures in the works breakdown structure (WBS) or execution plan.	Technical staff in charge of the subproject (TS-PCU)	MoTI Environmental and Safeguard Specialist	
7.	Development of monitoring indicators	MoF-PCU; M&E		
8.	Implementation of the other safeguards measures, including environmental monitoring (when relevant) and sensitization activities	MoF-PCU	MoTI Environmental and Safeguard Specialist	
9.	Oversight of safeguards implementation (internal)	MoF-PCU	MoTI Environmental and Safeguard Specialist	
	Reporting on project safeguards performance and disclosure	MoF-PCU		

	External oversight of the project safeguards compliance/performance	EPA	
10.	Building stakeholders' capacity in safeguards management	MoF-PCU	
11.	Independent evaluation of the safeguards performance (Audit)	MoF-PCU	

5.1 Environmental and Social Capacity Analysis for Implementation of Framework ESMP

5.1.1 Stakeholder Consultations and Engagements

The ESMF preparation included extensive stakeholder consultations and participation in order to ensure that key interests of the public, at various levels of governance, are addressed and incorporated into the design and implementation of the GET safeguard tools. Key project stakeholders were identified for consultations and these included Government Ministries, State Agencies/ Organizations/ and Departments, Non-governmental organization and local communities, including women, the poor and most vulnerable groups. The Consultant conducted stakeholder consultations at various levels of governance to solicit information on the implementation of GET sub-projects. This was undertaken from February 20 to March 12, 2019. The consultations focused on:

- Assessing the views and perceptions of the PIEs on the GETP;
- Identifying and Assessing environmental and social impact of the GETP
- Assessing proposed infrastructure rehabilitation activities under the GETP
- Reviewing the status of compliance and enforcement of environmental regulations.
- Identifying capacity building needs and relevant regulatory institutions and recommending actions to strengthen MoF and MoTI, GFZA and its partners to ensure sustained environmental and social compliance monitoring.

5.1.2 Institutional Capacity Assessment

Generally, the institutional capacity was limited in terms of availability of specialists in environmental and social safeguards. Institutional coordination among various institutions and even peer professionals was equally weak. A consistent concern across the stakeholders is the need to address gaps and build capacity within the implementing agencies to improve environmental management and ultimately support the development and implementation of project objectives. These concerns are addressed in the GETP through the various training and capacity building initiatives which are budgeted for under the ESMF.

5.2 Institutional Capacity for Implementation of Framework for the ESMP

The institutional arrangement will be made up of the following committees to oversee the implementation of the GET project:

- 1. Steering Committee;
- 2. Ministry of Finance;
- 3. Project Coordinating Unit (PCU); and
- 4. Technical Committee.

The roles and responsibilities of the implementing units are spelt out in more detail in the main body.

• Project Coordinator:

- Environmental Safeguards Specialist (ESS-PCU):
- Social Safeguards Specialist (SSS-PCU):
- Procurement Specialist (PS-PCU):
- Technical Specialist (TS PCU):
- Financial management Specialist (FS PCU):
- Monitoring and Evaluation Specialist (M&E-PCU):

Table 4: Role and responsibilities (focus on the PCU)

Project Coordinator	Coordinate day-to-day project implementation; public relations and coordination with project stakeholders; supporting and guiding national and international stakeholders; administration; supervision/management; monitoring and reporting				
Environmental Safeguards Specialist	Ensure environmental compliance in all project ar (conducting EIA – where applicable)				
Social Safeguards Specialist	Ensure all social grievances are addressed and recorded (developing relocation assessment plan – where applicable)				
Procurement Specialist	Provide overall procurement guidelines and support during the bidding/selection process; responsible for reviewing and handling all procurement related issues (legal, commercial and financial)				
Technical Specialist	Planning, coordination and management of the project activities; technical task; administrative task				
Financial management Specialist	Budgeting and planning; funds management; expenditure/payment processing; accounting and records management; financial reporting; audit				
Monitoring and Evaluation Specialist	Developing M&E system building tools and processes				

A Project Coordinating Unit (PCU) would be hosted within the Ministry of Finance to be responsible for overall project management including safeguards and grievance redress. Since the project activities will be nationwide, the respective regional offices of the beneficiary institutions will be involved in project execution. The other agencies who will be part of the implementation include the Ghana Investment Promotion Centre (GIPC); the National Board for Small Scale Industries (NBSSI); the Ministry of Business Development (MoBD); the Registrar General's Department (RGD); the Ghana Standard Authority (GSA); the Ghana Free Zones Authority (GFZA) and the Venture Capital Trust Fund (VCTF).

Dedicated implementation teams at the regional offices of these implementing agencies will be formed to participate in project planning, coordination and implementation. They will work closely with the PCU and report to same through their head office in Accra. The regional teams will include assigned officers for Safeguards. Local supervisory/monitoring teams will be formed at each project site to assist with the implementation of the project and will liaise with local communities to manage any safeguards related concerns.

5.3 Training and Capacity Building Requirements

The success and sustainability or otherwise of the GETP will to a large extent depend on the capacity of Government and the project implementation parties to carry out their respective design, planning, approval, permitting, monitoring and implementation roles. A capacity building programme for Project Implementation Units (PIU), industrial zones developers, contractors and other stakeholders will be put in place to ensure that, over time, capacity to conduct due diligence on social and environmental aspects of infrastructure projects is developed.

5.4 Identification of Capacity Building Needs

The first step in pursuing capacity building will be to identify the capacity building needs of the various stakeholders. Capacity building should be viewed as more than training. It is human resource development and includes the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively. It also involves organizational development, the elaboration of relevant management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).

All the relevant officials will be provided formal training in the management of environmental and social issues. The initial stakeholder performance analysis for environmental and social safeguards as well as the Project Appraisal Document identified some key topics that the training programme should focus on which includes the following:

- An orientation program on the ESMF;
- Environmental and Social Screening Checklist;
- Completion of EA Registration Forms;
- Preparation of Terms of Reference for ESIA;
- Environmental Assessment Processes;
- Environmental Management Plan;
- Resettlement Action Plan (RAP);
- Project Management; and
- Environmental and Social Clauses in Contractors' contract and bidding documents.

5.5 CAPACITY BUILDING ARRANGEMENTS

The capacity building would include awareness- creation, sensitisation and technical training workshops for all project stakeholders. The recommended training programmes are as summarised in Table 5 below:

No	Training content	Participants		
1.	 World Bank Safeguard policies of OP 4.12 and OP 4.01 WBG EHS Guidelines Ghana EPA Environmental Assessment Regulations ESMF/ RPF 	MoF - PCU PCU Safeguards Specialist PIUs (GFZA, MoTI, GIPC, NBSSI, MBD, RGD, GSA and VCTF)		
2.	 Screening Checklist ESMF Screening checklist Preparation of TORs for ESIAs, ESMPs, RAPs, etc. Preparation of ESIAs, ESMPs, RAPs, etc. Completion of EA Registration Forms 	PCU Safeguards Specialist PIUs (GFZA, MoTI, GIPC, NBSSI, MBD, RGD, GSA and VCTF)		
3.	 Environmental and Social Management Plans Grievance redress registration and resolution forms 	Contractors Supervising engineers, Project site managers MMDAs, Private Sector Community persons		

5.6 Grievance Redress Mechanism

The project will develop an online grievance system at the MoF -PCU and linked to all implementing agencies (MoTI, GFZA, GIPC, NBSSI, MoBD, RGD, GSA and VCTF). The channels of uptake at all levels (Project sites, communities, institutions and implementing agencies) will include walk-ins, face-to-face communication, toll-free calls, letters, e-mails, text messages, WhatsApp, etc. The mediation process shall be confidential, transparent and objective, as well as accountable, easy, fast, accurate and participative.

5.7 **Openness and Transparency**

Under this Project, openness and transparency would be achieved through the following mechanisms:

- 1. Rigorous Information, Education and Communication System. Specific tools to be used in internal and external communication are as follows:
 - a. Internal Communication
 - b. Project Technical Committee meetings
 - c. Project Steering Committee meetings
 - d. Periodic briefing of MoF & PIUs
 - e. Generation and Circulation of Periodic Reports
- 2. Citizen Participation in Decision Making
- 3. Adopting Paperless Systems

5.8 Environmental and Social Monitoring

Monitoring is a key component of the ESMF during project implementation. The aim of monitoring would be to:

- 1. Improve environmental and social management practices;
- 2. Check the efficiency and quality of the EA processes;

- 3. Establish the scientific reliability and credibility of the EA for the project; and
- 4. Provide the opportunity to report the results on the safeguards, its impacts and the implementation of the proposed mitigation measures.

Monitoring plans will be developed to track the safeguards' progress at both the ESMF and sub-project activity level (at the respective industrial sites). The proposed plans are presented in Part 4 of Annex 1. These plans have been phased into three main activities: Preparatory Activities; Implementation Activities; and Supervision Activities. A monthly Field Environmental Monitoring Checklist has been provided to track progress and performance of project activities.

5.9 Budgetary provisions

The implementation of the ESMF would have budget implications in terms of awareness creation, capacity improvement and training workshops as well as dissemination of ESMF to key stakeholders involved in the implementation of proposed interventions. The budget is estimated at UD\$725,000 and local counterpart funding from Government of Ghana of $GH\phi2,328$ million. Table 7 below shows the breakdown of the budget estimates.

#	Item	Unit	Unit Cost		Total		Source of
#	Item		Local	US\$	Local	US\$	financing
1	Preparation of specific ESIA						
	ESIA/ Scoping Reports for Industrial parks & SECs	20	60,000	-	1,200,000	-	GoG; Project Funds
	Permit and Processing Fees	10		10,000	-	100,000	GoG; Project Funds
2	Training & Capacity Building						
	Awareness creation and Capacity building for MoF, project staff (Refer Table 14)	200	5,000	2,000	1,000,000	400,000	GoG; Project Funds
	Study tours (local) for selected social and environmental champions participating in GET drawn from EPA, MoF, MoTI	15	10,000	-	150,000	-	GoG; Project Funds
3.	Mid-term audit of ES performance						
	Performance Audit	5	-	12,000	-	60,000	Project Funds
4	Completion audit of ES performance						
	Completion Performance Audit	10	-	15,000	-	150,000	Project Funds
5.	Monitoring and Evaluation						
	Safeguards component for M&E	6	5,000	2,500	30,000	15,000	GoG; Project Funds
	Total				2,380,000	725,000	

Table 7: Indicative Budget for ESMF Implementation

CHAPTER ONE

1 INTRODUCTION

1.1 PROJECT DESCRIPTION

The Government of Ghana (GoG) through the Ministry of Finance has requested the World Bank for credit support of US\$200 million to implement the Ghana Economic Transformation Project (GETP). The GETP aims at supporting the diversification of the economy to better shock-proof against volatility in primary commodity prices, spur a transition to an economic structure that generates higher growth that is more sustainable over the long term. It also aims at helping the government to better respond to the imperative of creating more and decent jobs for the youth and rapidly growing labour force. The project is anchored in the 'Ghana Beyond Aid' vision and recognizes the critical role of the private sector in achieving economic transformation. The project will have a national coverage and will comprise multiple activities that aim at helping the Government to achieve the objective of creating more and decent jobs for the youth and rapidly growing labour force.

The Ghana Economic Transformation Project (GETP), according to World Bank's Environmental Assessment Policy (OP 4.01), is Category B and will require the preparation of an Environmental and Social Management Framework (ESMF). The features of the GETP make an ESMF the appropriate requirement under the Bank's OP/BP 4.01 because sub-projects and exact locations for their implementation are not yet known.

Activities under the GETP that trigger potential environmental and social risks and impacts comprise generally Component 2 that will involve some civil works (i.e. construction and/or rehabilitation and refurbishment of existing infrastructure for private investments). Due to the small to medium scale nature of these sub-projects, they are classified as Schedule 1 undertakings (i.e. projects which require registration and permit) under the Ghana system.

1.2 GET PROJECT OBJECTIVES

The Program Development Objective is to promote sustainable private investments, productive jobs and firm growth in non-resource-based sectors. The guiding principle of the program is to promote and strengthen a growth model that is conducive to economic transformation which will achieve, simultaneously higher rates and productivity growth across the economy (especially in non-resource-based sectors), with a view to creating quality and raising incomes.

1.3 PROJECT COMPONENTS

The project has four primary components:

- 1. Component 1: Enabling Investments— improving the enabling business environment, investment promotion capacity and quality infrastructure support system
- 2. Component 2: Crowding-in Investments— promoting spatial and industrial planning and development
- 3. Component 3: Accelerating Entrepreneurship and SME growth
- 4. Component 4: Project Management

1.3.1 Component 1: Enabling Investments— improving the enabling business environment, investment promotion capacity and quality infrastructure support system

- Sub-Component 1.1: Improving the Business Regulatory Environment.
- Sub-Component 1.2: Investment Policy and Promotion
- Sub-Component 1.3: Improving Ghana's Quality Infrastructure (QI).

1.3.1.1 Sub-Component 1.1: Improving the Business Regulatory Environment.

Under this sub-component, the project will support three activities:

<u>Activity 1: Support to the Registrar General's Department (RGD</u>) in identifying, designing and implementing administrative and institutional changes and streamlining its operations in delivering business-registration services. It will also support the inter-connectivity of all agencies related to new business registrations (Registrar General, Ghana Revenue Authority, Social Security, Metropolitan Authority), in order to create a one-stop shop for business registration. This will include development of a data exchange solution as well as required staff training to effectively support, maintain, and operate this e-Registrar solution.

<u>Activity 2: Support for the implementation of the new Companies Bill</u>, specifically in the establishment of an autonomous Office of the Registrar of Companies (ORC), separate from the Registrar General's Department, headed by a substantive Registrar, with a full complement of staff and resources to operate a modern Companies Registry in Ghana.

Activity 3[K1]

1.3.1.2 Sub-Component 1.2: Investment Policy and Promotion

Under this sub-component, the following activities will be implemented:

<u>Activity 1: Development of GIPC's Corporate Strategy</u>: This subcomponent will support GIPC develop a well-articulated multi-year Corporate Strategy. It will serve as a roadmap to the attainment of predefined objectives and goals aimed at bolstering the quantity and quality of investment in Ghana. In addition to organising GIPC's activities for maximum impact, the Corporate Strategy would help GIPC define and leverage its partnerships with stakeholders, help stakeholders understand its role, demonstrate its value, raise funds, build internal and external teams, bolster its advocacy for investment climate reforms, expand and adjust its activities as needed to offer relevant and comprehensive services to investors.

<u>Activity 2: Improving GIPC's Systems and Tools</u>: Support the enhancement and/or deployment of the systems and tools to ensure that GIPC is efficient and maximizes its ability to service investors by providing software, hardware and training as needed including:

- Investor Relationship Management System (IRMS)
- Investor Information System (IIS)
- Standard Operating Procedures (SOPs)

<u>Activity 3: Roadmap for capacity building of GIPC staff</u>: The project will support GIPC staff in acquiring and improving the skills needed to perform their tasks. This may include enquiry handling, investor outreach, investor aftercare, research and business intelligence, systems/IT, marketing, languages, etc. The support will include:

- Conducting an HR/staff skills audit;
- Devising a multi-year capacity building plan; and
- Capacity building through training programs, courses, workshops, seminars and study tours, as most appropriate.

<u>Activity 4: Strengthening GIPC Investor Services:</u> This activity will aim to improve the scope and quality of the services that GIPC provides to foreign and domestic investors in Ghana along the investment lifecycle. It will focus on building sector-specific investment promotion programs. These services can be divided into four categories: marketing, information, assistance, and advocacy; and can further be grouped into programs. The project will provide for the design and oversight of one or more programs of investors services, including:

- Investor outreach
- Investor aftercare
- Investor linkages
- Investor advocacy

<u>Activity 5: Supporting Legislative Reforms to Minimize Sector-Specific Investment Barriers</u>: Based on a review of relevant IPP legislation in 1 or 2 priority sectors (as defined in GIPC's corporate strategy), work under this activity will aim to identify key legal and regulatory barriers and support reform activities to remove such barriers and encourage investment in these sectors. This work will build from the analysis and activities carried out under the Ghana IC project supporting revisions to the GIPC Act (2013).

Activity 6: Supporting upgrade in the physical infrastructure of GIPC's space: The project will support upgrades to the physical infrastructure of the GIPC (minor works, remodeling and refurbishment), to improve investor experience.

1.3.1.3 Sub-Component 1.3: Improving Ghana's Quality Infrastructure (QI).

This sub-component supports the Government's Industrialization Agenda by strengthening the regulatory and institutional framework for Quality Infrastructure in Ghana. Under these Ghana Standard Authority's objectives, the project will support a number of key reforms, regulations and investments including the Ghana Standards Bill, NQI Policy, ISO certification of GSA units and departments, and development of regional labs. Specifically, the project will support the Ghana Standards Authority in the following ways:

- Develop a National Quality Policy (NQP).
- Demand Assessment for QI services² in the country.
- Develop the needed QI services
- Develop accreditation services for Conformity Assessment Bodies (CABs) in the country
- Support the development of QI ICT infrastructure,
- Support the administration and operations of respective QI functions,
- Institutional reforms:

1.3.2 Component 2: Crowding-in Investments— promoting spatial and industrial planning and development

This component is to put in place a sound framework and process for spatial planning and development (specifically for Special Economic Zones), that can lead to increased investments and maximize their economic rate of return in terms of jobs, incomes and productivity growth. The component will involve:

• Sub-Component 2.1: Technical assistance to build institutional and planning capacity in GFZA as well as in other relevant line agencies such as the Customs Authority and GIPC;

² *QI services* is utilized throughout the report as a collective term to denote the outputs of the QI organizations such as standard development, calibration, test reports, certificate, accreditation certificate and many more.

- Subcomponent 2.2 will focus on building the Government's capacity to enable and foster the private development and operation of SEZs on government owned land allocated and strengthening and clarifying the Government's role as a regulator, enabler and promoter of spatial development; and
- Subcomponent 2.3 will support last-mile infrastructure investments to make developmentally attractive SEZ projects viable.
- A viability gap fund that will finance last-mile infrastructure in eligible zones.

1.3.2.1 Sub-Component 2.1: Technical assistance to build institutional and planning capacity

This subcomponent will provide technical assistance to a) develop the first set of diagnostics for both the country's overall SEZ regime and specific SEZ zones/projects, b) build planning and development capacity to regularly carry out such assessments on needs, opportunities and potentials for various zone projects, c) improve institutional efficiency, efficacy and strategic alignment with development objectives, d) strengthen investment promotion and marketing, and investor aftercare.

<u>Activity 1: Support preliminary site assessments for this select number of sites</u> that have been proposed for the specific FZ/IP projects, including those under the "One Region, One Zone" initiative, and those to be developed by the potential private developers/operators. These sites provisionally selected will also be assessed for security, environmental, social, resettlement, cultural, religious or other issues and risks, including any potential reputational risks for the WBG and development partners.

1.3.2.2 Sub-Component 2.2: Viability Gap Fund for zone development

This sub-component will support spatial development with the establishment of a Viability Gap Fund (VGF) to be managed by a Special Purpose Vehicle (SPV) which will invest in off-site and on-site infrastructure in those zones identified as priority in sub-component 2.1.

Activity 1: Off-site, last-mile infrastructure

Please note that this list is not all-inclusive

- Construction, paving or upgrading of access roads to the SEZ site
- Construction of a railroad spur directly to the site
- Upgrading of a nearby, adjacent, or on-site port
- Extension or upgrading of the electric power network to the SEZ site
- Extension or upgrading of the telecommunications network to the site
- Preparation of inland waterways to the site
- Extension or upgrading of the water network to the SEZ site, including pipeline construction or upgrading

- Provision of infrastructure and services to surrounding communities (schools, clinics and hospitals, water, electric power, waste treatment and solid waste removal)

- On-going or regular maintenance of any of the above

Activity 2: On-site infrastructure (within the walls of or adjacent to the SEZ site)

- Construction of an electric power plant or the extension of the network throughout the park

- Construction of an on-site waste water treatment plant or water purification/storage facility, waste stabilization ponds, storm drainages and capture systems, sewage systems, or creation/upgrading and maintenance of boreholes

- Construction of a perimeter wall surrounding the SEZ
- Paving of internal roads
- Construction or upgrading of on-site customs office and facilities
- Construction or upgrading of internal zone administration building
- Construction or upgrading of internal amenities/services/SME building
- Construction or upgrading of standard factory buildings or office buildings
- Construction or upgrading of on-site employee residences
- Construction of or upgrading on-site training facilities
- Construction or upgrading of on-site clinic
- Construction or upgrading of on-site eating facilities
- Construction or upgrading of on-site day care facilities
- Construction or upgrading of police station/facilities
- Preparation of all or part of the land for construction of tenant companies
- Construction or upgrading of on-site pipelines
- On-going or regular maintenance of any of the above

Activity 3: Other on-site equipping, outfitting and maintenance activities(within the walls of or adjacent to the SEZ site)

- Provision of on-site emergency equipment, systems, and personnel
- Provision of on-site security equipment (cameras, etc.), systems, and personnel
- Provision of on-site eating services
- Provision of on-site day care services, systems, and personnel
- Provision, outfitting and equipping of on-site training services, including systems and personnel
- Outfitting and equipping of police station/facilities
- Outfitting and equipping of customs office/facilities
- Landscaping and gardening within and in front of the SEZ site, systems, and personnel
- Solid waste removal facilities and services, systems, and personnel
- Fire prevention and extinguishing equipment (vehicles, extinguishers, etc.), systems, and personnel
- Miscellaneous maintenance work, systems, and personnel

Activity 4: Technical assistance, diagnostics and studies

- Site assessment
- Benchmarking
- Demand forecasting for specific SEZs
- Master Planning for specific SEZs
- Feasibility study for specific SEZs (including industry and sector analysis, infrastructure analysis, and any other analysis included in the feasibility study)
- Economic and financial analysis for specific SEZs
- Marketing strategy and plan for specific SEZs
- Environmental and social impact assessments, and management frameworks for specific SEZs
- Any other diagnostics required for realizing specific projects for specific SEZs

Activity 5: Marketing and investment promotion activities

- Developing, printing and dissemination of promotional materials for the entire SEZ regime as well as for individual SEZ projects

- Website development
- Development of e-services and information

- Investment promotion and aftercare infrastructure (investor tracking systems including software and hardware, one-stop shop, on-line investor service systems, etc.)

- Investment promotion activities including participation in trade fairs (travel, per diems, hotels, rental fees for stands, transportation of samples, etc.), participation in international conferences, capacity building, one-on-one visits to prospective clients and SEZ developers/operators, etc.

Activity 6: Other activities

- Training and capacity building for government officials and private sector stakeholders, including participation in study tours

- Reorganization/streamlining of government institutions
- Community and other stakeholder engagement and consultation
- Preservation of natural habitats for flora and fauna
- Innovation solutions toward the reduction of carbon emissions
- Incorporation of alternative energy sources (wind, solar, etc.) to the SEZ electric power mix
- Support of investment climate reforms/improvements related to SEZs

1.3.3 Component 3: Accelerating Entrepreneurship and SME growth

This component is to enable the entry and expansion of enterprises with high-growth potential that can contribute to economic dynamism and job creation in the non-resource sectors of Ghana's economy. This will be achieved through strengthening and rationalizing the government's main entrepreneurship and enterprise support programs, the delivery of financial and non-financial support to SMEs, and the strengthening of entrepreneurship hubs and other organizations in the entrepreneurship ecosystem.³

- Sub-Component 3.1 Reform and Rationalisation of Government Entrepreneurship and SME Support Agencies
- Sub-Component 3.2: High Growth SMEs and Entrepreneurship Ecosystem Strengthening
- Sub-Component 3.3 Venture Financing for Early-Stage Businesses and Strategic Industries

1.3.3.1 Sub-Component 3.1: Reform and Rationalisation of Government Entrepreneurship and SME Support Agencies

<u>Activity 1 Support reforms and capacity building for key government agencies</u> that support entrepreneurs, SMEs, and innovative enterprises, including the NBSSI, NEIP, and VCTF. It will also support the harmonisation and rationalisation of these agencies and related programs, leading to the creation of a new enterprise development agency that groups many of these currently dispersed initiatives.

<u>Activity 2: Support the planned review and updating of the NBSSI Law</u> and improve the structure and operational efficiency of the NBSSI agency. Support capacity building of the NBSSI, which will include

³ Entrepreneurship hubs is defined broadly for the project to include business incubators, accelerators, technology centers, or other organizations with a mission to support the startup and growth of businesses.

partnering of the agency with a well-run, similarly mandated agency in another country.

<u>Activity 3: Support a review of the VCTF mandate and strategy, updating of the VCTF law</u> if necessary, and resulting reforms of the agency. This will include capacity building support to professionalize VCTF operations and improve efficiencies following the reforms. Given the expanded mandate of VCTF to stimulate early-stage investing activity and provide co-investment to growth stage funds in strategic industries,

<u>Activity 4: Support the establishment of a Ghana EDA</u> that will assume the mandate for enterprise development and consolidate key entrepreneurship and SME support programs under its authority. The EDA would take over relevant responsibilities from the NBSSI and NEIP to avoid duplication of roles, with these agencies presumably absorbed into the EDA

1.3.3.2 Sub-Component 3.2: High Growth SMEs and Entrepreneurship Ecosystem Strengthening

Activity 1: Support growth and productivity improvements for domestic SMEs and start-ups by providing customized support to SMEs and support to Ghana's entrepreneurship ecosystem.

Activity 2: Support the emergence of high-growth SMEs, the sub-component will finance a *MarketConnect* type program⁴ that focuses on 360-degree assessments of business capabilities and growth targets and delivers custom-tailored technical assistance and grant financing to firms at different levels of growth (from those at entry level, to those gearing up for expansions, and those well placed for product upgrading and enhanced competitiveness).

Activity 3: Support the development of the entrepreneurship ecosystem by providing capacity building to entrepreneurship hubs to bring the quality of their services up to international standards.

1.3.3.3 Sub-Component 3.3 Venture Financing for Early-Stage Businesses and Strategic Industries

This Sub-component seeks to provide seed and venture capital to SMEs through the establishment of funds for co-investments in SMEs and strategic industries. Resources for these funds will be channeled through VCTF.

Activity 1: Finance a new SME financing vehicle, the "Startup Catalyst" Fund, which will focus on promoting seed (startup) and very early stage funding to high-growth potential startups and SMEs.

Activity 2: Finance a "Strategic Industries" Fund that will provide co-investment for qualified investment funds that make investments in businesses operating in sectors relevant to Ghana's economic transformation. These sectors are expected to initially target investments in the agriculture and manufacturing sectors (including agribusiness) as well as ICT sector.

Activity 3: Support technical assistance (TA) to further develop the early stage financing ecosystem. This TA will go towards (i) fund management team training, (ii) investor training (e.g. for pension fund and insurance fund managers to better understand PEVC mechanisms), and (iii) reimbursement of actual TA expenses of PEVC funds that were made for completed early-stage investments.

⁴ Such as the ones being financed by the World Bank in Zambia and other countries.

1.3.4 Component Four: Project Management, Monitoring and Evaluation

Under component 4,the Project will support Project Management, Monitoring and Evaluation. This fourth component will finance specialized consultant services to assist PCU of the ETP at MoF in project implementation and to develop a comprehensive monitoring and evaluation system for the project.

1.4 PROJECT BENEFITS AND TARGETS

The primary beneficiaries of this Project are Ghanaian growth-oriented investors as well as Foreign Investors, businesses and entrepreneurs, in addition to line agencies whose capacity to execute their sub-programs will be strengthened.

1.5 PROJECT COORDINATION AND IMPLEMENTATION ARRANGEMENTS

The implementation structure will comprise Project Steering Committee (PSC), Lead Agency, Implementing Agencies and a Technical Committee as well as Collaborating Agencies, given the multisectoral nature of the project. Figure 1 below shows the proposed structure for the project implementation arrangements

The main institutions to implement the program and projects and to ensure sound management of the environmental and social aspects include:

- Ministry of Finance (Economic Transformation Unit) and Resource Mobilization and Economic Relations Division (RMERD)
- Ministry of Trade and Industry
- Ghana Free Zone Authority
- Government Regulatory Agencies Ghana Investment Promotion Council:
 - Ghana Free Zones Board;
 - o Ghana Standards Authority
 - Venture Capital Trust Fund;
 - Ministry of Trade and Industry;
 - Ministry of Business Development

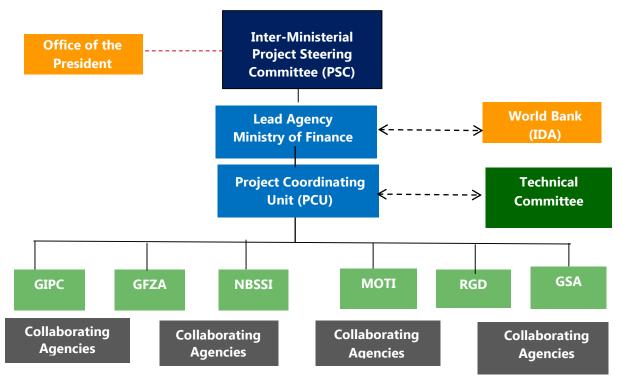


Figure 1: Project Implementation Structure

1.5.1 Inter-Ministerial Project Steering Committee (PSC)

The Inter-Ministerial Project Steering Committee (PSC) shall have oversight responsibility of the project. It will comprise of representatives of all relevant Ministries, Agencies and the Private Sector. The PSC will be co-chaired by Minister for Finance/Trade or his representative. The PSC will meet biannually with the Project Coordination Unit as its Secretariat. The PSC will specifically perform the following roles:

- provide overall strategic advice and policy guidance for implementation of the project;
- review and approve annual work plans and budget;
- review and discuss bi-annual and annual project progress reports and make recommendations;
- assess progress towards achieving the project's objectives and take corrective actions if necessary; and
- facilitate the timely execution of the project.

1.5.2 Lead Agency (LA)

The Lead Agency shall be responsible for coordinating the activities of the Implementing Agencies. It shall constitute a Project Coordination Unit to be run by a Project Coordinator, Procurement, Financial Management and M&E Experts.

1.5.3 Project Coordinating Units

The Project Coordinating Units (PCU) will be responsible for the following:

• opening and maintaining the project designated Account;

- coordinating the preparation of the annual work/procurement plans and submitting consolidated plans to the World Bank;
- facilitating/supervising procurement activities of the various implementing agencies;
- where certain items/services are required by all the agencies, the procurement will be done by the LA in collaboration with the Implementing Agencies to ensure efficiency and economies of scale;
- collating M&E reports and other reports that may be required and submit same to the World Bank;
- serves as a secretariat to the PSC convene meetings and ensuring that decisions made by the PSC are implemented;
- Monitor and assess progress and results under the project results framework, and address implementation challenges;
- Build relationship across the component and sub-components managers to find solutions to complex implementation challenges;
- Arrange the audit of the project.

1.5.4 Technical Committee

The Technical Committee shall be made up of representatives from the beneficiary agencies and chaired by the Project Coordinator. The TC will meet every quarter to review implementation progress and propose lasting solutions to challenges that may arise. The TC shall be responsible for providing quality assurance on the technical aspects of the project including providing relevant data and information required for the implementation of activities and reviewing various reports.

1.5.5 Implementation Agencies (IAs)

The Implementation Agencies will be responsible for the day-to-day implementation of the various components of the project. The Agencies will constitute their Project Implementation Teams (PITs).

1.5.6 Safeguards Implementation Arrangements

The E&S Specialist at the PCU will have overall responsibility for all safeguards related issues on the project and will be supported by an E&S Specialist at the GFZA as well as Safeguards Focal Persons (SFPs) within the other implementing agencies as required (MoTI, GIPC, NBSSI, MBD).

1.6 PURPOSE OF THE ESMF

The proposed GETP involves environmental liabilities during project development and operation phases such as use of construction materials for building infrastructure and related earth moving activities; generation of industrial and domestic wastewater, and solid waste from operations and other industrial emissions. Compliance with the national and World Bank safeguard policies and conducting ESA of the GETP will help ensure implementation of environmental mitigation measures that can eliminate or reduce adverse impacts of the development activities and industrial operations to a minimum level. Furthermore, cleaner production and pollution prevention knowledge and technologies can be used at various stages of the project to reduce the environmental risks of GETP.

Environmental and Social Management Framework Document (ESMF) provides general policies, guidelines, codes of practice and procedures to be integrated into the implementation of the WB-supported Projects. It defines the steps, processes, and procedures for screening, alternative analysis,

assessment, monitoring and management of the environmentally related issues. The ESMF is intended to be used as a practical tool during program formulation, design, implementation, and monitoring. The ESMF identifies the policy triggers for the project, the screening criteria for activities, the environmental and social impacts as well as likely financing and the potential mitigation measures to mitigate the identified risks, assessment of the institutional capacity of the implementing agency and measures for capacity-filling gaps, and an estimate of the budget needed for the implementation of the ESMF and related instruments.

1.7 OBJECTIVES AND PRINCIPLES OF THE ESMF

The ESMF should be prepared according to the following specific objectives and principles they include :

- To establish clear procedures and methodologies for the environmental and social planning, review, approval and implementation of sub-projects to be financed under the Project;
- To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to sub-projects;
- To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF/RPF;
- To establish the Project funding required to implement the ESMF requirements; and
- To provide practical information resources for implementing the ESMF.

The principles should include that the Project:

- Supports project implementers to develop their sub-projects applications to avoid or minimize environmental and social safeguards concerns;
- Supports local authorities to review applications and determine if additional, more detailed environmental or social planning is required before applications can be approved;
- Supports project implementers and local authorities in carrying out their respective roles by funding substantial training, information resources and technical assistance; and

The ESMF outlines mechanisms for:

- Screening of proposed project interventions, identifying potential environmental and social impacts and management of safeguards policy implications;
- Arrangements by MoF and other relevant institutions for implementation and their capacity building;
- Monitoring of the implementation of ESMF measures;
- Community consultations; and
- The estimated costs related to the ESMF.

CHAPTER TWO

2 ENVIRONMENTAL AND SOCIAL BASELINE DATA

This section presents a description of the existing environment, comprising the bio-physical and socioeconomic conditions of the proposed project area. The project area covers the entire country of Ghana.

2.1 PHYSICAL AND NATURAL RESOURCES

2.1.1 Location and Size

Ghana is situated on the west coast of Africa and lies within longitudes 3°5'W and 1° 10'E and latitudes 4°35'N and 11°N, with a total area of 238,540 km². The country has a north-south extent of about 670 km and a maximum east-west extent of about 560 km. It shares borders with Côte d'Ivoire to the west, Burkina Faso to the north, and Togo to the east. To the south are the Gulf of Guinea and the Atlantic Ocean. The country is divided into 16 administrative regions and 254 Metropolitan, Municipal and District Assemblies (MMDAs) (Figure 2).

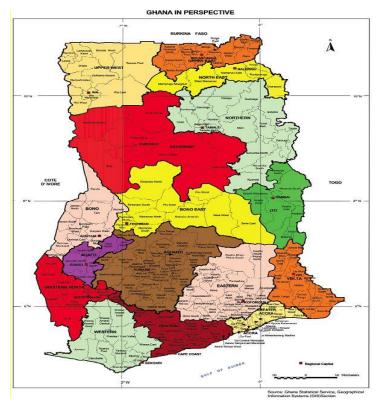


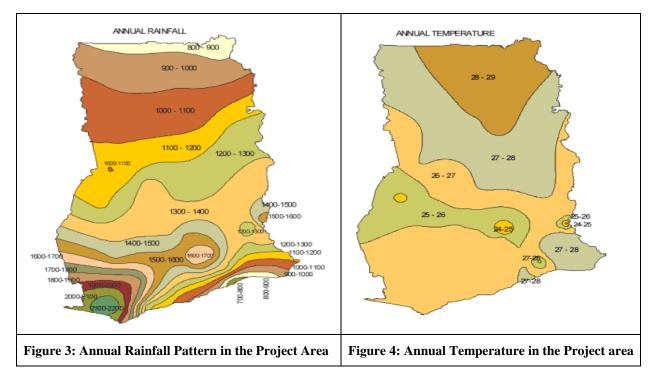
Figure 2: Political and Administrative Map of Ghana

2.1.2 Climate

The country has a warm equatorial climate. Mean annual temperatures range between 24°C and 36°C. Relative humidity is high at the coastal areas decreasing inland. The dry harmattan conditions occur from November to January throughout the country, but severer in the north.

Average rainfall over the country is about 1,260 mm/year but ranges from 890 mm/year in the coastal zone near Accra to 2,030 mm/year in the southwestern rainforests. The rainfall is bi-modal in the southwestern forest zone, giving a major and a minor growing season; elsewhere, a uni-modal

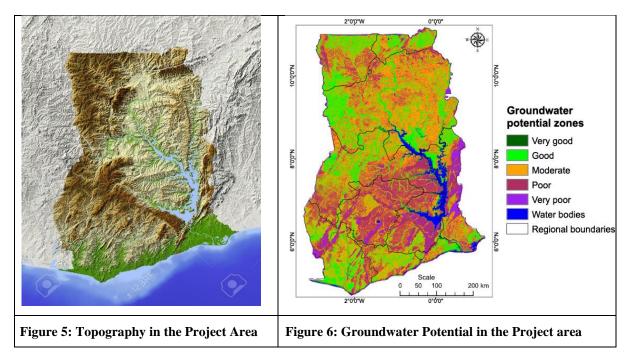
distribution gives a single growing season from May to October. Except for the southwestern zone, the reliability of the rainfall, particularly after crop germination, is a major factor affecting crop growth and agriculture in general. Rainfall decreases from south to north and eastwards, reaching an average of 1,000 mm in the extreme northeast and in the southeast coastal areas. Rainfall in the wettest areas of the forest zone reaches an average of 2,000 mm. The rainfall pattern in the savanna areas is uni-modal while in the forest and forest-savanna transitional zones, a bi-modal pattern occurs.



2.1.3 Topography and Relief

The country is characterized by fairly low relief with few areas of moderate elevation in the north and east. The land is generally 600 meters above sea level. Physiographic regions include the coastal plains, the forest dissected plateau, and high hill tops which are important ecological subsystems in a generally undulating terrain. The topography is predominantly undulating and of low relief with slopes of less than 1 percent. Despite the gentle slopes, about 70 percent of the country is subject to moderate to severe sheet and gully erosion. The highest elevation in Ghana, Mount Afadjato in the Akwapim-Togo Ranges, rises 880 metres above sea level. There are five distinct geographical regions:

- The low plains, stretching across the southern part of the country.
- The Ashanti Uplands, stretching from the Côte d'Ivoire border in the west to the elevated edge of the Volta Basin in the east.
- The Akwapim-Togo Ranges in the eastern part of the country consist of a generally rugged complex of folded strata, with many prominent heights composed of volcanic rock. The ranges begin west of Accra and continue in a north-easterly direction, finally crossing the border into Togo.
- The Volta Basin occupies the central part of Ghana and covers about 45 percent of the nation's total area. The basin is characterized by poor soil, generally of Voltaian sandstone.
- The high plains in the northern and north-western part of Ghana, outside the Volta Basin, consist of a dissected plateau. Soils in the high plains are more arable than those in the Volta Basin.



2.1.4 Surface and Ground water Resources

Ghana's water resources potential is divided into surface and groundwater sources. Surface water resources are mainly from three river systems that drain Ghana, namely: the Volta, South western and Coastal River Systems. The Volta River system in Ghana occupies nearly two thirds (70%) of the land area of Ghana, the South Western River system, 22% and the minor Coastal River system, 8%. The Southwestern Rivers comprise the Bia, Tano, Ankobra and Pra rivers, while the Coastal river system is made of the Ochi-Amissah, Ochi Nakwa, Ayensu, Densu and Tordzie/Aka rivers. The average annual runoff from Ghana alone is 39.4 billion cubic meters, with the Volta, Southwestern and Coastal River systems contributing 64.7%, 29.2% and 6.1% respectively. This amount of runoff is enough to support most domestic and irrigation uses in the country if it is adequately managed.

The occurrence of groundwater in Ghana is associated with 3 main geological formations. These are the basement complex, comprising crystalline igneous and metamorphic rocks; the consolidated sedimentary formations underlying the Volta basin (including the limestone horizon); and the mesozoic and cenozoic sedimentary rocks. The basement complex and the Voltain formation cover 54 percent and 45 percent of the country respectively. The remaining 1 percent consists of mesozoic and cenozoic sediments. The quality of groundwater resources in Ghana is generally good except for some cases of localised pollution and areas with high levels of iron, fluoride and other minerals. Salinity in certain groundwater occurrences is also found especially in some coastal aquifers.

2.1.5 Geology and Soils

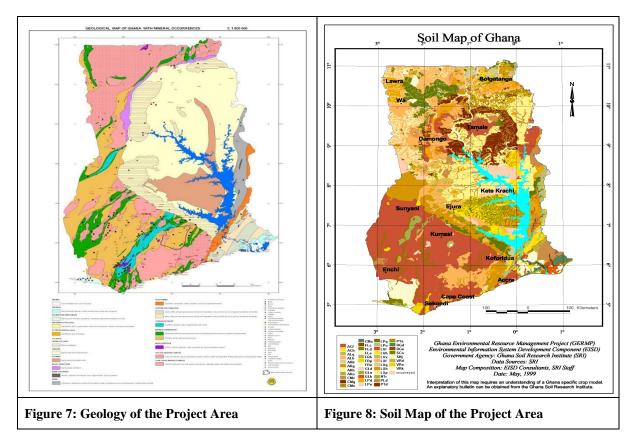
The geology of Ghana is primarily very ancient crystalline basement rock, volcanic belts and sedimentary basins, affected by periods of igneous activity and two major orogeny mountain building events. Aside from modern sediments and some rocks formed within the past 541 million years of the Phanerozoic Eon, along the coast, many of the rocks in Ghana formed close to one billion years ago or older leading to five different types of gold deposit formation.

The major soils occurring in the various agro-ecologies, classified as Lixisols, Aerisols, Nitisols, Luvisols, Lithosols, Plinthosols, Gleysols and Cambisols. Fluvisols (Alluvia soils) and Leptosols (eroded shallow soils), are found in all the ecologies. The soils in the interior Savannas are generally

weak structured, light textured surface horizon, of low organic matter content and are of low inherent fertility.

Numerous studies have shown that in Ghana the bulk of the soil organic matter and nutrients are bound within the few centimetres of the topsoil below which there is drastic decrease in these. It is also known that the soils lose their fertility very fast when cultivated. Hence the application of especially nitrogen and phosphorus is necessary for the maintenance of the fertility of the soil (Asiamah 1988).

The upland soils are fragile and susceptible to soil erosion hazards when large tracts are cleared. It is therefore important to adopt practices such as strip cropping, cover cropping, as well as ploughing, ridging along the contours and agro-forestry that will conserve the soils at all times.



2.2 BIOLOGICAL ENVIRONMENT

2.2.1 Agro-ecological zones

The country is divided into six agro-ecological zones reflecting climate, vegetation and soils. These zones are namely, Sudan, Guinea and Coastal Savannas, the Forest-Savanna Transitional, the Semi-deciduous Forest and the High Forest zones. The characteristics of the soils of Ghana are due to influence of local climate and vegetation, including other organisms, which act on the various geological materials as modified by local relief or topography over periods of time.

2.2.2 Vegetation (Flora)

The flora of Ghana is diverse with both indigenous and introduced floral species considered in Ghana's floral diversity. A total of some 3,600 species of the major regional centres of endemism represent the three major taxonomic groups. Floral diversity is more pronounced among the angiosperms represented

with well over 2,974 indigenous and 253 introduced species in Ghana. Among the various vegetation types of the tropical rain forest, it is the wet evergreen forest type in the southwestern Ashanti-Kwahu Plain that exhibits the highest level of endemism and species richness in Ghana.

Flora species diversity and endemism in the savanna biomes in Ghana is very sparse and biological diversity of species in the Ghanaian savanna woodlands and gallery forests of the savannas show greater species richness than the dry savannas. Within Ghana, there are areas of high biological diversity, referred to as prime biological locations; such as the Ankasa and Nini-Suhien Conservation Area in the southwestern Ashanti-Kwahu terrestrial plain of Ghana, where the climatic diversity is greater. There are also Encephalartos barteri, and gymnosperm indigenous to Ghana; others growing in various Ghanaian ecological zones are introduced species for purposes including aesthetics and economic.

2.2.3 Land Degradation

Land degradation is a serious and major problem threatening sustainable use of natural resources in Ghana. Forests are disappearing at an alarming rate and land degradation is severe and extensive particularly in the savanna agro-ecological zone of the country. It is estimated that 70% of the original 8.2 million ha of closed forest in Ghana have been destroyed leaving a current level of 1.9 to 2.0 million ha. Currently, the rate of forest depletion is about 2% per annum.

The socio-economic impact of land degradation is severe and has affected development as well as quality of life. In the energy sector, there has been scarcity of fuelwood supplies. Agricultural residues and even animal manure (cow dung), which would have contributed to improved soil management, are used in some cases as energy substitute in Northern Ghana. Studies in Northern Ghana revealed that one full day is required to gather 3 days' worth of fuelwood and women travel about 8 km to collect firewood (Asare, 1985). With the on-going degradation, the situation has worsened.

2.2.4 Fauna

Ghana has a vast array of fauna and they are of great significance, as some of Ghana's fauna have attained conservation status because of the current rate of decline in their number and distribution. The fauna of the Ghanaian terrestrial ecosystem comprise a diverse array of species including several of conservation concern. Ghanaian records show that there are as many as 221 species of amphibians and reptiles, 724 species of birds, 225 mammalian species inhabiting Ghana; with 93 recorded to be inhabiting the Ghanaian savanna ecological zone. As with floral diversity, prime locations for faunal diversity is located in the Ghanaian high forest uplands; accounting for 83% of the total number of butterfly species recorded in Ghana, where canopy stratification and micro-climatic differentiation have provided habitats and niches for specific faunal organisms.

Endemism among Ghanaian terrestrial fauna has been observed in three species of frogs; Hyperolius baumanni; Hyperolius fusciventris; and Hyperolius sylvaticus; and the lizards; and Agama sylvanus found in the Ghanaian Bia Forest Reserve and the Atwema Range Forest Reserve. Ghana has a high degree of butterfly endemism where more than 20 species are classified endemic or near-endemic. Ghana is home to 84 known amphibian species: 78 frogs, 5 toads and caecilians. Threatened species recorded in Ghana include four species of marine turtles and three species of crocodiles. Bird species of conservation concern include seven threatened species, including four species endemic to the Upper Guinea forest block and seven near-threatened species.

2.3 SOCIO-ECONOMIC ENVIRONMENT

2.3.1 Population

The current population of Ghana is 29,884,261 as of March 3, 2019, based on the latest United Nations estimates. Ghana's population is equivalent to 0.39% of the total world population. Ghana ranks number 48 in the list of countries (and dependencies) by population. The population density in Ghana is 132 per km² (343 people per mi²). The total land area is 227,540 km² (87,854 sq. miles) 54.8 % of the population is urban (16,507,512 people in 2019).

There is a growing consensus in Ghana that while rapid population growth may not prevent economic growth, economic improvements will occur more rapidly without this obstacle. A slower rate of population growth will ensure that more people will have better access to health care and social amenities (Population Impact Project, 1994). Ghana has a youthful population, thus consisting of a large proportion of children under 15 years, and a small proportion of elderly persons (65 years and older). The proportion of the population living in urban areas is 50.9 percent, with the level of urbanisation varying from region to region.

2.3.2 Economy

The economy of Ghana has a diverse and rich resource base, including the manufacturing and exportation of digital technology goods, automotive and ship construction and exportation, and the exportation of diverse and rich resources such as hydrocarbons and industrial minerals. These have given Ghana one of the highest GDP per capita in West Africa. Owing to a GDP rebasement, Ghana became the fastest-growing economy in the world in 2011.

Ghana's economy grew 7.4 percent year-on-year in the third quarter of 2018, following a 5.4 percent expansion in the previous period. It was the strongest growth rate since the third quarter of 2017, mostly driven by the industry and services sectors. GDP Annual Growth Rate in Ghana averaged 6.68 percent from 2000 until 2018, reaching an all-time high of 25 percent in the first quarter of 2012 and a record low of -1.60 percent in the third quarter of 2015.

Of population aged 15 years and older, 71.1 percent are economically active and of these, most are employed (94.7%). About two-fifth (41.2%) of this economically active population aged 15 years and older are into skilled agricultural, forestry and fishery workers. About 21 percent are also engaged as service and sales workers while 15.2 percent are craft and related trade workers. Skilled agricultural, forestry and fishery work remains the dominant occupation for both males (44.9%) and females (37.7%). However, a much higher proportion of females (31.7%) than males (10.2%) is engaged as service and sales work. This pattern is generally the same for most of the regions, with the three Northern Regions (Northern, 73.3%; Upper West, 72.3%; Upper East, 70.1%) having relatively high proportions of the economically active population engaged as skilled agricultural, forestry and fishery workers (Ghana Statistical Service, 2012).

2.3.3 Agriculture

Agriculture is the main driving force behind Ghana's economy, accounting for approximately 42% of the country's GDP and employing 54% of its work force. Ghana is the world's largest cocoa producer after Cote d'Ivoire. Ghanaian cocoa is grown by small-holder farmers. The cocoa industry in Ghana is vital to the strength of the formal economy and it employs 1.5 million people in production and transport. In recent

years, the government has encouraged the development of the non-traditional agricultural sector in order to diversify the country's export base.

2.3.4 Industry

Industry in Ghana accounts for about 25.3% of total GDP. However, Ghana's industrial production is rising at a 7.8% rate, giving it the 38th fastest growing industrial production in the world due to government industrialisation policies. Ghana's most important manufacturing industries include electronics manufacturing, car manufacturing, electric car manufacturing, automotive manufacturing, light manufacturing, aluminium smelting, food processing, cement, and small commercial ship building. The foreign capital has increased in recent years. Most products are for local consumption and exportation. Other industries include the production of food and beverages, textiles, chemicals and pharmaceuticals, and the processing of metals and wood products.

The industrial sector grew 11.7 percent, faster than an 11.1 percent expansion in Q2, mainly driven by manufacturing (6.5 percent from 2.7 percent). In contrast, output growth slowed in mining & quarrying (23.9 percent from 24.7 percent); electricity (5.6 percent from 9.0 percent) and construction (0.9 percent from 2.0 percent). Additionally, output shrank for oil & gas (-4.4 percent from 12.1 percent) and water & sewerage (-4.9 percent from -3.5 percent).

In line with overall economic performance, the industrial sector has grappled with several challenges in recent years. The sector experienced negative growth in 2016, contracting by 0.5%. However, the overall decline was mitigated by the beginnings of a recovery in the second half of the year, with the sector posting positive growth of 3.9% and 3% in the last two quarters of 2016 respectively. This positive trend continued in the first half of 2017, with industry expanding by 19.3% in the second quarter of the year, driving overall GDP growth to 9% year-on-year, according to the Ghana Statistical Service's second-quarter GDP report. Most of the established industrial areas are on converted ecosystems with no significant values for biodiversity, wildlife, wetlands and flora (see pictures in Figure 9 to 14 below).



Figure 9: Preserved Tree at AppoloniaFigure 10: Cattle grazing within undeveloped
portion of the Dawa Industrial Park

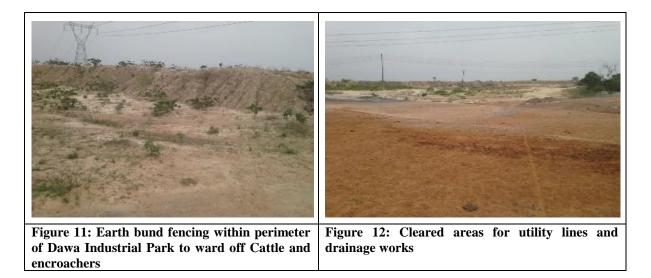




Figure 13: Vegetable Nursery at Dawa Dam Site



Figure 14: Women Farmers at Dawa Dam site

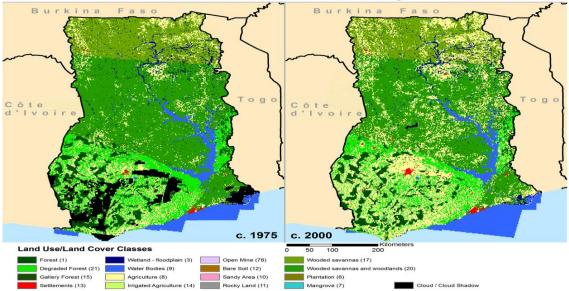
2.3.5 Land Use

The land use in Ghana can be grouped into seven major categories as shown in Table 1 below.

Land use	Land area ('000 ha)	% of Total area
Savannah woodland	7,100	30
Unimproved pasture	3,600	15
Bush fallow etc.	5,000*	21
Water bodies and wetlands	1,000	4
Forest reserves	2,600	11
Wildlife reserves	1,200	5
Tree crops	1,700	7
Annual crops	1,200	5
Unreserved forests	500	2
Total	23,900	100

Table 1: Broad land use categories in Ghana

Source: MLF, Ghana.



Ghana Land Use / Land Cover Change

Figure 15: Ghana Land Use/Land Cover Map - 1975 and 2000

2.4 GENDER AND VULNERABLE GROUPS ISSUES

2.4.1 Role of Women in Ghana's Economy

In Ghana, although women's roles and participation in economic activity have been defined and shaped along biological and cultural lines, women have made significant strides in all aspects of the Ghanaian economy especially in the agricultural and service sectors. Presently, more Ghanaian women are now getting out of their home jobs into paid jobs and are forced to combine their work at home as homemakers and their jobs outside the home. Amu, 2006 has investigated the role of women in the Ghanaian economy especially their participation in economic activities, to identify factors that hinder their development, to shed light on how women affect and are affected by policies, programs and projects that are instituted by the government, domestic and otherwise, how best to take advantage of some of these programs and policies, and how best to minimize their negative impact on women.

Although females make up about 51 percent of the Ghanaian population as at 2000, illiteracy is more prevalent among women than men. The GLSS4 survey for instance found out that twice as many females as males have never been to school. This among other factors implies that in Ghana more males have access to education than women. This situation explains why the concentration of women in skill and knowledge-based industries is low, as against the high concentration of women in the informal private sector employment and informal self-employment.

The gender characteristics of the unemployed indicate that the unemployment rate among women is lower than among males. Although women's participation in the labour force and economic activity makes up almost half of the economically active population, they are mostly found in the lower echelons of economic activity especially the private informal sector where women are predominantly entrepreneurs of small and medium scale businesses. Women are found to be mainly employed in agriculture and allied fields, sales work and to a lesser extent production, transport, professional and technical fields. These women, in recent times, have increasingly become the backbone of their families as breadwinners. Existing programs to enhance women's participation in economic activities have covered financial assistance in the form of micro credit as well as skills training and retraining through workshops, seminars, etc. However due to various operational constraints, financial assistance from micro-financial institutions has been poor and woefully inadequate. Some general recommendations given include the following:

- Identify diverse types of potential borrowers within the entire population of women in micro-enterprise to ensure that loan outreach extends to a diverse group of potential borrowers including poor women with little or no education and women in the informal sector.
- Identify the scope of lending opportunities to women by assessing the size and regional distribution of the population of women in micro-enterprise, identify needs in high-potential sub-sectors and strategize loan outreach by assessing differences in women's businesses between the commercial, services, and production sectors.
- Identify the needs and characteristics of both home-based enterprises and enterprises based outside the home, recognize the development potential of both types of enterprises, and design appropriate lending strategies for each type of enterprise.
- Devise strategies for addressing women's concerns about the high cost of credit, access to collateral and high interest rates, such as by increasing their access to information about credit and lending processes.
- Consider expanding the sectoral scope of the micro-finance programs to incorporate women's agricultural enterprises.
- Supplement lending programs with other forms of business support that are essential for the effective development of women's enterprises as a way of looking beyond credit and rather concentrating on non-financial support needs.

CHAPTER THREE

3 ENVIRONMENTAL AND SOCIAL IMPACTS, ISSUES AND RISKS

The GETP would be implemented across the country and some of the planned activities under Component 2 may trigger potential environmental and social risks and impacts, however, Components 1 and 3 will have insignificant environmental and social impacts. The potential environmental and social impacts likely to arise as a result of the GETP were identified by matching the project components as discussed in section 2.1 with the surrounding environmental and socio-cultural resources. Generally, the Component 2 will involve some civil works (i.e. construction of last mile infrastructure and/or rehabilitation and refurbishment of existing infrastructure for private investments).

3.1 OVERVIEW OF THE MAJOR ENVIRONMENTAL AND SOCIAL RISKS

This section presents both the likely positive and negative impacts that can arise from the Component 2 of the project. Information regarding the social, cultural, natural and coastal resources, etc., was sourced from related literature, visits to some of the project sites and consultation with relevant stakeholders.

Based on experiences with similar projects, the project implementation may result in the following potential environmental and social impacts:

3.1.1 Potential Environmental Impacts

- 1. Air Quality Impacts
- 2. Noise Quality Impacts
- 3. Land Environment Impacts (soil degradation and erosion)
- 4. Biodiversity and Vegetation loss
- 5. Water Resources and Water Quality Impacts
- 6. Solid and Liquid Waste Management;
- 7. Archaeology
- 8. Visual Intrusion

3.1.2 Socio-Economic Environment

The proposed development is envisaged to have a range of social and economic impacts, some of which would be temporary, whilst others would be long-term and permanent. In accordance with the key issues outlined above, the socio-economic assessment would examine the following potential impacts:

- 1. <u>Involuntary Displacement and loss of livelihood</u> (Resettlement and displacement issues; Working Conditions and management of Worker relationships; Loss of community properties; Pressure on existing infrastructure facilities like hospitals, shops, schools etc.; Cultural conflicts; Impacts on vulnerable minority groups, tribal and indigenous people; Impacts on human-heritage and cultural landscapes.; Appreciation of rents etc.)
- 2. <u>Employment Creation and Opportunities</u> (Job security; Unionisation and staff associations; Gender/female workers welfare; Access to social services and housing; Improve the economic status of a number of people, and contribute to reducing the current level of unemployment)
- 3. <u>Transportation and access</u> (Public safety due to traffic accidents especially during construction period; Temporary generation of Heavy Goods Vehicles (HGVs) of traffic during the construction works; Impacts of the development upon traffic flows and capacities of the local

highway network; Impacts on public transport capacity and accessibility; Impacts on access and servicing arrangements of the Site)

- 4. <u>Community Health, Safety and Security</u> (Increased incidence of water related diseases; Transmission of diseases by immigrant labour population; Workers may be exposed to various hazardous situations, operate heavy machinery and other potentially dangerous equipment; Spread of transmissible diseases including HIV/AIDS both within the workforce and between the workforce and the local community; Resentment of non-local nationals by local residents if they are perceived to have taken jobs that could be successfully filled by local people, or due to non-integration with the local community; Spread of new diseases due to migration of population and workers)
- 5. <u>Cultural heritage</u>.(Culturally significant landscapes, monuments, traditions and festivals, taboos, archaeological findings etc.)

The environmental regulations of Ghana and the World Bank's operational policies on environmental and social safeguards require that projects that present significant risks to communities and the environment must assess, plan, avoid, minimize and as a last resort, mitigate negative effects, while extending the development benefits that are presented by the project. The key sub projects will require the design and implementation of mitigation actions as per this ESMF.

3.1.3 Description of some risks and potential impact issues

The potential environmental and social risks and impacts associated with the specific project component activities as well as the mitigation measures have been summarised and presented in Table 2 below. Potential sites have been identified but not confirmed. When confirmed the necessary due diligence will be done.

Sub-project	Potential Impacts/Issues/Risks		Mitigation/Safeguards Measures ⁵
Sub-project	Environmental	Social	Mugation/Saleguards Measures
Activity 1: Off-site, last-mile infrastructure		-	
 Construction, paving or upgrading of access roads to the SEZ site Construction of a railroad spur directly to the site 	 Site clearing and excavation works Generation and disposal of solid waste Water resources and pollution Vegetation losses, Soil disturbance and Erosion Noise and vibration 	 Land and compensation issues Security and Safety Maintaining Livelihoods Occupational health and Safety Conflicts in land claims 	 Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles Allow affected persons to salvage their properties (including crops) before mobilizing to site to start work
 Upgrading of a nearby, adjacent, or on-site port Preparation of inland waterways to the site 	 Disposal of dredged material Alterations in local natural water cycles/ hydrology Generation and disposal of solid waste Noise and vibration 	 Maintaining Livelihoods Occupational health and Safety Land acquisition and compensation issues Established grievance redress options 	 Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies
• Extension or upgrading of the water network to the SEZ site, including pipeline construction or upgrading	 Soil disturbance and Erosion Alterations in local natural water cycles/ hydrology Cutting of roads 	 Inconvenience/Nuisance from relocation of utility lines Possible alternative options 	• Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles
 Extension or upgrading of the electric power network to the SEZ site Extension or upgrading of the telecommunications network to the site 	Visual IntrusionSite clearing and excavation worksVegetation clearance	 Public health and safety, and traffic issues Compensation issues 	• Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies
• Provision of infrastructure and services to surrounding communities (schools, clinics and hospitals, water, electric power, waste treatment and solid waste removal)	 Site clearing and excavation works Transport of construction materials and waste Generation and disposal of solid waste 	 Corporate Social Responsibility Cultural Heritage Resource Access and Possible Restriction 	• Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF

Table 2: Component Activities and Potential Environmental Impacts/Issues/Risks

⁵ Details on mitigation measures has been provided in Table 3 below.

Table 2: Component Activities and Potential Environmental Impacts/Is	ssues/Risks Cont'
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Sub project Potential Impacts/Issues/Risks		Mitigation/Safeguards Measures ⁶	
Sub-project	Environmental	Social	witigation/Safeguarus wieasures
Activity 2: On-site infrastructure (within the walls of	or adjacent to the SEZ site)		
 Construction of an electric power plant or the extension of the network throughout the park Construction or upgrading of on-site pipelines 	 Alterations in local natural water cycles/ hydrology Soil disturbance and Erosion Cutting of roads 	 Air pollution Inconvenience/Nuisance from relocation of utility lines 	 Air pollution Controls (APC) Land and compensation issues Security and Safety
• Construction of an on-site waste water treatment plant or water purification/storage facility, waste stabilization ponds, storm drainage and capture systems, sewage systems, or creation or upgrading and maintenance of boreholes	 Disposal of treated waste water Generation and disposal of solid waste Site clearing and excavation works Vegetation clearance 	• Public/community health and Safety	 Maintaining Livelihoods Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies Occupational health and Safety
 Construction or upgrading of on-site customs office and facilities Construction or upgrading of internal zone administration building Construction or upgrading of internal amenities / services / SME building Construction or upgrading of police station 	 Site clearing and excavation works Generation and disposal of solid waste Water resources and pollution Vegetation losses, Soil disturbance and Erosion Noise and vibration 	 Maintaining Livelihoods Occupational health and Safety Land acquisition and compensation issues Established grievance redress options 	 Cultural Heritage Resource Access and Possible Restriction Established grievance redress options Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF.
 Construction of or upgrading on-site training facilities Construction or upgrading of on-site clinic Construction or upgrading of on-site eating facilities 	 Site clearing and excavation works Vegetation clearance Generation and disposal of solid waste Noise and vibration 	 Maintaining Livelihoods Occupational health and Safety Land acquisition and compensation issues 	 Preservation of local cultural identity and heritage Established grievance redress options Resource Access and Possible Restriction
 Construction or upgrading of on-site employee residences Construction or upgrading of on-site day care facilities 	 Site clearing and excavation works Transport of construction materials and waste Generation/ disposal of solid waste 	 Unavailability and poor use of personal protective equipment and limited/ Established grievance redress options 	 Gender Based Violence (GBV) Preservation of local cultural identity and heritage Public health and safety, and traffic issues
• Construction or upgrading of standard factory buildings or office buildings	Traffic management at Industrial sitesAir Pollution	• Unavailability and poor use of personal protective	• Public health and safety, and traffic issues

⁶ Details on mitigation measures has been provided in Table 3 below.

• Preparation of all or part of the land for construction of tenant companies	 Generation/d disposal of solid waste Noise and vibration 	equipment and limited/ no enforcement process	• Consult affected property owners/users/ communities and seek their consent early
1		-	in the project development process

3.1.1 Generic Risks/ Impacts and Mitigation Measures

Table 3 below gives further details of the mitigation measures. These mitigation guidelines are given to address the significant impacts. The responsibilities for implementing these measures are described later in the report.

Table 3: Environmental and social mitigation measures

Environment, Social and Health Impact Issue/Concern	Proposed Mitigation Action/ Measures
Water Resources and pollution	 Construction stage Works not to be executed under aggressive weather conditions such as rains or stormy conditions. No solid waste, fuels, or oils to be discharged into any section of a waterway. Construction to be done in sections to minimize impacts and exposure of soil. Excavated materials and silt, which cannot be used will be disposed of at appropriate sites as per the Waste Management Plan prepared by contractor and approved by the Assembly. Temporary sediment barriers to be installed on slopes to prevent silt from entering water courses. Maintenance, fueling and cleaning of vehicles and equipment to take place at off-site workshop with adequate leakage prevention measures <u>Operational stage</u> Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies Host communities to be provided with sufficient toilet facilities and sensitized to use these to discourage open defecation

Air quality	 <u>Construction stage</u> Soil/sand and cement loads in transit to be well covered to reduce dust levels rising above acceptable levels. Stockpiles of exposed soil and unpaved access roads to be sprinkled with water to regulate dust levels. Use of good quality fuel and lubricants in vehicles, equipment and machinery. Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles Engines of vehicles, machinery, and other equipment to be switched off when not in use. Regular scheduled maintenance and servicing to be carried out on all vehicles and equipment to minimize exhaust emissions. Construction and civil works to be phased out or controlled to reduce emissions from equipment and machinery in use. <u>Operational stage</u> Adequate road signs to be planted on dust roads to limit vehicular speeds Properly designed and constructed speed ramps on access roads
Vibration and Noise	 <u>Construction phase</u> Excavation and construction activities to be carried out during daylight hours. Concrete mixer and other construction machines and equipment to be located away from sensitive environmental receptors. Construction equipment and machinery to be regularly maintained and serviced to reduce noise generation when in use. Engines of vehicles, equipment and machinery to be turned off when not in use. Earthworks and other construction activities to be phased out or controlled to reduce noise generation during construction.

Table 3 Environmental and social mitigation measures Cont'

Environment, Social and Health Impact Issue/ Concern	Proposed Mitigation Action/ Measures	
Visual intrusion	 Neighboring residents and commercial activities to be notified in advance of the project before contractor mobilizes to site Work will not be carried out during sensitive times/ periods of day/ year to avoid disturbance to fauna Operational phase Visible signs to be provided at suitable locations to warn workers of excessive noise Public to be well informed of upcoming project using appropriate signage's and display boards prior to contractor accessing sites; Construction activities to be done in sections to reduce impacts of change and visual intrusions to the general public. The construction sites to be hoarded off from public view. Good housekeeping measures, such as regular cleaning, to be maintained at the construction site. Ensure an acceptable post-construction site as per provisions in the contract. 	

Land acquisition and compensation issues	 Consult affected property owners/users/ communities and seek their consent early in the project development process Allow affected persons to salvage their properties (including crops) before mobilizing to site to start work Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF Obtain the required developmental permits from the respective Assemblies before start of work
Generation and disposal of	 Apply the principles of Reduce, Recycle, Reuse and Recover for waste management through the following actions:
solid wastes	<u>Construction phase</u> Excavated earth materials will, as much as possible, be re-used for back filling purposes to reduce waste Excavated solid waste from the drain channel that are unsuitable for backfilling will be collected onsite, allowed to drain and collected for disposal at sites approved sites in collaboration by the MMDAs. Ensure that the required amounts of construction materials are delivered to site to reduce the possibility of the occurrence of excess material Provide bins on site for temporary storage of garbage such as lubricant containers, drinking water sachets and carrier bags/packaging materials. Ensure judicious use of construction materials such as pipes, laterites, sand, etc. to reduce waste All metal scrap waste will be disposed of at sites approved by the MMDAs or sold to approved third party agents for use by metal companies. Contractor to work according to a prepared and agreed Solid Waste Management Plan. Operational phase Waste collection bins to be sited at vantage points to serve the general public Warning signs to be posted at suitable locations against littering with possible sanctions Proper arrangement with waste collection companies through the Assembly to regularly collect and dispose of solid waste

Table 3 Environmental and social mitigation measures Cont'

Environment, Social and Healtl Impact Issue/Concern	Proposed Mitigation Action/ Measures
Maintaining Livelihoods	• Ensure appropriate compensations are paid to PAPs as defined in the RPF;
	• Employment and other opportunities to be given to local communities as much as possible.
Public Health and Safety, and	Construction phase
Security	• Works on exposed trenches and earth materials will, as much as possible, be completed before new earth dug and trenches are created.
	• Work areas to be hoarded off adequately to avoid inquisitive trespassers especially children
	• Warning signs to be posted around work areas to discourage trespassers
	• Contractors to maintain adequate security at construction sites to avoid pilfering or vandalising of property
	• Visibility to be ensured in the night time by providing adequate lighting
	Operational phase

• Encourage community leadership to form watch committees to improve security		
• Work with police force to provide police posts at all major industrial sites		
• First aid facilities to be available at all sites with suitable arrangements with local health facilities to deal with emergencies		
• Contractors to provide traffic management plans to be approved by relevant authorities		
• Adequate alternative arrangements to be made to minimize impact on motorist and pedestrians		
• Works to be completed on time to minimize inconvenience to motorists and pedestrians		
Operational stage		
• Adequate road signs to be planted on access roads to limit vehicular speeds		
Construct properly designed speed ramps on access roads		
Construction phase		
• Engage experienced artisans for construction works.		
• All workers should be given proper induction/orientation on safety.		
• The contractors will have a Health & Safety Policy and procedures to guide the construction activities.		
• Regularly service all equipment and machinery to ensure they are in good working condition.		
• Ensure there are first aid kits on site and a trained person to administer first aid.		
Operational phase		
• Workers to be provided with PPEs		
• First aid facilities to be available at all sites with suitable arrangements with local health facilities to deal with emergencies		
• Traditional authority responsible for sanctity of local shrines properly identified and consulted		
• Necessary cultural rites agreed with community and performed prior to access to sites		

CHAPTER FOUR

4 POLICY FRAMEWORK FOR ENVIRONMENTAL MANAGEMENT

Since the 1990s Ghana has developed in a sustainable manner a number of policies, regulations and institutional frameworks aimed at ensuring sound and safe management of biological and human resources in the country. The environmental policy, EA legislation and procedures and institutional frameworks of Ghana as well as those of the World Bank, which are relevant and could affect the cost and benefit of the GET project are outlined. In principle the two sets of policies and procedures on environmental and social assessment are similar in many respects.

4.1 ENVIRONMENTAL POLICIES OF GHANA

The environmental related policies relevant for consideration during implementation of GET sub-projects among others include the following:

- 1. National Environmental Policy (NEP), 2012
- 2. Medium Term National Development Policy Framework (Ghana Shared Growth and Development Agenda- GSGDA), 2014 to 2017
- 3. National Land Policy (NLP), 1999
- 4. Ghana Trade Policy, 2014
- 5. National Energy Policy, 2013
- 6. National Water Policy (NWP), 2007
- 7. Forest and Wild life Policy, 2012
- 8. Riparian Buffer Zone Policy, 2011
- 9. National Climate Change Policy, 2013
- 10. Environmental Sanitation Policy, 2010
- 11. Occupational Safety and Health Policy of Ghana (OSHP), 2014
- 12. National Workplace HIV/AIDS Policy, 2012

4.1.1 Ghana's National Environmental Policy (NEP), 2012

The NEP is based on a broad vision founded on and directed by respect for all relevant principles and themes of environment and sustainable development. According to the Policy, Ghanaians are entitled to an environment that is not harmful to their health and wellbeing and are enjoined to have the environment protected for the benefit of present and future generations through reasonable legislative and administrative measures. The Policy therefore aims at:

- Reversing the current insufficient commitment to environmental objectives, policies and interventions
- Reversing rapid population growth, economic expansion, persisting poverty, poor governance and institutional weaknesses and failures
- Improving quality and flow of information
- Creating an understanding of the nature and causes of environmental problems

- Establishing a clear definition of the national environmental agenda and its links to economic growth and poverty reduction and weak legal, regulatory, financial, technical, human and institutional capacity
- Mainstreaming international relations into the national environmental agenda
- Improving the current environmental quality control programme by which prior environmental impact assessments of all new investments that would be deemed to affect the quality of the environment are undertaken.

Specific policy actions that will be beneficial and relevant to the GET Project implementation will include among others, measures to control water pollution and policy measures to protect critical ecosystems, including the flora and fauna in the project catchment areas. The policy thus makes a high quality environment a key element supporting the country's economic and social development.

4.1.2 Medium Term National Development Policy Framework (Ghana Shared Growth and Development Agenda- GSGDA II), 2014 to 2017

There have been several policies and programmes to accelerate the growth of the economy and raise the living standards of Ghanaians in the past which have been pursued with varying degrees of success. These include Ghana Vision 2020: The First Step (1996-2000); the First Medium-Term Plan (1997- 2000); Ghana Poverty Reduction Strategy (2003-2005); Growth and Poverty Reduction Strategy (2006-2009) and the Ghana Shared Growth and Development Agenda- GSGDA II), 2014 to 2017. In many respects, this medium-term development policy framework seeks to address the challenges and set-backs of the immediate past. It is also programmed to accelerate employment creation and income generation for poverty reduction and shared growth.

Ghana urgently requires an improvement in its infrastructure for the country to sufficiently fit into its middle-income status. The required investments are vast and the involvement of the private sector to share in some of the traditional responsibilities of the public sector is therefore vital. The required infrastructure may include roads, power, rail, water and sanitation, sea and airports among others.

The MTNDPF and GSGDA provides consistent set of policy objectives and strategies to guide the preparation and implementation of medium-term and annual development plans and budgets at sector and district levels as well as serve as a platform for donor coordination and economic transformation.

4.1.3 National Land Policy (NLP), 1999

The National Land Policy of Ghana aims at the judicious use of the nation's land and natural resources in support of the different socio-economic activities undertaken, in accordance with sustainable resource management principles and to maintain viable ecosystems.

The policy seeks to address some of the fundamental problems associated with land management in the country. These include general indiscipline in the land market, characterised by land encroachments, multiple land sales, use of unapproved development schemes, haphazard development, indeterminate boundaries of customary ownership, resulting from lack of reliable maps and plans, compulsory acquisition by government

of large tracts of land, which have not been utilised; a weak land administration system and conflicting land uses, such as, the activities of mining companies, which leave large tracts of land denuded as against farming, which is the mainstay of the rural economy, and the time-consuming land litigation, which have crowded out other cases in our courts.

The ESMF will have to address land management issues especially those associated with haphazard development, indeterminate boundaries of customary owned and Land administration.

4.1.4 Ghana Trade Policy, 2014

The Ghana Trade policy provides clear and transparent guidelines for the implementation of Government's domestic and international trade agenda. It is designed to ensure a consistent and stable policy environment within which the private sector and consumers can operate effectively and with certainty. The fundamental principle underlying the Trade Policy is that the private sector is the engine of growth, with Government providing a trade enabling environment to actively stimulate private sector initiatives.

In the medium term, trade sector policies that are the focus of attention are:

- creation of a buoyant and self-sustaining export sector
- expansion of domestic trade thereby ensuring the countrywide availability of goods at reasonable prices
- pursuit of efficient and effective import management practices
- adoption of anti-monopoly legislation and other regulations to protect the consumer
- pursuit of anti-dumping policies in international trade through rationalisation of all tariff and the identification of all non-tariff barriers to trade
- active and effective participation in multilateral trade for a secure increased market access for Ghana's exports especially processed and semi-processed goods and to achieve stable, fair and remunerative prices for commodities of export interest in Ghana

The general economic transformation of the country also hinges on trade policies that take cognizance of social and environmental issues relevant to the ESMF.

4.1.5 National Energy Policy, 2013

Ghana is well endowed with a variety of energy resources including biomass, hydrocarbons, hydropower, solar and wind as well as the capacity to produce bio-fuels and nuclear energy.

National Energy Policy therefore identifies the energy components as follows:

- Power sub-sector
- Petroleum sub-sector
- Renewable Energy sub-sector
- Waste-to-Energy
- Energy Efficiency Conservation

In response to the priority developmental objectives of Government, the vision for the energy sector is to develop an "Energy Economy" that would ensure secure and reliable supply of high quality energy services for all (both urban and rural) Ghanaian homes, businesses, industries and the transport sector while making significant contribution to the export earnings of the country.

The policy focuses on institutional and regulatory reforms intended to create competitive electricity markets. Government is committed to providing adequate, reliable and cost effective electricity supply through timely power generation capacity additions and modernization of transmission and distribution infrastructure as well as ensuring universal access to electricity by 2020.

This is the main overarching policy framework for the energy sector in Ghana. Specific policy actions that will be beneficial and relevant to the GET sub-projects implementation will include among others the introduction of Independent Power Agreements (IPPs) that will continue to impact significantly on the power production sector.

4.1.6 National Water Policy, 2007

The NPW of Ghana aims at providing a framework for the sustainable development and utilization of Ghana's water resources. It is targeted at all water users, water managers and practitioners, investors, decision-makers and policy makers within the central and decentralized government structures such as the district assemblies, non-governmental organizations and international agencies.

The Policy outlines the various cross-sectoral issues related to water-use and the links to other sectoral policies such as relating to energy, Hygiene Education and Environmental Sanitation which is relevant for the project implementation.

4.1.7 Forest and Wildlife Policy, 2012

The Forest and Wild life Policy of Ghana aims at the conservation and sustainable development of forest and wildlife resources for the maintenance of environmental stability and continuous flow of optimum benefits from the socio-cultural and economic goods and services that the forest environment provides to the present and future generations, whilst filling Ghana's commitments under international agreements and conventions. The specific objectives of the Policy are to:

- Manage and enhance the ecological integrity of Ghana's forest, savannah, wetlands and other ecosystems for the preservation of vital soil and water resources, conservation of biological diversity, and enhancing carbon stocks for sustainable production of domestic and commercial produce
- Promote the rehabilitation and restoration of degraded landscapes through forest plantation development, enrichment planting, and community forestry informed by appropriate land-use practices to enhance environmental quality and sustain the supply of raw materials for domestic and industrial consumption and for environmental protection
- Promote the development of viable forest and wildlife-based industries and livelihoods, particularly in the value-added processing of forest and wildlife resources that satisfy domestic and international demand for competitively-priced quality products

• Promote and develop mechanisms for transparent governance, equity sharing and citizens' participation in forest and wildlife resource management.

The implementation of the projects will definitely impact adversely on the ecology of the selected sites. It is therefore very important to understand the policy focus and strategic actions for conserving and protecting the integrity of the forest and wildlife resources in these areas.

4.1.8 Riparian Buffer Zone Policy, 2011

The Buffer Zone Policy is intended to protect, regenerate and maintain the native /established vegetation in riparian buffer zones to improve water quality by instituting proper procedures for managing and controlling the above activities along river banks and generally in catchments of surface water bodies. The overall objectives of the policy are:

- To protect, restore and maintain the ecological and livelihood –support functions of the buffer zone;
- To ensure equitable and sustainable utilization and management of buffer zone conservation areas, which will contribute to long- term well- being of both resident and downstream communities;
- To intensify capacity building, education, and training of stakeholders and ensure their commitment to the conservation of the buffer zone;
- To coordinate and harmonize policies and laws in the area of buffer zones amongst various governmental agencies with the view to achieve maximum synergy;
- To set guidelines for buffer zone designs that can be incorporated into the planning and decision making of other sectors;
- To promote research in the protection and management of buffer zones for water conservation, maintenance of ecosystem integrity and socio- economic growth;
- To encourage the development and management of buffer zones in urban and peri- urban areas by integrating natural systems into development planning; and
- To support international efforts to protect and manage buffer zones.

The policy provides comprehensive measures and actions that would guide the creation of vegetative buffers for the preservation and functioning of the nation's water bodies and vital ecosystems.

4.1.9 National Climate Change Policy, 2013

The National Climate Change Policy affirms Ghana's resolve to lessen the potential hardships that climate change impacts may pose to sustainable development. The policy seeks to provide strategic directions and co-ordinate issues of climate change in Ghana, bearing in mind its linkages with development.

The Policy is built on seven (7no.) systematic pillars and the objective of the Policy is to mitigate and ensure an effective adaptation in key sectors of the economy, such as agriculture and food security, natural resources management, energy, industry and infrastructure among others.

The policy gives direction for climate change mitigation measures. GET sub-projects including the proposed Industrial parks would consume a lot of energy and generate air pollution thereby contributing significantly to greenhouse gas emissions

4.1.10 Environmental Sanitation Policy, 2010

Consistent with the national socio-economic development framework (currently GPRSII), the overall goal of the Environmental Sanitation Policy is to develop a clear and nationally accepted vision of environmental sanitation as an essential social service and a major determinant for improving health and quality of life in Ghana.

National Environmental Sanitation Strategy and Action Plan (NESSAP) is in response to the need to refocus environmental sanitation sector in Ghana to meet Medium Term Development Planning Framework (MTDPF) for 2010 - 2013 objectives as well as those of Millennium Development Goals (MDGs) and other recent international initiatives such as the Sanitation and Water for ALL (SWA).: a Global Framework for Action. 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.

4.1.11 Occupational Safety and Health Policy of Ghana, 2014

The policy statement of the OSH Policy is: 'to prevent accidents and injuries arising out of or linked with or occurring in the course of work, by minimizing as far as reasonably practicable the cause of the hazards in the working environment and, therefore the risk to which employees and the public may be exposed'. The policy is derived from provisions of the International Labour Organization (ILO) Conventions 155 and 161.

The policy document has specific sections on objectives, scope, strategies, activities promotion and awareness creation on Occupational Health and safety which is relevant to the operation of the project.

4.1.12 National Workplace HIV/AIDS Policy, 2012

The HIV/AIDS epidemic is a national problem, and no sector is immune to it. Issues about HIV/AIDS are generating unwarranted stigmatization and discrimination of workers and people living with and affected by HIV and AIDS.

The broad objectives of the policy among others, are to provide protection from discrimination in the workplace to people living with HIV and AIDS; prevent HIV and AIDS spread amongst workers; and provide care, support and counselling for those infected and affected.

This policy defines the rights and responsibilities of Ghanaians and sets down the principles and policy directions in dealing with HIV and AIDS at the workplace.

4.2 LEGAL AND INSTITUTIONAL FRAMEWORK

The relevant national laws and legislation particularly to guide the preparation of the ESMF for the proposed project include the following:

- 1. Constitution of the Republic of Ghana 1992
- 2. Ghana Investment Promotion Centre Act 1994, Act 478
- 3. Free Zone Act 1995 (Act 504)
- 4. Environmental Protection Agency Act 490 of 1994;
- 5. Environmental Assessment Regulations, 1999 (LI. 1652);
- 6. Fees and Charges Amendment Instrument, 2015 (LI 2228);
- 7. National Environmental Quality Guidelines (NEQG)
- 8. Hazardous and Electronic Waste Control Management Act, 2016, Act (917)
- 9. Hazardous, Electronic and other Wastes (Classification), Control and Management Regulations 2016, LI 2250
- 10. Land Use and Spatial Planning Act, 2016 Act (925)
- 11. Lands Commission Act, 1994 (Act 483)
- 12. State Lands Act 1962, Act 125
- 13. Local Governance Act of 2016, Act 936;
- 14. Forest Protection Decree, 1974, (NRC Decree 243)
- 15. Wild Reserves Regulations 1971 (LI 740)
- 16. Fire Protection, (Premises) Regulations, 2003 (LI 1724);
- 17. Public Health Act, 2012 Act 851.
- 18. Ghana Standards Authority Act, 1973 (NRCD 175)
- 19. Water Resources Commission Act, 1996 (Act 522);
- 20. Water Use Regulations, 2001, LI 1692;
- 21. Ghana Water Company Limited Act 1993, Act 461
- 22. Electricity Regulations, L.I. 1937: 2008
- 23. Public Utilities Regulatory Commission (PURC) 1997, Act 538
- 24. Factories, Offices and Shops Act 1970, Act 328
- 25. New Labour Act 2003, Act 651
- 26. National Museum Act 1969 (NLCD 387)
- 27. Persons with Disability Act 2006, Act 715

4.2.1 Constitution of the Republic of Ghana 1992

The 1992 Constitution of Ghana was approved at the Referendum held on April 28, 1992 and promulgated by the Constitution of the Fourth Republic of Ghana (Promulgation) Law, 1992. It was last amended in 1996 by the Constitution of the Republic of Ghana (Amendment) Act, 1996.

The Constitution places an obligation on every citizen as a duty to protect and safeguard the environment for prosperity. Section 41(k) stipulated that 'It shall be the duty of every citizen to protect and safeguard the environment'.

4.2.2 Ghana Investment Promotion Centre Act 1994, Act 478

The Ghana Investment Promotion Centre Act provides the legal framework for investment in Ghana. The Act relates to the environment indirectly by providing incentives for tree planting, soil and water conservation activities. The Act further recognises the role of other agencies including those responsible for environmental protection authorities in specific Projects. Thus, no investment Project can be implemented without giving due consideration to environmental protection.

The Ghana Investment Promotion Centre Act 1994 (Act 478) requires that every investor wishing to invest in the country must in its appraisal of proposed investment projects or enterprises, "…have regard to any effect the enterprise is likely to have on the environment and measures proposed for the prevention and control of any harmful effects to the environment.".

4.2.3 Free Zone Act - 1995 (Act 504)

An ACT to enable the establishment of free zones in Ghana for the promotion of economic development; to provide for the regulation of activities in free zones and for related purposes. The Rights and Responsibilities of a Free Zone Enterprise include:.

(1) A free zone enterprise shall have the right to produce any type of goods and services for export but shall not produce any goods that are environmentally hazardous.

(2) A free zone enterprise shall be free to-

(a) store, warehouse, pack, unpack and repack, divide, sub-divide, group, breakdown, assemble, disassemble, bottle, rebottle, can, recan, decant, alter, sample, display, grade, test, classify, mark, label, relabel, finish, handle, mix, combine, clean, manipulate, restore, join, transform, transit and tranship, transfer, mount, refine, salvage, destroy, demolish, confect, process and manufacture any foreign or domestic raw material, intermediate, semi-finished or finished goods or components for export or re-export;
(b) render and sell any type of information processing, computer-aided design, computer-aided printing and publishing, software development tele-marketing and any other similar and related services;

(c) render and sell financial, banking, insurance, commercial, advisory, repair and maintenance, professional training and other services subject to all relevant laws and regulations for the time being in force; and

(d) carry out any other activities relevant to its licence as may be considered necessary by the Board.

4.2.4 Environmental Protection Agency Act 1994, Act 490

The Environmental Protection Agency Act 1994, Act 490) among other functions is mandated "to ensure compliance with any laid down environmental assessment procedures in the planning and execution of development Projects, including compliance in respect of existing Projects" Section 2(i).

Under Section 12 (1) of the Act, the Agency "may by notice in writing require any person responsible for any undertaking which in the opinion of the Agency has or is likely to have adverse impact on the

environment to submit to the Agency, in respect of the undertaking, an environmental impact assessment containing such information within such period as shall be specified in the notice". It also provides for integrated Environmental management and the protection and conservation of the environment through sustainable management and use of natural resources.

This law is the primary legal basis for undertaking environmental assessment for the proposed Project. It ensures that all investments and undertakings take cognisance of sound environmental management practices in their operations.

4.2.5 Environmental Assessment Regulations 1999, LI 1652

In order to meet the immediate demand imposed by Section 2(i) of Act 490, the Ghana E.I.A. Procedures were developed, published and launched in 1995. The procedures formed the basis for the Environmental Assessment Regulations 1999, LI 1652.

The regulations state that a developer shall not implement a Project for which an Environmental Impact Statement is required under the regulations, unless an Environmental Impact Assessment has been concluded in accordance with the Regulations and the EPA has issued a permit. The legislation also recognizes the following areas as environmentally sensitive areas:

- All areas declared by law as national parks, watersheds reserves, wildlife reserves and sanctuaries including sacred groves;
- Areas with potential tourism value;
- Areas which constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna);
- Areas of unique historic, archaeological or scientific interest;
- Areas which are traditionally occupied by cultural communities;
- Areas prone to natural disasters (such as geological hazards, floods, rainstorms, earthquakes, landslides, volcanic activity;
- Areas prone to bushfires;
- Areas classified as prime agricultural land;
- Recharge areas of aquifer; and
- Water bodies characterized by one or any combination of water tapped for domestic purposes, water within the controlled and/or protected areas and water which support wildlife and fisheries activities.

The following *Permit Regulations 1 Sub-regulation (1 and 2), 2, 23, 24 Sub-regulation (1, 2, 3 and 4) and 25 sub-regulation (1 and 2)* are relevant to the implementation of the project:

- 1. *Regulation 1:* "No person shall commence any of the undertakings specified in Schedule 1 to these Regulations or any undertaking to which a matter in the Schedule relates, unless prior to the commencement, the undertaking has been registered by the Agency and an environmental permit has been issued by the Agency in respect of the undertaking";
- 2. **Regulation 1, sub-regulation 2:** "No person shall commence activities in respect of any undertaking which in the opinion of the Agency has or is likely to have adverse effect on the

environment or public health unless, prior to the commencement, the undertaking has been registered by the Agency in respect of the undertaking";

- 3. Regulation 2 Existing undertakings: "Where the Agency considers that any undertaking in existence on the date of the coming into force of the Regulations has or is likely to have adverse effect on the environment or public health, the Agency shall issue a written notice to the person responsible to seek registration and obtain an environmental permit in respect of the undertaking within such time as shall be specified in the notice";
- 4. *Regulation 23:* "An undertaking in respect of which a reclamation plan is required shall be required to post reclamation bond based on approved work plan for reclamation";
- 5. Regulation 24 Environmental management plan, sub-regulation 1: "The person responsible for an undertaking in respect of which a preliminary environmental report or an environmental impact statement has been approved shall submit to the Agency an environmental management plan in respect of his operations within 18 months of commencement of operations and thereafter every 3 years";
- 6. *Regulation 24, sub-regulation 2:* "A person engaged in any of the undertakings mentioned in Schedule 1 which was in existence before the coming into force of these Regulations shall also submit an environmental management plan within 18 months from the coming into force of these Regulations and thereafter every 3 years";
- 7. *Regulation 24, sub-regulation 3:* "The environmental management plan shall be a document in such form as shall be determined by the Agency";
- 8. *Regulation 24, sub-regulation 4:* "The environmental management plan shall set out steps that are intended to be taken to manage any significant environmental impact that may result from the operation of the undertaking";
- Regulation 25 Submission of annual environmental report sub-regulation 1: "A person granted an environmental permit under these Regulations shall submit an annual environmental report in respect of his undertaking after 12 months from the date of commencement of operations and after every 12 months thereafter to the Agency";
- 10. *Regulation 25 sub-regulation 2:* "The annual environmental report shall be in such form and contain such particulars as the Agency shall direct".

4.2.6 Fees and Charges Amendment Instrument, 2015 (LI 2228)

The Environmental Assessment Regulations Fees and Charges (Amendment) Instrument 2015, LI 2228 gives regulation to the fees and charges (Miscellaneous Provision) Act 2009 (Act 793), which provides comprehensive rates, fees and charges collectable by the EPA for processing and permit fees. This Act is relevant to the Project in becoming abreast of the fees and charges collectable by the Environmental Protection Agency with respect to Environmental Permits and Certificates.

4.2.7 National Environmental Quality Guidelines (NEQG)

The NEQG provides permissible levels for ambient air quality, noise levels and effluent quality guidelines for discharge into natural water bodies. The environmental guidelines issued in 1997 include:

- National Ambient Air Quality Guidelines This guideline provides for permissible guideline values for a variety of air pollutants.
- National Ambient Noise Level Guidelines This guideline provides for permissible night and day noise levels for variety of settings ranging from residential areas with negligible or infrequent transportation to predominantly heavy industrial areas.
- **National Effluent Quality Discharge Guidelines** This provides the national effluent quality discharge guideline levels as administered by the EPA.

4.2.8 Hazardous and Electronic Wastes Control and Management Act, 2016, (Act 917)

This LI ensures that harmful elements associated with hazardous and other waste products are captured and processed safely to preserve critical ecological components such as the soil, groundwater, flora and fauna. This Act is important since some hazardous waste would be handled and managed by companies within the various Industrial Parks

4.2.9 Hazardous, Electronic and other Wastes (Classification), Control and Management Regulations 2016, LI 2250

This legislative instrument spells out clearly the appropriate and relevant regulations guiding the classification and implementation of the Hazardous and Electronic Wastes Control and Management Act, 2016, (Act 917).

4.2.10 Land Use and Spatial Planning Act, 2016 Act (925)

The Land Use and Spatial Planning Law seeks to provide sustainable development of land and human settlements through a decentralised planning system and ensures judicious use of land. This is to improve the quality of life, promote health and safety in respect of human settlements. It further regulates national, regional, district and local spatial planning and generally provides for spatial aspects of socio-economic development and related matters.

The significance and relevance of this law is viewed within the context of the development challenges or lapses inherent in the weak institutional, technological and legal framework governing the operations of the Town and Country Planning Department, which the Act seeks to address.

4.2.11 Lands Commission Act, 1994 (Act 483)

The Act 483 provides for the management of public and vested lands and the certification of stool lands transactions. It is a requirement of the 1992 Constitution that there shall be no disposition or development of any stool land unless the Lands Commission of the region in which the land is situated has certified that the disposition or development is consistent with the development plan drawn up or approved by the planning authority for the area concerned.

The Act provides the policy framework for the development of particular areas to ensure that the development of individual pieces of land is co-ordinated with the relevant development plan for the area concerned.

4.2.12 The State Lands Act 1962, Act 125

The State Lands Act 1962 (Act 125) has vested authority in the President of the Republic of Ghana to acquire land for the public interest via an executive instrument. On publication of an instrument made for the acquisition, the land shall vest in the President on behalf of the Republic (sect. 1). The Minister may pay compensation or may offer land of equivalent value. Disputes that arise may be referred by the Minister to the Tribunal established under section.

Where it becomes very necessary in the interest of the State, this Act can be revoked by the President for the provision of land for project implementation

4.2.13 Local Governance Act of 2016, Act 936

The Local Governance Act of 2016, Act 936 which Act repealed the Local Government Act 462 (1993).was passed into law on 27th October, 2016, by parliament and was assented to by the President on 20th December, 2016. The new Act give mandate to the Metropolitan, Municipal and District Assemblies among others, to promote local economic development; and provide guidance, give direction to and supervise other administrative authorities in the district as may be prescribed by law; initiate programmes for the development of basic infrastructure and provide municipal works and services in the district; as well as be responsible for the development, improvement and management of human settlements and the environment in the district;

It is relevant because the GET Project sites are under the jurisdiction of various Metropolitan, Municipal and District Assemblies in the country.

4.2.14 Forest Protection Decree, 1974, (NRC Decree 243)

The Forest Protection Decree, 1974 (NRCD, 243) and its amendment, the Forest Protection (Amendment) Act, 2002 (Act 624) make it an offence to fell or subject forest resources to any manufacturing process without the written consent of the competent forest authority. Part VI of the Timber Resources Management Regulations (L.I. 1649 – 1998) prohibits the use of chainsaw felling and the use of chainsaws in the processing of timber for commercial purposes. The amendment is as follows:

Any person who in a Forest Reserve without the written consent of the competent forest authority:

- fells, uproots, lops, girdles, taps damages by fire or otherwise damages any tree or timber;
- makes or cultivates any farm or erects any building;
- causes any damage by negligence in felling any tree or cutting or removing any timber;
- sets fire to any grass or herbage, or kindles a fire without taking due precaution to prevent its spread;
- makes or lights a fire contrary to any order of the Forestry Commission;
- in any way obstructs the channel of any river, stream, canal or creek;
- hunts, shoots, fishes, poisons water or sets traps or snares;

- subjects any forest produce to any manufacturing process or collects, conveys or removes any forest produce; or
- pastures cattle or permits any cattle to trespass,

commits an offence and is liable on summary conviction to a fine not exceeding 500 penalty units or to imprisonment not exceeding 2 years or to both, except that for a second or subsequent offence under this section the offender shall be liable on summary conviction to a fine of not less than 250 penalty units or to imprisonment not exceeding 3 years or to both;

4.2.15 Wild Animals Preservation Act, Act 235 1964

The Act provides for various matters relating to the protection of wildlife in Ghana including the appointment of game officers, collection of specimens for scientific purposes and hunting and the identification of wholly or partially protected faunal species.

4.2.16 Fire Precaution, (Premises) Regulations, 2003 (LI 1724)

The Fire Precaution (Premises) regulations 2003 L.I 1724 was passed to give backing to the Ghana National Fire Service (GNFS) to insist on or evaluate Fire Safety Precautions measures in premises to occupants or any person staying in that premises by ensuring that they can escape from fire safety and quickly.

This regulation is important to the GET sub-projects to ensure that fire safety measures are put in place to protect lives that will use project sites as well as the properties in the facility. Generally, the regulation requires that the developer applies to the GNFS for permit to ensure that the necessary fire safety measures are part of the drawings for the building before the developer is permitted to begin construction works.

4.2.17 Public Health Act, 2012 Act 851.

The Act empowers an Assembly to prevent unhealthy activities. It provides for the prevention of disease and pollution dangerous to human health and to any water supply for domestic use. It also empowers the Assembly to control drainage, latrine and disposal of sewerage and treatment systems.

4.2.18 Ghana Standards Authority Act, 1973 (NRCD 175)

Ghana Standards Authority (GSA) formerly Ghana Standards Board (GSB) is responsible for the maintenance of acceptable standards for product and services and sound management practices in industries and public institutions in Ghana. Under the Act, the Authority aims at ensuring high quality of goods produced in Ghana, whether for local consumption or for export; promote standardisation in industry and commerce; promote industrial efficiency and development; and promote standards in public and industrial welfare, health and safety

This Act is relevant to the Project due to the fact that it gives mandate to the Authority to undertake: National Standards development and dissemination; Testing Services; Inspection Activities; Product certification scheme; Calibration, Verification and Inspection of Weights, Measures and Weighing and Measuring

Instruments; Pattern approval of new weighing and measuring instruments; Destination Inspection of imported High Risk goods; and Promoting Quality Management Systems in Industry.

4.2.19 Water Resources Commission Act 1996, Act 522

The Water Resources Commission (WRC) Act 1996 (Act 522) establishes and mandates the WRC as the sole agent responsible for the regulation, management and utilization of water resources and for the co-ordination of any policy in relation to them. The Commission does this through the granting of water rights to potential water users.

4.2.20 Water Use Regulations 2001, LI 1692

These Regulations, made by the Water Resources Commission by section 35 of the Water Resources Commission Act, 1996, concern appeal for and grant of authorization by the Commission to use water. Subject to the Act, a person may obtain a permit from the Commission for: (a) domestic water use (b) commercial water use, (c) municipal water use, (d) industrial water use, (e) agricultural water use, (f) power generation water use, (g) water transportation water use, (h) fisheries (aquaculture) water. *Regulation 1, sub-regulation (d), Regulation 14, sub-regulation 1, (a and b) and sub-regulation 2,* Subject to the Act, a person may obtain a permit from the Commission for:

- 1. *Regulation 1, sub-regulation (d):* Industrial water use,
- 2. *Regulation 14, sub-regulation 1, (a and b):* A permit granted under these Regulations:
- 3. shall be for the period specified in the permit; and may be renewed.
- 4. *Regulation 14, sub-regulation 2:* An application for the renewal of a permit shall be made to the Commission not later than ninety days before the expiration of the permit.

4.2.21 Ghana Water Company Limited Act 1993, Act 461

An Act to establishment and incorporate the Ghana Water and Sewerage Corporation, to provide for its functions and maintenance, to repeal the Waterworks Ordinance (Cap. 67) and to provide for matters connected therewith or incidental thereto.

The Act 461 mandates the GWCL to provide, distribute and conserve the supply of water in Ghana for public, domestic and industrial purposes

4.2.22 Electricity Regulations, L.I. 1937: 2008

The purpose of these Regulations is to provide for:

- a) The planning, expansion, safety criteria, reliability and cost effectiveness of the national interconnected transmission system;
- b) The regulation of a wholesale electricity market;
- c) The market operations of the electricity transmission utility;
- d) The technical operations of the electricity transmission utility;

- e) Minimum standards and procedures for the construction and maintenance of facilities and installations;
- f) The protection of the mains and electrical installations and services;
- g) The protection of life and property and the general safety of the public in respect of electricity services;
- h) Minimum reserve margins to satisfy demand; and
- i) The development and implementation of programmes for the conservation of electricity.

4.2.23 Public Utilities Regulatory Commission (PURC) 1997, Act 538

The PURC 1997, Act 538 requires the PURC to set up guidelines for pricing of water supply and power generated by utility companies taking into consideration assurance of financial viability of water and power produced, investor interests and best use of natural resources. PURC is also responsible for the determination of actual tariffs for both production and service providing utilities.

4.2.24 Factories, Offices and Shops Act 1970, Act 328

The Factories, Offices and Shops regulates the conditions of employment in factories and other places of work as regard to the safety, health and welfare of persons employed there in. The Act also provides for the examination and inspection of certain plant and machinery in order to ensure safety.

4.2.25 New Labour Act 2003, Act 651

This Act provides a framework for the employment of persons; engagement of persons on contracts of service and to provide for the form of and enforcement of contracts of service; protection of wages of employees; and control of employment agencies. Section 118(1) of the New Labour Act 2003 (Act 651) stipulates that it is the duty of an employer to ensure that every worker employed works under satisfactory, safe and healthy conditions.

This Act consolidates existing laws relating to labour, employers, trade unions and industrial relations and provides for the rights and duties of employers and workers; legal or illegal strike; guarantees trade unions and freedom of associations, and establishes the Labour Commission to mediate and act in respect of all labour issues.

4.2.26 National Museum Act 1969 (NLCD 387)

The Ghana Museum and Monument Board (GMMB) is governed by the National Liberation Council Decree (NLCD) 387 of 1969, now known as Act 387 of 1969, which was further strengthened by the Executive Instrument (E.I.) 29 of 1973. GMMB's rules and regulations are spelt out in National Liberation Council Decree (NLCD) 387 of 1969 (now known as Act 387 of 1969), and Executive Instruments (EI) 29 of 1973 and 42 of 1972. EI 29 of 1973 mainly addresses:

- The export of antiquities
- The sale of antiquities

• National monuments.

4.2.27 Persons with Disability Act 2006, Act 715

Section 6 and 7 of the Act 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 7 states that a person who provides service to the public shall put in place the necessary facilities that make the service available and accessible to a person with disability. Penalty for contravention is stated in Section 8 that a person who contravenes Section 6, or 7 commits an offence and is liable on summary conviction to a fine not exceeding fifty penalty units or to a term of imprisonment not exceeding three months or to both.

Section 26 (1) states that an Assembly or an operator of a parking lot shall demarcate a special parking place which shall be reserved for the exclusive use of persons with disability. Section 26 (2) without limiting Subsection (1), each public place for parking vehicles shall have a clearly demarcated area for the exclusive use of persons with disability.

4.3 THE WORLD BANK REQUIREMENTS

4.3.1 The Bank's Safeguard Policies

The World Bank (WB) has published policies/procedures to guide the safe development of projects it is funding. Two (2) of the ten (10) WB Safeguards Policies, OP 4.01 (Environmental Assessment) and OP 4.12 (Involuntary Resettlement) are triggered by the proposed project. The Bank's ten (10) safeguard policies are designed to help ensure that programs proposed for financing are environmentally and socially sustainable, and thus improve decision-making.

4.3.1.1 Environmental, Health and Safety Guidelines

The World Bank Group EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable cost. Application of the WB EHS Guidelines to existing facilities may involve the establishment of site- specific targets, with an appropriate timetable for achieving them. The Ghana EPA has general and sector specific guideline values for effluents, noise, air quality and other environmental parameters. These are consistent with the principles under which the WB EHS guidelines have been prescribed and take cognizance of the country context, assimilative capacity of the Ghanaian environment and other socio- economic factors. The project will therefore mostly refer to the Ghana EPA standards for guidance. However, where the Ghana regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. The justification will demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

4.4 INSTITUTIONAL FRAMEWORK

The administration and institutional arrangements of the sector is fragmented among a number of Ministries, Department, Agencies and Organisations. These include:

- 1. Ministry of Finance
- 2. Ministry of Trade and Industries
- 3. Ministry of Business Development
- 4. Ministry of Local Government and Rural Development (MLGRD
- 5. Ministry of Lands and Natural Resources
- 6. Environmental Protection Agency (EPA);
- 7. Ghana Free Zones Board (GFZB)
- 8. Ghana Investment Promotion Centre (GIPC)
- 9. Ghana Standard Authority (GSA)
- 10. Land Use and Spatial Planning Authority (LUPSA)
- 11. National Board for Small Scale Industries (NBSSI)
- 12. Association of Ghana Industries (AGI)
- 13. Water Resources Commission
- 14. National Development Planning Commission (NDPC)
- 15. Lands Commission
- 16. Forestry Commission
- 17. Metropolitan, Municipal and District Assemblies (MMDAs)
- 18. Assembly Members and Unit Committees

4.4.1 Ministry of Finance

The Ministry of Finance must manages government financial assets, propose economic and financial policy, and coordinate and supervise these actions as empowered by law. Its main duties and functions are to: Prepare the annual fiscal budget and issue adequate regulations for its execution

The GET project is being coordinated and implemented under the newly formed Economic Transformation Unit within the Ministry of Finance.

4.4.2 Ministry of Trade and Industries

The Ministry of Trade & Industry is the lead policy advisor to government on trade, industrial and private sector development with responsibility for the formulation and implementation of policies for the promotion, growth and development of domestic and international trade and industry. The Ministry is also the advocate for the private sector within government and is the principal agency responsible for monitoring and implementing the Government's private sector development programmes and activities. The Ministry also ensures that Ghana derives maximum benefit from international trade relations and that domestic trade is conducted in a smooth and orderly manner.

4.4.3 Ministry of Business Development

The Ministry for Business Development is a new ministry formed to create a sustainable and most business-friendly, entrepreneurial and innovative business environment that fosters private sector-led investment and job creation.

4.4.4 Ministry of Local Government and Rural Development (MLGRD);

The Ministry of Local Government and Rural Development promotes the establishment and development of a vibrant and well-resourced decentralized system of local government for the people of Ghana to ensure good governance and balanced rural based development. All the project sites fall within the jurisdiction of an Assembly area.

4.4.5 Ministry of Lands and Natural Resources (MLNR)

The Ministry of Lands and Natural Resources (MLNR) has overall responsibility for forest sector planning and policy direction and for monitoring sector programs towards the attainment of the national goals. The ministry is thus responsible for the management of Ghana's land, forests, wildlife and mineral resources. In order to achieve this goal the ministry has set out the following objectives:

- to facilitate equitable access, benefit sharing from and security to land and forest resources;
- to promote public awareness and local communities participation in sustainable management and utilisation of forest, wildlife and land use management; to review, update and consolidate existing legislation and policies affecting natural resource management; and
- to develop and maintain effective institutional capacity and capability at the national, regional, district and community level for land, forest and wildlife service delivery.

4.4.6 Environmental Protection Agency (EPA)

The Environmental Protection Agency is responsible for providing technical advice on environmental protection and sustainable development to the Ministry of Environment, Science, Technology and Innovation. The functions of the agency include promotion of environmental education, research, monitoring and regulation, and preparation of standards and guidelines for environmental management.

In carrying out their functions, the agency is legally backed by the Environmental Protection Act 490, and the Environmental Assessment Regulation LI 1652. The agency also operates within the framework of the National Environmental Action Plan (NEAP), and the Environmental Sanitation Policy.

The EPA has issued formal guidance on regulatory requirements. The following documents will be relevant for Project implementation. These are:

- Environmental Assessment in Ghana, a Guide to (EPA, 1996);
- Ambient Air Quality Guidelines;
- Sector Specific Effluent Discharge Guidelines
- Ambient Noise level guidelines

The EPA was established under the Environmental Protection Agency Act (Act 490 of 1994) as the leading public body responsible for the protection and improvement of the environment in Ghana. It is responsible for enforcing environmental policy and legislation, prescribing standards and guidelines, inspecting and regulating businesses and responding to emergency incidents. It is responsible for issuing environmental permits and pollution abatement notices for controlling waste discharges, emissions, deposits or others sources of pollutants and issuing directives, procedures or warnings for the purpose of controlling noise. The EPA has the authority to require an ESIA and is responsible for ensuring compliance with ESIA procedures.

4.4.7 Ghana Free Zones Authority (GFZA)

The Ghana Free Zones Authority was established on 31st August 1995 by an Act of Parliament to enable the establishment of free zones in Ghana for the promotion of economic development, to provide for the regulation of activities in free zones and for related purposes. The main objective of Free Zones Programme is the promotion of Economic Development through the following means:

- An attraction of foreign direct investment
- Creation employment opportunities
- Increase in foreign exchange earnings
- Provision of business opportunities for foreign and local investors to undertake joint-ventures
- Enhancement of technical and managerial skills/expertise of Ghanaians
- Transfer of technology
- Diversification of exports

4.4.8 Ghana Investment Promotion Centre (GIPC)

The Ghana Investment Promotion Centre (GIPC) is a Government agency, responsible under the GIPC Act, 2013 (Act 865): to encourage and promote investments in Ghana, to provide for the creation of an attractive incentive framework and a transparent, predictable and facilitating environment for investments in Ghana.

4.4.9 Ghana Standard Authority

The Ghana Standards Authority (GSA) formerly Ghana Standards Board (GSB) is a Government of Ghana agency responsible for the maintenance of acceptable standards for product and services and sound management practices in industries and public institutions in Ghana

4.4.10 Land Use and Spatial Planning Authority

Land Use and Spatial Planning Authority has responsibility to revise and consolidate the laws on land use and spatial planning, provide for sustainable development of land and human settlements through a decentralised planning system, ensure judicious use of land in order to improve quality of life, promote health and safety in respect of human settlements and to regulate national, regional, district and local spatial planning, and generally to provide for spatial aspects of socio economic development and for related matters. The Authority is mandated to undertake the following services:

- Preparation of Spatial Plans (Spatial Development Frameworks; Structure Plans and Local Plans);
- Rezoning and Change of Use

- Plan Revision and Amendments
- Layout Extracts
- Sub-division
- Site Selection
- Processing Development and Building Permit Applications
- Provision of Certified true Copies of Planning Documents and Permits
- Provision of Planning Advisory Services

4.4.11 National Board for Small Scale Industries (NBSSI)

The National Board for Small Scale Industries (NBSSI) is the apex governmental body for the promotion and development of the Micro and Small Enterprises (MSE) sector in Ghana. It was established by an Act of the Parliament of the Third Republic of Ghana (Act 434 of 1981) and operationalised in 1985 because government views the sector as having the potential to contribute substantially to reducing the high unemployment and to the growth of the economy of Ghana.

4.4.12 Association of Ghana Industries (AGI)

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), agri-business, 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 subregion;
- Strengthening national industry associations through the sharing of knowledge, experience and critical information;
- 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

4.4.13 Water Resources Commission

The Water Resources Commission (WRC) was established by an Act of Parliament (Act 522 of 1996) as the overall body responsible for water resources management in Ghana. WRC Act 522 of 1996 provides a comprehensive law to establish a separate water resources management institution in Ghana. The mandate of the Water Resources Commission is specifically to:

- Regulate and manage the utilization of water resources,
- Coordinate the activities of the various agencies (public and private) in the development and conservation of water resources;
- Enforce, in collaboration with relevant agencies, measures to control water pollution; and
- Be responsible for appraising water resources development project proposals, both public and private, before implementation.

4.4.14 Forestry Commission

The Forestry Commission of Ghana is responsible for the regulation of utilization of forest and wildlife resources, the conservation and management of those resources and the coordination of policies related to them.

4.4.15 Lands Commission

The Lands Commission among others provides Land Services consisting of managing public and vested lands; surveying, mapping and maintaining national territorial boundaries; developing and maintaining national and geodetic reference network nationwide; registering title to land and other interests in land, registering deeds and other instruments affecting land, assessing compensation upon compulsory acquisition, assessing stamp duty & determining values of properties for letting, sale, purchase and rating. . The Lands Commission comprises of four Divisions:

- Lands Registration Division
- Land Valuation Division
- Survey and Mapping Division; and
- Public and Vested Lands Management Division

4.4.16 Metropolitan, Municipal and District Assemblies.

The Metropolitan, Municipal and District Assemblies (MMDAs) are responsible for administering the Local Governance Act of 2016, Act 936. The MMDAs have the ultimate role to seek the necessary approvals and implement the district's development plan.

One of the most important provisions of the law is the power of the MMDAs to make bye-laws for the purpose of the functions conferred under Act 462 or any other enactment. Most MMDAs have adopted bylaws on sanitation and waste. However, most MMDAs are still without sanitary engineered waste disposal facilities in place.

CHAPTER FIVE

5 FRAMEWORK ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The Environmental and Social Management Framework (ESMF) provides guidance to the Project on procedures to be followed and standards to be met in implementing the projects in agreement with national and World Bank safeguard policies. Roles and responsibilities of the implementing agencies and other collaborating agencies are clearly defined as well as monitoring protocols to be followed to ensure that the required provisions are adhered to. The ESMF will be included in the project's Manual of Operations.

5.1 ENVIRONMENTAL AND SOCIAL SCREENING AND MANAGEMENT PROCESS

The World Bank safeguard policy OP4.01 provides guidance on the environmental assessment procedures for WB funded projects. The Ghana ESIA procedures (EPA, 1995) have also established an acceptable process to screen and evaluate all developments, undertakings, projects and programmes which have the potential to give rise to significant environmental impacts. The two processes are largely similar and the Ghanaian procedures are therefore given in the following sections and will mostly be statutorily followed by all projects under the GET to obtain environmental permits for GET projects.

MoF will appoint an Environmental Officer or Safeguards Specialist to provide safeguards supervision over all GET associated projects. The Safeguards Specialist on the project must foremost carry out the preliminary environmental and social screening of proposed projects by using the checklist suggested in Annex 1. The purpose of the preliminary screening is to:

- determine whether projects are likely to have potential negative environmental and social impacts;
- decide if form EA1 needs to be submitted to EPA;
- identify appropriate mitigation measures for activities with adverse impacts;
- incorporate mitigation measures into the project design;
- review and approve projects proposals and
- monitor environmental and social impacts and concerns during implementation.

The early screening process will also consider the provisions of the RPF for possible land acquisition and livelihood impacts. This would largely apply to sub-projects involving mostly spatial development for offsite and on-site infrastructure in zones identified as priority in subcomponent 2.1. If significant impacts are anticipated, then the EPA must be consulted and the Ghana Environmental Assessment (EA) procedures duly followed. When there are minimal or no impacts (as determined using the checklist), Safeguards Specialist would proceed with the minimum regular reporting requirements.

5.1.1 Environmental and Social Assessment Procedures to be followed by Projects

The following steps will be followed by MoF PCU to ensure environmental and social compliance of the GET project.

5.1.2 Step 1: Environmental Registration of the GET project

Every undertaking or development that may have an impact on the environment is required to be registered with the EPA. A list of projects requiring registration has been listed to guide developers in the LI 1652. A special registration form has also been designed for this purpose and made readily available at EPA offices, and the District, Municipal and Metropolitan Assemblies. The appointed/designated Environmental Officer will be directly responsible for the registration with the EPA as required by law. For projects for which ESIA are mandatory, the Environmental Officer should register with Form EA2. This is a requirement under the Environmental Assessment Regulations LI 1652 (1999).

5.1.3 Step 2: Screening

A screening process, selection and evaluation of GET projects are required to manage environmental and social aspects of these activities. The extent of environmental assessment that might be required prior to the commencement of the projects will depend on the outcome of the screening process. MoF will use this checklist to screen all potential projects and report accordingly as part of the usual project formulation (feasibility phase) exercise.

The purpose of the screening process is to determine whether projects are likely to have potential negative environmental and social impacts; to determine appropriate mitigation measures for activities with adverse impacts; to incorporate mitigation measures into the project design; to review and approve projects proposals and to monitor environmental parameters during implementation.

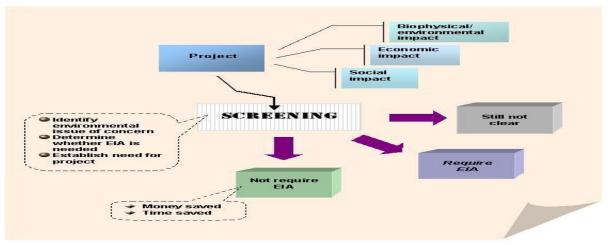


Figure 16: The Screening Process

The extent of environmental and social work that might be required for the projects prior to implementation will depend on the outcome of the screening process. This process should include screening for possible resettlement impacts.

This activity in accordance with the Environmental Assessment Regulation 1999 LI 1652 is the responsibility of the EPA. The Agency, within 25 days of receiving the Registration Form take a decision by placing the project at the appropriate level of environmental assessment. The results will be communicated to the implementing agency with reasons, which could be any of the following:

- Objection to the project
- No objection to the project (equivalent to World Bank Category C Project)
- Preliminary Environmental Assessment (PEA) will be required (equivalent to World Bank Category B2 Project)
- Environmental and Social Impact Assessment (ESIA) required (equivalent to World Bank Category B1).

The GETP is a Category B type of Project. The World Bank will support only Category B projects. For projects receiving the 'no objection' from the EPA (WB Category B and C projects), the implementing agency may move to implementation in accordance with pre-approved standards or codes of practices or the pre-approved guidelines for environmental and social management.

EMF Sub-project Screening, Review, Approval Process

- Screening form to be filled out by sub-project proponent
 - Sub-project name, location (map), type of activity, physical data, environmental information, likely environmental impacts, environmental screening category (A, B or C), mitigation of pollution, environmental studies required (ESIA/EMP), public consultation/disclosure required.
- Screening Criteria site-specific environmental risks and impacts; land zoning requirements, environmental license/permit; "negative" list of investments not allowed for financing under the project
- Reviewer decides the level of impact to be assessed through ESIA or EMP/EMP Checklist (category B)
- Subproject approved on the basis of environmental and social review findings (or denied/approved with some changes)
- Disclosure/public meeting function of subproject EA category

5.1.4 Step 3: Scoping

On completion of the Screening process, the EPA in line with section 11 of LI 1652 and on the basis of their assessment may request for Scoping Report. Scoping is a critical early step in the preparation of an ESIA. The Scoping process identifies the issues that are likely to be of most importance during the ESIA and eliminates those that are of little concern. Typically, this process concludes with the establishment of Terms of Reference for the preparation of an ESIA. In this way, scoping ensures that ESIA studies are focused on the significant effects and time and money are not wasted on unnecessary investigations. The aims and objectives for the Scoping include the following:

- identify concerns and issues for consideration in an ESIA
- ensure a relevant ESIA
- enable those responsible for an ESIA study to properly brief the study team on the alternatives and on impacts to be considered at different levels of analysis
- determine the assessment methods to be used
- identify all affected interests
- provide an opportunity for public involvement in determining the factors to be assessed, and facilitate early agreement on contentious issues
- save time and money
- establish terms of reference (TOR) for ESIA study
- help define the feasible alternatives to a proposed action

The safeguard specialist or Environmental Officer of the Project Implementing entity shall prepare the Scoping Report for the consideration of the EPA. Sample Draft Terms of reference as provided in section 12 of the LI 1652 is presented in Annex 5. It should be noted that not all the projects will have to go through the scoping process. The Agency upon receipt of the Scoping Report examines it and inform the applicant within 25 days of the receipt of the report whether it is acceptable or not acceptable. Where a Scoping Report is accepted by the Agency, the applicant is informed to submit an environmental impact statement based on the scoping report. Where a Scoping Report is not acceptable by the Agency, the applicant shall be advised by the Agency to revise the report as appropriate and re-submit it if he so desires.

5.1.5 Step 4: Conduct environmental and social assessment studies

For Projects for which the decision is the conduct of a PEA (equivalent WB category B project) or and ESIA (WB Category B and A Projects), standalone reports will be prepared. The Ghana EPA statutorily requires an EIA for projects in sensitive areas.

The Safeguard Specialist /Environmental Officer will prepare the Terms of Reference for the ESIA, and follow procurement rules for the recruitment of consultants for the ESIA. The ToR may be prepared using issues identified in the Scoping Report or during the screening exercise and also the registration of the project with the EPA. Also, the impact mitigation measures provided in this ESMF may provide some basis for the design of the ToR.

The ESIA will identify and evaluate potential environmental impacts for the proposed activities, evaluate alternatives, and design mitigation measures. It will also analyze any cumulative impacts, where applicable. The preparation of the ESIA will be done in consultation with stakeholders, including people who may be affected. Public consultations are critical in preparing a proposal for the activities of the projects likely to have impacts on the environment and population. The public consultations should identify key issues and determine how the concerns of all parties will be addressed in the ESIA. When an ESIA is necessary, the administrative process enacted by the EPA will be followed and executed.

5.1.6 Step 5: Review and approval of the ESIA for the sub-project; Publication / Dissemination of ESIA

The Environmental Officer will submit the draft ESIA to EPA. The report will be reviewed by a crosssectoral National Environmental and Social Impact Assessment Technical Review Committee (ESIA/TRC) which is expected to:

- Assist the Agency in screening/reviewing all Environmental Assessment Applications and Reports (Environmental Impact Statements, Annual Environmental Reports, Environmental Management Plans and other related reports)
- Make recommendations to the Executive Director of the EPA for final decision-making
- Provide technical advice on conduct of assessments and related studies on undertakings and the reports submitted on them;
- Make recommendations on the adequacy of the assessment and any observed gap;
- Advice on the seriousness of such gaps and the risks or otherwise to decisions required to be made recommend whether the undertakings as proposed must be accepted and under what conditions, or not to be accepted and the reasons, as well provide guidance on how any outstanding issue/areas may be satisfactorily addressed.

Copies of the ESIA will be placed at vantage points including the EPA Library, relevant District Assembly, EPA Regional Offices and MoF head office. EPA serves a 21-day public notice in the national and local newspapers about the ESIA publication and its availability for public comments.

5.1.7 Step 6: Public Hearing and Environmental Permitting Decision (EPD)

Regulation 17 of the LI 1652 specifies three conditions that must trigger the holding of a public hearing on a project by the Agency. These are:

- Where notice issued under regulation 16 results in great public reaction to the commencement of the proposed undertaking;
- Where the undertaking will involve the dislocation, relocation or resettlement of communities; and
- Where the Agency 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 extend beyond the prescribed timelines required for EPA's actions and decision-making.

5.1.7.1 Environmental Permitting Decision (EPD)

Where the draft ESIA is found acceptable, MoF will be notified to finalise the reports and submit eight hard copies and an electronic copy. Following submission to EPA, the implementing agency shall be issued an Environmental Permit within 15 working days and issue gazette notices.

Where the undertaking is approved, MoF shall pay processing and permitting fees prior to collection of the permit. The fees are determined based on the Environmental Assessment Fees Regulations, 2002, LI 1703.

5.1.8 Responsibilities for the Implementation of the Screening Process

The Ministry of Trade and Industry (MOTI) is the main institution implementing Component 2 subprojects. MOTI in collaboration with the Ministry of Finance will appoint an Environmental Officer or Safeguards Specialist to provide safeguards supervision over the projects. The Safeguards Specialist on the project must foremost carry out the preliminary environmental and social screening of proposed projects by using a checklist which has been provided in Annex 1. If significant impacts are anticipated, then the EPA must be consulted and the Ghana Environmental Assessment (EA) procedures duly followed. Table 3 below shows summary of the Screening process and responsibilities.

The ESMF will be implemented by MoF that would establish a team of environmental and Social Officers who will collaborate with the EPA and the World Bank safeguards team to ensure effective execution. Table 4 provides a summary of the stages and institutional responsibilities for the screening, preparation, assessment, approval and implementation of the GET project activities.

No	Steps/Stage	Institutional Responsible	Implementation Responsibility
1.	Identification and/or siting of the sub-project	MoF-PCU	Environmental and Safeguard Specialist
2.	Environmental and Social screening of proposed project intervention to assist in project formulation using E&S checklist (Annex 1)	MoF-PCU	MOTI Environmental and Safeguard Specialist
3.	Categorization and identification of the required instrument (use the national EIA procedure)	MoF-PCU	MOTI Environmental and Safeguard Specialist
4.	Approval of the classification and the selected instrument by the Public EA Agency	MoF-PCU	Environmental and Safeguard Specialist
	ration of the safeguard document/instrument (ESIA, En dance with the national legislation/procedure (taking int		
	Preparation and approval of the ToRs		Environmental and Safeguard Specialist
-	Preparation of the report	MEDOU	Environmental and Safeguard Specialist
5.	Report validation and issuance of the permit (when required)	– MoF-PCU	MOTI Environmental and Safeguard Specialist
	Disclosure of the document		
6.	(i) Integrating the construction phase mitigation measures and E&S clauses in the bidding document prior they're advertised; (ii) ensuring that the constructor prepares his ESMP (C-ESMP), gets it approved and integrates the	Technical staff in charge of the subproject (TS-PCU)	MOTI Environmental and Safeguard Specialist

Table 4: Summary of the Social and Environmental Screening Process and Responsibilities

	relevant measures in the works breakdown structure (WBS) or execution plan.		
7.	Development of monitoring indicators	MoF-PCU; M&E	
8.	Implementation of the other safeguards measures, including environmental monitoring (when relevant) and sensitization activities	MoF-PCU	MOTI Environmental and Safeguard Specialist
	Oversight of safeguards implementation (internal)	MoF-PCU	MOTI Environmental and Safeguard Specialist
9.	Reporting on project safeguards performance and disclosure	MoF-PCU	
	External oversight of the project safeguards compliance/performance	EPA	
10.	Building stakeholders' capacity in safeguards management	MoF-PCU	
11.	Independent evaluation of the safeguards performance (Audit)	MoF-PCU	

5.1.9 Other relevant World Bank provisions

The national provisions for the management of resettlement related issues are not as fully developed and therefore do not comply fully with the World Bank safeguard policy requirements. Thus, it is expected that the WB OP 4.12 will be applied under the sub-projects and a separate document to guide the process, i.e. a Resettlement Policy Framework (RPF) has been prepared as a standalone report to support the social management and acceptability of the projects.

5.1.10 Technical specifications

MoF with technical support from its department and agencies, will be responsible for the development and presentation of clear guidelines for the design and provision of technical specifications and standards to assist the private sector to plan for projects. These will ensure the streamlining of approaches and activities for sound implementation of projects. These will include adequate reference to sector norms and prescribed national codes of practice. The private sector will be well aware of applicable technical provisions and fit their projects into these accordingly.

5.1.11 Environmental standards

The EPA is responsible for setting environmental standards and has in place both general and sector specific guideline values. These standards and in some cases guidelines are required for the management of pollutant emissions. In situations where standards which therefore have legal backing are available then these must be followed. Otherwise, national guidelines or the World Bank guidelines could be used. In most cases, these are practically similar.

5.2 ENVIRONMENTAL AND SOCIAL CAPACITY ANALYSIS FOR IMPLEMENTATION OF FRAMEWORK ESMP

5.2.1 Stakeholder Consultations and Engagements

The ESMF preparation included extensive stakeholder and participation consultations in order to ensure that key interests of the public, at various levels of governance, are addressed and incorporated into the design and implementation of the GET safeguard tools. Key project stakeholders were identified for consultations and these included Government Ministries; Authorities, Departments and Agencies, Private sector institutions, Assembly members, and some Project Affected People in local communities including women. The Consultant conducted stakeholder consultations at various levels of governance on the implementation of GET subprojects. This was undertaken from February 20 to March 12, 2019. The consultations focused on:

- Assessing the views and understandings of the PIEs on the GETP;
- Identifying and Assessing environmental and social impact of the GETP
- Proposed or ongoing infrastructure rehabilitation activities under the GETP
- Reviewing the status of compliance and enforcement of environmental regulations.
- Identifying capacity building needs and relevant regulatory institutions and recommending actions to strengthen MoF and MOTI and its partners to ensure sustained environmental and social compliance monitoring.

Public consultations were also held with key representative stakeholders at the national and local levels. The national consultations involved meeting key representatives of Ministry of Finance (MoF), Ministry of Trade and Industry (MOTI), National Board for Small Scale Industries, Ghana Investment Promotion Centre and Ghana Free Zones Authority. The local consultations included field visits to some Private sector Industrial Park developers (LMI, Silicon Accra Technology Centre, Apolonia City, Tema Tema Free Zones Enclave, and Dawa Industrial Park).

Sets of stakeholder participatory questionnaires were prepared for the ESMF process to include general environmental and social issues and institutional capacity assessment in safeguards administration. Consultation notes of the above are presented in Annex 9.

5.2.2 Institutional Capacity Assessment

Generally, the institutional capacity is limited in terms of capacity of specialists in environmental and social safeguards. Institutional coordination among various institutions and even peer professionals was equally weak. A consistent concern across the stakeholders is the need to address gaps and build capacity within the implementing agencies to improve environmental management and ultimately support the development and implementation of project objectives. These concerns are addressed in the GETP through the various training and capacity building initiatives which are budgeted for as presented in Table 9. A summary of the key issues identified through questionnaires and meetings with stakeholders are presented in Annex 8

5.2.3 Institutional Capacity Analysis for Implementation of Framework ESMP

Capacity building in E&S assessment and management is essential for the ESMF implementation. The institutions need to understand the purpose of the ESMF, their expected roles and the extent to which the ESMF would facilitate the respective statutory functions. This would engender the required collaboration for the ESMF implementation.

The institutional capacity of the main implementing agencies; Ministry of Finance, Ministry of Trade and Industries, National Board for Small Scale Industries, Ghana Free Zones Authority, Ghana Investment Promotion Centre and the Environmental Protection Agency were assessed on their capacities to implement the ESMF. These MDAs were assessed based on their operational structure, budgetary resources and inventory, relevant skills and experience, adaptive management, stakeholder engagement, grievance redresss and disclosure of information.

The EPA had positive results in all indicators assessed. The MOTI and the GFZA have had experience in the management and implementation of the previous World Bank supported Tema Export Processing Zone, and therefore are also familiar with the E &S requirements and processes. Apart from these institutions, the other IAs barely had any experience in handling environmental and social risks, hence the need to build capacities.

5.2.4 Training and Capacity Building Requirements

The success and sustainability or otherwise of the GETP will to a large extent depend on the competence of government and the project implementation parties to carry out their respective design, planning, approval, permitting, monitoring and implementation roles. A programme of capacity building for Project Implementation Entities (PIE) their Master Developers, contractors and the other stakeholders will be put in place to ensure that, over time, capacity to conduct due diligence on social and environmental aspects of infrastructure projects on is developed.

5.2.5 Identification of Capacity Building Needs

The first step in pursuing capacity building will be to identify the capacity building needs of the various stakeholders. Capacity building should be viewed as more than training. It is human resource development and includes the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively. It also involves organizational development, the elaboration of relevant management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).

Environmental & Social Management Framework (ESMF)

Ghana Economic Transformation Project

Table 5: Institutional Assessment for Environmental and Social Safeguards

	Operational Structure and Staff Organogram		Budgetary Resources and Inventory		Relevant Skills and Experience			Adaptive Management	Stakeholder Engagement, Grievance Redress and Disclosure of Information.				
Institution	Environmen tal & Social Safeguard Role	Staff Adequacy	Budget Allocation for safeguard Issues	Monitoring Vehicles & equipment	Office accommod ation	Competence for scoping environmen tal and social risks	International industry practice Experience	ESS requirement s in contractor bidding	Works supervision	Monitoring /supervision detects unacceptable performance	stakeholder engagement	Grievance Redress	Information Disclosure
Ministry of Finance	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No
Ministry of Trade and Industry	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No	No	No
Ghana Free Zone Authority	Yes	No	No	No	Yes	Yes	No	Yes	Yes	No	No	No	No
Environmental Protection Agency	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Ghana Investment Promotion Centre	No	No	No	No	No	No	No	No	No	No	No	No	No
National Board for Small Scale Industries	No	No	Yes (through OSH Training)	No	No	No	No	No	No	No	Yes (High)	No	No

5.3 GRIEVANCE REDRESS MECHANISM

The World Bank/IFC standards outline requirements for grievance mechanisms for some projects. Grievance mechanisms should receive and facilitate resolution of the affected institutional or communities' concerns and grievances. The World Bank/IFC states the concerns should be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of affected communities, at no cost and without retribution. Mechanisms should be appropriate to the scale of impacts and risks presented by a project.

5.3.1 Objectives

The objective of the Grievance Redress Procedure is to address and resolve grievances or complaints from affected persons promptly, fairly, and in a manner that is, to the extent possible, acceptable to all parties for the period they will be operating in the new locations. Every effort will be made to:

- Ensure that complaints from aggrieved stakeholders will be channeled through the leaders of the various categories for possible resolution of disputes that might arise out of project implementation;
- Seek solutions to any tensions and conflicts early on in the implementation process, to avoid delay in the relocation exercise
- Identify and implement appropriate and mutually acceptable actions to redress complaints;
- Respond in a timely manner, and with sensitivity to the needs of complainants; and
- Ensure that claimants are satisfied with the outcome of the corrective actions, and maintain a dialogue with them to the extent possible
- • Provide affected people with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of projects;
- Ensure that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
- • Avoid the need to resort to judicial proceedings.

5.3.2 Major Expected Grievance

The consultation processes showed that the execution of the project will generate environmental and social concerns which are linked to quality of life of people in the immediate surroundings and possibly beyond the immediate project area of influence. These impacts may include but not limited waste and sanitation; dust and noise generation; clearance of vegetation as well as delayed expectations for social corporate responsibility projects. These instances make it imperative in developing a grievance mechanism to guide the ways in dealing with complaints or grievances.

The project will develop a robust online grievance system at the MoF -PCU and linked to all implementing agencies (MoTI, GFZA, GIPC, NBSSI, MBD, RGD, GSA and VCTF). The channels of uptake at all levels (Project sites, communities, institutions and implementing agencies) will include walk-ins, face-to-face communication, toil-free calls, letters, e-mails, text messages, WhatsApp, etc. It is however anticipated that the number of cases which may need to be referred for redress will be relatively small, and that only the first tier of the redress mechanism (the Local Mediation Committee), may need to be activated. The mediation process shall be confidential, transparent and objective, as well as accountable, easy, fast, accurate and participative.

5.3.3 Grievance Redress Process

The general steps of the grievance process comprise:

- Registration/receipt of Complaints;
- Acknowledging the complaints
- Investigate and determine solution to the complaint
- Implementing the Redress Action;
- Verifying the Redress Action;
- Monitoring and Evaluation; and
- Recourse or Alternatives

5.3.3.1 Registration/ Receipts/Acknowledging of complaints

GETP will establish a register of resettlement/compensation related grievances and disputes. The receipt of complaints will include its logging and registration as this will help with monitoring the status of the grievances and ease reporting on them. The existence and conditions of access to this register (where, when, how) will be widely disseminated within the project community/town as part of the consultation undertaken for the project in general. GETP will disseminate information through community engagement sessions, radio programs/campaigns, billboards, and through theatre for development programs.

It is proposed that complaints be lodged verbally or in writing to the MMDA office designated to receive all complaints. The elected local Assemblyman/woman for the project area could also receive complaints from PAPs (because the Assemblyman/woman lives within the community and may be closer to the PAPs and some PAPs may prefer to route their complaints through the Assemblyman/woman and avoid undue transport and time cost to the MMDA). Upon receipt, the Assemblyman/woman will acknowledge the complaints and ensure that such complaints reach the MMDA safeguard focal person designated to receive complaints within 24 hours via phone call or through any other means. The MMDA safeguard person shall receive all complaints and shall officially register these complaints using the first section of the proposed complaint registration and resolution form (GETP Form) provided in Annex 6. The MMDA safeguard person will inform the team leader for the Grievance Redress Team at the MDA within 24 hours on any complaint lodged.

5.3.3.2 Determining and implementing the redress action

When a grievance/dispute is recorded as per above-mentioned registration procedures, the Grievance Redress Team (GRT) will be called into action, and mediation meetings will be organized with interested parties. Minutes of meetings will be recorded.

The GRT will first investigate the foundation of the grievance and then determine the redress action in consultation with the complainant and concerned party if necessary. Otherwise, the grievance redress team will communicate to the complainant on the acknowledgement of the grievance, the redress action proposed and the timeframe for implementation.

The proposed redress action and the timeframe in which it is to be implemented will be discussed within 5 working days of receipt/registration of the grievance. The grievance issue should be resolved within 10 working days of receipt of complaints.

5.3.3.3 Verifying the redress action

The grievance redress team from the MMDA will visit the affected property site or get in touch with the complainant to confirm that the redress action is carried out. If the complainant is dissatisfied with the outcome of the redress proposal or action, additional steps may be taken to resolve the issue or reach an amicable agreement. Verification should be completed within one week of execution of the redress action.

5.3.3.4 Monitoring and Evaluation

The Monitoring and Evaluation Team from the MDA will monitor the activities of the Grievance Redress Team from the MMDA to ensure that complaints and grievances lodged by PAPs are followed-up and resolved amicably as much as possible.

5.3.3.5 Recourse or Alternatives

2nd Tier Amicable Mediation and Settlement

If the complainant is not satisfied with the decision of the grievance redress team, he/she can bring it to the attention of the MDA safeguard person. Otherwise the GRT should forward the issue to MoF PCU for further action. The GETP PCU in consultation with the MDA safeguard person will set up an appropriate mediation team to resolve the issue within 2 weeks from the date of receipt of such a decision by GETP. If such a time line is not possible, the GETP PCU should inform the MoF and the complainant accordingly giving reasons and possible new date.

Appeal to Court

If the complainant remains dissatisfied with the mediation effort of GETP PCU, the complainant has the option to pursue appropriate recourse via judicial process in Ghana.

The Constitution allows any aggrieved person the right of access to Court of law. Courts of law will be a "last resort" option, in view of the above mechanism.

5.3.4 Membership, Function and Financing of the GRT

In each beneficiary Metropolitan or District Area, the Grievance Redress Team (GRT) will include the following:

- Representative of the MMDA;
- The elected local Assemblyman for the project area
- Member of the sub metro/ zonal council preferably a woman; and
- Representative of the traditional authority.

In addition to the main function of resolving grievances, disputes, complaints and conflicts, the GRT will also

- a) Ensure community is mobilized around the project including implementation of the resettlement instrument;
- b) Establish dialogue with the PAPs; and
- c) Ensure that their concerns and suggestions are incorporated and implemented during the project.

It is important that the grievance redress teams be made known or be set up as soon as land acquisition or resettlement plan preparation starts. Disputes can arise from census operations and preliminary siting of

subprojects and it is therefore important that the mediation mechanisms be available to cater for claim, disputes and grievances at the early stage. The activities of the GRT will be financed by GETP and the Social Safeguards specialist of the PCU will oversee the activities of the GRT Schedule Template for Grievance Redress and Institutional Responsibilities. The Table 6 below presents a schedule template for Grievance Redress Steps Process Description Time frame

Step	Process	Description	Time frame	Responsibility
1.	Grievance receipt and registration/ logging	 -Face to face; phone; letter, recorded during public/community meetings; recorded from Assemblyman/woman, etc. -Significance assessed and grievance recorded or logged using the model complaint form and filed. 	1-2 Days	An aggrieved party or PAPs
2.	Development and implementation of response	 GRT meets or takes a decision on the grievance -Grievance assigned to appropriate party for resolution if necessary -Response development with input from relevant stakeholders -Redress response/action approved by GRT and logged -Redress response/update of progress on resolution communicated to the complainant -Start implementing redress action 	5- 10 Days	Chairman /Secretary to Workers Association/Union or Assemblyman/woman living within the community
3.	Verifying the implementation of redress action	 Redress action implemented and verified by GRT. -GRT satisfied with implementation of redress action Complainant duly signed the grievance resolution form 	10-15 Days	Environmental Officer/Safeguard Specialist at sub project level or MMDAs
4.	Close grievance or refer grievance to 2nd tier resolution	 -Completion of redress action recorded or logged -Confirm with complainant that grievance can be closed or determine what follow up is necessary -Record final sign off of grievance 	15-25 Days	Environmental Officer/Safeguard Specialist at sub project level or MMDAs
5.	Court of law	 if 2nd level settlement does not address dispute, complainant can resort to court of law 	Unknown	Safeguard Specialist at GFZA, MOTI, MoF PIU
6.	Monitoring and evaluation, and reporting	Grievance Redress Mechanism Process is documented and monitored		Safeguard Specialist at GFZA, MOTI, MoF PIU

Table 6: Schedule Template Grievance Redress Mechanism

5.4 OPENNESS AND TRANSPARENCY

Openness is the key to effective and inclusive development. It is the idea that citizens and governments can work together to achieve better results for all. Under this Project, openness and transparency would be achieved through the following mechanisms:

5.4.1 Rigorous Information, Education and Communication System

Information, Education, and Communication (IEC) will be a key feature of project implementation and will be pursued vigorously throughout the entire project cycle. Project IEC will target both internal and external audiences with varied objectives. Internal communication will aim at improving information flow, knowledge sharing and effective co-ordination amongst Project implementers. On the other hand, external communication will target sensitizing stakeholders, providing clarity on project implementation processes and intended benefits, enhancing visibility and dissemination of results for policy consideration. Specific tools to be used in internal and external communication are as follows:

- Internal Communication
- Project Technical Committee meetings
- Project Steering Committee meetings
- Periodic briefing of MoF & PIEs
- Generation and Circulation of Periodic Reports
- External Communication
- Dedicated Project Website
- Sensitization and review meetings
- Workshops, seminars and exhibitions
- Production and dissemination of documentaries
- Use of electronic and mass media platforms
- Field trips for target groups

5.4.2 Citizen Participation in Decision Making

Participation of direct and indirect project beneficiaries in decision making is another wavelength that would improve openness and transparency within the project. Through Trade Associations, beneficiaries of the project should be engaged periodically, starting with briefings on the project, its objectives, implementation arrangements and delivery mechanisms. This would allow for constructive contribution to decision making within the project. Feedback mechanism would also be established for continued access of project beneficiaries to project implementers.

5.4.3 Adopting Paperless Systems

The project would be encouraged to fully digitize all delivery mechanisms ranging from application for grants, financial systems, grievance redress, procurements, monitoring and evaluation. Robust management information systems for the various IAs would be encouraged to achieve greater transparency

5.5 ESMF DISCLOSURE

The World Bank policies require that environmental reports/ESIA for projects are made available to project affected groups, local NGOs, and the public at large. Public disclosure of ESIA documents or environmental reports is also a requirement of the Ghana ESIA procedures. However, there is no limitation as to the extent and scope of disclosure. MoF in collaboration with the line agencies and EPA will make available copies of the ESMF in selected public places as required by law for information and comments. Public notice in the media should be served for that purpose. The notification should be done through a newspaper or radio announcement or both. The notification should provide:

• a brief description of the Project;

- a list of venues where the ESMF report is on display and available for viewing;
- duration of the display period; and
- contact information for comments.

This ESMF has been prepared in accordance with Ghana environmental assessment guidelines and applicable World Bank safeguards policies, which involved the following activities:

- Review of Literature
- Public Consultations
- ESMF Disclosure

CHAPTER SIX

6 ESMF IMPLEMENTATION ARRANGEMENTS

The successful implementation of the GETP will depend largely on the key stakeholder institutions. An understanding of the institutional needs for implementing the ESMF includes a review of the authority and capability of institutions at different levels, and their capacity to manage and monitor ESMF implementation. The implementation activities will be under the overall coordination and support of the MoF PCU located at the Ministry of Finance, Accra. The main institutions involved with the implementation of the ESMP related activities and their responsibilities are presented in Table 7 below:

No.	Institution	Responsibility
1.	Ministry of Finance/Project Coordinating Unit (MoF PCU)	 Monitor implementing agencies for standards adherence Coordinate and support ESMF preparation and implementation Overall responsibility for ensuring that participating MDAs apply ESMF.
2.	 MMDAs and MDAs (Implementing Agencies): Ministry of Trade and Industry (MOTI) Ministry of Business Development Registrar General's Department (RGD) Ghana Investment Promotion Centre (GIPC); Ghana Standards Authority (GSA) Ghana Free Zones Authority (GFZA) 	 Assist with initial screening of subprojects and initial identification of PAPs Assist in grievance redress matters Implement ESMF recommendations (Environmental performance of mitigation measures) Appoint E&S Specialists Implement recommended capacity building and training programmes
3.	Environmental Protection Agency (EPA)	 Overall Environmental Performance of the GETP Assess performance on mitigation measures Review screening reports and advise on level of environmental assessment if necessary Assist with training and capacity building of other institutions Grant environmental clearance
4.	Consultants/NGO	• Prepare ARAP/RAP if necessary and assist with implementation and capacity building and community sensitization.

Table 7: Summary of Implementation Arrangements

The E&S Specialist at the PCU will have overall responsibility for all safeguards related issues on the project and will be supported by an E&S specialist at the GFZA as well as Safeguards focal persons (SFPs) within the other implementing agencies (MoTI, GIPC, NBSSI, MBD, RGD, GSA and VCTF)

6.1 CAPACITY BUILDING ARRANGEMENTS

Table 8 below shows the proposed capacity building activities that would be undertaken to enhance capacity in environmental and social safeguard issues. The list is by no means exhaustive.

Table 8: Training Course Contents to enhance	e Capacity Building in ESMF
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No.	Contents	Target Audience	No*
1.	Orientation program on the ESMF,	PCU; All stakeholders Consultant	12
2.	Environmental and social Screening Checklist	PCU, EPA Consultants	10
3.	Completion of EA Registration Forms	Safeguards Specialist	12
4.	Preparation of Terms of Reference for ESIA	Safeguards Specialist, EPA	14
5.	Environmental Assessment Processes,	Safeguards Specialist, EPA	12
6.	Resettlement Action Plan (RAP),	Safeguards Specialist, EPA	10
7.	Environmental and Social Clauses in Contractors' contract and bidding documents.	Procurement Specialist – PCU	12
8.	World Bank Safeguard policies of OP 4.12 and OP 4.01;	Monitoring and Evaluation Specialist (M&E-PCU)	10
9.	World Bank Group EHS Guidelines	Safeguards Specialist; PCU M&E-PCU	8
10.	Ghana EPA Environmental Assessment Regulations	Safeguards Specialist; PCU M&E-PCU	8
11.	Preparation of Terms of Reference for ESIAs and RAPs	Procurement Specialist – PCU	12
		TOTAL	120

6.1.1 Environmental and Social Monitoring

Monitoring is a key component of the ESMF during project implementation. The aim of monitoring would be to:

- 5. Improve environmental and social management practices;
- 6. Check the efficiency and quality of the EA processes;
- 7. Establish the scientific reliability and credibility of the EA for the project; and
- 8. Provide the opportunity to report the results on safeguards and impacts and proposed mitigation measures implementation.

Monitoring plans will be developed to track safeguard progress at both the ESMF and sub-project activity level (at the respective industrial sites). The proposed plans are presented in the Annex 1 Part 4. The Plan has been phased into three main activities: Preparatory Activities; Implementation Activities; and Supervision Activities. Monthly Field Environmental Monitoring Checklist has been provided to track progress and performance of project activities/

6.2 BUDGETARY PROVISIONS

The implementation of the ESMF would involve awareness creation, capacity improvement and training workshops as well as dissemination of ESMF to key stakeholders involved in the implementation of proposed interventions. The budget for these is estimated at UDS 725,000 and local counterpart funding from Government of Ghana of GHC 2,328 million. Table 9 below shows the breakdown.

#	Item	Unit	Unit	Cost	Tot	al	Source of
#	Item	Umt	Local	US\$	Local	US\$	financing
1	Preparation of specific ESIA						
	ESIA/ Scoping Reports for Industrial parks & SECs	20	60,000	-	1,200,000	-	GOG; Project Funds
	Permit and Processing Fees	10		10,000	-	100,000	GOG; Project Funds
2	raining & Capacity Building						
	Awareness creation and Capacity building for MoF, project staff (Refer Table 14)	200	5,000	2,000	1,000,000	400,000	GOG; Project Funds
	Study tours (local) for selected social and environmental champions participating in GET drawn from EPA, MoF, MoTI	15	10,000	-	150,000	-	GOG; Project Funds
3.	Mid-term audit of ES performa	nce					
	Performance Audit		-	12,000	-	60,000	Project Funds
4	Completion audit of ES perform	nance					
	Completion Performance Audit	10	-	15,000	-	150,000	Project Funds
5.	Monitoring and Evaluation						
	Safeguards M&E	6	5,000	2,500	30,000	15,000	GOG; Project Funds
	Total				2,380,000	725,000	

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ANNEXES

ANNEX 1

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN CHECKLIST

ESMP Checklist for Rehabilitation and Construction Sub-project Activities

General Guidelines for use of ESMP checklist:

The ESMP checklist-type format attempts to cover typical core mitigation approaches to civil works contracts with small, localized impacts. It is accepted that this format provides the key elements of an Environmental and Social Management Plan (ESMP) to meet World Bank Environmental Assessment requirements under OP 4.01. The intention of this checklist is that it would be applicable as guidelines for the small works contractors and constitute an integral part of bidding documents for contractors carrying out small civil works under Bank-financed projects.

The checklist has three sections:

- **Part 1** includes a descriptive part that characterizes the project and specifies in terms the institutional and legislative aspects, the technical project content, the potential need for capacity building program and description of the public consultation process. This section could be up to two pages long. Attachments for additional information can be supplemented when needed.
- **Part 2** includes an environmental and social screening checklist, where activities and potential environmental issues can be checked in a simple Yes/No format. If any given activity/issue is triggered by checking "yes", a reference is made to the appropriate section in the following table, which contains clearly formulated management and mitigation measures.
- **Part 3** represents the monitoring plan for activities during project construction and implementation. It retains the same format required for EMPs proposed under normal Bank requirements for Category B projects. It is the intent of this checklist that Part 2 and Part 3 be included into the bidding documents for contractors, priced during the bidding process and diligent implementation supervised during works execution.

CONTENTS

- A) General Project and Site Information
- B) Safeguards Information
- C) Mitigation Measures
- D) Monitoring Plan

PART 1: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMIN	INSTITUTIONAL & ADMINISTRATIVE				
Country					
Project title					
Scope of project and activity					
Institutional arrangements (Name and contacts)	WB (Project Team Leader)	Project Management	Local Counter	part and/or Recipient	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Counterpart Supervision	Local Inspectorate Supervision	Contactor	
SITE DESCRIPTION	SITE DESCRIPTION				
Name of site			1		
Describe site location			Attachment 1: Site	e Map []Y [] N	
Who owns the land?					
Description of geographic, physical, biological, geological, hydrographic and socio-economic context					
Locations and distance for material sourcing, especially aggregates, water, stones?					
LEGISLATION	1				
Identify national & local legislation & permits that apply to project activity					
PUBLIC CONSULTATION					
Identify when / where the public consultation process took place					
INSTITUTIONAL CAPACIT	Y BUILDING				
Will there be any capacity building?	[] N or []Y if Y	es, Attachment 2 inclue	les the capacity buil	lding program	

PART 2: SAFEGUARDS INFORMATION

ENVIRONMENTAL /SOCIAL SCREENING					
	Activity	Status	Triggered Actions		
	A. Rehabilitation	[] Yes [] No	See Section A below		
Will the site	B. Industrial wastewater treatment systems	[] Yes [] No	See Section B below		
activity include/involve	C. Cultural/Historical Building(s) and districts	[] Yes [] No	See Section C below		
any of the following?	D. Acquisition of land ⁷	[] Yes [] No	See Section D below		
tonowing ?	E. Hazardous or toxic materials ⁸	[] Yes [] No	See Section E below		
	F. Traffic and Pedestrian Safety	[] Yes [] No	See Section F below		
	G. Visual Intrusion	[] Yes [] No	See Section G below		

⁷ Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

⁸ Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

PART 3: MITIGATION MEASURES

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
General Conditions	Notification and Worker Safety	 (a) The local construction and environment inspectorates and communities have been notified of upcoming activities (b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) All legally required permits have been acquired for construction and/or rehabilitation (d) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
A. General Rehabilitation and /or Construction Activities	Air Quality	 (i) Appropriate signposting of the sites with inform workers of key rules and regulations to follow. <u>Construction stage</u> (a) Soil/sand and cement loads in transit to be well covered to reduce dust levels rising above acceptable levels. (b) Stockpiles of exposed soil and unpaved access roads to be sprinkled with water to regulate dust levels. (c) Use of good quality fuel and lubricants in vehicles, equipment and machinery. (d) Ensure that heaped sand delivered for construction works is covered with tarpaulin to prevent wind and water transport of soil particles (e) Engines of vehicles, machinery, and other equipment to be switched off when not in use. (f) Regular scheduled maintenance and servicing to be carried out on all vehicles and equipment to minimize exhaust emissions. (g) Construction and civil works to be phased out or controlled to reduce emissions from equipment and machinery in use. (h) Adequate road signs to be planted on dust roads to limit vehicular speeds (i) Properly designed and constructed speed ramps on access roads
	Noise Vibration	 <u>Construction phase</u> (a) Excavation and construction activities to be carried out during daylight hours. (b) Concrete mixer and other construction machines and equipment to be located away from sensitive environmental receptors. (c) Construction equipment and machinery to be regularly maintained and serviced to reduce noise generation when in use. (d) Engines of vehicles, equipment and machinery to be turned off when not in use. (e) Earthworks and other construction activities to be phased out or controlled to reduce noise generation during construction. (f) Neighboring residents and commercial activities to be notified in advance of the project before contractor mobilizes to site (g) Work will not be carried out during sensitive times/ periods of day/ year to avoid disturbance to fauna <u>Operational phase</u> (h) Visible signs to be provided at suitable locations to warn workers of excessive noise ,

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
A. General Rehabilitation and /or Construction Activities	Water Quality	Construction stage (a) Works not to be executed under aggressive weather conditions such as rains or stormy conditions. (b) No solid waste, fuels, or oils to be discharged into any section of a waterway. (c) Construction to be done in sections to minimize impacts and exposure of soil. (d) Excavated materials and silt, which cannot be used will be disposed of at appropriate sites as per the Waste Management Plan prepared by contractor and approved by the Assembly. (e) Temporary sediment barriers to be installed on slopes to prevent silt from entering water courses. (f) Maintenance, fuelling and cleaning of vehicles and equipment to take place at off-site workshop with adequate leakage prevention measures Operational stage (g) Adequate sanitary facilities to be provided at industrial sites to avoid discharge of waste into water bodies (h) Host communities to be provided with sufficient toilet facilities and sensitized to use these to discourage open defecation
	Waste management	 Apply the principles of Reduce, Recycle, Reuse and Recover for waste management through the following actions: <u>Construction phase</u> (a) Excavated earth materials will, as much as possible, be re-used for back filling purposes to reduce waste (b) Excavated solid waste from the drain channel that are unsuitable for backfilling will be collected onsite, allowed to drain and collected for disposal at sites approved sites in collaboration by the MMDAs. (c) Ensure that the required amounts of construction materials are delivered to site to reduce the possibility of the occurrence of excess material (d) Provide bins on site for temporary storage of garbage such as lubricant containers, drinking water sachets and carrier bags/packaging materials. (e) Ensure judicious use of construction materials such as pipes, laterites, sand, etc. to reduce waste (f) All metal scrap waste will be disposed of at sites approved by the MMDAs or sold to approved third party agents for use by metal companies. (g) Contractor to work according to a prepared and agreed Solid Waste Management Plan. <u>Operational phase</u> (h) Waste collection bins to be sited at vantage points to serve the general public (i) Warning signs to be posted at suitable locations against littering with possible sanctions (j) Proper arrangement with waste collection companies through the Assembly to regularly collect and dispose of solid waste

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST					
A. General Rehabilitation and /or Construction Activities	Public Health and Safety, and Security	 <u>Construction phase</u> (a) Works on exposed trenches and earth materials will, as much as possible, be completed before new earth dug and trenches are created. (b) Work areas to be hoarded off adequately to avoid inquisitive trespassers especially children (c) Warning signs to be posted around work areas to discourage trespassers (d) Contractors to maintain adequate security at construction sites to avoid pilfering or vandalising of property (e) Visibility to be ensured in the night time by providing adequate lighting <u>Operational phase</u> (f) Encourage community leadership to form watch committees to improve security (g) Work with police force to provide police posts at all major industrial sites (h) First aid facilities to be available at all sites with suitable arrangements with local health facilities to deal with emergencies 					
B . Industrial wastewater treatment systems	Water Quality	 (a) The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities (b) Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment. (c) Monitoring of new wastewater systems (before/after) will be carried out (d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies. 					
C. Cultural/Historic Building(s)	Cultural Heritage	 (a) Traditional authority responsible for sanctity of local shrines properly identified and consulted (b) Necessary cultural rites agreed with community and performed prior to access to sites (c) If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, notification shall be made and approvals/permits be obtained from local authorities and all construction activities planned and carried out in line with local and national legislation. (d) It shall be ensured that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted and registered, responsible officials contacted, and works activities delayed or modified to account for such finds. 					
D . Acquisition of land	Land Acquisition Plan/Framework	 (a) Consult affected property owners/users/ communities and seek their consent early in the project development process (b) Allow affected persons to salvage their properties (including crops) before mobilizing to site to start work (c) Ensure fair and adequate compensation is paid to all affected persons prior to commencement of construction activities as per the provisions of the RPF (d) Obtain the required developmental permits from the respective Assemblies before start of work (e) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank's Task Team Leader shall be immediately consulted. (f) The approved Land Acquisition Plan/Framework (if required by the project) will be implemented 					

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST					
E. Toxic Materials	Toxic / hazardous waste management	 (a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition properties and handling information (b) The containers of hazardous substances shall be placed in an leak-proof container to prevent spillage and leaching (c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility. (d) Paints with toxic ingredients or solvents or lead-based paints will not be used 					
F Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	 (a) In compliance with national regulations the contractor will insure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public. Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public. 					
G. Visual Intrusion	Public Complaints	 (a) Neighboring residents and commercial activities to be notified in advance of the project before contractor mobilizes to site (b) Work will not be carried out during sensitive times/ periods of day/ year to avoid disturbance to fauna (c) Operational phase (d) Visible signs to be provided at suitable locations to warn workers of excessive noise , (e) Public to be well informed of upcoming project using appropriate signages and display boards prior to contractor accessing sites; (f) Construction activities to be done in sections to reduce impacts of change and visual intrusions to the general public. (g) The construction sites to be hoarded off from public view. (h) Good housekeeping measures, such as regular cleaning, to be maintained at the construction site. (i) Ensure an acceptable post-construction site as per provisions in the contract. 					

PART 4: MONITORING PLAN

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
During activity preparation							
During activity implementation							
During activity supervision							

Monthly Field Environmental Monitoring Checklist

Site location					
Name of contractor					
Name of supervisor					
Date of site visit					
Status of civil works					
Documents and activities to be examined		Statu	s		Comments
Contractor holds license for extraction of natural resources	Yes	Partially	No	N/A	Comments
Contractor holds permit for operating concrete/asphalt plant					
Contractor holds agreement for final disposal of waste					
Contractor holds agreement with service provider for removal of household waste from site					
Work site is fenced and warning signs installed					
Working hours are observed					
Construction machinery and equipment is in standard technical condition (no excessive					
exhaust and noise, no leakage of fuels and lubricants)					
Construction materials and waste are transported under the covered hood					
Construction site is watered in case of excessively dusty works					
Contractor's camp or work base is fenced; sites for temporary storage of waste and for					
vehicle/equipment servicing are designated					
Contractor's camp is supplied with water and sanitation is provided					

Contractor's camp or work base is equipped with first medical aid and firefighting kits			
Workers wear uniforms and protective gear adequate for technological processes (gloves,			
helmets, respirators, eye-glasses, etc.)			
Servicing and fuelling of vehicles and machinery is undertaken on an impermeable surface			
in a confined space which can contain operational and emergency spills			
Vehicles and machinery are washed away from natural water bodies in the way preventing			
direct discharge of runoff into the water bodies			
Construction waste is being disposed exclusively in the designated locations			
Extraction of natural construction material takes place strictly under conditions specified in			
the license			
Excess material and topsoil generated from soil excavation are stored separately and used			
for backfilling / site reinstatement as required			
Works taken on hold if chance find encountered and communication made to the State			
agencies responsible for cultural heritage preservation			
Upon completion of physical activity on site, the site and contractor's camp/base cleared			
of any remaining left-over from works and harmonized with surrounding landscape			
Enhancing professional skills of staff			
Promoting investor confidence			
Water resources and pollution			
Stirring up of pollutants and their transport downstream			
Alterations in local natural water cycles/ hydrology			
Disposal of dredged material			
Disposal of treated wastewater			
Vegetation losses, soil disturbance and Erosion			
Site clearing			
Increased soil erosion due to disturbances			
<u>Air quality</u>			
Site clearing and excavation works			
Transport of construction materials and waste			
Cutting of roads			
Exhaust emissions for equipment including heavy duty trucks			
Vibration and Noise			
Site clearing and excavation works			
Concrete works			
Cutting of roads			
Disturbance to fauna in protected areas			
Visual intrusion			

Construction sites		
Aesthetical compatibility of industrial facility with local environment		
Generation and disposal of solid waste		
Construction works		
Dredged materials		
Poor sanitary conditions at industrial sites		
Improper disposal of wastes generated by workers/industry		
Public health and safety, and traffic issues		
Construction works		
Poor traffic management at Industrial sites		
Land and compensation issues		
Clear understanding of land use and occupancy		
Conflicts in land claims		
Land acquisition and compensation issues		
Discrimination, lack of grievance mechanisms for land owners and users		
Temporary and permanent properties affected by project		
Political influences		
Maintaining Livelihoods		
Demand for alternative locations for traders to do their business		
Adequate, documented and transparent compensation for affected persons in order to		
vacate unauthorized sections of industrial parks		
Security and Safety		
Safety and security of workers and general public		
Occupational health and Safety		
Lack of awareness creation programs on health and safety		
Cultural Heritage		
Access to local shrines		
Preservation of local cultural identity and heritage		
Compensation issues		
Community pride and support		
Community relinquishing/ sharing heritage for greater good		
Resource Access and Possible Restriction		
Possible alternative options		
Established grievance redress options		

GENERAL ENVIRONMENTAL & SOCIAL MANAGEMENT CONDITIONS FOR CONSTRUCTION CONTRACTS GENERAL

- In addition to these general conditions, the Contractor shall comply with any specific Environmental Management Plan (EMP) or Environmental and Social Management Plan (ESMP) for the works he is responsible for. The Contractor shall inform himself about such an EMP. and prepare his work strategy and plan to fully take into account relevant provisions of that EMP. If the Contractor fails to implement the approved EMP after written instruction by the Supervising Engineer (SE) to fulfil his obligation within the requested tune, the Owner reserves the right to arrange through the SE for execution of the missing action by a third party on account of the Contractor
- 2. Notwithstanding the Contractor's obligation under the above clause, the Contractor shall implement all measures necessary to avoid undesirable adverse environmental and social impacts wherever possible, restore work sites to acceptable standards, and abide by any environmental performance requirements specified in an EMP. In general these measures shall include but not be limited to.
- 3. Minimize the effect of dust on the surrounding environment resulting from earth mixing sites, vibration equipment, temporary access roads, etc.to ensure safety, health and the protection of workers and communities living within the vicinity dust producing activities.
- 4. Ensure that noise levels emanating from machinery, vehicles and noisy construction activities (eg. excavation, blasting) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities.
- 5. Ensure that existing water flow regimes in rivers, streams and other natural or irrigation channels is maintained and or re-established where they are disrupted due to works being carried out.
- 6. Prevent oils, lubricants and waste water used or produced during the execution of works from entering into rivers, streams, irrigation channels and other natural water bodies reservoirs, and also ensure that stagnant water in uncovered borrow pits is treated to the best way to avoid creating possible breeding grounds for mosquitoes.
- 7. Prevent and minimize the impacts of quarrying, earth borrowing, piling and building of temporary construction camps and access roads on the biophysical environment including protected areas and arable lands; local communities and their settlements. In as much as possible restore /rehabilitate all sites to acceptable standards.
- 8. Upon discovery of ancient heritage, relics or anything that might or believed to be of archaeological or historical importance during the execution of works, immediately report such findings to the SE so that the appropriate authorities may be expeditiously contacted for fulfilment of the measures aimed at protecting such historical or archaeological resources.
- 9. Discourage construction workers from engaging in the exploitation of natural resources such as hunting; fishing, and collection of forest products **or** *any* other activity that might have a negative impact on the social and economic welfare of the local communities
- 10. Implement soil erosion control measures in order to avoid surface run off and prevents siltation, etc.
- 11. Ensure that garbage, sanitation and drinking water facilities are provided in construction workers camp.
- 12. Ensure that, in as much as possible, local materials are used to avoid importation of foreign material and long distance transportation.

- 13. Ensure public safety, and meet traffic safety requirements for the operation of work to avoid accidents,
- 14. The Contractor shall indicate the period within which he/ she shall maintain status on site after completion of civil works to ensure that significant adverse impacts arising from such works have been appropriately addressed.
- 15. The Contractor shall adhere to the proposed activity implementation schedule and the monitoring plan/ strategy to ensure effective feedback of monitoring information to project management so that impact management can be implemented properly, and if necessary, adapt to changing and unforeseen conditions.
- 16. Besides the regular inspection of the sites by the SE for adherence to the contract conditions and specifications, the Owner may appoint an Inspector to oversee the compliance with these environmental conditions and any proposed mitigation measures. State environmental authorities may carry out similar inspection duties. In all cases, as directed by the SE. the Contractor shall comply with directives from such inspectors to implement measures required to ensure the adequacy rehabilitation measures carried out on the bio-physical environment and compensation for socio-economic disruption resulting from implementation of any works.

Worksite/Campsite Waste Management

- 17. All vessels (drums, containers, bags, etc.) containing oil/ fuel/ construction materials and other hazardous chemicals shall be bunded in order to contain spillage. All waste containers, litter and any other waste generated during the construction shall be collected and disposed off at designated disposal sites in line with applicable government waste management regulations.
- 18. All drainage and effluent from storage areas, workshops and camp sites shall be captured and treated before being discharged into the drainage system in line with applicable government water pollution control regulations.
- 19. Used Oil from maintenance shall be collected and disposed-off appropriately at designated sites or be re-used or sold for re-use locally.
- 20. Entry of runoff to the site shall be restricted by constructing diversion channels or holding structures such as banks, drains, dams, etc. to reduce the potential of soil erosion and water pollution.
- 21. Construction waste shall not be left in stockpiles along the load, but removed and reused or disposed of on a daily basis.
- 22. If disposal sites for clean spoil are necessary, they shall be located in areas, approved by the SE. of low land use value and where they will not result in material being easily washed into drainage channels. Whenever possible, spoil materials should be placed in low-lying areas and should be compacted and planted with species, indigenous to the locality.

Material Excavation and Deposit

- 23. The Contractor shall obtain appropriate license/ permits from relevant authorities to operate quarries or borrow areas.
- 24. The location of quarries and borrow areas shall be subject to approval by relevant local and national authorities, including traditional authorities if the land on which the quarry or borrow areas fall in traditional laud
- 25. New extraction sites:

- a) Shall not be located in the vicinity of settlement areas, cultural sites, wetlands or any other valued ecosystem component, or on high or steep ground or in areas of high scenic value, and shall not be located less than 1km from such areas.
- b) shall not be located adjacent to stream channels wherever possible to avoid siltation of river channels where they are located near water sources, borrow pits and perimeter drains stall surround quarry sites.
- c) shall ret be located In archaeological areas, Excavations in the vicinity of such areas shall proceed with great care and shall be done in the presence of government authorities having a mandate for their protection.
- d) shall not be located in forest reserves, However, where there are no other alternatives, permission shall be obtained from the appropriate authorities and an environmental impact study shall be conducted.
- e) shall be easily rehabilitated, Areas with minimal vegetation cover such as flat and bare ground, or areas covered with grass only or covered with shrubs less than 1.5m in height; are preferred.
- f) shall have clearly demarcated and marked boundaries to minimize vegetation clearing.
- 26. Vegetation clearing shall be restricted to the area required for safe operation of construction work.
- 27. Vegetation clearing shall not be done more than two months in advance of operations.
- 28. Stockpile areas shall be located in areas where trees can act as buffers to prevent dust pollution.
- 29. Perimeter drains shall be built around stockpile areas. Sediment and other pollutant traps shall be located at drainage exits from workings.
- 30. The Contractor shall deposit any excess material in accordance with the principles of these general conditions, and any applicable EMP, in areas approved by local authorities and or the SE
- 31. Areas for depositing hazardous materials such as contaminated liquid and solid materials shall be approved by the SE and appropriate local and/or national authorities before the commencement of work. Use of existing, approved sites shall be preferred over the establishment of new sites.

Rehabilitation and soil Erosion Prevention

- 32. To the extent practicable, the Contractor shall rehabilitate the site progressively so that the rate of rehabilitation is similar to the rate of construction.
- 33. Always remove and retain topsoil for subsequent rehabilitation. Soils shall not be stripped when they are wet as this can lead to soil compaction and loss of structure.
- 34. Topsoil shall not be stored us large heaps. Low mounds of no more than 1 to 2m high are recommended.
- 35. Re-vegetate stockpiles to protect the soil from erosion, discourage weeds and maintain an active population of beneficial soil microbes.
- 36. Locate stockpiles where they will not be disturbed by future construction activities.
- 37. To the extent practicable, reinstate natural drainage patterns where they have been altered or impaired.
- 38. Remove toxic materials and dispose of them in designated sites. Backfill excavated areas with soils or overburden that is free of foreign material that could pollute groundwater and soil.
- 39. Identify potentially toxic overburden and screen with suitable material to prevent mobilization of toxins.

- 40. Ensure reshaped land is formed so as to be inherently stable, adequately drained and suitable for the desired long-term land use and allow natural regeneration of vegetation.
- 41. Minimize the long-term visual impact by creating landforms that are compatible with the adjacent landscape.
- 42. Minimize erosion by wind and water both during and after the process of reinstatement.
- 43. Compacted surfaces shall be deep ripped to relieve compaction unless subsurface conditions dictate otherwise.
- 44. Re-vegetate with plant species that will control erosion, provide vegetative diversity and. Through succession, contribute to a resilient ecosystem. The choice of plant species for rehabilitation shall be done in consultation with local research institutions, forest department and the local people.

Water Resources Management

- 45. The Contractor shall at all costs avoid conflicting with water demands of local communities.
- 46. Abstraction of both surface and underground water shall only be done with the consultation of the local community and after obtaining a permit from the relevant Water Authority.
- 47. Abstraction of water from wetlands shall be avoided. Where necessary, authority has to be obtained from relevant authorities.
- 48. Temporary damming of streams and rivers shall be done in such a way to avoid disrupting water supplies to communities downstream and maintains the ecological balance of the river system.
- 49. 36, No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.
- 50. 37, Wash water from washing out of equipment shall not be discharged into water courses or road drains.
- 51. 38, Site spoils and temporary stockpiles shall be located away from the drainage system, and surface runoff shall be directed away from stockpiles to prevent erosion.

Traffic Management

- 52. Location of access roads/ detours shall be done in consultation with the local community especially in important or sensitive environments. Access roads shall not traverse wetland areas.
- 53. Upon the completion of civil works, all access roads shall be ripped and rehabilitated.
- 54. Access roads shall be sprinkled with water at least five times a day in settled areas, and three times in unsettled areas, to suppress dust emissions.

Blasting

- 55. 42, Blasting activities shall not take place less than 2km from settlement areas, cultural sites, or wetlands without the permission of the SE.
- 56. 43, Blasting activities shall be done during working hours, and local communities shall be consulted on the proposed blasting times
- 57. 44, Noise levels reaching the communities from blasting activities shall not exceed 90 decibels.

Disposal o1 Unusable Elements

58. Unusable materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures will be disposed of in a manner approved by the SE.

The Contractor has to agree with the SE which elements are to be surrendered to the Client's premises, which will be recycled or reused, and which will be disposed of at approved landfill sites.

- 59. As far as possible, abandoned pipelines shall remain in place. Where for any reason no alternative alignment for the new pipeline is possible, the old pipes shall be safely removed and stored at a safe place to be agreed upon with the SE and the local authorities concerned.
- 60. AC-pipes as well as broken parts thereof have to be treated as hazardous material and disposed of as specified above.
- 61. Unsuitable and demolished elements shall be dismantled to a size fitting on ordinary trucks for transport.
- 62. Hearth and Safety
- 63. In advance of the construction work, the Contractor shall mount an awareness and hygiene campaign
- 64. Workers and local residents shall be sensitized on health risks particularly of AIDS.
- 65. Adequate road signs to warn pedestrians and motorists of construction activities, diversions, etc. shall be provided at appropriate points.
- 66. Construction vehicles shall not exceed maximum speed limit of 40km per hour.

Repair of Private Property

- 67. Should the Contractor, deliberately or accidentally, damage private property, he shall repair the property to the owner's satisfaction and at his own cost. For each repair, the Contractor shall obtain from the owner a certificate that the damage has been made good satisfactorily in order to indemnify the Client from subsequent claims.
- 68. In cases where compensation for inconveniences, damage of assets etc. are claimed by the owner, the Client has to be informed by the Contractor through the SE. This compensation is in general settled under the responsibility of the Client before signing the Contract. In unforeseeable cases, the respective administrative entities of the Client will take care of compensation.

Contractor's Health, safety and Environment Management Plan (HSE-MP)

- 69. Within 6 weeks of signing the contract, the Contractor shall prepare an EHS-MP to ensure the adequate management of the health, safety environmental and social aspects of the works, including implementation of the requirements of these general conditions and any specific requirements of an EMP for the works The Contractor's EHS-MP will serve two
- 70. For the Contractor, for internal purposes, to ensure that all measures are in place for adequate HSE management, and as an operational manual for his staff.
- 71. For the client support where necessary by a SE, to ensure that the contractor is fully prepared for the adequate management of the HSE aspects of lie project, and as, a basis for monitoring of the contractor's HSE performance.
- 72. The contractor's EHS-MP shall provide at least:
 - a. description of procedures and methods for complying with these general
 - b. environmental management conditions, and any specific conditions specified in an EMP;
 - c. description of specific mitigation measures that will be implemented in order to minimize adverse impacts,

- d. a description of all planned monitoring activities (e g. sediment discharges from borrow areas) and the reporting thereof; and the internal organisational management and reporting mechanisms put in place for such.
- 73. The Contractor's EHS-MP will be reviewed and approved by the Client before start of the works.
- 74. This, review should demonstrate if the Contractor's EHS-MP covers all of the identified impacts, and has defined appropriate measures to counteract any potential impacts.

HSE Reporting

- 75. The Contractor shall prepare bi-weekly progress reports to the SE on compliance with these general conditions, the project EMP if any and his own EHS-MP. An example format for a Contractor HSE report is given below. It is expected that the Contractor's reports will include information on:
- 76. HSE management actions/measures taken, including approvals sought from local or national authorities;
- 77. Problems encountered in relation to HSE aspects {incidents, including delays, cost consequences etc. as a result thereof),
- 78. Lack of compliance with contract requirements on the part of the Contractor.
- 79. Changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects; and
- 80. Observations, concerns raised and/or decisions taken with regard to HSE management during site meetings
- 81. It is advisable that reporting of significant HSE incidents be done "as soon as practicable". Such incident reporting shall therefore be done individually. Also, it is advisable that the Contractor keeps his own records on health, safety and welfare of persons, and damage to property. It is advisable to include such records, as well as copies of incident reports, as annexes to the bi-weekly reports Example formats for an incident notification and detailed report are given below. Details of HSE performance will be reported to the Client through the SE's reports to the Client.

Training of Contractor's Personnel

- 82. The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions, any project EMP, and his own EHS-MP and .are able to fulfil their expected roles and functions. Specific training should be provided to those employees that have particular responsibilities associated with the implementation of the EHS-MP. General topics should be:
- 83. HSE in general (working procedures), emergency procedures, and social and cultural aspects (awareness raising on social issues)

Cost of Compliance

84. It is expected that compliance with these conditions is already part of standard good workmanship and state of art as generally required under this Contract. The item "Compliance with Environmental Management Conditions" in the Bill of Quantities covers these costs. No other payments will be made to the Contractor for compliance with any request to avoid and/or mitigate an avoidable HSE impact.

ENVIRONMENTALLY & SOCIALLY SENSITIVE AREAS

ENVIRONMENTAL & SOCIAL ASSESSMENT REGULATIONS, 1999 SCHEDULE 5 (Regulation 30 (2))

- 1. All areas declared by law as national parks, watershed reserves, wildlife reserves and sanctuaries including sacred groves.
- 2. Areas with potential tourist value.
- 3. Areas which constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna).
- 4. Areas of unique historic, archaeological or scientific interests.
- 5. Areas which are traditionally occupied by cultural communities.
- 6. Areas prone to natural disasters (geological hazards, floods, rainstorms, earthquakes, landslides, volcanic activity etc.)
- 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 characterized by one or any combination of the following conditions a. water tapped for domestic purposes;

b. water within the controlled and/or protected areas; c. water which support wildlife and fishery activities.

- 12. Mangrove area characterised by one or any combination of the following conditions
 - a. areas with primary pristine and dense growth;
 - b. areas adjoining mouth of major river system;
 - c. areas near or adjacent to traditional fishing grounds;
 - d. areas which act as natural buffers against shore erosion, strong winds or storm floods.

ENVIRONMENTAL PROTECTION AGENCY SCREENING REPORT FORMAT

REGISTRATION/FILE NO......TM/CI.....

This Form must be completed by two (2) officers only after visiting the project site.

Name	of Receipt of Form EA1: of Proponent/Contact Person pany's Name:	:	
Section	on A: Information Analy	vsis and Inspection	Results
1.0	Description of Proposed Un	· -	
1.1	Type of Undertaking:	C	
1.2	Components		
1.3	Capacity (Installed/ Produc	tion/Volumes)	
1.5	Labour Force:		
	Land Take:		
1.4	Wastes (type, quantity and the Liquid Waste: Solid Waste:		
*(comments on the description o	f the undertaking	
	te description is adequate.	T the undertaking	
Se	ction B Site Information		
2.0	Location and Surrounding		
2.1	Plot No:	Street/Area name:	
		District:	

2.2 Current Zoning: Adjacent Land use: Industries North: South: East: West:
2.3 Geographical Coordinates: Lat:^o Long:^o

Major Landmark (if any):

2.4 Existing Infrastructure & Facilities on site:

There was no facility on project site

2.5 Comment on site information (appropriateness, sensitivity, compatibility etc.) Site is compatible with the activity.

Section C Environmental Impacts

- 3.0 List possible potential Environmental Impacts of the proposed undertaking
- 3.1 Constructional Phase:
-
- 3.2 Operational Phase:
- 3.3 Have these impacts been addressed by the proponent in the Form EA1?

Section D Consultations

4 Indicate persons consulted and their views in the table below.

.....

Section E Observations, Comments and Recommendations

5.0 Observations and comments
5.1 Observations:
5.2 Comments:
5.3 Recommendation
Permit Recommended:
Additional Information required:
PER Recommended:
PER Recommended:
Permit Declined:

If permit declined, give reasons

Section F Declaration

We the under signed, hereby declare that the information provided on this form is true and accurate

Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:

SCOPING REPORT OUTLINE AND DRAFT TERMS OF REFERENCE

1. Introduction

- Project Background
- Purpose/objectives of the scoping
- Justification for the project
- The scoping process/methodology
- 2. Policy, Legal, Regulatory and Institutional Framework (relevant ones) Policies

Acts and Legislations

International conventions and requirements (where applicable)

3. Description of the Project

- Project location and adjoining land uses
- Key project components in terms of processes, raw materials, equipment, human resource requirements, etc

Sub-project components

Auxiliary components

4. Baseline (highlights on the affected environment in terms of project location and adjoining

land uses)

Bio-physical, socio-economic, cultural and institutional

5. Public Participation/Stakeholder Engagement

- Stakeholders Identified (categories)
- Approaches/tools/methods
- ✓ Public notices
- ✓ One-on one
- ✓ Key persons interview
- ✓ Focus group interviews
- ✓ Emails
- ✓ etc
- Issues /concerns of stakeholders
- Issues-Response (Matrix)

6. Alternatives (based on sections 3, 4 and 5)

- Location Technology Raw materials Access
- etc
- 7. Key Issues for consideration in the EIS. (focus on significant impacts)

8. Terms of Reference (ToR) for Environmental Impact Assessment

9. Annexes/Appendices

Terms of Reference (ToR) Outline

1.0 Introduction

- ✓ Background to the proposal
- ✓ Purpose &Objectives of the scoping and the EIA
- ✓ highlight issues identified in the scoping
 - Significant baseline information
 - Assess alternative
 - Identify impacts
 - Propose mitigation
 - etc

2.0 Overview and approach to the preparation of the EIA

- ✓ literature review
- ✓ Conduct of expert studies
- ✓ Public participation and engagement

3.0 Policy, Legal and Regulatory requirements

- ✓ Relevant National Policies
- ✓ Company's Corporate Environmental Policy
- ✓ Laws and regulations that necessitates the EIA
 - Act 490, LI 1652
 - Sector laws
- ✓ International laws and requirements (if applicable)
- ✓ etc

4.0 Study area and boundaries

 \checkmark Discuss the area of influence of the project in terms of impacts

5.0 Alternatives to be examined

- ✓ No project alternative
- ✓ Technology alternative
- ✓ Location alternatives
- ✓ Management alternatives
- ✓ etc

6.0 Public Participation/involvement Approaches

- ✓ Steps, approaches/methods for engaging the public during the EIA
- ✓ Additional or further engagements required
- ✓ Any feedback?/Disclosure
 - Notices
 - Reviews
 - Revisions
 - Etc.

7.0 Specialist/Expert studies and approaches

- ✓ Discuss the technical and expert studies required during the EIA and how these will be done
- ✓ List them,
- Air quality studies
- Noise nuisance
- Traffic impact studies
- Geotechnical investigations
- Others

8.0 Impacts assessment and requirements for mitigation and monitoring

- ✓ How impacts will be identified, assessed or evaluated and their significance
 - Direct impacts
 - Indirect impacts
 - Cumulative impacts
 - Their nature, intensity, reversible/irreversible, spatial extent, duration, probability, magnitude, significance, etc.
- \checkmark Dealing with uncertainties
- ✓ Proposed management and monitoring plan
- ✓ NOTE: You can use impact assessment tables

9.0 Information and data to be included in the EIA report

✓ Other information, data and reports to be included in the EIS, mainly as attachments. Could be PP reported, air quality report, correspondences, etc.

10.0 Content of the EIS

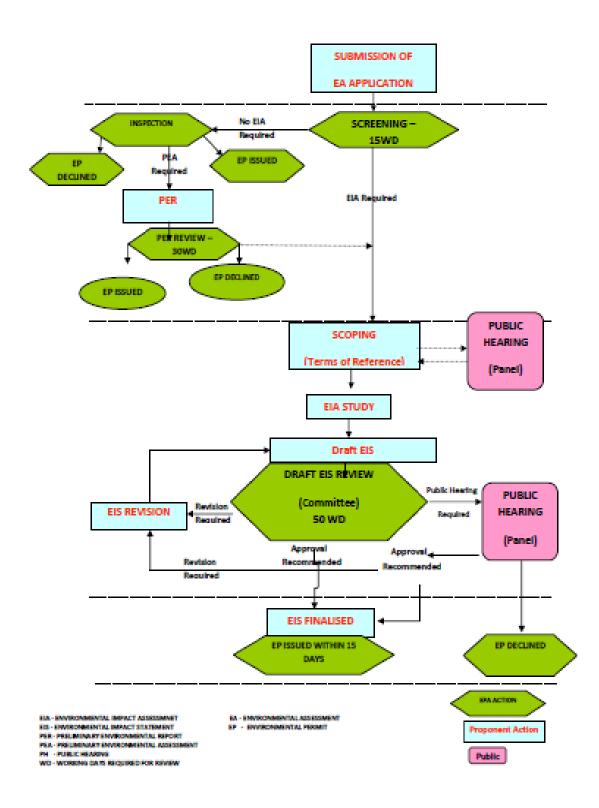
- ✓ Consultant's team
- ✓ Executive summary
- ✓ Introduction
- ✓ Policy, Legal and Regulatory Framework
- ✓ Project description and alternatives
- ✓ Baseline
- ✓ Public participation
- ✓ Impact identification and prediction
- ✓ Impact mitigation
- ✓ Provisional Environmental Management and Monitoring Plan
- ✓ Conclusion

• Timetable and requirements for completion of the EIA process

• Present this in a table or in a chart

No	Activities	Time frame
1.	Submission of scoping report	
2.	Various phases of the EIA	

ADMINISTRATIVE FLOW CHART FOR GHANA ESIA PROCEDURES



ENVIRONMENTAL AND SOCIAL SCREENING FORM (ESSF)

1. Project Information: Name and Contact Details:

Project Name	Location: (region/district/Community)			
r roject r tunic	If other, explain:			
DA (District Engineer)		Date of screening:		
Name of reviewer: (Regional Coordinator)		Date of reviewing		
Name of Approver: National Safeguard Specialist		Date of approval:		

2. Site Selection Data:

Attach Location Map

2. Physical Data:	Comments
(longitude – latitude coordinates (GPS reading) if available):	
Subproject Site area in ha	
Extension of or changes to existing land use	
Any existing property?	
Any plans for construction, movement of earth, changes in land cover	

3. Impact identification and classification:

When considering the location of the sub-project, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. They do indicate a real risk of causing undesirable adverse environmental and social effects, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate or manage potential effects. The following table should be used as a reference.

Impact Identification and Classification

Issues	Site Sensitivity					
155005	Low	Medium	High			
Natural habitats	No natural habitats present of any kind					
Water quality and water resource availability and use	Water flows exceed any existing demand; low intensity of water use; potential water use conflicts expected to be low; no potential water quality issues	Medium intensity of water use; multiple water users; water quality issues are important	Intensive water use; multiple water users; potential for conflicts is high; water quality issues are important			
Natural hazards vulnerability, floods, soil stability/erosion	Flat terrain; no potential stability/erosion problems; no known volcanic/ seismic/ flood risks	Medium slopes; some erosion potential; medium risks from volcanic/ seismic/ flood/ hurricanes	Mountainous terrain; steep slopes; unstable soils; high erosion potential; volcanic, seismic or flood risks			
Cultural property	No known or suspected cultural heritage sites	Suspected cultural heritage sites; known heritage sites in broader area of influence	Known heritage sites in project area			
Involuntary resettlement	Low population density; dispersed population; legal tenure is well- defined; well-defined water rights	Medium population density; mixed ownership and land tenure; well-defined water rights	High population density; major towns and villages; low-income families and/or illegal ownership of land; communal properties; unclear water rights			
Land Tenure	No conflicts, disagreements around use of land,	Process of land regularization and rights to natural resources being worked out with clear communication and grievance process in place	Land conflicts historically unresolved, and no transparency or grievance redress available			

4. Checklist of Environmental impacts

	Potential for Adverse Impacts				
	None	Low	Med	High	Remarks (Specify closest resource or site in question)
Wildlife habitats or populations disturbed					
Sensitive ecosystems downstream disrupted					
Environmentally sensitive areas disturbed					
Number of stream crossings or disturbances					

Existing water sources supply/yield depletion	
Existing water users disrupted	
Downstream water users disrupted	
Potential Soil erosion concerns (e.g., due to highly erodable soils or steep gradients)	
Potential flooding concerns	
Wet season excavation	
Creation of quarry sites or borrow pits	
Significant vegetation removal	
Solid or liquid waste generate	
Dust generation	
Noise generation	
Physical Cultural or religious sites disturbed	
Other (specify):	

5. Checklist of Social impacts

	Potential for Adverse Impacts			verse Impacts	
	Non e	Low	Med	High	Remarks (Specify closest resource or site in question)
Land tenure issues on site/ Community					
Land acquisition concerns					
Resettlement					
Changes to livelihoods from land acquisition					
permanent or temporary loss of crops, fruit trees					
Impact on vulnerable (Women, children, etc.)					
Other (specify):					

6. Summary Impact Evaluation:

The summary of the impact identification and evaluation presented below is based on the screening findings under section 3, 4 and 5. The highest rating in all five areas will be chosen in all cases.

Summary of Site Sensitivity (Rate as Low/Medium/High for the site and provide comments)						
Site Characteristics	Natural habitats	Water quality and water resource availability and use	Natural hazards vulnerability, floods, soil stability/ erosion	Involuntary resettlement	Land Tenure	Comments
Evaluation Criteria: (None, Low, Medium & High)						

7. Categorization and Recommendations*

Determination of the environmental category is based on final evaluation findings under section 6 the screening checklist.

Tick as appropriate	Category	Rating	Recommendation
	A	High	Requires registration with the EPA and additional environmental or social instruments (ESMP, ESIA, ARAP, RAP, etc.) to support the ESMF/RPF
	В	Medium	Requires additional environmental or social instruments to support the ESMF/RPF. In case the sub-project is registered with EPA and no further documentation is required, the PIU would prepare a site-specific Environmental and Social Management Plan Checklist (ESMP Checklist). Find attached ESMP Checklist (Annex 1)
	С	Low/None	Does not require additional environmental or social due diligence than what is provided in the ESMF/RPF. Refer to ESMF /RPF Sub-projects will however be registered with EPA in accordance with LI 1652

Approval's Name: Signature:

Date:

SUMMARY OF STAKEHOLDER ENGAGEMENT RESPONSES

	Institution	Name/Position of Officer Consulted	Telephone	Date and Venue	Main Issues	Responses
	Ministry of Patrick Yaw Nimo (Chief Director)			25 th February 2019	 Project coordination and institutional arrangements 	• Provided a proposed organisational structure of project implementation at
1.	Trade and Industry	Ebenezer Adjirakor		Office of the	 Project Monitoring and Reporting Responsibility for Environmental and Social Sofaceureda 	 MOTI level. Project Implementation Team (IP, SEZ Team Leader, PPME Director
		Kwesi Ofori-Antwi (SIPO)	0277757573	Chief Director,		
		Abukari Ibrahim (SIPO)	0209466524	MOTI, Accra		Standards Division of MOTI
	Ghana Free	Kristine Lartey (Head Legal)		Office of the	6	• Identified training for Estates and Enclave Management Officers
2.	Zone Authority	Ernest Amoah Asistant Manager BOR)	0247627861	Administration,	F	• To liaise with Land Valuation Board on land compensation issues
	(GFZA)	Ziblim Alhassan Admin Head)	0208145671	GFZA, Accra	Disputes and Grievance Redress Mechanism	• Yet to have a well-structured Grievance Redress Process
3.	Ghana Investment Promotion Centre	Ms. Asantewaa Donkor (Principal Investment Promotion Officer)	0244687113	Conference Room, GIPC, Accra	Environmental and Social SafeguardsGrievance Process	 Need to establish a unit to manage environmental and social risks Investor Services Division to be strengthened to handle
4.	National Board for Small Scale Industries	Habiba Sumani Director, Women Entrepreneur Development	0302668641 0548311118	20th February 2019 NBSSI, Accra	• Management of Environmental and Social Risks	• No need to establish new unit to handle. PIU at head Office and District staff to be strengthened to handle
5.	Ministry of Finance/W/B Group Unit	Lawrence Agyekum Nyanor (Principal Economic Officer)	0243438322	Office of the Principal Economic Officer, Accra	 Project Coordination and Institutional Arrangement Compensation/entitlement and Asset valuation delays 	 M&E to be supported within the Ministry MDAs to submit budget promptly for compensation payment
	LMI	Kojo Aduhene (CEO)		25 th February 2019	• Infrastructural requirements especially Water project at the Dawa Industrial	• Expectations and decision on package for infrastructural development (e.g. water system at Dawa)
6.	Holdings	Norbert Anku (MD Southern Utilities)	0244315329	LMI Conference Room, Accra	 Park Training and Capacity Building. 	 Training on Development of SOPs, Work place Safety Issues and Management of Industrial Spills.

7.	Dawa Industrial Park	Norbert Anku (MD Southern Utilities)	0244315329	Dawa Industrial Park, Project Office, Dawa	• PAPs/Stakeholder Consultation with cattle grazers and Vegetable Farmers	• Common understanding on use of areas not yet developed within concession area by the PAPs.
8.	Private Sector Silicon Technology Park, Accra	David Osei Chief Executive Officer		Silicon Technology Park, Project Office, Accra	 Presence of Technology Park has triggered high rent values in project area Poor accessibility to site No encumbrances no compensation payments 	 Promoting greenery of site Replication of concept in other regions in Ghana Cutting edge computer skills and employment opportunities
9.	Private Sector Apollonia City, Accra	Nana Adi Appiah Construction Site Manager	0277814544	12 th March 2019 Appolonia	 Urban developers – acquired Very high cost infrastructural development (e.g. Electricity and water) 	 Government to support infrastructural development CSR Coordination Unit of Apollonia City established to interface with communities on social demands
10	Opinion Leader/ Assemblyman	Hon. Samuel Laryea Ayeh, Former Assemblyman, Dawa	0246907770	14 th March 2019 Dawa	 Dawa Industrial Park lands acquired by government – No settlements on site Current land use mostly cattle grazing and vegetable farming. Pressure on social facilities as 	 Stakeholder engagements forum held with community and understanding reached on co-existence CSR packages –Bridge over Asilekpo stream, employment etc. Increased rents. Landlords benefitting now
11	Dawa Dam Farmers Association	Samuel Nartey Organising Secretary		14thMarch2019DawaDawaDamSite	Denokofe stream takes its source from Industrial park. Any water pollution	
12.	Women Farmers, Dawa	Helena Narh Doris Nartey Lardjer Djangme Lardjer Ntiamoah		14thMarch2019DawaDawaDamSite	 Micro-finance to increase productivity Paclamation of dug pits 	 Increased incomes. Women cooking for working labour force Improvement in farming practices as high demand for farm products by working force

COMPLETED QUESTIONNAIRE BY MININISTRY OF TRADE AND INDUSTRIES



MINISTRY OF FINANCE

GHANA ECONOMIC TRANSFORMATION PROJECT STAKEHOLDERS' CONSENT INTERVIEW GUIDE

DEVELOPMENT OF ENVIRONMENTAL SOCIAL MANAGEMENT FRAMEWORK (ESMF) AND RESETTLEMENT POLICY FRAMEWORK (RPF)

Dear Respondent

The Government of Ghana through the Ministry of Finance is implementing the Economic Transformation Project (ETP). The ETP aims at supporting the diversification of Ghana's economy to better shock-proof against volatility in primary commodity prices, spur a transition to an economic structure that generates higher growth that is more sustainable over the long term. As part of the project preparatory process, an Environmental Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) is being prepared in order to adequately address the World Bank and Ghanaian safeguards policies.

You have been selected as one of the key stakeholders to volunteer information for the completion of the study to the best of your ability. You are however assured that information provided to complete this study will be treated with the strictest confidentiality.

Thanks in Advance for Participating

Start of Interview (Time)..... End of Interview (Time).....

A: BACKGROUND INFORMATION

Name	Description	Contact Number /Email
Ministry of Trade	An arm of the Executive	P.O. Box MB 47
and Industry	Government responsible for the	Ministries, Accra, Ghana
	Development of Trade and	
	Industrial related Policies,	<u>motichief@moti.gov.gh</u>
	Programmes and projects in	<u>motichief@yahoo.com</u>
	Ghana	
Group/Association		
Individual		

2. Address of Key Informants

Address	Description
Name of Community	
District	
Region	

PART B: ESMF AND RPF

a s f	Project Description: Provide an overview of project objectives, components and associated activities, with an emphasis on component(s) that will finance subprojects; anticipated types of subprojects, and types that will be excluded from inancing; project target areas; project coordination and implementation arrangements, with details of institutional arrangements for managing the subproject cycle; and annual reporting and audit requirements.
1.1.	Have you heard about the proposed Economic Transformation Project to be implemented by the MoF? a.
1.2	If yes, have you in any way been involved in the planning and design of this project and at what level of involvement?
	a) Technical/Expect Group Level b) Ministerial Level
A B	List the anticipated types of sub-project components that your institution will directly be involved in implementing. ect Component 1 . Selected doing business reforms (legal, regulatory and process re- engineering/automation 2. Institutional Capacity Building (training equipment/facility upgrade) 2. Public-private partnerships coordination/technical assistance and public-private dialogue forums
•	ect Component 2 Technical assistance for development of the legal and regulatory framework for development, financing and the establishment of industrial and special economic zones and free ports Institutional capacity building for regulatory bodies established under 1.3 (A) and other relevant institutions. Marketing, investment promotion and investor aftercare Last mile investments(off-site and on-site)
1.4	Has your institution/organization in the past implemented similar projects supported by donor agencies like the World Bank, ADB, etc.? If yes list two major ones. <i>Tema Export Processing Zone project implemented under the Ghana Trade and</i>

Investment Gateway Programme (GATEWAY Project)

1.5	Provide your Organisation chart indicating particular persons responsible for environmental and social safeguard affairs, their offices and locations.
	Any coordination and institutional bottlenecks realized in the implementation of these ects?
1.7	What organizational structure, project coordination and institutional arrangements will you use for the implementation of the GET sub-projects?
1.8	Any measures to improve project coordination and institutional arrangements?
	 Participation in Technical Working Group Institute monitoring and evaluation framework including economic and social database Administrative and logistics support for program implementation Support for private sector
and	Baseline Data: Give adequate information on the current environmental situation socioeconomic and cultural characteristics in project areas, including physical, and ogical environments, as well as socio-economic and cultural settings in project area.
2.1	General Baseline characteristics and location information Topographical information of the area or surroundings of the company operations
-	YES
-	Area or site map providing basic information on the existing situation.
-	YES
-	General environmental and social information on the project area or company
-	YES
	Analysis of Environmental and Social Impacts, Issues and Risks: Based on the erent pillars to be implemented under the project, assess the associated
envi envi spec activ envi	ronmental and social impacts, issues and risks that might require separate ronmental and social assessment in relation to location, project size, and other site- ific factors. This will involve proper scoping of the project's field of influence, vities and impacts that will have to be studied. Provide information on the current ronmental situation, socioeconomic and cultural characteristics in project areas. Environmental Issues

Type of Sub- project	Environmental issue	Actions/ Measures	Responsibility	Monitoring method & parameters	Estimated Cost	Implementation schedule & Completion Date	
Tema EPZ							
Dawa Industrial Park							
Tamale Industrial Park							
Sekondi EPZ							
Shama EPZ							
Westpark Industrial Park							
Apolonia Business Park							
Kumasi Industrial City							
Builsa Industrial Enclave							
Silicon Accra Technology City							
3.1.1. Will the cost?	e environmen	tal benefits	of the GET s	sub-projects o	outweigh th	e environmental	
a. Yes	✓		No				
3.1.2. Rate the <i>Environment</i>	-	onmental be	nefits and co	ost of the Proj <i>Environme</i>	-	Community	
High ✓ Medium Low High Medium Low ✓							
3.2 Social Iss	3.2 Social Issues						
participation,	For each significant social impact (e.g. poverty, gender, population, Civil Society/ participation, resettlement etc.) identified in the audit (and ESIA) the following table would be completed.						

Type of Sub- project	Social Impact	Actions/ Measures	Responsibility	Monitoring method & parameters	Estimated Cost	Implementation schedule & Completion Date	
Tema EPZ							
Dawa Industrial Park							
Tamale Industrial Park							
Sekondi EPZ	Sekondi EPZ						
Shama EPZ	Shama EPZ						
Westpark Industrial Park							
Apolonia Business Park							
Kumasi Industrial City							
Builsa Industrial Enclave							
Silicon Accra Technology City							
b. Yes	 3.2.1. Will the Social benefits of the GET sub-projects outweigh the social cost? b. Yes ✓ □ No □ 3.2.2. Rate the likely social benefits and cost of the sub-projects 						
Social Benefi	ïts			Soci	al Cost		
High 🖌 🗌] Medium [Low	Hi	igh 🗌 N	Iedium		
Consultant's and impacts	intervention that will have	will be the e to be stud	scoping of tl lied in the E	he project's f SMF.	ield of influ	l stage of the uence, activities	
4.1 In your v influence).	view, what an	e the likely	y broad bou	ndaries for t	he sub-pro	jects (sphere of	
4.2 Which institution or body will estimate the extent and scope of ESIA to be performed on the proposed GET sub-projects, and offer an initial recommendation as to whether a full ESIA is required or not;							
Environmente	Environmental Protection Agency (EPA)						
4.3 Are you av	4.3 Are you aware of the Ghana ESIA Procedures and EA Regulations?						
a. Yes	✓ □		No				

4.4 Any challenges in obtaining environmental permits from this institution? Yes or No.
a. Yes No V
4.5 Census of Project affected Persons (PAPs): How many persons are likely to be affected
by the project
4.6 How many are :
a. Males
b. Females
c. Children
4.7. Asset Inventory: What are the major assets in the project area that are likely to be affected by the project?
4.8. What is the cost of such assets?
4.9 What forms of compensations/entitlements will be required for the PAPs?
Monetary compensation and resettlement package in worse case
5. Assess capacity and performance of the responsible agencies to manage
environmental and social risks: The Consultant should assess institutional capacity of
implementing agencies in implementing ESMF and identify needs for capacity building. The ESMF should also describe how sensitization meetings and launching
workshops can bring out environmental and social issues and considerations of the
proposed economic transformation. Based on the findings, the Consultant will develop
an ESMF training programme for various stakeholders including proposed recipients - MDAs etc. and non-government partners and ETP facilitators to ensure adequate
development, implementation and monitoring of the project.
5.1. Which of the following EPA and World Bank Specific Safeguards Polices and
instruments are you aware of :
 Environmental Assessment (OP 4.01) ✓ Involuntary Resettlement (OP 4.12). ✓
 RAP
 ARAP Description
ESMPESIA
Comments:
5.2 In what specific ways do you think the sub-projects will benefit from the application of
these policies and instruments? Please tick:
 Environmenal resources conservation
- Avaidance of conflicts on complaints
 Avoidance of conflicts or complaints Improved livelihoods of affected persons

5.4 How will you rate your capacity and performance to manage environmental and social					
risks					
High Medium 🖌 🗌 Low					
5.5 Has there been any training programme (s) in your institution to enhance competences and capacities of staff in environmental and social safeguards policies/instruments					
In the past but not now					
5.6 Which of your staff members will you recommend to receive training?					
IP & SEZ Team, Policy Planning, Monitoring & Evaluation Directorate; Strategic Anchor Team; Standard Team					
5.7 Given the opportunity, suggest areas where you think you require training to make you competent in addressing environmental and social safeguards issues					
Social and Environmental Safeguard policies					
6. Institutional Framework: Propose institutional arrangements to handle the preparation, implementation and supervision of the ESMF of the proposed project. Such framework should include means for strengthening of implementing institutions to be able to assess and manage the environmental and social impacts and risks of the project and its sub-projects. To this end, the ESMF will address institutional tasks and cover every stage of the project process (from the initiation and reviews to the monitoring of the implementation of ESMF). The Framework should also examine the need for in-house capacity building, and should explore the possibility of establishing an environmental and social unit within institutions where possible with the responsibility to conduct or supervise the environmental and social analyses of all project components.					
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7. Stakeholder and Public Consultation and participation: Indicate the anticipated needs for in-country consultation and field work to prepare the ESMF. Since the ESMF is developed before most of the components of the project decisions are made, the consultant shall propose consultation and disclosure processes to be undertaken. In close coordination with implementation agencies, assist in carrying out stakeholder consultations with national NGOs, community opinion leaders, scientific experts, relevant government agencies and the private sector in order to present and discuss potential impacts of project activities and a proposed mechanism to address them under the ESMF and take their views into account. Consultation process and major issues raised need to be documented and attached to the ESMF.

7.1 Which stakeholders especially PAPs will be involved in the implementation of the GETP?

Traditional Authorities/opinion leaders, Parliamentarians, District Chief Executives, Assembly men and women

.....

7.2 How do you think these stakeholders will be involved in decision-making at all stages of project implementation?

Steering Committee.....

8 Grievance Redress Mechanism and social inclusion: Taking into account the existing mechanism in implementing agencies, the Consultant shall suggest a grievance mechanism which provides an effective avenue for expressing concerns and achieving remedies for project affected people, promote a mutually trustful and constructive relationship and enhance social accountability and ultimately the achievement of project development objectives.

8.1 How is land accessed in the community?

Either by Privately acquire or by Force Acquisition or compulsory acquisition by the state with rightful compensation paid......

8.2 Was land access/acquisition a requirement for the GETP

a. Yes

No

8.2 Are there any disputes over ownership of the land?

No

Yes

What livelihood restoration manufactures will your institution put i

8.3 What livelihood restoration measures will your institution put in place before construction works begins?

- A. Crops and settlement compensation schemes instituted
- **B.** Conduct independent valuation exercise on all economic trees/crops and settlements
- C. Payment of compensation to affected people.

8.4 Do you have in place a transparent grievance process, which made issues available and clear to PAPs and communities? Yes/No

Yes 🖌	No	
-------	----	--

If Yes, How effective is the grievance process?

a) Highly Effective b) Averagely Effective **〈** c) Not Effective

What are the procedures for recording and processing grievances?

Manual processing, correspondence and meeting minutes.....

9 Monitoring and Evaluations: Describe a monitoring regime that will be established, prioritizing those elements that must be in place prior to the implementation of the project and where possible to allow a baseline to be established against which changes during the implementation of the project can be assessed with identification of persons responsible for respective actions on M & E.

9.1 Describe a monitoring regime that will be established in the implementation of the project

M & *E* plan.....

9.2 Who will be responsible for monitoring and reporting?

Project Implementation Team, (IP and SEZ Team Leader, PPME Directorate Director...

9.3 Do you already have any monitoring checklist and reporting format to be used?

NO.....

9.4 Project Reporting requirements. Provide format to be used or most recent (progress report) on environmental and social aspects of the project.

Not Applicable.....

10. A Budget for implementing the ESMF

10.1 Budget Allocation for safeguards administration *Not applicable*

10.2 Vehicle and equipment for monitoring

Ans. Yet to be developed

10.3 Office Accommodation

Ans Yet to be established/identified

General Recommendation

STAKEHOLDER ENGAGEMENTS - PICTURES



Start Off Meeting with Project Co-ordinator

Stakeholder Engagement with MoF World Bank Unit





Stakeholder Engagement with NBSSI Representative Stakeholder Engagement with GIPC Representative



22222

Stakeholder Engagement with LMI Holdings

Stakeholder Engagement with MOTI



Main Entrance of Dawa Industrial Park,

Main Entrance of Appolonia City



Stakeholder Engagement with Hon Assemblyman at Dawa



Meeting with CEO of Silicon Accra Technology Park. Background is the proposed site for the Project

COMPLETED QUESTIONNAIRE FROM W/BANK GROUP UNIT, MoF



MINISTRY OF FINANCE

GHANA ECONOMIC TRANSFORMATION PROJECT

STAKEHOLDERS' CONSENT INTERVIEW GUIDE

DEVELOPMENT OF ENVIRONMENTAL SOCIAL MANAGEMENT FRAMEWORK (ESMF) AND RESETTLEMENT POLICY FRAMEWORK (RPF)

Dear Respondent

The Government of Ghana through the Ministry of Finance is implementing the Economic Transformation Project (ETP). The ETP aims at supporting the diversification of Ghana's economy to better shock-proof against volatility in primary commodity prices, spur a transition to an economic structure that generates higher growth that is more sustainable over the long term. As part of the project preparatory process, an Environmental Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) is being prepared in order to adequately address the World Bank and Ghanaian safeguards policies.

You have been selected as one of the key stakeholders to volunteer information for the completion of the study to the best of your ability. You are however assured that information provided to complete this study will be treated with the strictest confidentiality.

Thanks in Advance for Participating

Start of Interview (Time)......End of Interview (Time).....

A: BACKGROUND INFORMATION

Name	Description	Contact Number /Email
Individual	Lawrence Agyekum Nyanor	0243438322
Organization	MoF World bank Group Unit	
Position/Designation	Principal Econ Officer	

2. Address of Key Informants

Address	Description
Name of Community	
District	
Region	

PART B: ESMF AND RPF

	Project Description: Provide an overview of project objectives, components and associated activities, with an emphasis on component(s) that will finance subprojects; anticipated types of subprojects, and types that will be excluded from financing; project target areas; project coordination and implementation arrangements, with details of institutional arrangements for managing the subproject cycle; and annual reporting and audit requirements.
1.2.	Have you heard about the proposed Economic Transformation Project to be implemented bythe MoF?a.Yes.b
1.2	If yes, were you involved in the planning and design of this project/ Indicate your level of involvement?
	Adequate consultation with the relevant MDAs
1.3	List the proposed types of sub-project components that your institution will directly be involved in implementing.
	1
	2
	3
1.4	4 Has your institution/organization in the past implemented similar projects supported by donor agencies like the World Bank, ADB, etc.? If yes list two major ones.
	Jobs and Skills
1.5.	What coordination and institutional bottlenecks did you experience in the implementation of these projects?
	 Where to situate the project. Who to host the coordinating units Institutional conflicts between MDAs
1.6	Has your current Organogram any provision for Environmental and Social safeguard affairs.
	c. Yes 🗌 No 🗌 🗸
	M &E to be supported within the Ministry
1.7	What organizational structure, project coordination and institutional arrangements will you use for the implementation of the GET sub-projects?
1.8	Any measures to improve project coordination and institutional arrangements?

2.0 Baseline Data: Give adequate information on the current environmental situation and socioeconomic and cultural characteristics in project areas, including physical, and biological environments, as well as socio-economic and cultural settings in project area.

2.1 Do you have any Baseline information on the characteristics and location of the sub0components to share with the consultant?

- Prevoius environmental and social studies
- Location maps and site plans
- Topographical and Drainage Systems (water bodies
- Vegetation and biodiversity
- Geology and soils
- Population and human settlement
- Infrastructure (Utility Services, road and transport etc..
 - Others.....

3.0 Analysis of Environmental and Social Impacts, Issues and Risks: Based on the different pillars to be implemented under the project, assess the associated environmental and social impacts, issues and risks that might require separate environmental and social assessment in relation to location, project size, and other site-specific factors. This will involve proper scoping of the project's field of influence, activities and impacts that will have to be studied. Provide information on the current environmental situation, socioeconomic and cultural characteristics in project areas.

3.1 Environmental Issues

Using the table below, what significant potential environmental impacts (e.g. ecology, water, soil, air, etc.) do you envisage with the implementation of the GET project.

Type of Sub- project	Environmental issue	Actions/ Measures	Responsibility	Monitoring method & parameters	Estimated Cost	Implementation schedule & Completion Date
Tema EPZ						
Dawa Industrial Park						
Tamale Industrial Park						
Sekondi EPZ						
Shama EPZ						
Westpark Industrial Park						
Apolonia Business Park						
Kumasi Industrial City						
Builsa Industrial Enclave						

Silicon Accra Technology City						
3.1.1. Do you think the environmental benefits of the GET sub-projects outweigh the environmental cost?						
d. Yes	✓ □	N	lo			
3.1.2. Rate the 1	likely environm	ental benefit	s and cost of t	he Project on y	our Commu	nity
Environmenta	l Benefits			Environmenta	l Cost	
High 🖌 🗌	Medium	Low	Hig	Mediur	n Lo	v
3.2 Social Issue	es					
-						der, population, tion of the GET
Type of Sub- project	Social Impact	Actions/ Measures	Responsibility	Monitoring method & parameters	Estimated Cost	Implementation schedule & Completion Date
Tema EPZ						
Dawa Industrial Park						
Tamale Industrial Park						
Sekondi EPZ						
Shama EPZ						
Westpark Industrial Park						
Apolonia Business Park						
Kumasi Industrial City						
Builsa Industrial Enclave						
Silicon Accra Technology City						
 3.2.1. Do you think the Social benefits of the GET sub-projects outweigh the social cost? e. Yes ✓ □ No □ 						

3.2.2. Rate the likely social benefits and cost of the sub-projects				
Social Benefits Social Cost				
High 🖌 📃 Medium Low 🗌 High Medium 🗌 Low 🖌 🗌				
4.0. Environmental and Social Screening and Scoping: The initial stage of the Consultant's intervention will be the scoping of the project's field of influence, activities and impacts that				
will have to be studied in the ESMF.				
4.1 In your view, what are the likely key environmental and social issues to be considered in determining the scope or boundaries for the sub-projects (sphere of influence).				
YES, Relocation Issues				
4.2 Do you have in-house capacity to undertake Scoping and Screening of the proposed GET sub- projects.				
b. Yes No				
4.3 Are you aware of the Ghana ESIA Procedures and EA Regulations?				
c. Yes 🖌 🗌 No 🗌				
4.4 Any challenges in obtaining environmental permits from this institution?				
b. Yes No				
4.5 How many persons are likely to be affected by the project				
4.6 How many are :				
a. Males				
b. Females c. Children				
4.7.What are the major assets in the project area that are likely to be affected by the project?				
4.8. What is the cost of such assets?				
4.9 What forms of compensations/entitlements will be required for the PAPs?				
• MDAs submits budget for payments of compensation				
Asset valuation delays				
5.0 Assess capacity and performance of the responsible agencies to manage environmental and social risks: The Consultant should assess institutional capacity of implementing agencies in				
implementing ESMF and identify needs for capacity building. The ESMF should also describe				
how sensitization meetings and launching workshops can bring out environmental and social issues and considerations of the proposed economic transformation. Based on the findings, the				
Consultant will develop an ESMF training program for various stakeholders including				
proposed recipients - MDAs etc. and non-government partners and ETP facilitators to ensure adequate development, implementation and monitoring of the project.				

$5 + W_{1} + 1 + 5 + 5 + 5 + 1 + 5 + 5 + 5 + 5 + 5$
5.1. Which of the following EPA and World Bank Specific Safeguards Polices and instruments are
you aware of :
 Environmental Assessment (OP 4.01)
■ Involuntary Resettlement (OP 4.12). ✓
■ RAP ✓
■ ARAP ✓
■ ESMP ✓
■ ESIA ✓
5.2 In what specific ways do you think the sub-projects will benefit from the application of these policies and instruments? Please tick:
• Environmenal resources conservation \checkmark
• Avoidance of conflicts or complaints \checkmark
 Improved livelihoods of affected persons ✓
 Social acceptance of the project by community and affected persons
social acceptance of the project by community and affected persons
Others
5.4 How will you rate your capacity and performance to manage environmental and social risks
Very High High 🖌 Medium Low
5.5 Has there been any training program (s) in your institution to enhance competences and capacities of staff in environmental and social safeguards policies/instruments
World bank Safeguards Clinics
5.6 Which of your staff members will you recommend to receive training?
Project Coordination
 Safeguard Specialists
• Sajeguara Specialisis
5.7 Given the opportunity, suggest areas where you think you require training to make you competent
in addressing environmental and social safeguards issues
Dicks with action (Eins)
 Risks mitigation (Fire) Occupational Health and Safety
Occupational Health and Safety
6.0 Institutional Framework: Propose institutional arrangements to handle the preparation
6.0 Institutional Framework: Propose institutional arrangements to handle the preparation, implementation and supervision of the ESMF of the proposed project. Such framework should
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6.1 Who is in-charge of managing environmental safeguards in your institution?
• No Division. However, M & E to manage
6.2 If there is no internal institutional arrangements made to handle ESMF and RPF issues, what recommendations will you make for the implementation and supervision of the programme?
6.3 Do you think it is worthwhile to establish a unit to manage environmental and social risks?
b. Yes 🖌 🗌 No 🗌
6.4 Any recommendations to strengthen these institutions to effectively address environmental and social risks?
• Capacity building of M&E staff in the Ministry to take up the challenge
7.0 Stakeholder and Public Consultation and participation: Indicate the anticipated needs for
in-country consultation and field work to prepare the ESMF. Since the ESMF is developed before most of the components of the project decisions are made, the consultant shall propose consultation and disclosure processes to be undertaken. In close coordination with implementation agencies, assist in carrying out stakeholder consultations with national NGOs,
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b. Yes No
8.2 Are there any disputes over ownership of the land?
Yes No
8.3 What livelihood restoration measures will your institution put in place before construction works begins?
8.4 Do you have in place a transparent grievance process, which made issues available and clear to PAPs and communities? Yes/No
Yes No 🖌 🗌
• Issues tackled as and when it happens
If Yes, How effective is the grievance process?
b) Highly Effective 🖌 b) Averagely Effective c) Not Effective
What are the procedures for recording and processing grievances?
9.0 Monitoring and Evaluations: Describe a monitoring regime that will be established, prioritizing those elements that must be in place prior to the implementation of the project and where possible to allow a baseline to be established against which changes during the implementation of the project can be assessed with identification of persons responsible for respective actions on M & E.
9.1 Describe a monitoring regime that will be established in the implementation of the project
• Work as a team through M & E Department
9.2 Who will be responsible for monitoring and reporting?
Management and M&E
9.3 Have you already designed any monitoring checklist and reporting format to be used for the project?
Yes No Not yet
10. A budget for implementing the ESMF.
10.1 Total Budget Allocation your component of the GET project.
<i>US\$100 million</i> 10.2 What percentage of this amount will be used for safeguards administration

 10.3 Vehicle and equipment for monitoring?

 • Details yet to be determined......

 10.4 Office Accommodation?

 • I1. General Recommendation

 • Good project looking at the project components – transforming the economy of Ghana

ATTENDANCE LIST

MINISTRY OF FINANCE

ENVIRONMENT AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) AND RESETTLEMENT POLICY FRAMEWORK (RPF) FOR GHANA ECONOMIC TRANSFORMATION (GETP) PROJECT

SR NO	NAME	DESIGNATION/ POSITION	TEL. CONTACT	EMAIL ADDRESS	DATE	SIGNATURE
1	Ranklin Alice	de PC Mot	02446858	& functulade	grand. L	Frych
2	ASANIZUA DONKOR	the Principal in	024468711	s adenkare al	Collegain	ater
3	Habilog Rimani	Ent Devit NBCB	0548811118	briba 2001@Yaha	0. con 10219	1 the
4	Koustine A. Lartey	HEPS, LEGAL	024 432 7546	Kurtne Cartey @ gfzb	20/00/19	Accerateles
5	Ernest Amuch	Assof Mg- BOR	0247627861	ernesternoch@ gfzb.gov.gh	20/2/19	Stan Y
6	Zillim Allass	~ Admin Hea	020-814567	1 betinbidued	galico com ?	elozia A
7	HYMOR	PEO	024348832	2 Conjanor D moto cond	21/2/19	Son
8	Jognita Alcalipo	AEO	0248649152	Jaaka Lpo Engep.gov.g	6 21/2/19	E.
9	Norbert Anken	ing Southern	0244315-329	n.ancue sulgho	tes 21/19	James
10	KOD ADULTONE		024431064	10-aduchene	and L1	JENDUS
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MINISTRY OF FINANCE

ENVIRONMENT AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) AND RESETTLEMENT POLICY FRAMEWORK (RPF) FOR GHANA ECONOMIC TRANSFORMATION (GETP) PROJECT

SR NO	NAME	DESIGNATION/ POSITION	TEL. CONTACT	EMAIL ADDRESS	DATE	SIGNATURE
1	Kunger ofour-Anoral	8.1.p.0	0277757573	kwasighe hotmant a	m 25/02/19	Ketta
2	Abubakars Horshin	SIPD	020946652	c ibrohim rogo	Tchniewn	AP
3	David Osei	CEO	0544694991	david@ tsinvestmentgrou	12/03/19 p.com	An
4	Samuel Longes Ayeh	former Assemblymen		-	14/03/2019	Sonfor to
5	Samuel Longes Ayeh Soumuel Nartey	Assembly unin Termens Aster. OR. G-SEC	024218692	6 —	14 13 12-19	NOR
6	2					
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SAMPLE GRIEVANCE AND RESOLUTION FORM

	er of Complaint): ID Number: formation :	
	formation : Grievance or Complaint:	
(PA	Ps ID number) (Village <u>; mobile</u>	phone)
<u>Date</u>	Individuals Contacted	Summary of Discussion
Signature		
Date:	_	
-		
		(if different from Filer) Position
Review/Re		
	nciliation Session:	
Was Filer F of complain	Present? : at conducted? Yes	Yes No Was field verification No Findings of field investigation:
 Summarv (of Conciliation Session Discuss	sion:
Was agreen	nent reached on the issues?	Yes No
If agreemen	it was reached, detail the agreem	ent below:
If agreemen	t was not reached, specify the po	oints of disagreement below:
Signed (Co	nciliator):	
Signed (File	er):	
Signed:		
Independen	t Observer	