Ministério das Finanças
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Unidade de Gestão
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UNIDADE DE GESTÃO DE PROJECTOS ESPECIAIS

CABO VERDE RENEWABLE ENERGY AND IMPROVED UTILITY PERFORMANCE PROJECT

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ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN ENERGY STORAGE SYSTEM

CABO VERDE RENEWABLE ENERGY AND IMPROVED UTILITY PERFORMANCE PROJECT

COMPONENT 1 ("RENEWABLE AND EFFICIENT ELECTRICITY SERVICE")

Subcomponent 1.1 ("Small-Scale for the Integration of Renewable Energy")

DOCUMENT INFORMATION

Project	Cabo Verde Renewable Energy and Improved Utility Performance Project
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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

ACP	Abbreviated Compensation Plan
BESS	Battery Energy Storage Systems
ICIEG	Cape Verdean Institute for Gender Equality and Equity
ESCP	Environmental and Social Commitment Plan
PCAS	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
EIA	Environmental Impact Assessments
ESHS	Environmental, Social, Health and Safety
GBV	Gender-Based Violence
GM	Grievance Mechanism
GRM	Grievance Redress Management Mechanism
HSP	Health and Safety Plan
LGRM	Local Grievance Redress Management Committees
MWp	Megawatts Peak
OHS	Occupational Health and Safety
OE	Owner's Engineer
PESER	Strategic Sector Plan of Renewable Energies
SEP	Stakeholder Engagement Plan
UGPE	Unidade de Gestão de Projectos Especiais
VAC	Violence Against Children
ZDER	Renewable Energy Development Zone

EXECUTIVE SUMMARY

This document summarizes the Environmental and Social Management Plan (ESMP) of the installation of the Battery Energy Storage Systems (BESS) in the Islands of Santo Antão, São Nicolau, Maio and Fogo.

These BESS will be implemented in the scope of the so-called "Cabo Verde Renewable Energy and Improved Utility Performance Project". This Project is being developed in line with the country's commitment to increase the production and coverage of electricity from renewable energy resources. For that purpose, the Government of Cabo Verde has obtained support from the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA/World Bank), Canada Clean Energy and Forest Climate (CCEFCF) and the Global Infrastructure Facility (GIF) to implement the Project.

The implementation of the Project will be done by the Unidade de Gestão de Projectos Especiais (Special Projects Management Unit - UGPE).

The Project will also finance the implementation of photovoltaic plants in the islands of São Nicolau, Santo Antão, Maio and Fogo.

Installation sites for the BESS

In Fogo, the BESS will be located at Electra's thermal power plant in São Filipe and will have a capacity of 2.08 MW and 2.08 MWh.

In Santo Antão, the BESS will be located at Electra's thermal power plant, in Porto-Novo, with a capacity of 1.4 MW and 2 MWh.

In São Nicolau, the BESS will be located at Electra's new thermal power plant, in Tarrafal with a capacity of 0.5 MW and 1 MWh.

Finally, In Maio, the BESS will also have a capacity of 0.5 MW and 1 MWh and will be located close to the future solar PV plant to be built in Esgrovere in the peri-urban area of the City of Porto Inglés.

Description of the BESS

It is expected that each BESS will arrive in Cabo Verde already assembled inside containers (one or two for each location), which will then just need to be installed in a suitable surface and connected to the existing electrical systems.

The batteries that will integrate the BESS will be lithium ions, with no risk of electrolyte leakage (as with lead-acid batteries). The transformers to be installed in each BESS will be oil-filled and each transformer will be provided with a spill-containment tray.

The civil works to be carried out at each location will be simple and have a small footprint, in areas that have already been artificialized and subject to use related to the production of electricity.

The manpower required for the installation of BESS will be limited and will be associated with transport operations and the execution of minor civil works/foundations for the placement of the containers. A more specialized workforce will be involved in connecting the

BESS to the electrical systems on each island, testing and commissioning. Under normal operating conditions, the BESS will not require the direct assignment of workforce.

As complementary sub-projects to the BESS the implementation of solar PV plants in the islands of Santo Antão, São Nicolau, Maio and Fogo and the respective connection to each of the island's electrical grids.

Policy and regulatory framework

The assessment was carried out taking into account the applicable national legislation, covering, among other aspects:

- Environmental impact assessment regulations.
- Biodiversity conservation and protection.
- Waste.
- Water and sanitation.
- Air quality, noise pollution.
- Cultural heritage.
- Territorial and urban planning.
- Gender-based violence.
- Expropriation.
- Health and safety at work.
- Labor and working conditions.
- Road code.
- Private security activities.

Additionally, and given the funding source for the Project, the World Bank's Environmental and Social Framework (ESF) and the relevant Environmental, Health and Safety Guidelines (EHSGs), namely the General EHSGs and the EHSGs for Electric Power Transmission and Distribution) have also been considered. The ESF contains an import set of requirements, structured in Environmental and Social Standards, covering aspects like:

- Assessment and Management of Environmental and Social Risks and Impacts.
- Labor and Labor Conditions.
- Resource Efficiency, Pollution Prevention and Management.
- Community Health and Safety.
- Land Acquisition, Land Use Restrictions, and Involuntary Resettlement.
- Biodiversity Conservation and Sustainable Management of Living Natural Resources.
- Cultural Heritage.
- Stakeholder Engagement and Information Dissemination.

Consultation and Information Disclosure and Grievance Redress Mechanism

It is intended that the public consultation and information disclosure actions throughout the development of the project are aligned with good practice and the requirements of the World Bank.

Between March and August 2020 members of the local communities in the Fogo, Santo Antão, São Nicolau and Maio islands were interviewed with the objective of presenting the Project and get their views on project risks, impacts, and possible mitigation measures.

The recruitment of local labor, the provision of information prior to the start of work and the availability of a grievance redressal mechanism were some of the issues highlighted in the interviews.

Between February and May 2021, a series of stakeholder meetings were held in the municipalities where interventions will take place under the sub-component of the project, with the aim of presenting the project's objectives and planned activities, introducing the grievance redress mechanism implemented by UGPE, and establishing the local grievance redress committee for the project.

UGPE has implemented a Grievance Redress Mechanism for the Project. For that purpose, Local Complaints Management Committees have been created, one in each municipality where the Project is developed, as well as the Central Complaints Management Committee (CCMC), along with the means and procedures necessary for the operation of the Grievance Redress Mechanism.

Any person or group of people associated with the projects or affected by their activities can submit a question, complaint, or grievance.

Any person or group of persons involved in the project, partner institutions, NGOs and community-based associations, local councils and any individual or group affected by the project can raise a grievance. Anonymous suggestions and complaints are accepted.

The Grievance Redress Mechanism contains provisions related to the reception and registration of grievances, their treatment, analysis and investigation, verification and subsequent actions and the follow-up, monitoring and reporting of the grievances, as well as the communication strategy to be adopted.

Prior to the start of the work, the UGPE will promote the dissemination of the GRM among the various interested and affected parties, including those working on the project.

A public meeting is planned to be held as soon as the contractor is appointed and before the start of the works, in order to introduce the Contractor, who, in turn, will describe his work plan (activities to be carried out and respective expected start and end dates), to present the Project's environmental and social safeguards, with emphasis on the Gender Based Violence and Violence Against Children prevention measures, and to disseminate the Project's Grievance Redress Mechanism.

The budget of the Project already covers the costs for implementation and operation of the Grievance Redress Mechanism.

Environmental and Social Characteristics of the Installation Sites

On all four islands, BESS will be installed in state-owned areas that are already artificial at the time of installation, with uses related to power generation.

Each of the target islands has important biodiversity areas and a significant number of threatened species. However, the BESS will not be installed in any important biodiversity area, nor will interfere with any protected area.

No sensitive receptors (e.g., residential areas) are present in the immediate vicinity of the sites where BESS will be installed.

Risks and Impacts and Associated Mitigation Measures

The environmental and social risks and impacts associated with the BESS can be summarized as follows:

- The installation of the BESS will not imply risks or impacts on climate variables nor will it imply an increase in the vulnerability of communities, infrastructures, or activities to the effects of climate change.
- No geological or geotechnical impacts are expected associated with the implementation of the BESS.
- No significant effects are expected in terms of land use. Mitigation measures are justified to prevent and control any possible soil contamination events.
- No water resources are expected to be affected by the implementation of the BESS. In any case and as indicated for the soils, mitigation measures are justified to prevent water contamination events.
- The construction works may cause a localized increase of dust, but it is not expected that this affects residential areas. In any case, mitigation measures are justified.
- Similarly, no noise impact is expected on any residential areas.
- The BESS will not cause any relevant visual intrusion.
- The BESS will be installed in areas of modified habitat, where the primary ecological functions of the territory and the composition of species are greatly altered, and far from any protected areas.
- Different types of waste will be generated. Mitigation measures will be required.
- No impacts are expected in terms of cultural heritage. In any case a procedure to deal with the discovery of previously unknown archaeological resources must be implemented.
- No interference has been identified with territory planning instruments.
- The land where the BESS will be installed is state-owned and does not currently support any built occupation or economic activity. No impacts in terms of physical or economic displacement are expected.
- The installation works will create few temporary jobs. Specific measures must be adopted to promote the recruitment of local labor and also the recruitment of women. No jobs will be generated for the operation phase.
- There will be health and safety risks for the personnel involved in the installation and operation of the BESS, justifying the need for specific health and safety plans which will detail the preventive measures and the emergency procedures to be adopted.

- No significant fire risks are anticipated in relation with the BESS.
- No significant health and safety risks are expected for the local communities as a result of the BESS installation. However, preventive measures are justified in relation with the traffic associated with the construction works and with the access of unauthorized personnel to risk areas. Also, specific measures will be required for the prevention of Covid-19 and for the security of the facilities.
- Considering the limited labor influx to and the current situation in terms of Gender Based Violence awareness and prevention in Cabo Verde, no significant risks are expected in this regard. In any case, preventive measures will be implemented, including strict codes of conduct.
- No significant risks and impacts are expected in relation with the decommissioning of the plant. In any case, it will be necessary to manage the materials and equipment which will be removed from the site, promoting its reuse, or recycling as much as possible.

As a general conclusion, no environmental or social risks or impacts affecting the sustainability of the BESS were identified. No loss of natural resources has been identified in relation with the BESS.

In any case, the implementation of a few measures is recommended, with the primary objective of preventing the possible negative risks and impacts and to assure the sustainability of the Project. These measures can be summarized as follows:

Measures for the Preparation phase

Risks and Impacts on:	Measures related to:	Responsibility
General	GRM implementation	UGPE, Tenderer
	Codes of Conduct	Contractor
	Relationship with Populations	UGPE, OE, Tenderer
	Relationship with Other Entities	UGPE, OE, Tenderer
	Completion and Detailing of the Environmental and Social Management Plan	Contractor
	Completion and Detailing of the Health and Safety Plan	Contractor
Employment and Working Conditions	Labor Management	Contractor

Measures for the Installation Phase

Risks and Impacts on:	Measures related to:	Responsibility
General	Staff Training and Awareness	UGPE, with support from OE and ICIEG, and Contractor
Geology, Geotechnics and Geomorphology	Execution of Works • Exploration of loan stains to obtain aggregates	Contractor
Soils and Land Use	Construction Yard Location and Installation • Waste and wastewater Management • Storage and Handling of Hazardous Substances • Machinery Overhauls and Maintenance Execution of Works • Management of Materials resulting from Excavations • Washing of Concrete Mixers and Concrete Residues	Contractor
Water Resources	Construction yard location and installation • Water supply for the work • Waste and wastewater management • Storage and handling of hazardous substances • Machinery overhauls and maintenance • Washing of concrete mixers and concrete residues	Contractor
Air Quality	Execution of works • Preservation of Air Quality and Noise Prevention	Contractor
Noise	Execution of works • Preservation of Air Quality and Noise Prevention • Implementation of the Health and Safety Plan	Contractor
Waste	Construction yard location and Installation • Waste and wastewater Management Execution of works • Management of Materials resulting from Excavations • Washing of Concrete Mixers and Concrete Residues	Contractor
Cultural Heritage	Execution of works Discovery of archaeological remains (chance find procedure)	Contractor, OE and UGPE
Employment and Working Conditions	Staff Training and Awareness Implementation of the GRM (maintaining its accessibility and dissemination to workers) Codes of Conduct (maintenance)	UGPE, OE and ICIEG, and Contractor

Community health and safety	Execution of Works • Fencing and Signaling of Works and Conditioning of Pedestrian and Car Circulation • Fire Prevention	Contractor
Human rights	Staff Training and Awareness Implementation of the GRM (maintaining its accessibility and dissemination to communities) Codes of Conduct (maintenance)	UGPE, with support of OE and ICIEG, and Contractor

Measures for the Completion Phase of the Work

Risks and Impacts on:	Measures related to:	Responsibility
General	Remediation of affected areas	Contractor

Measures for the BESS Operation Phase

Risks and Impacts on:	Measures related to:	Responsibility
Occupational Health and Safety	Preparation and implementation of the Health and Safety Plan	Operator
Soils and Land Use	Storage and Handling of Hazardous Substances	Operator
Water Resources	Storage and Handling of Hazardous Substances	Operator

Measures for the BESS Decommissioning

Risks and Impacts on:	Measures related to:	Responsibility
General	The measures for the decommissioning phase will be, in essence and with the necessary adaptations, identical to those recommended for the installation phase.	Operator
Waste	Reuse or recycling of decommissioned materials and equipment	Operator

Responsibilities for the implementation of the ESMP

The ESMP clarifies the responsibilities of the various intervening parties in the implementation of the mitigation measures defined to address the risks and impacts of the project. The intervening parties are:

- The UGPE, who will establish from the outset the terms of reference to be followed for the environmental and social management of the Project, taking into account the applicable legal requirements and the requirements of the entity financing the Project, and will ensure that these terms of reference are complied with. The UGPE will oversee obtaining licenses and authorizations for carrying out the Project, formal articulation with the various official entities involved in the process and implements a Grievance Redress Mechanism (GRM) to receive and process complaints related to the Project. The UGPE will oversee the obtaining of licenses and permits to carry out

the project, the formal articulation with the various official bodies involved in the process, and the implementation of the Grievance Redress Mechanism (GRM).

- The "Owner's Engineer", who will be responsible for assisting UGPE in the procurement of goods and services, controlling and supervising construction works, supporting the implementation of the training program, and supporting and monitoring the implementation of environmental and social safeguards.
- The Contractor awarded the contract to design, deliver and install the BESS will be responsible for the physical execution of the works under the supervision of the Owners' Engineer. As such, the Contractor will be responsible for the completion and detailing and adequate implementation of the Environmental and Social Management Plan and of the Health and Safety Plan. The Contractor will have, in its organization, the necessary means to carry out the works and to manage the different areas involved, such as quality, health and safety and environment, including .an Environmental Specialist with demonstrated in Health and Safety management, as well as an experienced Social Specialist. These specialists will be present full-time at the construction sites.
- The Operator (Electra). Electra will have the BESS installed within the perimeter of its installations (existing thermal power stations), except for what will happen in Maio, when the BESS may be installed within the perimeter of the solar PV plant (basis option). Thus, Electra will establish the conditions that the Contractor will have to comply with in the installation of the BESS in the perimeters of the thermal power plants. Once the installation of the BESS and the respective commissioning is completed, ELECTRA will be in charge of the operation of the BESS.

The ESMP also defines the requirements applicable to the environmental and social monitoring, namely in terms of actions by the different intervening parties and the indicators to be calculated, monitored and reported.

The schedule for the implementation of the ESMP and the requirements applicable to its review are also established.

The following table summarizes the environmental and social management activities to be implemented for the subcomponent 1.1 of Project (photovoltaic pant and their respective interconnections with the electric grid and the battery storage systems), also indicating the responsible parties and the estimated cost:

Table 1 - ESMP budget

Activity	Responsibility	Estimated cost	Comments
Implementation of mitigation measures (Contractor and Operator)	Contractor, Operator		The environmental and social management measures to be implemented by the contractor and the operator will rely exclusively to compliance with the applicable legal requirements or best practices and will have a reduced cost, which should be included in the general budget of the respective contracts. It is not foreseen the need to implement any environmental or social measure that implies investment costs.
Environmental and Social Monitoring and Auditing	UGPE	12,000 USD	Lump sum estimation of the costs associated with E&S monitoring and auditing of the project, including possible audits to be carried out by the external entities (e.g., National Directorate for the Environment, Delegations of the Environment and Agriculture Ministry, Municipalities). The operational costs of the Owner's Engineer and UGPE teams are not included in this estimation
Stakeholder Engagement	UGPE	5,000 USD	Lump sum estimation of the costs associated with the stakeholder engagement, including public meetings, disclosure of information documents. The operational costs of the Owner's Engineer and UGPE teams are not included in this estimation
Grievance Mechanism	UGPE, Local and Central Grievances Management Committees	10,000 USD	Lump sum estimation of the costs associated with the GRM, including the Local and Grievances Management Committees. The operational costs of the UGPE team are not included in this estimation.
Capacity Building (as detailed in the Environmental and Social Commitment Plan)	Owner's Engineer, Contractor, Operator, ICIEG	21,500 USD	Lump sum estimation of the costs associated with organizing and delivering the capacity building sessions, including mobilization of participants. The operational costs of the Owner's Engineer and UGPE teams are not included in this estimation
Training of Project Workers (initial training of the Contractor's and Operator's management staff)	Owner's Engineer, Contractor, Operator, ICIEG	10,000 USD	Lump sum estimation of the costs associated with organizing and delivering the training sessions. The operational costs of the Contractor's, Operator's, Owner's Engineer and UGPE teams are not included in this estimation
Total		58,500 USD	

Controversial issues

No controversial issues have been identified in relation with the BESS.

1 INTRODUCTION

The present Environmental and Social Management Plan (ESMP) is related to the installation of the Battery Energy Storage Systems (BESS) in the Islands of Santo Antão, São Nicolau, Maio and Fogo, in the framework of the Cabo Verde Renewable Energy and Improved Utility Performance Project (the "Project").

The Project is financed by several international entities, namely the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA/World Bank), Canada Clean Energy and Forest Climate (CCEFCF) and the Global Infrastructure Facility (GIF) and has as main objectives to:

- Increase renewable energy production; and
- Improve the performance of the public electricity service in Cabo Verde, leveraging private financing.

To meet these objectives the Project integrates the following three components:

- Component 1 ("Renewable and Efficient Electricity Service") will fund investments to integrate variable renewable energy sources into the grid and provide sustainable and resilient electricity solutions to public health facility buildings.
- Component 2 ("Technical Assistance Services for the Restructuring and Privatization of the Electricity Sector", will cover technical assistance for the restructuring and privatization of the electricity sector (ELECTRA) and technical assistance to the Multisectoral Economic Regulation Agency.
- Component 3 ("Project Implementation Support and Technical Assistance") will support the Special Projects Management Unit (UGPE) in the management and coordination of the Project and provide technical assistance to the Ministry of Industry, Trade and Energy, more specifically to the National Directorate of Industry, Trade and Energy (DNICE).

Component 1 of the Project includes two subcomponents:

- Subcomponent 1.1 ("Integration of small-scale renewable energy") will support the construction of small-scale solar power plants, their connection to the grid, as well as the installation of pilot energy storage facilities; Subcomponent 1.1 ("Integration of small-scale renewable energy") will support the construction of small-scale solar power plants in the islands of Santo Antão, São Nicolau, Maio and Fogo, their connection to the grid, as well as the installation of the pilot energy storage facilities in those same islands;
- Subcomponent 1.2 ("Resilient and Efficient Electricity Service in Public Services") will finance public investments in solar photovoltaic systems (on rooftops) and energy efficiency in public health buildings, including public hospitals and health centers.

Environmental and Social Impact Assessments (ESIAs) have been prepared for each of the photovoltaic plants in Santo Antão, São Nicolau, Maio and Fogo. In the scope of the Project a set of safeguard instruments was prepared in 2020/21 in order to meet the requirements of the World Bank's Environmental and Social Framework. These instruments included a Labor

Management Plan (LMP), an Environmental and Social Commitment Plan (ESCP), a Grievance Redress Mechanism (GRM) and a Stakeholder Engagement Plan (SEP).

2 SCOPE AND OBJECTIVES

2.1 Scope

This ESMP refers to the implementation of BESS in four islands of Cape Verde, namely Santo Antão, São Nicolau, Maio and Fogo, through a design, supply, and installation contract.

More specifically:

- In Fogo, the BESS will be located at Electra's thermal power plant in São Filipe and will have a capacity of 2.08 MW and 2.08 MWh.
- In Santo Antão, the BESS will be located at Electra's thermal power plant, in Porto-Novo, with a capacity of 1.4 MW and 2 MWh.
- In São Nicolau, the BESS will be located at Electra's new thermal power plant, in Tarrafal with a capacity of 0.5 MW and 1 MWh.
- Finally, In Maio, the BESS will also have a capacity of 0.5 MW and 1 MWh and will be located close to the future solar PV plant to be built in Esgrovere in the peri-urban area of the City of Porto Inglés.

This ESMP must be detailed and complemented by the successful bidder for the installation of the BESS, demonstrating how the requirements now established will be implemented.

2.2 Objectives

The main objective of this ESMP is to provide clear mitigation measures for identified potential social and environmental impacts. Having this in mind, the ESMP must:

- Be proportionate to the significance of the identified environmental and social risks and impacts.
- Ensure compliance with applicable legal, regulatory, or normative requirements.
- Assign responsibilities to the various entities involved in all phases of the subproject.
- Define a list of the mitigating measures to be adopted in mitigation hierarchy logic, and the monitoring plans to be carried out.
- Define the bases for the procedures to be prepared and adopted and which ensure compliance with the measures to mitigate risks and environmental impacts.
- Promote the application of the best environmental and social practices.
- Promote the prevention of environmental and social risks.
- Define the necessary records for the environmental and social management of projects, namely regarding the environmental monitoring of construction.

3 NATIONAL LEGISLATION AND ENVIRONMENTAL AND SOCIAL STANDARDS (ESS)

3.1 National Legislation

As the main legal instruments for framing environmental policy applicable to the development of the Project, we highlight the following:

- The Environment Policy Framework Law (Law No. 86/IV/93) that establishes the bases of Cabo Verde's environmental policy, starting from the principle of prevention, based on the reduction or elimination of the causes, and the correction of the effects of actions or activities that may alter the quality of the environment.
- The Legislative Decree no. 14/97, of July 1st, whose objectives are to optimize and guarantee the use of natural resources, qualitatively and quantitatively, as a basic assumption for a self-sustained development, and to safeguard the citizens' right to a healthy and ecologically balanced living environment and the duty to defend, preserve, and it is up to the State and the Municipalities to promote the improvement of the individual and collective quality of life.
- Decree-Law No. 27/2020, of March 19, establishes the legal regime for environmental impact assessment (EIA) of public or private projects likely to have an impact on the environment, revising the regime that had been in force since 2006. One of the changes introduced has to do with the categorization of projects, leading to projects of different types being subject to demanding evaluation processes.

In this revised regulation, the requirements for Environmental Impact Assessments (EIA) and evaluation processes will have more adherence to internationally established best practices and the typical requirements of international funding institutions.

Another change now introduced has to do with the categorization of projects, leading to projects of different types being subject to demanding evaluation processes, ranging from Category A, applicable to more complex projects and requiring a full Environmental Impact Assessment, to Category C, for simpler projects, requiring only the approval of environmental management measures. It is understood that the installation of BESS would fall into Category C.

It is worth mentioning other laws of great importance in more specific matters:

- Decree-Law No. 3/2003 of February 24, as amended by Decree-Law No. 44/2006 of August 28, which establishes the legal regime regarding natural spaces, landscapes, monuments, and other spaces that deserve special protection and must be integrated in the National Network of Protected Areas, due to their ecological function, importance for the conservation of biodiversity, and interest from a socioeconomic, cultural, or scientific point of view.
- In the field of waste, it is worth noting Decree-Law No. 56/2015 of October 17, which establishes the general waste regime, applicable to the prevention, production and management of waste and approves the legal regime for licensing and concession of waste management operations. In addition to this decree, there are several other relevant pieces of legislation, namely Decree-Law No. 26/2020 of March 19

establishing the legal regime for solid urban waste management services, Decree-Law No. 65/2018 approving the National Waste List, Decree-Law No. 32/2016 approving the National Strategic Plan for Waste Management and Ordinance No. 18/2016 establishing the guide model for monitoring waste road transport.

- In the water and sanitation sector, Legislative Decree no. 3/2005, of October 19, which approves the Water and Sanitation Code - B.O. 29/07/2015, the Decree-Law nº 8/2004 that regulates the criteria and standards for water quality and its classification and the Decree-Law nº 7/2004 that regulates the discharge of wastewater and the Regulatory Decree nº4/2020, of 4 March, which establishes the criteria and parameters to control the quality of water for irrigation, of surface or underground origin, desalinated water, recovered rainwater or treated wastewater.
- In the field of air quality, Decree-Law no. 5/2003 of March 31, defines the national air protection and control system.
- Law nº 34/VIII/13 of July 24th, which establishes the prevention and control of noise pollution, aiming to safeguard people's rest, peace, and well-being.
- Law nº 85/IX/2020 of April 20th, which establishes the Legal Regime of Protection and Values of the Cultural Heritage.
- Legislative Decree No. 4/2018, of July 6, which approves the Bases of Territorial Planning and Urban Planning and Legislative Decree No. 61/2018, of December 10, which establishes the National Regulations for Territorial Planning and Urban Planning.
- Law No. 84/VII/2011 of January 10 - Establishes measures to prevent and repress the crime of gender-based violence (GBV Law).
- Legislative Decree nº 2/2007, de 19 de Julho - Soils Law.
- Legislative Decree no. 3/2007, of July 19 - Expropriation of real estate due to public utility reasons.
- Decree Law No. 55/99, September 6 - Establishes rules on safety, hygiene, and health at work.
- Decree Law No. 64/2010, December 27 - Establishes the general rules for planning, organization, and coordination to promote safety, hygiene, and health at work on construction sites.
- Legislative Decree No. 1/2016, of February 3 - Cabo Verdean Labor Code.
- Legislative Decree nr. 4/2005 (altered by Legislative Decree nr. 1/2007 of May 11th - Cabo Verdean Labor Code - approves the Highway Code.
- Law 8/V/96, of November 11, altered by Law 59/VII/2010, of April 19 - prohibits the driving of vehicles by individuals under the influence of alcohol.
- Law no. 50/VII/2009, of December 30 defines the legal regime for the exercise of private security activities.

3.2 Environmental and Social Standards (ESS)

In developing this ESMP the World Bank's Environmental and Social Framework (ESF) and the World Bank Group General Environmental, Health and Safety Guidelines (EHSGs) and the

EHSGs for Electric Power Transmission and Distribution have also been considered, given the funding source for the Project.

A comparison between the national legal framework and the requirements of the World Bank's Environmental and Social Framework (ESF) has been performed, allowing to highlight the following aspects can be highlighted, structured according to the Environmental and Social Standards (ESS) integrated in the ESF:

- ESS1 - Assessment and Management of Environmental and Social Risks and Impacts: No significant gaps or conflicts are identified between the requirements of ESS1 and those of the national legislation on EIA.
- ESS 2 - Labor and Labor Conditions: No significant gaps or conflicts are identified between the requirements of ESS2 and those of national legislation on labor and labor conditions. At most, it should be noted that national legislation does not have as explicit requirements as ESS2 on labor management procedures or the adoption of a formal project-specific code of conduct, aspects that thus should be addressed in accordance with ESS2.
- ESS 3 - Resource Efficiency, Pollution Prevention and Management: The legal framework is relatively complete but lacks specific regulations in many areas; national practice in emission control and environmental quality monitoring is relatively incipient. This justifies the use of good practices and international guidelines to complement the existing gaps in the country.
- ESS 4 - Community Health and Safety: No significant gaps or conflicts are identified between the requirements of ESS4 and those of national legislation, which, however, does not have as explicit requirements as ESS4, which should therefore be considered. Regarding private security services, the requirements in national legislation are considerably aligned with the requirements set out in ESS 4.
- ESS 5 - Land Acquisition, Land Use Restrictions, and Involuntary Resettlement: National legislation has significant gaps compared to the requirements of ESS 5. Thus, even though there is convergence in aspects such as the types of payment, in-kind compensation, the consideration of regular occupants and the determination of the eligibility date, in several other aspects there are gaps or even divergence between the national legislation and ESS 5, namely with regard to the persons eligible for compensation, the fact that irregular occupants are not covered, relocation assistance, compensation alternatives, the failure to consider economic displacement, the absence of specific provisions to protect vulnerable groups, adequate dissemination of information, relevant consultation and informed participation, or monitoring and evaluation procedures. In other words, the sole consideration of national legislation does not allow safeguarding an important set of requirements of ESS 5, thus the use of the instruments and the observation of the requirements foreseen in this ESS should be foreseen.
- ESS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources: The requirements of ESS 6 should be applied complementarily to what follows from national legislation (very focused on protected areas).
- ESS 8 - Cultural Heritage: Recent national legislation is reasonably aligned with the requirements of ESS 8, and no significant gaps or conflicts are identified.

- ESS 10 - Stakeholder Engagement and Information Dissemination: Despite the improvements introduced with the new legal regime of environmental impact assessment, the options adopted in terms of stakeholder engagement and information dissemination do not fully address the requirements of ESS.

4 PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

The key objectives of the public consultation in the scope of the Project are:

- To allow stakeholders to understand the risks and impacts of the project, and potential opportunities.
- To create the conditions for stakeholders to provide input for the environmental and social assessment of the project, namely by expressing their views on project risks, impacts, and mitigation measures.
- To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow UGPE to respond to and manage such grievances.
- To provide regular updates to stakeholders on project performance and possible changes in scope or schedule.
- To seek feedback from stakeholders on the environmental and social performance of the project and the implementation of the mitigation measures.
- To be accessible and culturally appropriate and be proportionate to the risks and impacts of the project.

The national legal requirements on public consultation and information disclosure are less comprehensive that those set by World Bank ESS. Being so, it is intended that the public consultation and information disclosure actions throughout the implementation of the Project are aligned with good practice and the requirements of the World Bank.

Between March and August 2020 members of the local communities in the Fogo, Santo Antão, São Nicolau and Maio islands were interviewed with the objective of presenting the Project and get their views on project risks, impacts, and possible mitigation measures.

The recruitment of local labor, the provision of information prior to the start of work and the availability of a grievance redressal mechanism were some of the issues highlighted in the interviews.

Between February and May 2021, a series of stakeholder meetings were held in the municipalities where interventions will take place under the sub-component of the project, with the aim of presenting the project's objectives and planned activities, introducing the grievance redress mechanism implemented by UGPE, and establishing the local grievance redress committee for the project.

A public meeting will be held in each municipality prior to the commencement of works. The purpose of these meetings will be to present the environmental and social safeguards of the project, with emphasis on the measures to prevent gender-based violence and violence against children, to disseminate the project's grievance redress mechanism, and to introduce

the contractor, who will in turn describe his work plan (activities to be carried out and their expected start and end dates).

Information disclosure activities will continue throughout the implementation of the project.

5 POTENTIAL RISKS AND NEGATIVE IMPACTS ASSOCIATED WITH THE SUBPROJECT

The following paragraphs present a summary of the potential negative impacts associated with the installation of the BESS. In each case, the need for management measures to address the identified risks and impacts will be identified, and these measures will be described in detail in the following chapters.

5.1 Sub-Project Details

5.1.1 General

The equipment of each of the BESS will be packed in containers, which will be received in Cape Verde ready to be installed.

The batteries that will integrate the BESS will be lithium ions, with no risk of electrolyte leakage (as with lead-acid batteries). The transformers to be installed in each BESS will be oil-filled and each transformer will be provided with a spill-containment tray.

The successful bidder for the BESS contract will be responsible:

- For the detailed design of the equipment that will make up the storage systems and their manufacture.
- For the transport of the BESS (containerized structures) to Cape Verde (Porto da Praia, in the Island of Santiago or Porto Grande in Mindelo, São Vicente Island) and from there to each of the Project's implantation sites.
- In each of these locations, the successful tenderer will prepare the foundations for laying the containerized structures that will contain the equipment, digging the trenches for installing the interconnection cabling from the BESS to the electrical infrastructure (of the solar PV parks or ELECTRA power plants, as the case may be) and carrying out tests on the functioning of the system.

It is expected that the BESS will arrive in Cabo Verde already assembled inside containers (one, or two for each location), which will then just need to be installed in a suitable surface and connected to the existing electrical systems.

The civil works to be carried out at each location will be simple and have a small footprint, in areas that have already been artificialized and subject to use related to the production of electricity.

The manpower required for the installation of BESS will be limited and will be associated with transport operations and the execution of minor civil works/foundations for the placement of the containers. A more specialized workforce will be involved in connecting the BESS to the electrical systems on each island, testing and commissioning.

Under normal operating conditions, the BESS will not require the direct assignment of workforce.

As complementary sub-projects to the BESS the implementation of photovoltaic plants in the islands of Santo Antão, São Nicolau, Maio and Fogo and the respective connection to each of the island's electrical grids.

5.1.2 Fogo Island

The project will be located in São Filipe, Fogo Island. The BESS will be installed next to the Electra thermal power plant. An underground distribution line, at 20 kV and located within the perimeter of the Electra premises, will be used to connect the battery directly to the power plant busbar.

Figure 1 - Localization of the ESS Site (Fogo)

The site location is at the following coordinates 14°54'34" N, and 24°29'34" W. An aerial view of the site is shown in Figure 1 below, and the location of the site relative to the thermal power plant is shown in Figure 2.

The BESS will be installed on land owned by the State, which is already artificial and whose use is related to the generation of electricity.

No residential areas are present in the immediate vicinity of the site.

The Fogo Island has important biodiversity areas and a significant number of threatened species. However, the BESS will not be installed in any important biodiversity area, nor will interfere with any protected area.

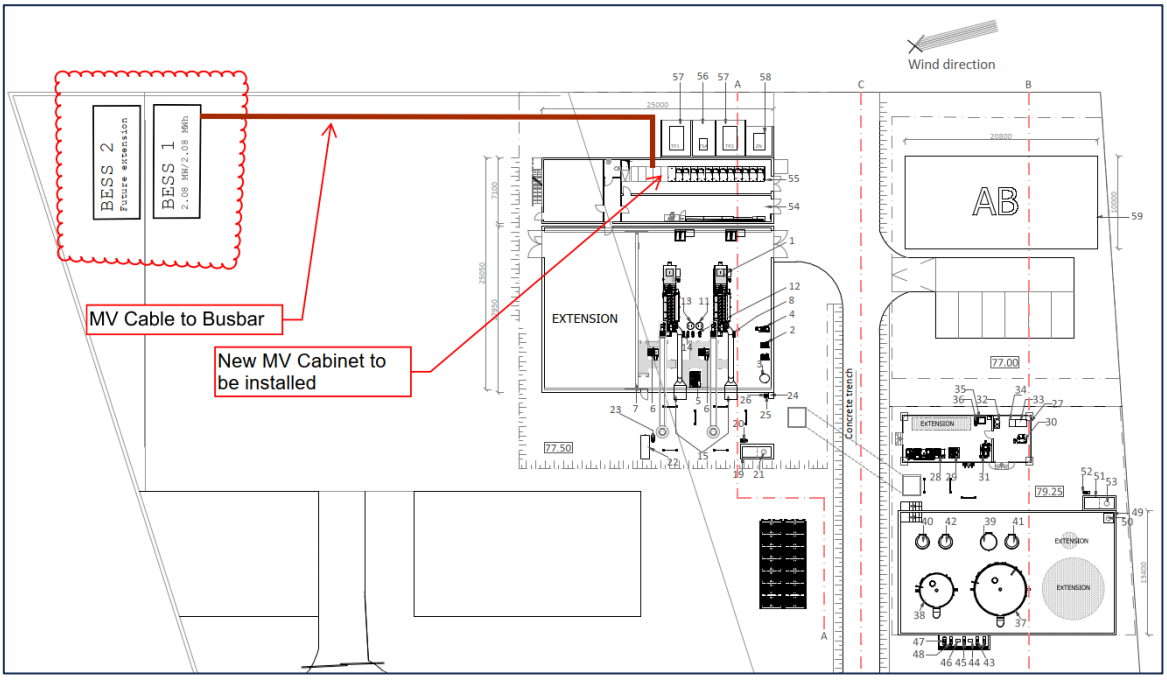

Figure 2 – ESS Location and Outcoming Feeder to the Electra power plant (Fogo)

5.1.3 Santo Antão Island

The project will be located in Porto Novo, Santo Antão Island. The BESS will be installed next to the Electra thermal power plant. An underground distribution line, at 20 kV and located within the perimeter of the Electra premises, will be used to connect the battery directly to the power plant busbar.

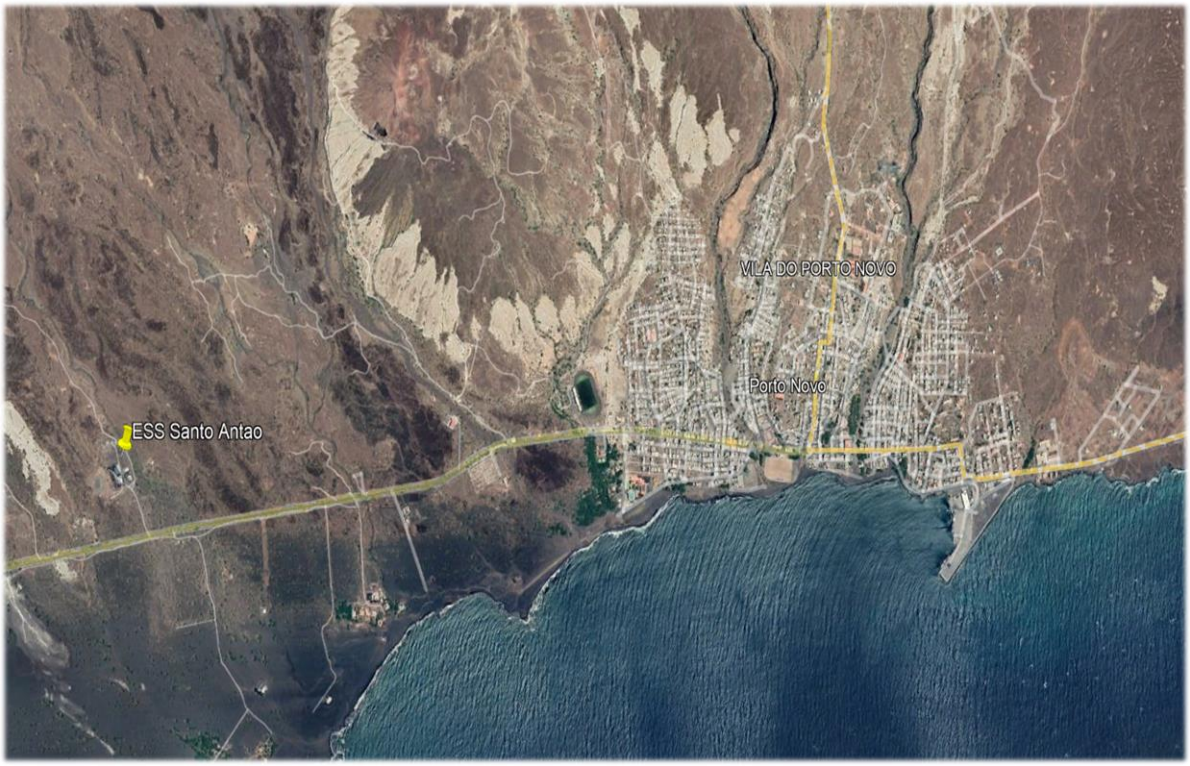

Figure 3 - Localization of the ESS Site (Santo Antão)

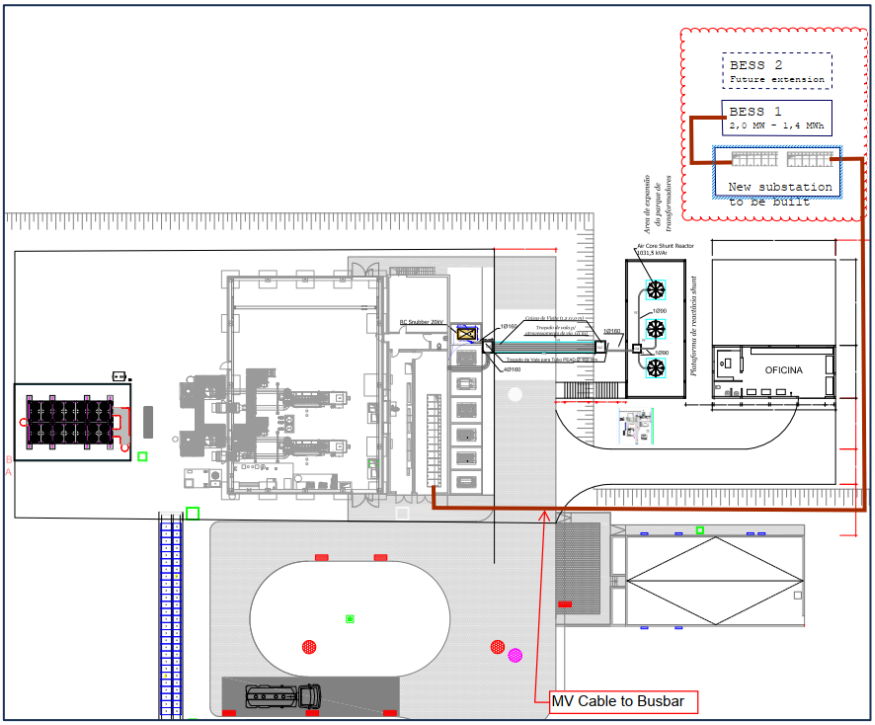

Figure 4 – ESS Location and Outcoming Feeder to the Electra power plant (Santo Antão)

The site location is at the following coordinates 17° 1'8"N and 25° 5'54" W. An aerial view of the site is shown in Figure 3 below, and the location of the site relative to the thermal power plant is shown in Figure 4.

The BESS will be installed on land owned by the State, which is already artificial and whose use is related to the generation of electricity.

No residential areas are present in the immediate vicinity of the site.

The Santo Antão island has important biodiversity areas and a significant number of threatened species. However, the BESS will not be installed in any important biodiversity area, nor will interfere with any protected area.

5.1.4 São Nicolau Island

The project will be located in Tarrafal de São Nicolau, São Nicolau Island. The BESS will be installed next to the Electra thermal power plant. An underground distribution line, at 20 kV and located within the perimeter of the Electra premises, will be used to connect the battery directly to the power plant busbar.

The site location is at the following coordinates 16°32'47" N, and 24°20'52" W. An aerial view of the site is shown in Figure 5 below, and the location of the site relative to the thermal power plant is shown in Figure 6.

The BESS will be installed on land owned by the State, which is already artificial and whose use is related to the generation of electricity.

No residential areas are present in the immediate vicinity of the site.

The São Nicolau Island has important biodiversity areas and a significant number of threatened species. However, the BESS will not be installed in any important biodiversity area, nor will interfere with any protected area.

Figure 5 - Localization of the ESS Site (São Nicolau)

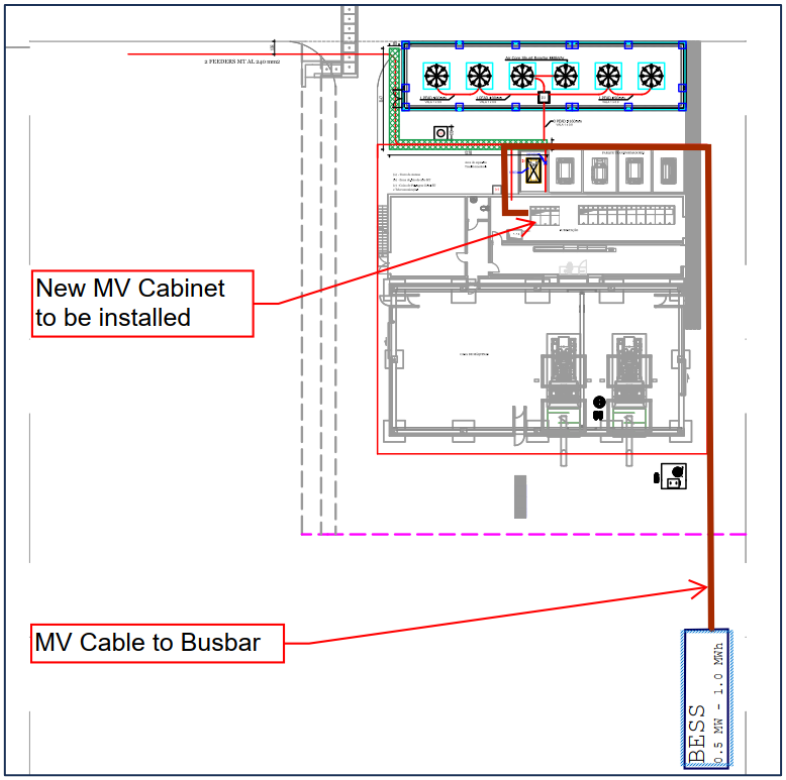

Figure 6 – ESS Location and Outcoming Feeder to the Electra power plant (São Nicolau)

5.1.5 Maio Island

The project will be located in Porto Inglés, Maio Island. The ESS will be installed, (i) **option 1:** inside the solar PV power plant (see Figure 8), (ii) **option 2:** next to the Electra thermal power plant. An underground distribution line, at 20 kV and located within the perimeter of the Electra premises or of the solar PV plant, will be used to connect the battery directly to the power plant busbar.

Note: UGPE will confirm the final location after the Effective Date of the Contract Agreement.

The site location is at the following coordinates 16°32'47" N, and 24°20'52" W. An aerial view of the site is shown in Figure 7 below, and the location of the site relative to the solar PV power plant is shown in Figure 8 (Option 1) and to the Thermal power plant is shown in

o

Figure 7 - Localization of the ESS Site (Maio)

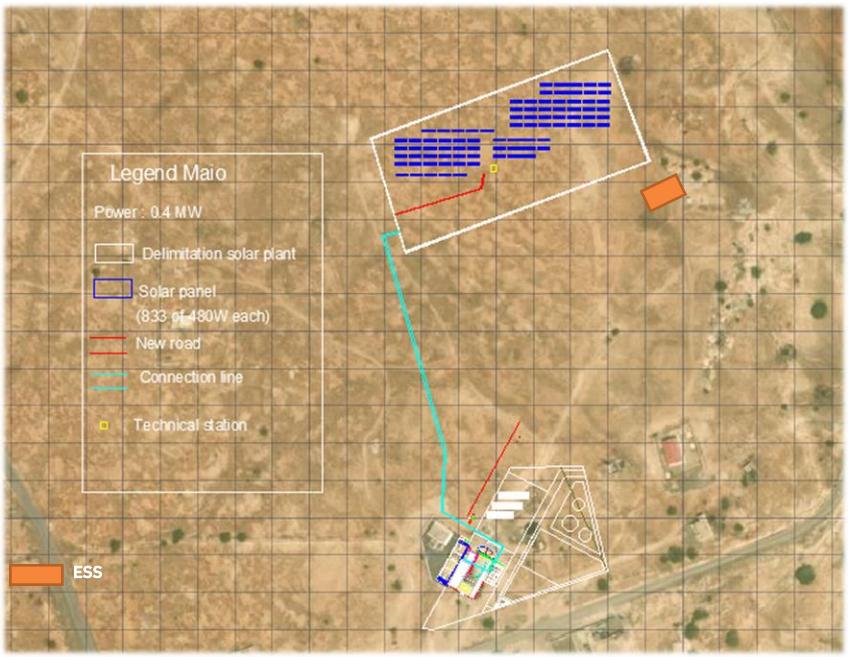

Figure 8 – ESS Location at the Solar PV plant and outcoming Feeder (Maio) – Option 1

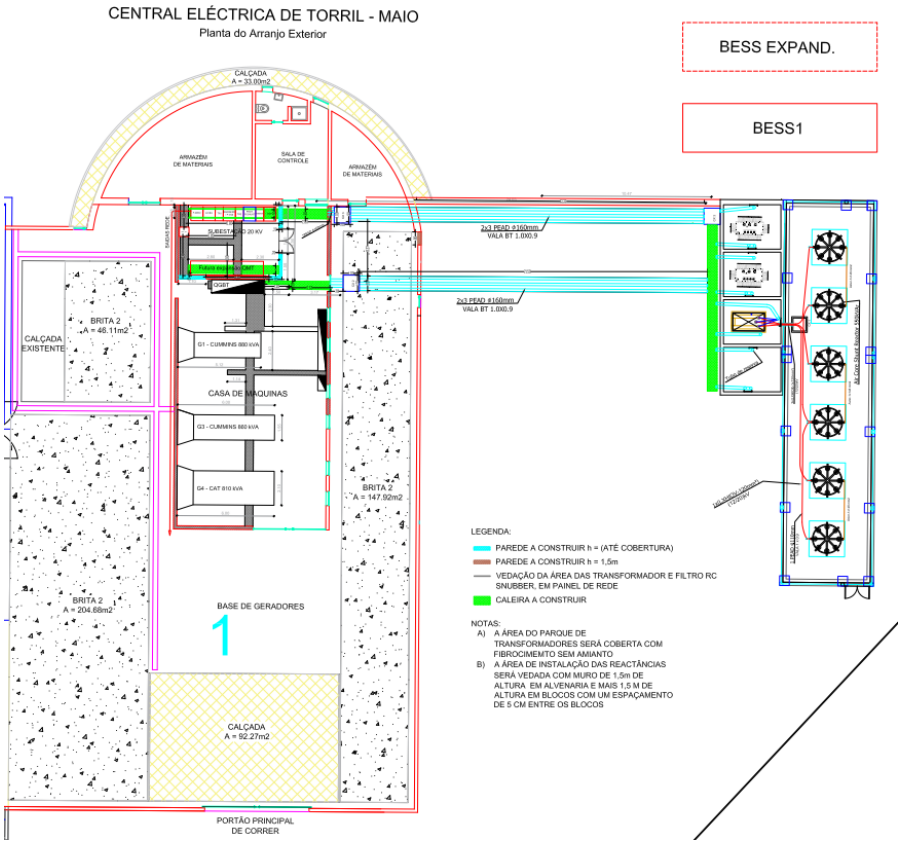

Figure 9 - ESS Location at the Thermal power plant (Maio) – Option 2

5.2 Climate and Climate Change

The installation of the BESS will not imply risks or impacts on climate variables nor will it imply an increase in the vulnerability of communities, infrastructures, or activities to the effects of climate change. Specific management measures are not justifiable.

5.3 Geology, Geotechnics and Geomorphology

The installation of the BESS will be carried out in areas that have already been intervened, without the need for significant earthworks. Specific environmental management measures are not justifiable.

Although in predictably small quantities, the aggregates to produce concrete that may be necessary for the foundations of the BESS containers must be obtained in environmentally acceptable conditions and in compliance with legal requirements. Justifiable management measures.

5.4 Soils and Land Use

The installation of BESS within the perimeter of Electra's installations or of a photovoltaic plant implies the inexistence of impacts due to changes in land use. Specific management measures are not justifiable.

The excavations for the foundations of the containers will be of limited impact but will produce surplus soil that will have to be sent to the appropriate final destination. Given that some of the BESS will be in the perimeters of Electra's thermal power stations, the possibility of contamination of these soils cannot be excluded. Justifiable management measures.

The possible use of hazardous substances like oils, lubricants, chemicals, and other similar substances and the consequent risk of spills or leakages from their storage sites and from engines of the generators, machines, equipment, and vehicles, as well as the generation of waste and wastewater during installation work can lead to soil contamination. Specific management measures are therefore justifiable.

5.5 Water Resources

Given that no significant changes are foreseen in the morphology of the terrain (the earthworks to be carried out will be of limited impact), it is not expected that, even if some heavy rain occurs during the installation work, important erosion phenomena can occur and, consequently, the transport of solids by waterways towards the sea. Specific management measures are not justifiable.

The possible use of hazardous substances (risk of spills) and the generation of waste and wastewater can cause contamination of the water environment (surface water, in periods of precipitation, or groundwater). Justifiable environmental management measures.

The scarcity of water resources in Cape Verde, in general, and in the island where the BESS will be installed, lead to the need for an efficient use of water. Justifiable management measures.

5.6 Air Quality

The reduced impact of earth movements and the limited traffic of machines and vehicles for the installation of the BESS, as well as the absence of sensitive receivers (e.g., residential areas) in the immediate vicinity of the places where the BESS will be located, mean that the foreseeable impacts on air quality are not significant. In any case, the adoption of management measures is justified.

5.7 Noise

The reduced impact of earth movements and the limited traffic of machines and vehicles for the installation of the BESS, as well as the absence of sensitive receivers (e.g., residential areas) in the immediate vicinity of the places where the BESS will be located, mean that the foreseeable impacts on the acoustic environment are not significant. In any case, the adoption of management measures is justified.

Although some areas inside Electra's thermal power plant installations are quite noisy, the workers who will carry out the BESS installation work should not have to access these areas. In any case, this aspect must be safeguarded in terms of workers' health and safety.

5.8 Landscape

The BESS containers will be installed inside the perimeters of Electra premises (Santo Antão, São Nicolau and Fogo) or the solar PV plant (Maio), without implying a significant increase in visual intrusion. Specific management measures are not justifiable.

5.9 Biodiversity and Ecosystem Services

The BESS will be installed in areas of modified habitat, where the primary ecological functions of the territory and the composition of species are greatly altered, and far from any protected areas. Specific management measures are not justifiable.

5.10 Waste

The processes and materials that will be used in the construction phase will give rise to waste, among which, due to their potential for contamination, used oils and, in general, the waste produced in the maintenance operations of the machinery used in the work, despite its reduced size and the fact that maintenance work on this machinery is not foreseen near the installation sites of the BESS. In any case, the adoption of management measures is justified.

It is also foreseeable that the execution of the foundations for the BESS containers will lead to the production of concrete waste, which, if deposited directly on the ground, constitutes a factor in its degradation. The adoption of management measures is justified.

The production of significant amounts of packaging waste (equipment packaging) is expected if an important part may have potential for reuse or recycling. The adoption of management measures is justified.

5.11 Cultural Heritage

There are no known elements of tangible or intangible cultural heritage in the areas where the BESS will be located. However, in order to safeguard the discovery of any element of cultural heritage (such as archaeological or historical sites, remains or objects / artifacts, cemeteries, or individual tombs) it is justified to adopt management measures (chance find procedure).

5.12 Territorial Planning

The installation of the BESS does not conflict with any land use planning instruments approved or under development. Specific management measures are not justifiable.

5.13 Physical or Economic Displacement

The land where the BESS will be installed has uses attributed to the production of electricity, does not currently support any other built occupation or economic activity and is State property, so no impacts are expected in terms of physical or economic displacement. Specific management measures are not justifiable.

5.14 Employment and Working Conditions

Few temporary jobs are foreseen. In any case, efforts should be made to maximize the hiring of local labor, especially women. Justifiable management measures.

The legal labor framework in force in Cape Verde is designed to prevent inadequate working conditions. In any case, the UGPE will have a Grievance Redress Mechanism (GRM) for any issues related to conditions of employment and it has also prepared codes of conduct for the Implementation of Environmental, Social, Health and Safety (ESHS) and Occupational Health and Safety (OHS) standards, and for the prevention of Gender Based Violence (GBV) and Violence Against Children (VAC), to be subscribed at the level of companies, managers and individuals (workers) involved in the Project. Management measures are recommended.

5.15 OHS

During the installation phase the workforce will be subject to risks of injury linked to various construction machinery and handling operations. In this case, the site does not require any work at height. Injuries are therefore intrinsically linked to construction equipment, mainly

trucks and other surface preparation equipment. The risks also concern possible accidents when vehicles are moving around each site or at the entrance to each site.

During this phase, the main electrical hazards exist during the first commissioning and testing of the installation. The electrical risk is then linked to the presence of live electrical works as soon as the BESS are connected. This risk primarily concerns the personnel employed on the site. Electrical risks will then be present all along the operation of the BESS.

These risks will need to be considered in the preparation and implementation of the Health and Safety Plan.

5.16 Fire

During the installation phase, the fire risk could occur accidently. However, fire risk is minimized by the absence of live equipment. The fire can thus result from an electrical malfunction when the BESS are first powered on, or from a construction machine possibly.

In any case, specific measures are included in the ESMP to mitigate the fire risk.

The risk of an external fire reaching the BESS cannot be concealed, but it remains very low given the absence of flammable materials (afforestation) around the sites.

5.17 Community Health and Safety

The works for installing the BESS will take place within the perimeters of Electra facilities (Santo Antão, São Nicolau and Fogo) or a solar PV plant (Maio), so no relevant risks for local communities are to be expected, especially given the lack of inhabited areas in the immediate vicinity of those perimeters. The MGR implemented by the UGPE is also intended to be used by local communities in the event of risk situations for their health and safety. Management measures are recommended.

5.18 Gender Based Violence and Violence Against Children

Cape Verde has a legal framework on gender-based violence (GBV) and actions taken to raise awareness and prevent GBV have had positive effects. The Project is of low risk, given the predictably limited scale of the potential influx of labor and the current situation in terms of GBV awareness and prevention. In addition to the Project's GRM, UGPE prepared codes of conduct for the Implementation of Environmental, Social, Health and Safety (ESHS) and Occupational Health and Safety (OHS) standards, and for the prevention of Work-Based Violence Gender (GBV) to be subscribed at the level of companies, managers, and individuals (workers) involved in the Project. Management measures are recommended.

5.19 Decommissioning Phase

The main actions generating impacts during the decommissioning phase of the BESS will correspond to the disconnection and removal of the BESS containers.

Thus, there will be an increase, temporary and of shorter duration than during construction, in the movement of vehicles, machinery and people. This increase will be associated with the same types of risks and impacts analyzed for the construction phase, generally not significant.

An environmentally relevant aspect of the decommissioning phase has to do with the waste that may then be produced. However, it should be noted that most of the materials used in

solar PV plants, including the panels, are to a large extent reusable or recyclable. The metallic structures and electric cables also have great potential for recovery. Therefore, assuming that appropriate schemes will be adopted for the recovery of waste produced in the decommissioning phase, it is not expected the occurrence of significant impacts in this area.

It is not expected that the decommissioning of the BESS will imply the loss of the any jobs.

Overall, the risks and impacts foreseen for the decommissioning phase are not relevant. No particularly serious environmental or social situation should be highlighted.

5.20 Synthesis

The following tables summarize the measures relating to each of the previously analyzed risks and impacts.

These measures will be further detailed in detail in the next chapter.

5.20.1 Measures for the Preparation phase

Risks and Impacts on:	Measures related to:	Responsibility
General	GRM implementation	UGPE, Tenderer
	Codes of Conduct	Contractor
	Relationship with Populations	UGPE, OE, Tenderer
	Relationship with Other Entities	UGPE, OE, Tenderer
	Completion and Detailing of the Environmental and Social Management Plan	Contractor
	Completion and Detailing of the Health and Safety Plan	Contractor
Employment and Working Conditions	Labor Recruitment	Contractor

5.20.2 Measures for the Installation Phase

Risks and Impacts on:	Measures related to:	Responsibility
General	Staff Training and Awareness	UGPE, with support from OE and ICIEG, and Contractor
Geology, Geotechnics and Geomorphology	Execution of Works • Exploration of loan stains to obtain aggregates	Contractor
Soils and Land Use	Construction Yard Location and Installation • Waste and wastewater Management • Storage and Handling of Hazardous Substances • Machinery Overhauls and Maintenance	Contractor

	Execution of Works • Management of Materials resulting from Excavations • Washing of Concrete Mixers and Concrete Residues	
Water Resources	Construction yard location and installation • Water supply for the work • Waste and wastewater management • Storage and handling of hazardous substances • Machinery overhauls and maintenance • Washing of concrete mixers and concrete residues	Contractor
Air Quality	Execution of works • Preservation of Air Quality and Noise Prevention	Contractor
Noise	Execution of works • Preservation of Air Quality and Noise Prevention • Implementation of the Health and Safety Plan	Contractor
Waste	Construction yard location and Installation • Waste and wastewater Management Execution of works • Management of Materials resulting from Excavations • Washing of Concrete Mixers and Concrete Residues	Contractor
Cultural Heritage	Execution of works Discovery of archaeological remains (chance find procedure)	Contractor, OE and UGPE
Employment and Working Conditions	Staff Training and Awareness Implementation of the GRM (maintaining its accessibility and dissemination to workers) Codes of Conduct (maintenance)	UGPE, with support from OE and ICIEG, and Contractor
Community health and safety	Execution of Works • Fencing and Signaling of Works and Conditioning of Pedestrian and Car Circulation • Fire Prevention	Contractor
Human Rights	Staff Training and Awareness Implementation of the GRM (maintaining its accessibility and dissemination to communities) Codes of Conduct (maintenance)	UGPE, with support of OE and ICIEG, and Contractor

5.20.3 Measures for the Completion Phase of the Installation

Risks and Impacts on:	Measures related to:	Responsibility
General	Remediation of Affected Areas	Contractor

5.20.4 Measures for the BESS Operation Phase

Risks and Impacts on:	Measures related to:	Responsibility
Occupational Health and Safety	Preparation and implementation of the Health and Safety Plan	Operator
Soils and Land Use	Storage and Handling of Hazardous Substances	Operator
Water Resources	Storage and Handling of Hazardous Substances	Operator

5.20.5 Measures for the BESS Decommissioning

Risks and Impacts on:	Measures related to:	Responsibility
General	The measures for the decommissioning phase will be, in essence and with the necessary adaptations, identical to those recommended for the installation phase.	Operator
Waste	Reuse or recycling of decommissioned materials and equipment	Operator

6 TABLE OF RESPONSIBILITIES

The following distribution of direct responsibilities in the environmental and social management of the Subproject implementation is assumed:

Special Projects Management Unit (UGPE):

The UGPE, through a Project Implementation Unit and acting on behalf of the "Business Owner" (the Ministry of Industry, Commerce and Energy), will immediately establish the terms of reference to be observed in terms of environmental and social management of the Project, considering the applicable legal requirements and the requirements of the Project's financing entity and will ensure that these terms of reference are complied with.

The UGPE will be in charge of obtaining licenses and authorizations for carrying out the Project, formal articulation with the various official entities involved in the process and implements a Grievance Redress Management Mechanism (GRM) to receive and process complaints related to the Project.

Contractor:

The contractor awarded the contract to design, deliver and install the BESS will be responsible for the physical execution of the works under the supervision of the Owners' Engineer. As such, the Contractor will be responsible for the completion and detailing and adequate implementation of the Environmental and Social Management Plan and of the Health and Safety Plan.

The Contractor will have, in its organization, the necessary means to carry out these works and to manage the different areas involved, , including an Environmental Specialist with demonstrated in Health and Safety management, as well as an experienced Social Specialist. These specialists will be present full-time at the construction sites.

Owner's Engineer (OE):

The activities that the OE will oversee will include, among others, assisting the UGPE in the procurement of goods, services related to Sub-component 1.a of the Project, controlling and supervising the construction works, supporting the implementation of the training program and support and monitor the implementation of environmental and social safeguard measures. In this particular aspect, the intervention will focus on the following aspects:

- Support the UGPE in the implementation of the training scheme associated with the implementation of the Project.
- Review and approve the plans and other documentation to be prepared by the Contractor in accordance with the provisions of this ESMP.
- Develop and put into practice a system for supervising the works covered by the Contractor, to verify the implementation of plans and safeguard measures and, in general, the performance in environmental and social matters of that contract.
- Prepare periodic reports for the UGPE on the environmental, social, health and safety management of the project.

A particular aspect will be that in the case of the BESS to be installed in Maio, within the perimeter of the photovoltaic plant to be built and it is expected that this installation will take place at a stage when the installation of the photovoltaic plant will already be completed or close to it, the OE will be in charge of ensuring the articulation between the BESS and photovoltaic plant contract recipients.

Electra:

ELECTRA will have the BESS installed within the perimeter of its installations (existing thermal power stations), except for what will happen in Maio, when the BESS will be installed within the perimeter of the solar PV plant (basis option). Thus, ELECTRA will establish the conditions that the Contractor will have to comply with in the installation of the BESS in the perimeters of the Santo Antão, São Nicolau and Fogo installations.

Once the installation of the BESS and the respective commissioning is completed, ELECTRA will be in charge of the operation of the BESS.

7 ENVIRONMENTAL AND SOCIAL MANAGEMENT MEASURES

This chapter details the environmental and social management measures listed above. These measures must be implemented in compliance with applicable national legal requirements and in accordance with the World Bank Group's Environmental, Health and Safety Guidelines.

7.1 BESS Installation Preparation Phase

7.1.1 Implementation of the Grievance Redress Management Mechanism (GRM)

Prior to the beginning of the physical realization of the Project, the UGPE will implement the GRM, namely with the constitution of the Local Grievance Redress Management Committees (LGRM), one in each municipality where the Project is developed, and the Central Grievance

Redress Management Committee (CGRM), and with the creation of the means and procedures necessary for the operation of the GRM.

Within the scope of the GRM, complaints are categorized as follows:

- Category A – Complaints related to the management and execution of the project:
    - Stakeholder participation and dissemination of information.
    - Environmental and social risks and effects.
    - Labor and working conditions.
    - Rational use of resources and prevention of pollution.
    - Community health and safety.
    - Land acquisition, restrictions on land use and involuntary resettlement.
    - Biodiversity conservation and management.
    - Cultural heritage.
    - Mobilization of partners and information/communication.
- Category B – Gender-Based Violence and Violence Against Children.
- Category C – Project Performance.

Any person or group of persons who have any connection with the projects or who are affected by their activities may file a question, complaint, or complaint. In general, communities and their members will be most affected by project activities, but workers involved in carrying out the Project, providers, NGOs, City Councils and any individual or group affected by projects may also raise concerns. Anonymous suggestions and complaints are accepted.

Suggestions and complaints can be submitted locally or centrally (UGPE), in several ways:

- By telephone ("Linha Verde").
- Email.
- Specific form.
- Community meetings.
- Personally.

The GRM contains provisions relating to the reception and registration of complaints, their treatment, analysis and investigation, verification and subsequent actions and the follow-up, monitoring and reporting of the situations complained of, as well as the communication strategy to be adopted.

Before the start of the works, the UGPE will promote the dissemination of the GRM among the different interested and affected parties, including the Project workers (see section on training and awareness of workers, below).

During the implementation phase of the BESS, the Contractor will ensure that the GRM will be easily accessible and that its existence will be disseminated among the workers, direct and indirect, at its service.

Responsibility: UGPE

7.1.2 Codes of Conduct

The Contractor will subscribe and implement the Codes of Conduct for the Implementation of Environmental, Social, Health and Safety (ESHS) and Occupational Health and Safety (OHS) Standards, and prevention of Gender-Based Violence (GBV) and Violence Against Children (VAC) presented in Appendix 1:

- Company Code of Conduct: Commits the company to address GBV and VAC issues.
- Manager's Code of Conduct: Commits managers to implement the Company's Code of Conduct, as well as those signed by individual workers.
- Individual Code of Conduct: Code of Conduct for everyone working on the project, including managers.

Responsibility: Contractor

7.1.3 Relationship with Populations

Conducting socialization sessions in each of the municipalities where the BESS will be implemented, allowing:

- Introduce the Contractor, who, in turn, will describe his work plan (activities to be carried out and respective expected start and end dates).
- Present environmental and social safeguards, with emphasis on GBV and VAC prevention measures, and disseminate the Project's GRM.

Responsibility: UGPE, with the support of the OE and participation of the Contractor

7.1.4 Coordination with Other Entities

In the work planning phase, the Contractor must identify/confirm with Electra and with the contractor for the construction of the solar PV plants the operational, health and safety and environmental requirements to be followed during the installation of the systems, inside the premises of the Electra and the solar PV plant in Maio.

Likewise, prior identification of possible interruptions in the supply of electricity by Electra, foreseeable due to the work to be carried out for the installation of the systems, should be carried out, defining the procedures to be adopted accordingly, namely for the timely warning to consumers.

The opening of the construction yard, even if within the perimeters of the facilities of Electra of Santo Antão, São Nicolau or Fogo, or of the solar PV plant of Maio, as well as any other interventions that are carried out outside these perimeters will be communicated to the respective Municipal Councils and Delegations of the Ministry of Agriculture and Environment.

Responsibility: Contractor, with knowledge of the UGPE and the OE

7.1.5 Labor Management

A LMP, including Labor Management Procedures has been prepared for the Project[1]. The Contractor must take in consideration the requirements set in the LMP when preparing the CESMP.

Although it is not foreseen that the installation of the system will require a relevant volume of manpower, the Contractor must ensure the prioritization of local manpower, whenever this is compatible with the needs of the contract, with the adoption of recruitment procedures that are transparent in order to guarantee that the communities in the areas where the systems will be implemented have priority in the selection process.

All staff recruited (directly by the Contractor or its subcontractors) must sign the code of conduct relating to GBV and VAC and will be subject to specific awareness raising on these matters.

Responsibility: Contractor

7.1.6 Completion and Detailing of the Environmental and Social Management Plan

As part of the preparation of the work, the Contractor will complete and detail the general requirements established in this ESMP, depending on the specificities of its organization and the human and material resources that will be assigned to the work.

The revised ESMP will be submitted for approval by the UGPE (assisted by the OE) before the start of work. Once approved, the revised document will become the Contractor´s ESMP (CESMP).

Responsibility: Contractor

7.1.7 Health and Safety Plan

The Contractor will prepare a Health and Safety Plan (HSP) that responds to the requirements established in Decree 64/2010. Thus, the HSP should include an identification of hazards and risk assessment that leads to the definition of preventive measures and protective equipment to be adopted, considering the following aspects:

- The types of work to be carried out, with emphasis on those with special risks (e.g., electrical) and the respective phasing.
- The specificities of the places where the work is carried out and the infrastructure and activities that are located there and the requirements for managing health and safety at work in force in the perimeters of Electra's power plants (Santo Antão, São Nicolau and Fogo) and the solar PV plant (Maio).
- The construction processes, materials, and products to be used.

Specifically in relation to the prevention of Covid-19, the following aspects must be ensured right from the planning stage:

[1] Downloadable from: https://www.mf.gov.cv/documents/20126/0/02_PGM-Projecto+do+Servic%CC%A7o+de+Eletricidade+Sustenta%CC%81vel.docx/e6826cca-c548-074d-c9e8-d20588794fd9?t=1620993310677

- Strict compliance with the determinations of the national health authorities and the follow-up of the guidelines of international institutions.
- Creation, implementation of verification of the effectiveness of procedures related to[2]:
    - Assessment of workforce characteristics.
    - Transport, entry and exit from the workplace and checks before starting work.
    - General hygiene care.
    - Cleaning and waste management.
    - Adjustments in work practices.
    - Health care on site and available on the island.
    - Procedure in case of identification of a positive case of infection.
    - Continuity of supplies and Project activities.
    - Training and communication with workers.
    - Communication and contact with the community.

At least one qualified first-aider must be present at all times and appropriately equipped first-aid stations must be easily accessible on site. All the personnel must be aware of the actions to be taken in an emergency.

Where hazardous substances are stored and/or handled, there must be means (absorbent products – sand or sawdust – utensils and containers to collect spilled products), which allow for quick action in the event of a spill, to reduce the amount of spilled product and the extent of the affected area. Personnel working in these locations must have specific training on what to do in the event of a spill.

Where flammable substances are stored and/or handled, means of first intervention in case of fire must be available (at least fire extinguishers of a class suitable for the type of substances in question) and the staff must have specific training for their use.

During the entire duration of the construction work, the Contractor must ensure the capacity to respond promptly, even outside normal working hours and on weekends and holidays, to any accident or emergency related to the work (on the construction site or on any of the work fronts), and for this purpose keep personnel in a state of readiness and in conditions to be contacted.

This procedure should provide for articulation with local civil protection and fire services and security forces (National Police), to:

- Ensure that these local services are familiarized with the specificities of the actions and infrastructure related to the BESS; and

[2]To prepare these procedures, consider, in addition to articulating with national health authorities, the specific guidelines of the World Bank: "ESF/Safeguards Interim Note: Covid-19 Considerations in Construction / Civil Works Projects" (Version 1, of 7 April 2020 or a more recent one that becomes available in the meantime).

- Confirm the exact ways in which those local services and/or the National Police can be alerted and mobilized to respond to an emergency (use of the national emergency number – 112 – or another mechanism to be indicated.

The HSP and the detailed procedure to be adopted in case of emergency must be prepared by the Contractor and be submitted for approval by the UGPE (assisted by the OE) before the start of the works. This procedure must reflect the specificities of the organization and of the human and material resources that will be assigned to the contract.

Once approved, the revised document will become the Contractor´s HSP (CHSP).

Responsibility: Contractor

7.2 BESS Installation Phase

7.2.1 Staff Training and Awareness

Before the start of the work, the UGPE will promote, with the support of the State Budget and other entities, namely the ICIEG – Cape Verdean Institute for Gender Equality and Equity, the training of the Contractor's management staff, namely the environment, health and safety technician(s), foreman(s) and work management personnel, covering the following topics:

- Environmental effects that the work may cause and corresponding good practices and preventive and corrective measures to be adopted.
- Rules and procedures for managing waste on site.
- Safety risks associated with works and corresponding preventive measures and behaviors to be adopted (including personal protective equipment).
- First aid and action in the event of an accident.
- General norms for dealing with local populations.
- GBV and VAC prevention code of conduct.
- Risks and prevention of sexually transmitted diseases.
- Measures to be taken in case of discovery of archaeological remains.
- Complaint management mechanism for workers and its use.

Subsequently, the Contractor's management team must ensure that training and awareness-raising activities are carried out for all on-site personnel at its service (including the personnel of its subcontractors), in order to improve their knowledge of the actions to be taken have in order to prevent or minimize the environmental effects of its activity and to promote the best relationship with the local populations. The presence and content of these actions must be duly registered.

Whenever new workers are admitted, they must be given identical training and awareness.

During the work and following the follow-up and monitoring activities, the need for complementary training and awareness actions can be determined, if it is found that the previous actions have not produced the desired effects.

Responsibility: UGPE, with support from OE and ICIEG, and Contractor.

7.2.2 Location and Operation of the Construction Yard

7.2.2.1 Location

The construction yards and material plants for the installation of each BESS must be located within the perimeters of the Electra power plants (Santo Antão, São Nicolau and Fogo) or the solar PV plant (Maio), preferably in areas where it is not necessary to carry out destruction of vegetation and relevant earthworks.

The works will have to be carried out considering the security and access control requirements of the power plants and Photovoltaic Plant where the BESS will be installed.

Responsibility: Contractor

7.2.2.2 Water Supply for the Work

The water supply for the work should be done primarily from the existing public systems.

If it is necessary to use water sources other than public systems, the Contractor must ensure that they are licensed water sources and that their use does not result in damage or limitations for local populations.

The reuse of treated wastewater for irrigation (dust suppression or landfilling) should be promoted if public systems are capable of supplying sufficient quantities of such water and the quality is guaranteed to be compatible with such uses (i.e., if reuse does not pose a risk to the health of workers or the public).

The use to be given in the work to waters of different origins must be compatible with the respective qualities. For example, do not use potable water for washing or watering floors.

The provision of guaranteed potable water in sufficient quantity to meet the needs of workers while at work should deserve particular attention.

Responsibility: Contractor

7.2.2.3 Waste and Wastewater Management

Wastewater generated in sanitary facilities and any other contaminated wastewater generated in other areas of the construction yards must be drained and, if necessary, subject to adequate treatment in view of the type of contamination they present, prior to its discharge into the receiving environment. At a minimum, the wastewater generated in the sanitary installations must be sent to a septic tank (which must remain to serve the installations in the exploration phase).

The construction yard must have adequate sanitary facilities for the number of workers, as follows:

- Separate toilets for females and males.
- Fixed toilets (connected to a septic tank, as mentioned above), supplemented by mobile toilets where workers may be more than 200m from the fixed toilets.
- As a general rule, there should be one toilet for every 12 workers.
- Mobile toilets must be cleaned (and emptied into a septic tank) daily or more frequently if necessary.

The discharge of wastewater is subject to licensing, under legal terms (Water and Sanitation Code, Legislative Decree 3/2015).

Before the start of works, the Contractor must establish the necessary agreements/contracts to ensure the proper management of waste produced during construction, in strict compliance with applicable legal provisions and applicable good practices to prevent risks and environmental and social impacts associated with inadequate disposal of that waste.

The construction yards must be equipped with adequate technical conditions for the storage of different types of waste while awaiting transportation for recycling, treatment, or disposal.

The different types of waste, which must be duly marked, must not be mixed, and must not be exposed to meteorological conditions that could cause its degradation or lead to soil, water, or air contamination.

Waste originating on the site must be stored, separately, in appropriate containers, until it is removed for recycling, treatment or disposal by duly licensed / authorized operators for this purpose.

Waste management operations produced on site will have to comply with the requirements established in the general regime applicable to waste prevention, production and management (Decree 56/2015). Any transport of waste generated on site must comply with the legal requirements relating to the accompanying guides for this waste. The waste monitoring guides must be included in the monthly reports to be prepared by the Tenderer.

Responsibility: Contractor

7.2.2.4 Storage and Handling of Hazardous Substances

The storage and handling of oils, lubricants, or other substances likely to cause contamination of soil and surface or groundwater must be carried out in places specially adapted for this purpose, in order to safeguard environmental values and human health.

At the very least, if it is necessary to handle oils and fuels, waterproof and limited areas must be provided to contain any spillage.

Responsibility: Contractor

7.2.2.5 Machinery Overhauls and Maintenance

Overhauls and maintenance of machinery should not be carried out at the workplace, but in properly prepared workshops.

In cases where this type of intervention has to be carried out in the workplace, the necessary care must be taken to prevent soil and water contamination and to collect the resulting waste, which must subsequently be sent for recycling, treatment, or disposal.

Responsibility: Contractor

7.2.3 Execution of Works

7.2.3.1 Fencing and Signaling of Works and Conditioning for Pedestrian and car Circulation

If any intervention takes place outside the perimeters of the Electra power plants or the Maio solar PV plant, the Contractor must at all times ensure the signaling of the work areas, restricting the movement of people, machinery and equipment to the defined accesses and limiting the actions from the construction process to the intervention areas, thus avoiding the allocation of areas not strictly necessary for the proper execution of the work.

The transport operations of equipment between the ports and the installation sites of the BESS will be carried out in compliance with the road code. The need for transport of extraordinary dimensions is not foreseen.

The restrictions to be imposed on car and foot traffic on the access roads to the PV farm area, namely in terms of signage and fencing, speed limits more restrictive than the pre-existing ones or other restrictions applicable to the circulation of vehicles and pedestrians will be systematized in a specific traffic management plan that will be part of the ESMP. This traffic management plan should pay particular attention to periods of higher traffic intensity generated by the works (particularly in the transportation of materials and equipment for the construction of the photovoltaic plant) and to periods and places where there may be interventions outside the perimeter of the plant.

Responsibility: Contractor

7.2.3.2 Use of Borrow Sites/Pits to Obtain Aggregates

Priority should be given to obtaining aggregates (sand, in particular) for the work in existing explorations, instead of resorting to explorations started purposely for the Project.

In the case of recourse to existing operations, the use of aggregates from non-licensed operations will be prohibited (i.e., the licensing of operations must be evidenced).

Responsibility: Contractor

7.2.3.3 Management of Materials Resulting from Excavations

Uncontaminated soil from excavation operations must be reused for refilling trenches or foundations. Any remaining quantities that cannot be reused constitute waste, and must be sent to an appropriate final destination, prohibiting its indiscriminate spreading in places where this could cause damage.

In the case of soils that have been contaminated by some accidental action, their disposal must be planned in a controlled manner, in coordination with the municipal services. In case of contamination by hydrocarbons, before its deposition the soil must be treated, for example in biopiles.

Responsibility: Contractor

7.2.3.4 Washing of Concrete Mixers and Concrete Residues

Concrete mixer washing water and concrete residues that may be produced by the works should not be thrown onto the ground, but preferably reused or else collected and packaged

for controlled disposal in places where they cannot cause environmental damage (for example in places used by municipal services for the disposal of urban solid waste).

Responsibility: Contractor

7.2.3.5 Preservation of Air Quality and Noise Reduction

All equipment, machines and vehicles assigned to the work with a combustion engine must be in good working order, to limit the undesirable emission of atmospheric pollutants and noise.

Whenever there is room for machinery and vehicles to circulate on unpaved paths or for soil mobilization and, as a result, dust is raised that may disturb or cause damage, watering these paths or work fronts must be carried out to mitigate dust creation. When carrying out this irrigation, priority should be given to the use of non-drinking water (see point on water supply for the work).

The open-air burning of any type of urban, industrial, toxic or dangerous waste is prohibited, as well as all types of material commonly referred to as scrap (article 40 of Decree-Law no. 5/2003).

Responsibility: Contractor

7.2.3.6 Fire Prevention

Carrying out hot work (namely cutting and welding work), as well as any operation or activity that involves setting fires, must not be allowed in places where there is a presence of combustible material (namely dry vegetation) that could aggravate the risk of fire.

Any work or activities involving a risk of fire must be preceded by clearing the pasture or bush and be carried out in the presence of immediately mobilized firefighting means, namely chemical powder extinguishers (ABC).

Responsibility: Contractor

7.2.3.7 Discovery of Archaeological Remains (Chance Find Procedure)

Work management personnel and personnel directly involved in the (limited) earthworks to be carried out for the installation of the BESS will receive specific training on the actions to be taken in the event of the discovery of any archaeological remains during those works.

In the event of the discovery of archaeological remains, the work must be immediately interrupted and the person in charge of the work front must be immediately notified so that the following actions can be taken.

Thus, the discovery area and its immediate surroundings must be immediately fenced, with a ban on work and the presence of personnel inside it and with any findings duly protected and subject to photographic record without being removed from the site.

The works management will communicate with the OE, and this will be responsible for communicating the occurrence to the UGPE which, in turn, will inform the Environmental and Social Consultant and the World Bank.

The UGPE will also, under the terms of paragraph 1 of article 39 of Law 85/IX/2020, inform "*Immediate knowledge to the local authority which, in turn, must inform the Ministry of guardianship in order to take the necessary steps*".

Under paragraph 2 of the aforementioned article, "*The local authority must ensure the safeguarding of these testimonies, namely by resorting to scientific entities of recognized repute that carry out studies without prejudice to the immediate communication to the responsible Ministry".*

Works will not be resumed in the isolated area without authorization from the local authority, transmitted to the UGPE which, in turn, will instruct the Contractor and the OE accordingly.

Any changes or details of these requirements will be subject to a procedure to be drawn up by the Contractor, to be submitted for approval by the UGPE (assisted by the OE).

Responsibility: Contractor, OE and UGPE.

7.2.4 Completion of Works

7.2.4.1 Remediation of Affected Areas

After the installation of the infrastructures, the affected areas that are not occupied by the BESS must be promptly remediated, in order to restore them to their previous state, unless future uses that are foreseen and proved benefit from maintaining the existing conditions.

Responsibility: Contractor

7.3 BESS Operation Phase

7.3.1 Health and Safety Plan

The Operator will prepare the respective Health and Safety Plans (HSP) for the operation and maintenance of each BESS. Therefore, these HSPs should include a hazard identification and risk assessment leading to the definition of the preventive measures to be adopted and must be coordinated with the HSP of the premises where the BESS will operate (thermal power plants in Fogo, Santo Antão and São Nicolau or solar PV plant in Maio).

Responsibility: Operator (Electra)

7.3.2 Storage and Handling of Hazardous Substances

A routine shall be established for monitoring possible leaks from the oil-filled transformers in each BESS. In the event of a leak from a transformer, the respective spill containment tray must be emptied into a dedicated and labelled transformer oil container for safekeeping pending transport to a recycling/disposal facility abroad.

Responsibility: Operator (Electra)

7.4 Measures for the BESS Decommissioning

The environmental and social management measures for the decommissioning phase will be, in essence and with the necessary adaptations, identical to those recommended for the construction phase.

It is assumed that the BESS containers will be removed from the sites and will be sent abroad for recycling or disposal. In any case a circular economy logic should be adopted, using the technologically and economically viable options that are available at the time (predictably very different from those that exist at the present time).

If the transformers in the BESS are removed from the containers, they must be handled with special care to prevent oil leakage and transported to a safe, designated location for processing. This processing must include the removal of oil from the transformers and the oil recovered must be sent abroad for recycling or disposal.

Responsibility: Operator (Electra).

8 ENVIRONMENTAL AND SOCIAL MONITORING

The analysis of environmental and social risks and impacts carried out did not lead to the identification of the need to implement complex monitoring plans on any specific environmental or social component.

However, it will be necessary to monitor the implementation of the envisaged environmental and social management measures and verify whether these measures yield the expected results.

The following points describe how such monitoring should be carried out, with the aim of proportioning the effort to be applied in this monitoring to the (limited) scale of the risks and impacts foreseen for the installation of the BESS.

8.1 Action of the Stakeholders

Responsibilities for the implementation of each of the mitigating measures were already identified in the previous chapter, now specifying the responsibilities for monitoring their implementation and effectiveness.

Thus, and as general principles, the following should be considered:

- In the course of its activities, the Contractor resorts to good practices, complies with legal requirements and implements the measures that are under its responsibility, creating records that demonstrate this implementation.
- Weekly it takes stock of the situation, with a factual description of the most relevant facts in environmental and social matters and monthly presents a detailed report containing all the records produced and an assessment of the occurrences in that period.
- The monthly report to be produced by the Contractor, with the structure defined in the revised ESMP, will have to be delivered to the OE by the 5th of the month following the month to which the report refers.
- Verification of the Contractor's performance will be the responsibility of the OE, verifying and validating the records produced by the Contractor.
- Upon finding serious failures or omissions, the OE will be responsible for directly instructing the Contractor in order to correct them.

- The OE will keep the UGPE informed about the progress of the work, making a monthly status report covering the most relevant facts in environmental and social matters, without prejudice to ad hoc communications in the event of urgent situations.

8.2 Indicators

The monitoring of the Subproject's environmental and social management will be carried out using the following set of indicators to be reported by the Contractor in its monthly report:

- Number of new jobs created.
- Number of jobs eliminated.
- Number of permanent jobs created / eliminated.
- Number of jobs for women created / eliminated.
- Number of workers in the month in question.
- Number of accidents (with sick leave, including fatalities, and without sick leave).
- Number of days lost due to accidents at work.
- Number of hours of exposure to risk or number of working hours.
- Work accident frequency index[3].
- Index of incidence of accidents at work[4]
- Occupational accident severity index[5].

[3]Frequency index: The frequency index indicates how many accidents with sick leave, including fatal ones, occur in every million man-hours performed and is represented by the expression:

$$IF = \frac{N \times 10^6}{T}$$

N= Number of accidents at work with sick leave, including fatal ones.
T= No. of hours of exposure to risk.

[4]Incidence rate: The incidence rate indicates the number of accidents with sick leave, including fatal ones, per thousand workers and is calculated using the expression:

$$I_i = \frac{N \times 10^3}{NT}$$

N= Number of accidents at work with sick leave.
NT = Average number of workers

[5]Severity index: The severity index indicates the number of days lost due to an accident at work per thousand man-hours performed, calculated using the expression:

$$I_g = \frac{Dp \times 10^3}{T}$$

Dp = Number of days lost due to accidents at work.
T= Number of hours of exposure at risk.

According to a resolution of the 6th International Conference of Labor Statisticians, a fatal accident is equivalent to the loss of 7,500 working days.

- Number of workers participating in training and awareness sessions.
- Quantity of waste produced (by typology provided for in the National Waste List, with verification through the respective Monitoring Guides).
- Quantity of waste, by type of management operation to which they were subjected, with verification through the respective Monitoring Guides).

These indicators will be considered by the OE in the preparation of its monthly report to the UGPE, which will also contain the following indicators:

- Non-conformity: Number of non-conformity (non-compliance with environmental and social management measures) identified by the OE.
- Complaints received number of complaints received through the GRM.
- Average time to resolve identified nonconformity.
- Average response time to complaints received.
- Average time taken to resolve the issues in question in the complaints received.

9 TIME SCHEDULE FOR THE IMPLEMENTATION OF THE ESMP

Within a maximum period of 2 weeks before the start of the works, the Contractor will present for approval by the UGPE (assisted by the OE) the revision of this ESMP (including the HSP), complementing and detailing it, explaining its understanding regarding the envisaged environmental and social impacts and of the corresponding mitigation measures and describing:

- The organization and human and material resources that will be allocated to the environmental and social management of its intervention.
- The methods, procedures, equipment and materials to be used to carry out the work, with a view to preventing, correcting or compensating for the environmental and social impacts of its intervention.
- The plan for the construction yard(s) and material plant(s), with particular detailing of the planned measures to respond to the established environmental and social requirements.
- The way in which it will articulate environmental management with the management of safety and health at work.
- The records that will be produced to show compliance with the planned mitigation measures and the proposed structure for the monthly reports to be presented during the term of the contract.
- The specific timetable for the environmental and social management actions and measures to be implemented and their relationship with the general timetable for the works.

10 ESMP REVIEW

The provisions set out in this ESMP should be reviewed whenever it becomes necessary to update the applicable legislation, change the actions / procedures to be implemented depending on the effectively verified impacts and the monitoring results.

It will be up to the UGPE, with the support of the OE, to work with the various stakeholders to ensure that these updates are made and communicated to all parties whose actions may be subject to change.

11 CAPACITY BUILDING

Apart from the Project workers training mentioned above, the ESCP considers a series of capacity-building initiatives for the UGPE, other institutions and Project implementing partners, covering themes as:

- Health and safety.
- Working conditions.
- Risk management.
- Waste management.
- Gender based violence.
- Grievance redress mechanism.

12 BUDGET

The following table summarizes the environmental and social management activities to be implemented for the subcomponent 1.1 of Project (photovoltaic pant and their respective interconnections with the electric grid and the battery storage systems), also indicating the responsible parties and the estimated cost.

Table 2 – ESMP Implementation Budget

Activity	Responsibility	Estimated cost	Comments
Implementation of mitigation measures (Contractor and Operator)	Contractor, Operator	-	The environmental and social management measures to be implemented by the contractor and the operator will relate exclusively to compliance with the applicable legal requirements and/or best practices and will have a reduced cost, which should be included in the general budget of the respective contracts. It is not foreseen the need to implement any environmental or social measure that implies investment costs.
Environmental and Social Monitoring and Auditing	UGPE	12,000 USD	Lump sum estimation of the costs associated with E&S monitoring and auditing of the project, including possible audits to be carried out by the external entities (e.g., National Directorate for the Environment, Delegations of the Environment and Agriculture Ministry, Municipalities). The operational costs of the Owner's Engineer and UGPE teams are not included in this estimation
Stakeholder Engagement	Owner's Engineer, UGPE	5,000 USD	Lump sum estimation of the costs associated with the stakeholder engagement, including public meetings, disclosure of information documents. The operational costs of the Owner's Engineer and UGPE teams are not included in this estimation
Grievance Mechanism	UGPE, Local and Central Grievances Management Committees	10,000 USD	Lump sum estimation of the costs associated with the GRM, including the Local and Grievances Management Committees. The operational costs of the UGPE team are not included in this estimation.
Capacity Building (as detailed in the Environmental and Social Commitment Plan approved by the World Bank)	Owner's Engineer, Contractor, Operator, ICIEG	21,500 USD	Lump sum estimation of the costs associated with organizing and delivering the capacity building sessions, including mobilization of participants. The operational costs of the Owner's Engineer and UGPE teams are not included in this estimation
Training of Project Workers (initial training of the Contractor's and Operator's management staff, responsible for ensuring the training of the workers)	Owner's Engineer, Contractor, Operator, ICIEG	10,000 USD	Lump sum estimation of the costs associated with organizing and delivering the training sessions. The operational costs of the Contractor's, Operator's, Owner's Engineer and UGPE teams are not included in this estimation
Total		58,500 USD	

The environmental and social management measures borne by the Contractor (and the Operator) are entirely related to compliance with legal requirements and/or applicable good practices and will have a reduced cost that must be included in the general budget of the contract.

It is not foreseen the need to implement any environmental or social measure that implies investment costs.

The costs with the implementation of the GRM and with the training borne by the UGPE are covered by the general budget of the Project.

13 APPENDICES

Appendix 1 - Codes of Conduct for the Implementation of Environmental, Social, Health and Safety (ESHS) and Occupational Health and Safety (OHS) Standards, and Prevention of Gender-Based Violence (GBV) and Violence Against Children (VAC)

CODES OF CONDUCT FOR IMPLEMENTING ENVIRONMENTAL, SOCIAL AND HEALTH AND SAFETY STANDARDS, OCCUPATIONAL HEALTH AND SAFETY STANDARDS, PREVENTION OF GENDER BASED VIOLENCE, AND PREVENTION OF VIOLENCE AGAINST CHILDREN

(Source: UGPE, 2022)

1. Objectives

The objective of these Codes of Conduct for the Implementation of Environmental, Social, Health and Safety (ESHS) and Occupational Health and Safety (OHS) Standards, and Prevention of Gender-Based Violence (GBV) and Violence Against Children (VAC) is to introduce a set of key definitions, fundamental codes of conduct and guidelines that:

Clearly define the obligations for all project workers (including subcontractors and casual workers) regarding the application of the project's environmental, social, health and safety (ESHS) and occupational health and safety (OHS) standards and,

Help prevent, report, and respond to GBV and VAC in the workplace and in the immediate surrounding communities.

Application of these Codes of Conduct will help ensure that the project meets its ESHS and OHS objectives, as well as prevent and/or mitigate the risks of GBV and VAC on the project and in local communities.

These Codes of Conduct should be adopted by those working on the project and are intended to:

- Raise awareness about ESHS and OHS expectations associated with the project.
- Create a common awareness of the VBG and VAC and:
    - Ensure a shared understanding that it is not permissible on the project.
    - Create a clear system for identifying, responding to, and sanctioning incidents related to GBV and VAC.
- Ensuring that all project workers understand the values underlying the project and the conduct expected of them and recognize the consequences in the event of violation of these values, will contribute to the creation of a respectful and productive work environment, and to the achievement of project goals.

2. Definitions

The following definitions apply:

- Environment, Social, Health and Safety (ESHS): This is a term covering issues related to the impact of the project on the environment, communities, and workers.
- Occupational Health and Safety (OHS): Occupational health and safety focus on protecting the safety, health, and well-being of workers. The enjoyment of these standards at the highest level is a basic human right that should be accessible to all workers.

- Gender-Based Violence (GBV): This is a term that encompasses any harmful act that is perpetrated against a person's will and is based on socially ascribed differences (i.e., gender) between men and women. It includes acts that inflict physical, sexual, or mental harm or suffering, threats of such acts, coercion and other deprivations of liberty. These acts can occur in public or in private. The term GBV is used to highlight the systemic inequality between men and women (which exists in every society in the world) and acts as a unifying and fundamental characteristic of most forms of violence perpetrated against women and girls. The 1993 United Nations Declaration on the Elimination of Violence against Women defines violence against women as "any act of gender-based violence that results in or is likely to result in physical, sexual or psychological harm or suffering to women."

The six main types of GBV are:

- Rape: Non-consensual penetration (even if slight) of the vagina, anus or mouth with a penis, other body parts or an object.
    - Sexual Assault: Any form of non-consensual sexual contact that does not result in or include penetration. Examples include attempted rape, as well as unwanted kissing, fondling, or touching of genitals and buttocks.
    - Sexual Harassment: These are unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature. Sexual harassment is not always explicit or obvious, it may include implicit and subtle acts, but it always involves a power and gender dynamic where one person in power uses their position to harass another based on their gender. Sexual conduct is unwelcomed whenever the person subjected to it considers it undesirable (e.g., looking someone up and down; kissing; howling or making inappropriate sounds; walking around someone; whistling; in some cases, giving personal gifts).
- Sexual Favors: This is a form of sexual harassment and includes making promises of favorable treatment (e.g., promotion) or threats of unfavorable treatment (e.g., job loss) contingent on sexual acts - or other forms of demeaning, degrading or exploitative behavior.
- Physical Assault: An act of physical violence that is not sexual in nature. Examples include hitting, slapping, choking, and cutting, pushing, burning, shooting, or using any weapon, acid attacks or any other act that results in pain, discomfort, or injury.
- Forced Marriage: The marriage of a person against their will.

Denial of Resources, Opportunities or Services: Denial of legitimate access to economic/active resources or opportunities for livelihood, education, health, or other social services (e.g., a widow prevented from receiving an inheritance, income forcibly taken away by an intimate partner or family member, a woman prevented from using contraceptives, a girl prevented from attending school, etc.).

- Psychological/Emotional Abuse: Infliction of mental or emotional pain or injury. Examples include threats of physical or sexual violence, intimidation, humiliation, forced isolation, stalking, harassment, unwanted attention, remarks, gestures, or

written words of a sexual and/or threatening nature, destruction of cherished things, etc.

- Violence Against Children (VAC): Is defined as physical, sexual, emotional, and/or psychological harm, neglect, or negligent treatment of children under the age of 18 (i.e., under 18 years), including exposure to such harm that results in actual or potential harm to the child's health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power. This includes the use of children for profit, work, sexual gratification, or some other personal or financial advantage. It also includes other activities such as using computers, cell phones, video and digital cameras, or any other means to exploit or harass children or access child pornography.
- Grooming: These are behaviors that make it easier to find a child for sexual activity. For example, an abuser may build a trusting relationship with a child, and then seek to sexualize that relationship (e.g., by encouraging romantic feelings or exposing the child to sexual concepts through pornography).
- Online Grooming: The act of sending an electronic message with indecent content to a recipient whom the sender believes to be a minor, with the intention that the recipient will engage in or submit to some type of sexual activity with another person, including but not necessarily including the sender.
- Accountability Measures: These are the measures in place to ensure the confidentiality of survivors and to hold contractors, consultants, and the client accountable for implementing a fair system for handling cases of GBV and VAC.
- Construction Environmental and Social Management Plan (C-ESMP): This is the plan prepared by the contractor that describes how construction activities will be implemented in accordance with the environmental and social management plan defined for the Project (ESMP).
- Child: Term used interchangeably with the term "minor" and refers to a person under the age of 18. This definition is in accordance with Article 1 of the United Nations Convention on the Rights of the Child.
- Child Protection (CP): Is an activity or initiative aimed at protecting children from any form of harm, particularly from VAC.
- Consent: Is the informed choice underlying an individual's free and voluntary intention, acceptance, or agreement to do something. It is not considered consent when such acceptance or agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if the national legislation of the country in which the Code of Conduct is applied provides for a lower age. The mistaken belief about the age of the child and the child's consent is not a defense.
- Consultant: Is any company, organization or other institution that has been awarded a contract to provide consulting services for the project and has hired managers and/or employees to carry out this work.

- Contractor: is any company, organization or other institution that has been awarded a contract to carry out infrastructure development work for the project and has hired managers and/or employees to carry out this work. This also includes subcontractors hired to perform activities on behalf of the contractor.
- Worker: Any person who provides individual labor to the contractor or consultant within the country, on or off-site, under a formal or informal employment contract, typically but not necessarily (including unpaid interns and volunteers), in exchange for a salary, without responsibility for managing or supervising other workers.
- Manager: Any individual person who provides labor to the contractor or consultant, on or off the job, under a formal or informal employment contract and in exchange for a salary, with responsibility for controlling or directing the activities of a contractor's or consultant's team, unit, division or similar, and for supervising and managing a predefined number of workers.
- GBV and VAC Allegation Procedure: The procedure for reporting incidents of GBV or VAC.
- GBV and VAC Codes of Conduct: The Codes of Conduct adopted for the project that cover the company's commitment as well as the responsibilities of managers and individuals with respect to GBV and VAC.
- GBV and VCA Compliance Team (GCCT): Experts responsible for addressing GBV and VAC issues associated with the project.
- Feedback and Grievance Redress Mechanism (FGRM): The procedure established by a project to receive and respond to suggestions and complaints.
- Aggressor: The person(s) committing or threatening to commit an act or acts of GBV or VAC.
- Response Protocol: The mechanisms established to respond to cases of GBV and VAC.
- Survivors: The person(s) adversely affected by GBV, or VAC. Women, men, and children can be survivors of GBV; children can be survivors of VAC.
- Work Site: The area in which infrastructure development work is being conducted as part of the project. Consulting assignments are considered to have the areas in which they are active as work sites.
- Work Site Surroundings: The "Project Area of Influence" is any area, urban or rural, directly affected by the project, including all human settlements found therein.

3. Codes of Conduct

This chapter presents three Codes of Conduct for use:

- Company Code of Conduct commits the company to address issues of GBV and VAC.
- Manager Code of Conduct: Commits managers to implement the Company's Code of Conduct as well as those subscribed to by employees on an individual level.
- Individual Code of Conduct: Code of Conduct for everyone working on the project, including managers.

Company Code of Conduct

Implementation of ESS and OHS Standards

13.1.1.1.1 Prevention of Gender Based Violence and Violence Against Children

The company is committed to ensuring that the project is implemented in a way that minimizes any negative impacts on the local environment, communities, and its workers. This will be done by respecting environmental, social, health and safety standards (ESHS) and ensuring that appropriate occupational health and safety standards (OHSS) are met. The company is also committed to creating and maintaining an environment in which gender-based violence (GBV) and violence against children (VAC) do not occur and are not tolerated by any employee, subcontractor, supplier, associate, or representative of the company.

Therefore, to ensure that all project participants are aware of this commitment, the company commits to the following fundamental principles and minimum standards of behavior applicable to all employees, associates, and company representatives, including subcontractors and suppliers, without exception:

General

1. The company, and therefore all employees, associates, representatives, subcontractors, and suppliers, undertake to comply with all relevant national laws, rules, and regulations.

2. The company commits to fully implement its Construction Environmental and Social Management Plan (C-ESMP).

3. The company undertakes to treat women, children (under 18) and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic, or social origin, property, disability, birth or other status. The acts of VBG and VAC violate this commitment.

4. The company will ensure that interactions with members of the local community are conducted respectfully and without discrimination.

5. Humiliation, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all company employees, associates and their representatives, including subcontractors and suppliers.

6. The company will follow all reasonable work instructions (including environmental and social standards).

7. The company will protect and ensure the proper use of assets (e.g., to prohibit theft, carelessness, or waste).

Health and Safety

8. The company will ensure that the project's Occupational Health and Safety Management Plan (OH&SMP) is effectively implemented by company employees, as well as subcontractors and suppliers.

9. The company will ensure that everyone in the workplace wears prescribed and appropriate personal protective equipment, preventing preventable accidents and reporting conditions or practices that pose a safety hazard or threaten the environment.

10. The company shall prohibit:

i. The use of alcohol during work activities.
ii. The use of narcotics or other substances that may impair the faculties.

11. The company will ensure that adequate toilet facilities are available on site and in any worker, accommodations provided to those working on the project.

13.1.1.1.2 Gender-Based Violence and Violence Against Children

12. Acts of GBV or VAC constitute serious misconduct and are therefore grounds for sanctions on perpetrators, which will depend on the act, and may in the most serious cases result in termination of employment, and, where appropriate, notification of the authorities.

13. All forms of GBV and VAC, including grooming, are unacceptable, regardless of whether they take place in the workplace, in the workplace environment, on construction sites or in local communities.

i. Sexual harassment - for example, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, including subtle acts of such behavior - is prohibited.
ii. Sexual favors - for example, making promises or favorable treatment contingent upon sexual acts - or other forms of humiliating, degrading or exploitative behavior are prohibited.

14. Sexual contact or activity with children under the age of 18 - including through digital means - is prohibited. A mistaken belief about a child's age is not a justification. The child's consent also cannot be used as a justification or excuse.

15. Unless there is full consent of all parties involved in the sexual act, sexual interactions between company employees (at any level) and members of the communities surrounding the workplace are prohibited. This includes relationships that involve withholding/promising to actually provide benefits (monetary or non-monetary) to community members in exchange for sex - such sexual activity is considered "non-consensual" under this Code.

16. In addition to company sanctions, prosecution of those who commit acts of GBV, or VAC will be initiated if appropriate.

17. All employees, including volunteers and subcontractors, are strongly encouraged to report suspected or actual acts of GBV and/or VAC by a colleague, whether in the same company or not. Reports must be made in accordance with the project's GBV and VAC allegation procedures.

18. Managers are required to report and take action in the event of suspected or actual acts of GBV and/or VAC, as they have a responsibility to respect the company's commitments.

13.1.1.1.3 Implementation

To ensure that the above principles are effectively implemented, the company undertakes to ensure that:

19. All managers sign the 'Manager's Code of Conduct' established for the project, detailing their responsibilities in carrying out the company's commitments and applying the responsibilities set out in the 'Individual Code of Conduct'.

20. All employees sign the 'Individual Code of Conduct' established for the project, confirming their acceptance regarding compliance with NASSS and HSO, and to not committing acts that result in GBV or VAC.

21. Company Codes of Conduct as well as Individual Codes of Conduct are displayed prominently and in conspicuous places on construction sites, offices and in public areas of the workspace. For example, in waiting areas, rest areas, canteen and medical office.

22. Company Codes of Conduct as well as Individual Codes of Conduct are translated into local languages.

23. The company will appoint a "Focal Point" to address GBV and VAC issues, including representing the company on the GBV and VAC Compliance Team, which is composed of representatives from the customer, contractor(s), supervisory consultant, and local service provider.

24. Effective GBV and VAC action plans will be developed consistent with the GBV Prevention and Response Action Plan prepared for the Project.

25. The company effectively implements the action plans for GBV and VAC, providing feedback to the GBV and VAC Compliance Team for improvements and updates as appropriate.

26. All employees attend an induction training course before starting work on site to ensure they are familiar with the company's NESHS and SSO commitments, as well as the Project's GBV and VAC Code of Conduct.

27. All employees receive regular periodic training, following induction training, to reinforce their understanding of ESHS and HSO and the GBV and VAC Code of Conduct.

I hereby acknowledge that I have read the Company's Code of Conduct, and on behalf of the Company agree to abide by the provisions set forth therein. I understand my role and responsibilities in supporting ESHS and OHS standards and in preventing and responding to GBV and VAC. I understand that any act inconsistent with this Company Code of Conduct or failure to act mandated by this Company Code of Conduct may result in disciplinary sanctions.

Company Name: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Manager Code of Conduct

Implementation of ESHS and OHS Standards

13.1.1.1.4 Preventing Gender Based Violence and Violence against Children

Managers at all levels have a responsibility to uphold the company's commitment to implement ESHS and OHS standards, and prevent and respond to acts of GBV and VAC. This means that managers have responsibility to create and maintain an environment that respects these standards and prevents GBV, and VAC. Managers need to support and promote the implementation of the Company's Code of Conduct. To this end, managers must adhere to this Code of Conduct, and sign the Individual Code of Conduct. This commits them to support the implementation of the C-ESMP and the OHSMP, and to develop systems that facilitate the implementation of the GBV and VAC Prevention and Response Action Plan. They need to ensure a safe workplace, as well as an environment free of GBV and VAC, both in the workplace and in local communities. These responsibilities include, but are not limited to the following:

13.1.1.1.5 Implementation

1. To ensure maximum effectiveness of the Company Code of Conduct and Individual Codes of Conduct:

   i. Display these codes prominently and in conspicuous locations on construction sites, offices and in public areas of the workspace. For example, in waiting areas, break areas, canteen and medical office.
   ii. Ensure that these codes are translated into local languages.

2. Verbally and in writing explain to all employees the Company Code of Conduct and the Individual Codes of Conduct.

3. Ensure that:

   i. All employees sign the "Individual Code of Conduct", including an acknowledgement that they have read and agree to the Code.
   ii. Employee lists and signed copies of the Individual Code of Conduct are provided to the OHS Manager, the GBV and VAC Compliance Team, and the customer.
   iii. Participates in training and ensures that all employees also participate as described below.
   iv. Create an FGRM for workers:
   v. Staff are encouraged to report suspected or actual GBV or VAC issues, emphasizing staff responsibility to the Company and the country hosting their employment, and emphasizing respect for confidentiality.

4. In accordance with applicable laws and to the best of their ability, prevent perpetrators of sexual exploitation and abuse from being hired, rehired or promoted. Request a criminal background check from all workers.

5. Ensure that when entering into partnership agreements, subcontractors, suppliers or the like, these agreements:

   i. Incorporate the ESHS, OHS, VBG and VAC Codes of Conduct.

ii. Use appropriate language requiring such contractors and individuals, as well as their employees and volunteers, to comply with the Individual Codes of Conduct.
iii. Have expressly stated that the failure of such entities or individuals, as the case may be, to ensure compliance with ESHSS and OHS, to take preventive measures against GBV and VAC, to investigate alleged acts of GBV and VAC, or to adopt and implement corrective measures when such allegations are confirmed, will not only constitute grounds for sanctions in accordance with the Individual Codes of Conduct, but also grounds for termination of agreements to work on or provide the Project.

6. Provide support and resources to the GBV and VAC Compliance Team to create and disseminate internal awareness initiatives through the awareness strategy under the GBV and VAC Prevention and Response Action Plan.

7. Ensure that any act of GBV or VAC that warrants police action is immediately reported to law enforcement, the client, and the World Bank.

8. Present and act on the protocol for responding to any suspected or actual acts of GBV and/or VAC.

9. Ensure that any incidents of ESHS or OHS significance are immediately reported to the client and the supervising engineer.

13.1.1.1.6 Training

10. Managers are responsible for:

i. Ensuring the implementation of the OHSMP, with appropriate training required for all personnel, including subcontractors and suppliers; and,
ii. Making sure that all workers have an adequate understanding of the C-ESMP and have adequate training to implement the C-ESMP.

11. All managers are required to attend a manager training course prior to starting work on site to ensure that they are familiar with their roles and responsibilities in maintaining the VBG and VAC elements of these Codes of Conduct. This training will be separate from the induction training course required of all workers and will provide managers with the understanding and technical knowledge necessary to implement the GBV and VAC Prevention and Response Action Plan.

12. Managers are required to attend and participate in periodic training courses provided to workers on a regular basis. Managers will be required to present the trainings and announce self-assessments, including the collection of satisfaction surveys to evaluate training experiences and provide advice on improving training effectiveness.

13. Make sure that time is given during working hours for workers to receive training and that all workers receive initial induction training before they start work covering the following topics:

i. ESHS and OHS; and,
ii. VBG and VAC.

13.1.1.1.7 Response

14. Managers will be required to take appropriate action to resolve any ESHSS or OHS incidents.

15. With regard to GBV and VAC:

i. They shall contribute to the GBV, and VAC allegation procedures and Response Protocol developed by the GCCT under the GBV and VAC Prevention and Response Action Plan.
ii. Once the GBV and VAC Prevention and Response Action Plan is adopted by the Company, managers will ensure that the necessary measures are in place to ensure the confidentiality of all employees who report or (allegedly) commit acts of GBV and VAC (unless it is a breach of confidentiality necessary to protect persons or property from serious harm or required by law.
iii. If a manager has concerns or suspicions of acts of GBV or VAC regarding one of their workers or workers of another contractor involved in the work, they are required to report the matter using the FGRM.
iv. Once a decision has been made to impose a sanction on an employee, the manager is personally responsible for ensuring that the measure is effectively enforced, no later than 14 days from the date the sanction decision was made.
v. If the manager has a conflict of interest due to personal or family relationships with the survivor and/or offender, he/she must notify the respective company and the GBV and VAC Compliance Team. The Company will be required to appoint another manager without a conflict of interest to handle the claim in question.
vi. Ensure that any act of GBV or VAC that warrants police action is immediately reported to the police authorities, the client, and the World Bank.

16. Managers who fail to address ESHS or OHS related incidents, or who fail to report or comply with the provisions applicable to GBV and VAC may be subject to disciplinary measures, to be defined by the CEO, Managing Director, or equivalent manager of the company. Such measures may include:

i. Informal warning.
ii. Formal warning.
iii. Additional training.
iv. Loss of up to one week's salary.
v. Suspension from employment (without pay), for a minimum of 1 month up to a maximum of 6 months.
vi. Termination of employment.

17. Ultimately, the failure of company managers to respond effectively to HSE, HSO, GBV and VAC cases in the workplace is grounds for legal action by the authorities.

I hereby acknowledge that I have read the above manager's code of conduct, agree to abide by the provisions set forth therein, and understand my roles and responsibilities for preventing and responding to HSE, HSP, GBV and VAC requirements. I understand that any action inconsistent with this Manager's Code of Conduct or failure to act mandated by this Manager's Code of Conduct may result in disciplinary action.

Company Name: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Individual Code of Conduct

Implementation of ESHS and OHS Standards

13.1.1.1.8 Prevention of Gender-Based Violence and Violence Against Children

I, ***(insert employee's full name),***

acknowledge that subscribing to the Project's environmental, social, and health and safety (ESHS) and occupational health and safety (OHS) requirements and preventing Gender-Based Violence (GBV) and Violence Against Children (VAC) is important.

The Company considers non-compliance with ESHSS and OHS standards, or participation in GBV or VAC activities, whether in the workplace, its surroundings, on the construction sites or in the surrounding communities, to constitute an act of misconduct subject to sanctions that may culminate in termination of employment. Reporting to the police those committing acts of GBV, or VAC will be carried out as appropriate.

I agree that while working on the Project:

1. I will participate in training courses related to ESHSS, OHS, HIV/AIDS, GBV and VAC as requested by my employer.

2. I will wear my personal protective equipment (PPE) whenever I am in the workplace or engaged in Project-related activities.

3. I will take all practical steps to implement the Construction Environmental and Social Management Plan (C-ESMP).

4. I will implement the OHS Management Plan.

5. I will adhere to a zero-alcohol policy during working hours and refrain from the use of narcotics or other substances that may impair my faculties.

6. I will consent to a criminal background check.

7. I will treat women, children (persons under the age of 18) and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic, or social origin, property, disability, birth, or other status.

8. I will not use inappropriate, harassing, abusive, sexually provocative, demeaning, or culturally inappropriate language or behavior toward women, children, or men.

9. I will not engage in sexually harassing acts, such as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, including subtle acts of such behavior (e.g., looking down on someone; kissing, howling, or making inappropriate sounds; walking around someone; whistling; giving personal gifts; making comments about someone's sex life; etc.).

10. I will not engage in sexual favors, for example, making promises or favorable treatment contingent on sexual acts or other forms of demeaning, degrading, or exploitative behavior.

11. I will not engage in sexual contact or activity with children, including grooming, or contact through digital means. Mistaken belief about a child's age will not be considered a defense. Nor may the child's consent be used as a defense or excuse.

12. Unless there is full consent of all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships that involve withholding or promising to effectively provide benefits (monetary or non-monetary) to community members in exchange for sex, such sexual activity is considered "non-consensual" under this Code.

13. I will report through the MFRR or to my manager any suspected or actual acts of GBV or CCV committed by a fellow employee, whether or not employed by my company, or any violations of this Code of Conduct.

13.1.1.1.9 Regarding the children under the age of 18:

14. Whenever possible, I will make sure another adult is present while working near children.

15. I will not invite unaccompanied unrelated children into my home unless they are at immediate risk of injury or in physical danger.

16. I will not use computers, cell phones, video and digital cameras, or any other means to exploit or harass children or access child pornography (see also "Use of child images for work purposes" below).

17. I will not apply physical or disciplinary punishment to children.

18. I will refrain from hiring children under the age of 14 (or such higher age as may be referred to in national law) to perform domestic or other work, or any work that places them at significant risk of injury.

19. I will comply with all relevant legal provisions, including labor laws in relation to child labor, and World Bank safeguard policies on child labor and minimum age.

20. I will be careful when photographing or filming children.

The Use of Children's Images for Work-Related Purposes

When photographing or filming a child for work-related purposes, I must:

21. Before photographing or filming a child, evaluate and strive to comply with local traditions or restrictions on reproduction of personal images.

22. Before photographing or filming a child, obtain the informed consent of the child and a parent or guardian. As part of this, I must explain how the photograph or film will be used.

23. Ensure that photographs, films, videos, and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be appropriately dressed and not be in poses that could be considered sexually suggestive.

24. Make sure that images are honest representations of context and facts.

25. Make sure that digital file labels for electronic submission do not reveal information about the child's identity.

13.1.1.1.10 Sanctions

I understand that if I violate this Individual Code of Conduct, my employer will take disciplinary action that may include:

1. Informal warning.

2. Formal warning.

3. Additional training.

4. Loss of up to one week's pay.

5. Suspension from employment (without pay), for a minimum of 1 month up to a maximum of 6 months.

6. Termination of employment.

7. Reporting to the police, if necessary.

I understand that it is my responsibility to ensure that environmental, social, and health and safety standards are met. That I will adhere to the occupational and health management plan. That I will avoid actions or behavior that could be construed as GBV or VAC. Such actions will be a violation of this Individual Code of Conduct.

I hereby acknowledge that I have read the above Individual Code of Conduct, agree to abide by the provisions contained therein, and understand my roles and responsibilities for preventing and responding to ESHS, OHS, GBV and VAC issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to take action mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature: _____

Printed Name: _____

Title: _____

Date: _____