



REPUBLIC OF MOZAMBIQUE

MINISTRY OF FINANCE

Ministry of Mineral Resources and Energy (MIREME)/

Electricity of Mozambique (EDM)/

Energy Fund (FUNAE)

**ACCELERATING SUSTAINABLE AND CLEAN ENERGY ACCESS  
TRANSFORMATION IN MOZAMBIQUE  
(P507759)**

**ENVIRONMENTAL AND SOCIAL  
MANAGEMENT FRAMEWORK  
(ESMF)**

FINAL VERSION

February 10, 2025

# Table of Contents

<i>Executive Summary</i> .....	<i>vii</i>
<i>Sumário Executivo</i> .....	<i>xii</i>
<b>1 INTRODUCTION</b> .....	<b>1</b>
<b>2 PROJECT DESCRIPTION</b> .....	<b>3</b>
2.1 Project components .....	3
2.2 Implementing agencies .....	8
2.3 Summary description of civil works for Components 1a and 1b .....	9
2.4 Summary description of works for off-grid energy solutions (Component 2) .....	11
<b>3 ENVIRONMENTAL AND SOCIAL POLICIES, REGULATIONS, AND LAWS</b> .....	<b>13</b>
3.1 Mozambique legal framework .....	13
3.2 National environmental and social assessment and permitting .....	21
3.2.1 Environmental and social assessment process in Mozambique .....	21
3.2.2 Environmental and social assessment screening.....	21
3.2.3 Environmental and social assessment scoping .....	23
3.2.4 Environmental and social impact assessment .....	24
3.2.5 Public participation in the EA.....	24
3.2.6 ESIA review process .....	25
3.2.7 Environmental licence .....	26
3.3 World Bank Group ESF .....	26
3.3.1 Applicable standards.....	26
3.4. Key gaps and inconsistencies in the national legal framework.....	30
<b>4 PROJECT TARGETED AREAS BASELINE DATA</b> .....	<b>32</b>
4.1 Physical environment.....	32
4.1.1 Location of project area.....	32
4.1.2 Terrain.....	33
4.1.3 Climate.....	33
4.1.4 Water resources.....	34
4.2 Biological environment .....	36
4.3 Social environment .....	40
4.3.1 Demography .....	40
4.3.2 Education .....	42
4.3.3 Occupation and livelihoods.....	42
4.3.4 Gender issues.....	45
4.3.5 Vulnerable groups.....	46
4.3.6 Housing .....	48
<b>5 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND BENEFITS DURING PROJECT CONSTRUCTION</b>	<b>51</b>

<b>5.1</b>	<b>Grid electrification (Component 1).....</b>	<b>51</b>
5.1.1	Environmental, occupational health and safety and social risks, impacts and mitigation .....	51
5.1.2	Planning and design considerations for avoidance of environmental and social risks and impacts .....	71
	Route selection of MV and LV lines.....	71
	Waste management.....	71
5.1.3	Risks and mitigation measures specific to disadvantaged and vulnerable groups .....	72
5.1.4	Security risks .....	73
<b>5.2</b>	<b>Off-Grid Electrification and Clean Cooking (Component 2).....</b>	<b>73</b>
5.2.1	Risk Categorization for DRE and Clean Cooking Projects.....	73
5.2.2	Preliminary Assessment of Off-Grid Electrification and Clean Cooking Risks and Benefit .....	74
<b>6</b>	<b>POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND BENEFITS DURING PROJECT OPERATION.....</b>	<b>86</b>
<b>6.1</b>	<b>Grid Electrification (Component 1).....</b>	<b>86</b>
<b>6.2</b>	<b>Off-Grid Electrification and Clean Cooking (Component 2).....</b>	<b>86</b>
6.2.1	E-Waste Generation and Disposal .....	86
6.2.2	Power Supply to Unsustainable Commercial Practices.....	88
<b>6.3</b>	<b>Operational Phase Benefits of all Project Components .....</b>	<b>88</b>
	Operational impacts of the project are expected to be overwhelmingly positive and can be grouped into seven categories (the impacts below are not ranked individually but are cumulatively expected to be highly significant).....	88
6.3.1	Greenhouse Gasses and Climate Change (Components 1 and 2) .....	88
6.3.2	Community Health (Component 2).....	88
6.3.3	Socio Economic Development and Support of Vulnerable People (Components 1 and 2) .....	89
<b>6.4</b>	<b>Summary risk rating of all project components .....</b>	<b>90</b>
<b>7</b>	<b>PROCEDURES AND IMPLEMENTATION ARRANGEMENTS .....</b>	<b>92</b>
<b>7.1</b>	<b>Environmental and social risk management procedures (Component 1) .....</b>	<b>92</b>
7.1.1	Assessment and analysis – subproject identification (E&S screening) .....	93
7.1.2	Subproject formulation and planning – E&S planning.....	94
7.1.3	Implementation and monitoring – E&S implementation .....	97
7.1.4	Review and evaluation – E&S completion .....	100
7.1.5	Technical assistance activities.....	100
<b>7.2</b>	<b>Environmental and social risk management procedures (Component 2) .....</b>	<b>101</b>
<b>7.3</b>	<b>Implementation arrangements .....</b>	<b>102</b>
7.3.1	Historical challenges in the grid electrification energy programme.....	102
7.3.2	Organisational structure .....	103
7.3.3	Proposed training and capacity building.....	105
7.3.4	Estimated Budget.....	108
<b>8</b>	<b>Stakeholder engagement, disclosure, and consultations.....</b>	<b>109</b>
	<b>REFERENCES.....</b>	<b>110</b>

## LIST OF TABLES

Table 2-1. Summary of key LV and MV line design elements .....	10
Table 3-1. Legal and institutional framework in Mozambique with minor relevance for the ASCENT project ....	19
Table 3-2. Relevance of World Bank environmental and social standards to the project .....	27
Table 4-1. Statistics on population by province .....	40
Table 4-2. Indicators of the age composition of the population by area of residence .....	41
Table 4-3. Percentage distribution of the population aged 12 and over, by sex, according to civil status (2017)	41
Table 4-4: Economically active and non-active population, by area of residence (2017).....	43
Table 4-5. Percentage distribution of the population aged 15 and over, employed by branches of activity, by area of residence and provinces (2017) .....	44
Table 4-6. Percentage distribution of people with disabilities, by area of residence, by type of disability (2017) .....	46
Table 4-7: Percentage distribution of people with disabilities, by age groups, by type of disability.....	46
Table 4-8. Specific disability rates by sex and area (2017).....	47
Table 4-9. Percentage distribution of the disabled population by cause of disability (2017).....	47
Table 4-10. Percentage Of children 0–17 years of age, by type of organisation, by province (2017) .....	48
Table 4-11. Percentage distribution of the population, by type of dwelling (2017).....	48
Table 4-12. Percentage distribution of private dwellings, by area of residence, according to basic services (2017) .....	49
Table 5-1. Rating scale for risks and impacts.....	51
Table 5-2. Expanding grid electrification - potential risks and impacts/benefits of line construction activities (Component 1a and 1b).....	52
Table 7-1. Project cycle and E&S management procedures (Component 1) .....	92
Table 7-2. E&S exclusion list for ASCENT activities.....	93
Table 7-3. Project cycle and E&S management procedures (Component 2) .....	101
Table 7-4. Roles and responsibilities for implementation of the project.....	104
Table 7-5. Organizational structure and E&S capacity for the project.....	105
Table 7-6. Training and awareness raising topics to be implemented during the project.....	106
Table 7-7. ESMF implementation budget.....	108

## LIST OF FIGURES

Figure 3-1. The environmental process in Mozambique for Category A projects .....	22
Figure 3-2. The environmental process in Mozambique for Category B projects.....	22
Figure 3-3. The environmental process in Mozambique for Category C projects.....	23
Figure 4-1. Location of Mozambique.....	32
Figure 4-2. The ten provinces of Mozambique.....	32
Figure 4-3. Average rainfall and temperatures in Mozambique .....	33
Figure 4-4. Riverine flooding risks in Mozambique .....	34
Figure 4-5. Major rivers and rainfall distribution in Mozambique .....	35
Figure 4-6. Conservation areas in Mozambique.....	38
Figure 4-7. Key biodiversity areas in Mozambique .....	39
Figure 5-1. Principles of waste management – the waste hierarchy .....	71
Figure 7-1. Summary of components of a C-ESMP.....	99

## LIST OF ANNEXURES

Annexure 1	Technical Information Describing the Construction Process for LV and MV lines
Annexure 2	Memorandum on Legal Requirements for Compensation for Permanent Disabilities and Fatalities caused by Workplace Incidents
Annexure 3	E&S Screening Form Template (Component 1)
Annexure 4	Labour Management Plan
Annexure 5	GBV/SEA/SH Risk Assessment and Action Plan
Annexure 6	Guidelines for the preparation of site-specific Resettlement Action Plans (RAPs)
Annexure 7	Chance Find Procedure
Annexure 8	Good Environmental Management Practice Procedures
Annexure 9	World Bank Guidance for the Elaboration of C-ESMPs
Annexure 10	Template for Periodic (Quarterly) Reporting on the Environmental and Social Aspects of Projects Financed by the World Bank
Annexure 11	Distinction between medically reportable and first aid incidents

## Abbreviations and Acronyms

ANAC	Administração Nacional das Áreas de Conservação (National Administration of Conservation Areas)
ASCENT	Accelerating Sustainable and Clean Energy Access Transformation
CCF	Clean Cooking Fund
C-ESMP	Construction - Environmental and Social Management Plan
CFL	Compact Fluorescent Lamp
COMESA	Common Market for Eastern and Southern Africa
DINAB	National Directorate for the Environment (a Directorate under the MTA)
DINAF	National Directorate of Forestry (a Directorate under the MTA)
DHS	Demographic and Health Survey
DRE	Distributed Renewable Energy
DUAT	Direito de Uso e Aproveitamento da Terra (Right of Use and Benefit of Land)
EDM	Electricidade de Moçambique (Electricity for Mozambique)
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMAP	Energy Sector Management Assistance Program (World Bank)
ESMP	Environmental and Social Management Plan
ESRC	Environmental and Social Risk Classification
ESS	Environmental and Social Standards
FCV	Fragility, Conflict, and Violence (country of)
FTL	Fluorescent Tube Lamp
FUNAE	Energy Fund ( <i>Fundo de Energia</i> )
GBV	Gender-Based Violence
GCF	Green Climate Fund
GHG	Greenhouse Gas
GoM	Government of Mozambique
GPN	Good Practice Note
GRM	Grievance Redress Mechanism
W-GRM	Workers' Grievance Redress Mechanism
IDA	International Development Association
IDP	Internally Displaced Person
IFR	Interim Financial Report
IRMS	Incident Recording Management System
KPI	Key Performance Indicator

KRI	Key Results Based Incentives
LPG	Liquid Petroleum Gas
LRP	Livelihood Restoration Plan
LV	Low Voltage
MDTF	Multi-Donor Trust Fund
MEF	Ministério da Economia e Finanças (Ministry of Economy and Finance)
MIREME	Ministério de Recursos Minerais e Energia (Ministry of Mineral Resources and Energy)
MSMEs	Micro, Small, and Medium Enterprises
MTA	Ministry of Land and Environment
MV	Medium Voltage
OE	Owner's Engineer
OGS	Off-grid solar
PBC	Performance Based Condition
PCB	Printed circuit boards
PDO	Project Development Objective
PES	Provincial Environmental Services (provincial sub-directorates of DINAB)
PIU	Project Implementation Unit
PPZ	Partial Protection Zone
PUE	Productive Use of Energy
PV	Photovoltaic
RAP	Resettlement Action Plan
RBF	Results Based Financing
RIFF	Regional Infrastructure Financing Facility
RoW	Right of Way
RPF	Resettlement Policy Framework
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SEP	Stakeholder Engagement Plan
SHS	Solar Home System
SMEs	Small and Medium Enterprises
TDB	Trade and Development Bank
WBG	World Bank Group

## Executive Summary

### E1. Introduction and Project Description

In Mozambique, the World Bank has supported the *Energia para Todos* program through multiple projects since its 2018 launch. First, ProEnergia was approved in 2019 and closed in April 2024, achieving 480,000 new household connections and over 330 public facilities. This was followed by ProEnergia Plus, launched in 2021 and set to close in December 2027, aiming to connect 2 million beneficiaries through on-grid connections and 450,000 through off-grid and clean cooking solutions.

As a third phase project under *Energia para Todos*, the Government of Mozambique is seeking financing from the World Bank towards the cost of the **Accelerating Sustainable and Clean Energy Access Transformation Mozambique Project** (ASCENT Mozambique). The project aims to further increase access to sustainable and clean energy in Mozambique, supporting nationwide on-grid electrification, off-grid energy solutions, clean cooking, rehabilitation of critical Medium Voltage (MV) / Low Voltage (LV) network infrastructure and utility performance improvement. The supported beneficiaries will include households, health and education public facilities, and productive uses. The project will be jointly implemented by Electricidade de Moçambique, E.P. (EDM), Fundo de Energia (FUNAE) and Ministério dos Recursos Minerais e Energia (MIREME). The project will follow a regional multi-phased approach, providing an estimated total of 146,400 on-grid and 70,000 off-grid electrical connections, initially 30 health centers and schools electrified on-grid, and (once fully capitalized) 450 health centers and 915 schools electrified off-grid. Clean cooking solutions will benefit 20,000 households including LPG, improved biomass cookstoves, and electric cooking technologies, aligning with Mozambique's national goals for safe and sustainable cooking practices. Furthermore, supported households and communities will benefit from overall resilience improvements due to access to electricity, information, appliances, productive use, and the provision of higher quality health and education. The project will promote gender inclusivity by promoting connections by female-led Households and businesses led/managed by women, as well as by a balanced representation of women and men in the value chain of DRE and clean cooking companies.

### E2. The Environmental and Social Management Framework Instrument

Since not all subprojects' activities, scope and implementation designs of the ASCENT Project are known at this stage, this Environmental and Social Management Framework (ESMF) sets out general principles, rules, guidelines, and procedures to assess and manage the environmental and social risks and impacts associated with the subprojects to be financed and provides general mitigation and E&S instruments to guide the development of the individual subprojects' E&S instruments during the implementation phase. The ESMF capitalizes on the work done for ProEnergia and ProEnergia Plus, and with minor adaptations uses the framework documents prepared under these contracts in support of the projects, namely, the Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), Gender Based Violence (GBV) / Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) Action Plan (GBV/SEA/SH Action Plan), and Chance Finds Procedure (CFP).



### E3. National E&S Policy and Legal Requirements

This ESMF has been prepared in line with the applicable policies and laws of Mozambique and those of the World Bank ESF. A detailed presentation of the applicable National E&S Policies and Laws is contained in Chapter 3.

### E4. World Bank E&S Framework (ESF), E&S Risk Classification (ESRC), and E&S Instruments

The ten Environmental and Social Standards (ESSs) from the ESF, together with their Annexes, set out the requirements for Borrowers relating to the identification, assessment and management of environmental and social risks and impacts associated with projects supported by the Bank through Investment Project Financing. **The project's Environmental and Social Risk Classification is rated as substantial** considering that the planned physical interventions consist of civil works to construct some 6,000 km of MV and LV lines, rehabilitation of substations, and some larger scale off-grid interventions involving mini-grids, meshgrids and solar farms. The Component 1a on-grid electrification is expected to involve 10 contractors and sixteen work sites operating at the same time across all provinces, which elevates health and safety risks for workers and communities and creates a challenging environment for the supervisory teams. Rehabilitation of the network planned under Component 1b is expected to involve three contractors for line rehabilitation and one company for substation rehabilitation. While these risks can be managed with the necessary commitment, capacity and training, experience of other EDM projects has shown that health and safety outcomes can be severe under conditions that are not systematically managed.

The project's potential adverse environmental and social risks and impacts will be mainly associated with the small to large-scale civil works planned under Component 1 and 2, and are expected to be moderate to substantial, primarily site-specific, temporary, reversible, and manageable through cost-effective mitigation measures. There are no relevant contextual factors that could exacerbate the project's environmental risks and impacts. The risks include (i) soil and water resources pollution; (ii) dust and noise emissions; (iii) generation of hazardous and non-hazardous waste; (iv) small-scale involuntary resettlement impacts associated with land acquisition, physical and economic displacement required as a result of a 3,5 meter RoW for the lines; (v) occupational health and safety risks, including risk of bodily harm for project workers in conflict areas; (vi) community health and safety risks, including SEA/SH risk, particularly as a result of the expected labor influx to be generated by the project, risk of communicable diseases such as STDs, risk of teenage pregnancies; (vii) labor risks, including those related to workplace discrimination and equal opportunity in the hiring process, along with the risk of child and forced labor, particularly among primary supply workers; (viii) the risk of inequitable distribution of project benefits among project beneficiaries and elite capture, facilitated by challenges in the process of ensuring genuine stakeholder engagement and participation of vulnerable and disadvantaged groups at the subproject level, considering the nature of identified vulnerable groups in the context of ASCENT such as the elderly persons, persons with disabilities (PWDs) and their caretakers, women and children-headed households, sexual and gender minorities, the unemployed, people with chronic illnesses (e.g. HIV/AIDS, tuberculosis, etc.). Risks to biodiversity due to impact on species or areas of key conservation concern are likely to be low as long as an effective procedure is implemented to screen routes once the detailed design is available, together with any necessary route re-alignment or other mitigation.

The Implementing Agencies have prior experience implementing similar Bank-financed projects and are building capacity on ESF with a commitment to reinforce its E&S team from an early stage of the project to ensure it is

implemented in a manner consistent with ESF requirements. However, performance in past and existing projects shows relevant capacity gaps at various levels, with particular emphasis on workers and communities health and safety.

## **E5. Environmental and Social Assessment and Management Procedures**

The procedures for Environmental and Social Assessment (ESA) of subprojects will include screening and determination of E&S risks to define the required level of assessment/s. The first level of E&S activity screening will be based on the E&S Exclusion List which contains activities considered to have a High Environmental and Social Risk Classification (ESRC) (Table 7-2, List of Excluded Activities) and includes the screening of the subproject's main ESHS risks and impacts and risk classification. Once a subproject has been through the screening process, where necessary, the preparation of E&S instruments will be done according to national laws and the World Bank ESF. It is likely that the ESF requirements will exceed those of the national regulator, and these are set out in the ESMF. The implementation strategy of the ESMF requires full integration of E&S management issues as they will be identified in the respective subprojects' instruments guided by this ESMF and included in the bidding documents and the Contractors contracts to ensure implementation of the subprojects as stated in the ESMP (Environmental and Social Management Plan). The ESMF specifies that Contractors must involve competent environmental and social consultants to prepare a route screening report for the on-grid electrical subprojects, once the detailed design has been completed, and that any adjustments to the route alignments due to ecological or social risks are made, based on this study. Contractors are also required to prepare C-ESMPs (Construction ESMPs) which must be submitted to the Owners Engineer and EDM/FUNAE for review and approval prior to commencement of civil works.

This ESMF will ensure that public consultations with relevant stakeholders (including vulnerable groups such as IDPs) of projects and subprojects are conducted and well documented to inform the ESIA and design of the projects/subprojects on the measures to undertake. This ESMF describes grievance redress mechanisms (GRMs) to be put in place to receive, evaluate, and resolve all grievances related to the Project.

## **E6. Potential Environmental and Social Risks and Mitigation Measures**

Generic impact mapping was undertaken to assess the potential ASCENT Project E&S risks and impacts. The following are the most probable that will need appropriate mitigation: E&S impacts will be mainly associated with the small to large-scale civil works planned under Components 1a and 1b, and the larger solar installations (mini grids, mesh grids) planned under Component 2. Environmental impacts will include soil and water resources pollution, soil erosion, dust and noise emissions, generation of hazardous and non-hazardous waste, biodiversity loss and occupational and community health and safety risks. These risks and impacts will be mostly limited to the direct area of influence of the project interventions (in the areas physically affected by civil works), temporary, reversible, and manageable through cost-effective mitigation measures. The social risks and impacts will be due to construction phase activities which may not meet local and international standards of fair labor practice, and generate some degree of social conflict, disruption, harm, and human security risk, associated with the fact that contractors will need to work in a conflict environment.

## **E7. Environmental and Social Management Plan**

The project will require the Implementing Agencies (EDM and FUNAE) to prepare a generic ESMP to be available to bidders for the civil works contracts. With some adjustments, this can make use of the ESMP developed and refined for ProEnergia Plus. Generic mitigation measures must be customized in site specific C-ESMPs, prepared by the contractors for the individual subprojects' civil works as per the requirements of Ministry of Land and Environment (MTA) and the World Bank's ESF. EDM contractors must also prepare a Route Screening report following completion of the detailed design. The following E&S instruments have been prepared as part of the ESMF to guide implementation of the ASCENT Project: a Stakeholder Engagement Plan (SEP) which provides an overall framework for undertaking meaningful stakeholder engagement, consultations and participation in project preparation and implementation, including information disclosure; Labor Management Procedures (LMP) which provide guidance on management of labor requirements of the project including addressing workers' grievances and regulating workers conduct; a GBV/SEA/SH Action Plan to prevent and respond appropriately to incidences of SEA, as well as other forms of GBV to ensure the project does not disproportionately negatively impact on the disadvantaged communities and vulnerable PAPs; and a Chance Finds Procedure to take care of chance finds that could be encountered as a result of bush clearing, excavation and related civil works. Finally, an Environmental and Social Commitment Plan (ESCP) has been developed to provide a summary of material measures and actions to be implemented by the Implementing Agencies to ensure outcomes that are materially consistent with the ESF during project implementation.

## **E8. Implementation Arrangements**

The implementing entities for proposed project will be the EDM, FUNAE and MIREME. To facilitate project implementation and allocation of responsibilities. The project will host a Project Implementation Unit (PIU) at EDM to facilitate day-to-day project implementation. EDM and FUNAE will oversee execution of the works, including procurement, E&S standards, and management of the engineering aspects. Given the overstretched E&S capacity, support to EDM and FUNAE to strengthen institutional capacity at all levels is included in the ESCP, building on the ongoing support provided during ProEnergia Plus. Other institutions that will be directly involved in the implementation of ASCENT Project may include MTA, Provincial Directorates of Land and Environment (DPTA), Environmental National Directorate (DINAB) and National Administration of Conservation Areas (ANAC) among others.

## **E9. Monitoring and Reporting**

The primary responsibility for monitoring rests with EDM and FUNAE in collaboration with the provincial authorities and regulatory agencies. The project will be monitored throughout its lifetime through site visits, reporting, and information from third parties, such as through grievance redress mechanism and civil society. Independent annual E&S audits will be required, prepared by competent consultants registered with MTA. Reporting to the Bank on a quarterly basis by EDM and FUNAE on the project's E&S performance must pay particular attention to the areas of higher risk during construction, which include occupational and community health and safety, and vulnerable groups, and confirming whether the mitigation measures are adequate or

whether adjustments are needed to meet the overall objectives of the project and the agreed environmental and social commitments.

#### **E10. Public Consultation, Participation and Disclosure**

Public consultation meetings will be conducted at the central, provincial, district and community levels. A mix of physical and virtual consultative meetings, workshop, and discussions in working focus groups will be used. A series of initial stakeholder consultations will be carried out with key resource persons, beneficiaries, institutions in Maputo, Regional and District level between January and February 2025. The draft instruments incorporating the EDM/FUNAE validation review comments will be sent to the different institutions at the central and provincial levels for review and feedback in January 2025. Regional consultation workshops will be held. Following World Bank no objection, the draft and Final ESMF will be disclosed on the EDM/FUNAE website with an invitation to stakeholders to comment. Subsequent E&S documents (Component 1 Route Screening Reports as well as C-ESMPs) for specific subprojects under the ASCENT project will be disclosed both in Country (EDM/FUNAE websites) and at the World Bank external website. Copies of these documents and this ESMF will be made available to the public in accessible locations in English and Portuguese.

#### **E11. Budget for Implementation of the ESMF**

All Project designs will be aligned with the principles and procedures of the ESMF, and other instruments prepared for the ASCENT Project and adhered to during project implementation. It is estimated that the total budget for the implementation of the ESMF and other associated instruments will be about US\$ 4.6 Million. The project is urged to prioritize and finance the listed activities to mitigate the likely environmental and social risks and impacts of the project activities.

## Sumário Executivo

### E1. Introdução e Descrição do Projecto

Em Moçambique, o Banco Mundial tem apoiado o programa Energia para Todos através de vários projectos desde o seu lançamento em 2018. Primeiro, o ProEnergia, foi aprovado em 2019 e encerrado em abril de 2024, alcançando 480 mil novas ligações domiciliárias e mais de 330 equipamentos públicos. Seguiu-se o ProEnergia Plus, lançado em 2021 e com conclusão prevista para dezembro de 2027, com o objectivo de ligar 2 milhões de beneficiários através de ligações à rede e 450 mil através de soluções de cozinha limpa e fora da rede.

Como projecto de terceira fase no âmbito da Energia para Todos, o Governo de Moçambique procura financiamento do Banco Mundial para custear o Projecto de Aceleração da Transformação do Acesso à Energia Sustentável e Limpa em Moçambique (ASCENT Moçambique). O projecto visa aumentar ainda mais o acesso à energia sustentável e limpa em Moçambique, apoiando a electrificação na rede em todo o país, soluções energéticas fora da rede, cozinha limpa, reabilitação de infra-estruturas críticas da rede de Média Tensão (MT) / Baixa Tensão (BT) e melhoria do desempenho do serviço. Os beneficiários do projecto incluirão famílias, instalações públicas de saúde e educação e utilizações produtivas. O projecto será implementado conjuntamente pela Electricidade de Moçambique, E.P. (EDM), Fundo de Energia (FUNAE) e Ministério dos Recursos Minerais e Energia (MIREME). O projecto seguirá uma abordagem regional multifásica, estabelecendo um total estimado de 146.400 novas ligações eléctricas dentro e 70.000 fora da rede, electrificando numa fase inicial cerca de 30 centros de saúde e escolas fora da rede, almejando capitalizar para um total de 450 centros de saúde e 915 escolas electrificadas fora da rede. As soluções de cozinha limpa beneficiarão 20.000 pessoas, incluindo GPL, fogões de biomassa melhorados e tecnologias de cozinha eléctrica, alinhando-se com os objectivos nacionais de Moçambique para práticas de cozinha seguras e sustentáveis. Adicionalmente, os agregados familiares e as comunidades apoiadas beneficiarão de melhorias globais de resiliência devido ao acesso a electricidade, a informação, a electrodomésticos, à utilização produtiva e à prestação de cuidados de saúde e educação de maior qualidade. O projecto promoverá a inclusão de género, estabelecendo ligações eléctricas para agregados familiares e empresas lideradas por mulheres, bem como uma representação equilibrada de mulheres e homens na cadeia de valor de empresas de energias renováveis e de cozinha limpa.

### E2. Quadro de Gestão Ambiental e Social

Uma vez que nem todos os subprojectos, escopo e desenhos de implementação são conhecidos nesta fase, este Quadro de Gestão Ambiental e Social (QGAS) estabelece princípios gerais, regras, directrizes e procedimentos para avaliar e gerir os riscos e impactos ambientais e sociais associados aos subprojectos a serem financiados e fornece as ferramentas gerais para mitigação dos riscos ambientais e sociais que orientarão o desenvolvimento dos instrumentos ambientais e sociais dos subprojectos individuais durante a fase de implementação. O QGAS capitaliza o trabalho realizado no âmbito do ProEnergia e ProEnergia Plus, desenvolvendo os instrumentos do projecto com base nos documento-quadro preparados para esses projectos, nomeadamente, o Plano de Envolvimento das Partes Interessadas (PEPI), os Procedimentos de Gestão de Mão-de-Obra (PGMO), Plano de Prevenção e Resposta contra Violência Baseada no Género (VBG) /Exploração e Abuso Sexual (EAS) / Assédio Sexual (AS), e Procedimento para Achados Furtivos.

### E3. Política Ambiental e Social Nacional e Requisitos Legais

Este QGAS foi preparado em conformidade com as políticas e leis aplicáveis de Moçambique e o Quadro Ambiental e Social (QAS) do Banco Mundial. As políticas e leis ambientais e sociais nacionais aplicáveis ao projecto são apresentadas no Capítulo 3.

### E4. Quadro Ambiental e Social do Banco Mundial, Classificação de Risco Ambiental e Social (ESRC) e Instrumentos Ambientais e Sociais

As dez Normas Ambientais e Sociais (NASs) do QAS, juntamente com os seus Anexos, estabelecem os requisitos relativos à identificação, avaliação e gestão de riscos e impactos ambientais e sociais associados a projectos apoiados pelo Banco através de Financiamento de Projectos de Investimento a serem cumpridos pelos Mutuários. A Classificação de Risco Ambiental e Social é **Substancial** considerando que as intervenções físicas planeadas consistem em obras civis para a construção de cerca de 6,000 km de linhas de MT e BT, reabilitação de subestações e algumas intervenções de maior escala fora da rede eléctrica, envolvendo mini-redes, redes mesh e centrais solares. Espera-se que as obras civis para electrificação na rede previstas na Componente 1a envolvam dez empreiteiros e dezasseis áreas de obra a operarem em simultâneo em todas as províncias, o que representa relevantes riscos de saúde e segurança e AES/AS para os trabalhadores e comunidades e cria um ambiente desafiador para as equipas de supervisão. Reabilitação da rede (prevê-se que a Componente 1b envolva 3 empreiteiros para reabilitação de linhas e uma empresa para reabilitação de subestações. Embora estes riscos possam ser geridos com o compromisso, capacidade e formação necessários, a experiência de outros projectos da EDM mostrou que os resultados de saúde e segurança pode ser grave em condições que não são geridas sistematicamente.

Os potenciais riscos e impactos ambientais e sociais adversos do projecto estarão principalmente associados às obras civis de pequena a grande escala planeadas no âmbito das Componentes 1 e 2, esperando-se que sejam moderados a substanciais, sobretudo específicos do local, temporários, reversíveis e geríveis através de medidas de mitigação que fiáveis e prontamente disponíveis. Não existem factores contextuais relevantes que possam agravar os riscos e impactos ambientais do projecto. Os riscos incluem (i) poluição do solo e dos recursos hídricos; (ii) emissões de poeiras e ruído; (iii) geração de resíduos perigosos e não perigosos; (iv) impactos de reassentamento involuntário em pequena escala associados à aquisição de terras e deslocamento físico e económico necessário como resultado de uma zona de protecção parcial de 3,5 metros para as linhas; (v) riscos de saúde e segurança dos trabalhadores, incluindo riscos associados a trabalho em áreas de conflito; (vi) riscos relacionados com a saúde e segurança das comunidades, em particular riscos de EAS/AS associado ao influxo de mão-de-obra gerado pelo projecto, de doenças transmissíveis, como as doenças sexualmente transmissíveis (DST), e de gravidez na adolescência; (vii) riscos laborais, incluindo os relacionados com a discriminação no local de trabalho e a igualdade de oportunidades no processo de contratação, juntamente com o risco de trabalho infantil e forçado, especialmente entre os trabalhadores do fornecimento primário; (viii) risco de distribuição desigual dos benefícios do projecto entre os beneficiários com benefício de elites, facilitada pelos desafios no processo de garantir o envolvimento genuíno das partes interessadas e a participação de grupos vulneráveis e desfavorecidos no nível dos subprojectos, considerando a natureza dos grupos vulneráveis identificados no contexto do Projecto, tais como idosos, pessoas portadoras de deficiência e os seus cuidadores, agregados

famíliares chefiados por mulheres e crianças, minorias sexuais e de género, desempregados, pessoas com doenças crónicas (por exemplo, VIH/SIDA, tuberculose, etc.)

Os riscos para a biodiversidade devido ao impacto em espécies ou áreas de interesse chave para a conservação são expectavelmente baixos, desde que seja implementado um procedimento eficaz para examinar os traçados das linha eléctricas, uma vez que o desenho detalhado esteja disponível, combinado com um ajuste no traçado ou outra mitigação.

As agências implementadoras têm experiência anterior na implementação de projectos semelhantes financiados pelo Banco e estão a desenvolver capacidades na gestão do risco ambiental e social com o compromisso de reforçar a sua equipa ambiental e social desde a fase inicial do projecto para garantir que seja implementado de uma forma consistente com os requisitos do QAS. Contudo, a performance em projectos passados e existentes evidencia lacunas de capacidade relevantes a vários níveis, com particular destaque para a saúde e segurança de trabalhadores e comunidades.

## **E5. Procedimentos de Avaliação e Gestão Ambiental e Social**

Os procedimentos para Avaliação Ambiental e Social (AAS) de subprojectos incluirão triagem e determinação de riscos ambientais e sociais para definir o nível exigido de avaliação(ões). O primeiro nível de triagem de actividades ambientais e sociais será baseado na Lista de Exclusão Ambiental e Social, que identifica actividades consideradas como tendo uma Classificação de Risco Ambiental e Social Elevada (Tabela 7-2, Lista de Atividades Excluídas) e inclui a triagem dos principais riscos e impactos ambientais e sociais do subprojecto e classificação de risco. Após um subprojecto passar pela triagem, nos casos em que a classificação de risco determine a necessidade de preparar instrumentos ambientais e sociais, tal é efectuado de acordo com as leis nacionais e com o QAS do Banco Mundial. É provável que os requisitos do QAS excedam os do regulador nacional, e estes estão definidos no QGAS. A estratégia de implementação do QGAS requer a integração total das questões de gestão ambiental e social, uma vez que serão identificadas nos instrumentos dos respectivos subprojectos orientados por este QGAS e incluídas nos documentos de concurso e nos contratos dos Empreiteiros para garantir a implementação dos subprojectos conforme declarado no PGAS (Plano de Gestão Ambiental e Social). O QGAS especifica que os Empreiteiros devem envolver consultores ambientais e sociais competentes para preparar um relatório de triagem dos alinhamentos das linhas eléctricas, uma vez concluído o projecto de execução, e que quaisquer ajustes nos alinhamentos das linhas devido a riscos ecológicos ou sociais sejam feitos, com base neste estudo. Os empreiteiros também são obrigados a preparar C-PGAS (Planos de Gestão Ambiental e Social da Construção) que devem ser submetidos ao Engenheiro do Dono da Obra (Proprietário) e à EDM/FUNAE para revisão e aprovação antes do início dos trabalhos civis.

Este QGAS garantirá que as consultas públicas com as partes interessadas relevantes (incluindo grupos vulneráveis, como Pessoas Portadoras de Deficiência) sejam conduzidas e bem documentadas para informar a AIAS e a concepção dos projectos/subprojectos sobre as medidas a empreender. Este QGAS descreve mecanismos de gestão de queixas (MGQs) a serem implementados para receber, avaliar e resolver todas as queixas relacionadas com o Projecto.

## **E6. Os potenciais riscos ambientais e sociais e medidas de mitigação**

Um mapeamento genérico foi realizado para avaliar os potenciais riscos e impactos ambientais e sociais do Projecto ASCENT. Os seguintes riscos e impactos são os mais prováveis e necessitarão de mitigação adequada: Os impactos ambientais e sociais estarão principalmente associados às obras civis de pequena a larga escala planeadas nas Componentes 1a e 1b, e às maiores instalações solares (mini-redes, redes de malha) planeadas na Componente 2. Os impactos ambientais incluirão a poluição do solo e dos recursos hídricos, erosão do solo, emissões de poeiras e ruído, geração de resíduos perigosos e não perigosos, perda de habitat e riscos para a saúde e segurança ocupacional e comunitária. Estes riscos e impactos serão na sua maioria limitados à área de influência direta das intervenções do projecto (nas áreas fisicamente afectadas pelas obras civis), temporários, reversíveis e administráveis através de medidas de mitigação custo-efetivas. Os riscos e impactos sociais serão devidos às actividades da fase de construção que podem não cumprir os padrões locais e internacionais de práticas laborais justas e gerar algum grau de conflito social, perturbação, danos e riscos para a segurança humana, associados ao facto de os empreiteiros necessitarem trabalhar em um ambiente de conflito.

## **E7. Plano de Gestao Ambiental e Social**

O projecto exigirá que as Agências Implementadoras (EDM e FUNAE) preparem um PGAS genérico para estar disponível aos licitantes para os contratos de obras civis. Com alguns ajustes, isso pode ser feito fazendo uso do PGAS desenvolvido e refinado para o ProEnergia Plus. As medidas genéricas de mitigação devem ser personalizadas para um PGAS específicos dos locais das obras (C-PGAS), preparados pelos empreiteiros para as obras civis dos subprojectos individuais, de acordo com os requisitos do Ministério da Terra e Ambiente (MTA) e do QAS do Banco Mundial. Os empreiteiros da EDM também devem preparar um relatório de triagem dos traçados das linhas de distribuição após a conclusão do projecto de execução. Os seguintes instrumentos ambientais e sociais foram preparados como parte do QGAS para orientar a implementação do Projecto ASCENT: um Plano de Envolvimento das Partes Interessadas (PEPI) que fornece uma estrutura geral para realizar o envolvimento significativo das partes interessadas, consultas e participação na preparação e implementação do projecto, incluindo divulgação de informação; Procedimentos de Gestão de Mão-de-Obra (PGMO) que fornecem orientação sobre a gestão dos requisitos laborais do projecto, incluindo a abordagem das queixas dos trabalhadores e a regulamentação da conduta dos trabalhadores; um Plano de Acção contra VBG/AES/AS para prevenir e responder adequadamente a incidentes de AES, bem como outras formas de VBG para garantir que o projecto não tenha um impacto negativo desproporcional nas comunidades desfavorecidas e vulneráveis; um Procedimento para Achados Fortuitos para cuidar de descobertas fortuitas que possam ser encontradas como resultado de limpeza de arbustos, escavações e obras civis relacionadas. Finalmente, foi desenvolvido um Plano de Compromisso Ambiental e Social (PCAS) para fornecer um resumo das medidas e acções materiais a serem implementadas pelas Agências Implementadoras para garantir resultados que sejam materialmente consistentes com o QAS durante a implementação do projecto.

## **E8. Arranjos de Implementação**

As entidades implementadoras do projecto propostas serão a EDM, FUNAE e MIREME. Para facilitar a implementação do projecto e a atribuição de responsabilidades, o projecto irá acolher uma Unidade de



Implementação de Projecto (UPI) na EDM para facilitar a implementação diária do projecto. A EDM e o FUNAE supervisionarão a execução das obras, incluindo aquisições, padrões ambientais e sociais e gestão dos aspectos de engenharia. Dada a capacidade ambiental e social sobrecarregada, o apoio à EDM e ao FUNAE para fortalecer a capacidade institucional a todos os níveis está incluído no ESCP, com base no apoio contínuo prestado durante o ProEnergia Plus. Outras instituições que estarão directamente envolvidas na implementação do Projecto ASCENT poderão incluir o MTA, Direcções Provinciais de Terra e Ambiente (DPTA), Direcção Nacional do Ambiente (DINAB) e Administração Nacional de Áreas de Conservação (ANAC), entre outras.

## **E9. Monitorização e Relatórios**

A principal responsabilidade pela monitorização cabe à EDM e ao FUNAE em colaboração com as autoridades provinciais e agências reguladoras. O projecto será monitorizado ao longo da sua vida através de visitas ao local, relatórios e informações de terceiros, tais como através de mecanismos de reparação de reclamações e da sociedade civil. Serão necessárias auditorias ambientais e sociais anuais independentes, preparadas por consultores competentes registados no MTA. O reporte trimestral ao Banco pela EDM e FUNAE sobre o desempenho ambiental e social do projecto deve prestar especial atenção às áreas de maior risco durante a construção, que incluem saúde e segurança ocupacional e comunitária, e grupos vulneráveis, e confirmar se as medidas de mitigação são adequadas ou se são necessários ajustes para cumprir os objectivos gerais do projecto e os compromissos ambientais e sociais acordados.

## **E10. Consulta Pública, Participação e Divulgação**

Serão realizadas reuniões de consulta pública aos níveis central, provincial, distrital e comunitário. Será utilizada uma combinação de reuniões consultivas de presença física e virtual, workshops e discussões em grupos focais de trabalho. Uma série de consultas iniciais às partes interessadas será realizada com pessoas-chave, beneficiários e instituições em Maputo, a nível regional e distrital, entre Janeiro e Fevereiro de 2025. Os projectos de instrumentos que incorporam os comentários da revisão da validação da EDM/FUNAE serão enviados às diferentes instituições aos níveis central e provincial para revisão e feedback em Janeiro de 2025. Serão realizados workshops de consulta regional. Na ausência de objecções do Banco Mundial, o projecto e o QGAS final serão divulgados no website da EDM/FUNAE com um convite às partes interessadas para comentarem. Os documentos ambientais e sociais subsequentes (Relatórios de Triagem de Rotas da Componente 1, bem como C-PGAS) para subprojectos específicos no âmbito do projecto ASCENT serão divulgados tanto nos sites do País (EDM/FUNAE) como no site externo do Banco Mundial. Cópias destes documentos e deste QGAS serão disponibilizadas ao público em locais acessíveis em inglês e português.

## **E11. Orçamento para Implementação do QGAS**

Todos os desenhos do Projecto serão alinhados com os princípios e procedimentos do QGAS e outros instrumentos preparados para o Projecto ASCENT e respeitados durante a implementação do projecto. Estima-se que o orçamento total para a implementação do QGAS e outros instrumentos associados será de cerca de 4,6 milhões de dólares americanos. O projecto é instado a priorizar e financiar as actividades listadas para mitigar os potenciais riscos e impactos ambientais e sociais das actividades do projecto.

# 1 INTRODUCTION

In Mozambique, the World Bank has supported the 'Energia para Todos' program through multiple projects since its 2018 launch. First, ProEnergia (US\$82 million IDA, US\$69 million MDTF) was approved in 2019 and closed in April 2024, and this achieved 480,000 new household connections and over 330 public facilities. Second, ProEnergia Plus (US\$300 million IDA, US\$38 million MEFA-MDTF), launched in 2021 and set to close in December 2027, aims to connect 2 million beneficiaries through on-grid and 450,000 through off-grid and clean cooking solutions.

As a third phase project supporting 'Energia para Todos', the Government of Mozambique is seeking financing (US\$ 400 million) from the World Bank towards the cost of the ***Accelerating Sustainable and Clean Energy Access Transformation Mozambique Project*** (ASCENT Mozambique). This operation, prepared under ASCENT regional multi-phased approach, will leverage scale-up and lessons learned in previous ProEnergia projects as well as the World Bank's regional portfolio. The proposed project will be implemented as an Investment Project Financing (IPF) over a 6-year period. The current project cost is estimated at US\$131 million comprising US\$100 million equivalent from the International Development Association (IDA), US\$31 million from the Multi-Donor Trust Fund (MDTF). In parallel, EDM is expected to contribute approximately US\$280 million (an additional 350 000 connections) during the project, and other donors will support off-grid connections to a value totalling approximately US\$80 million. To sustain the current pace of electrification to 2030, the full program will require at least \$3.7 billion in financing. It is expected that additional financing will be added to this program during implementation in future MPA phases, either from IDA, private sector, or government contributions.

This Environmental and Social Management Framework (ESMF) is developed to support the environmental and social due diligence provisions for activities financed by the World Bank in ASCENT Mozambique. The project aims to increase access to sustainable and clean energy in Mozambique. It will support nationwide on-grid electrification, off-grid energy solutions, rehabilitation of critical Medium Voltage (MV) / Low Voltage (LV) network infrastructure and utility performance improvement. The supported activities aim to provide nationwide access to energy under a sustainable and least-cost approach to households, health and education public facilities, and productive uses. The project will be jointly implemented by Electricidade de Moçambique, E.P. (EDM), Fundo de Energia (FUNAE) and Ministério dos Recursos Minerais e Energia (MIREME).

This ESMF follows the World Bank Environmental and Social Framework (ESF) and observes the Mozambican environmental and social (E&S) laws and regulations. The objective of the ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements. More specifically, the ESMF aims to (a) assess the potential environmental and social risks and impacts of the proposed Project and propose mitigation measures; (b) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social issues related to the activities; (d) identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF.

The ESMF is designed to incorporate feedback mechanisms, lessons learned, and capacity-building initiatives to support the long-term adaptability and improvement of E&S practices within the +ENERGIA Facility. It should be read together with other E&S risk management documents prepared for the project, including the Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP), Labour Management Procedures (LMP) and Security Risk Assessment and Management Plan.

## 2 PROJECT DESCRIPTION

The project builds on the success of previous phases of the access program in Mozambique and will follow an integrated approach to electrification following the least-cost Geospatial Electrification Plan. It will offer further innovations for geographically isolated consumers while also enhancing sustainability through business models that enable delivery of electricity services over time and improved utility performance. The activities described below are fully aligned with the scope of activities under the ASCENT MPA.

### 2.1 Project components

Beneficiaries of ASCENT will include households, businesses (including smallholder farmers), and health and education facilities in the peri-urban, rural, and deep rural areas serviced through new or improved electricity and clean cooking solutions leveraging both public and private delivery modalities. The project will provide around 146,400 connections through grid electrification and 70,000 connections through Distributed Renewable Energy (DRE) solutions by leveraging Results-Based Financing (RBF) and Catalytic Grants through the Off-grid Grant Facility established under ProEnergia Plus. At an average of 4.5 members per household, this translates into almost 1 million people connected. In addition, ASCENT aims to provide 90,000 people with clean cooking solutions.

The availability of reliable electricity is anticipated to increase productivity, both in agricultural and non-agricultural sectors, fostering income generation, income diversification, and job creation. Furthermore, supported households and communities will benefit from overall resilience improvements due to access to electricity, information, appliances, productive use, and the provision of higher quality health and education. The project will promote gender inclusivity by promoting connections by female-led households and businesses led/managed by women, as well as by a balanced representation of women and men in the value chain of DRE and clean cooking companies. This will be integrated into the eligibility criteria for companies applying for support through the Grant Facility, ensuring gender balance is prioritized. Government agencies (EDM, FUNAE, MIREME) will also benefit from the activities of capacity building, technical assistance, and implementation support. These activities are expected to improve their planning, technical, fiduciary, and institutional capacity to deliver and support the electrification agenda of Mozambique and enhance sustainability of electricity services in the long term

**Component 1: Increasing Access to On-Grid Electrification (US\$111 million: US\$80 million IDA equivalent and US\$31 million from the MEFA-MDTF)** - This component will provide continuity with the efforts made by EDM on ProEnergia and ProEnergia Plus projects, and support the delivery of EDM's plan for 2025-27, by financing investments aimed at electrifying urban and peri-urban areas where grid extension is the most cost-effective solution, while ensuring reliable service through the rehabilitation and strengthening of existing infrastructure. This component will provide access to electricity to over 1 million beneficiaries through grid densification, extension, and last mile connections. This component will include two subcomponents:

- *Subcomponent 1a: Construction of new networks and last mile connections (US\$101 million: US\$70 million IDA equivalent and US\$31 million from the MEFA-MDTF).* This subcomponent will finance the design, procurement of materials, construction works, and supervision support (owner's engineer) needed to electrify households, businesses, and public facilities in the project's target areas in all provinces, in peri-urban and rural locations. Activities will include the construction of new Medium and Low Voltage networks,

the installation of transformers, and service connections to customers. As in previous projects, all meters will be pre-paid, and readyboards will be provided free of charge to households that cannot afford internal wiring or where safety concerns exist.

Based on the experience of ProEnergia Plus implementation, it is estimated that with US\$101 million, 146,400 connections (about 1,7 percent of the national population) could be achieved benefiting households, enterprises, and public facilities in the target areas. Over 56 percent of the new connections to be made under the proposed project will be in the four northern provinces. The physical works estimated to connect 146,400 new customers is construction of about 2,700 km of MV lines, installation of 2,200 distribution transformers, extension of 3,300 km of LV distribution lines, and installation of about 5,800 km in service connections. At 4,5 people per household, this amounts to nearly 1 million people.

The project will connect all enterprises and public facilities in the target areas. A total of 30 unelectrified schools and health centers are expected to be electrified in these areas as well as many female-led and /or managed businesses. Building on lessons learned from previous operations (ProEnergia and ProEnergia Plus), the project will actively explore ways to reduce these barriers. This includes incorporating the installation of internal wiring under the works contracts to make it more affordable for public facilities and covering connection fees through Performance-Based Conditions. The project will also focus on maximizing the impact of electrification on health and education services in communities by assessing mechanisms to ensure the payment of a minimum consumption level for these essential facilities. Also, a gender lens will be used in the selection of the institutions to be electrified to include facilities providing critical services for women, such as neo-natal services.

**The following Performance Based Conditions (PBCs)** are proposed to strengthen the enabling environment for scaling up on-grid electrification to households, businesses, and public facilities by ensuring the efficient use of limited funds to maximize results and facilitating electrification of public facilities:

**PBC 1: Updated Technical Standards for Distribution Infrastructure, and development of procedures to manage occupational and community health and safety risks adopted by EDM (US\$10 million equivalent).**

Least-cost distribution standards that achieve high levels of quality of electricity supply and optimize the cost per connection for rural and peri-urban areas were developed in 2020, and have been applied in donor-funded projects, resulting in significant cost savings and improved safety standards. However, there remains a need to harmonize the utilization of standards beyond donor-funded activities and integrate climate adaptation and mitigation measures that enhance infrastructure resilience to climate events, such as cyclones and floods. Only donor-funded projects—which accounted for 30 percent of connections from 2018 to 2023—are currently using these optimized standards. The updated technical standards will be used for the infrastructure built under the Project, and all new infrastructure built by EDM, once adopted at the EDM level. This activity will reduce physical climate risks and build adaptive capacity of the power sector to respond to future climate change impacts. At the same time, there is a need to strengthen EDM’s health and safety procedures related to distribution infrastructure. Procedures for managing occupational and community health and safety risks associated with distribution infrastructure will be developed and implemented, ensuring material consistency with the World Bank Group’s ESF. The performance measurement is (i) Updated Technical Standards for Design and Construction of Electricity Distribution Infrastructure for urban, rural, and peri-urban areas including resilience aspects by EDM, and application of

the standards in project design; (ii) (ii) Development of procedures to manage occupational and community health and safety risks associated to distribution infrastructure in a manner materially consistent with World Bank ESF and meeting best industry standards, and application and implementation of the procedures in the project; and (iii) adoption of the standards by EDM and subsequent application of the standards for all EDM electrification activities, regardless of the source of financing. The targeted date of achievement for this PBC is December 2025. *PBC 2: Waiving of connection fees for health and education facilities (US\$10 million)*. One of the primary barriers to electrification for health and education facilities is the requirement to pay a connection fee. Following the successful introduction of a zero-connection fee policy for households in 2020, this will be continued in the current project.

- *Subcomponent 1b: Rehabilitation and reinforcement of existing networks (US\$10 million: US\$10 million IDA equivalent)*. It is essential to expand EDM's customer base while ensuring that the existing infrastructure can accommodate the increased electricity demand from newly electrified areas. Based on EDM's ongoing internal assessment, the necessary interventions to ensure reliable service in these areas will be identified and prioritized, focusing on the infrastructure that supports the electrified zones. The project may potentially support some of these efforts, depending on the scope and availability of funds. Potential activities may include rehabilitation or strengthening of medium voltage substations and lines.

**Component 2: Increasing Access to Off grid Electrification and Clean Cooking (US\$10 million: US\$10 million IDA equivalent)** - This component will include two subcomponents:

- *Subcomponent 2a. +ENERGIA Off-Grid Finance Facility for Households and Productive Uses, including clean cooking (US\$9 million IDA equivalent)*. This sub-component will expand Distributed Renewable Energy (DRE) in underserved rural and deep rural areas where off-grid technologies are the most cost-effective solutions due to geographical, economic, and infrastructure conditions. The component will aim to provide access to DRE solutions for 70,000 households (connections) and provide clean cooking solutions for an additional 20,000 households. To do so, this sub-component will re-capitalize the +ENERGIA Off-Grid Financing Facility established under ProEnergia Plus to further scale up the Facility's multi-technology approach for off-grid electricity access (covering solar home systems, mesh grids, and mini-grids), clean cooking (focusing on clean cookstoves and LPG solutions), and Productive Uses of Energy (PUE). It is anticipated that further financing will become available for this component in subsequent phases of the ASCENT project once the initial capitalization is depleted.

For Solar Home Systems (SHS), the initial focus will be on Tier 1 systems to ensure essential energy access by employing a range of models—including PayGo, Energy as a Service (EaaS) and other innovative approaches—targeting foundational energy needs. Specific financing windows will be launched offering baseline and key result-based incentives (KRIs) targeting impact areas such as collection, gender inclusivity, and geographical impact. In addition, ASCENT Mozambique will strategically consider deploying higher-tier technologies where they can enhance impact and meet the diverse demands of Mozambique's underserved communities. This flexible approach will allow the project to optimize energy solutions across various levels of access, maximizing reach and sustainability in off-grid expansion efforts. In the clean cooking sector, the facility will focus on higher-tier solutions (Tier 3 and above), including LPG, electric cooking, etc. aiming at reducing reliance on traditional biomass. Tier 2 technologies will be permitted for a transitional period with a long-term focus on higher-Tier solutions.

On the clean cooking side, approximately 20,000 households (90,000 people) will benefit from cleaner cooking solutions, including LPG, improved biomass cookstoves, and electric cooking technologies, aligning with Mozambique's national goals for safe and sustainable cooking practices.

The project is also expected to benefit from ASCENT regional efforts (ASCENT COMESA) which serves as a regional aggregator for carbon financing, consolidating data on greenhouse gas reductions from clean cooking projects across ASCENT countries. By aggregating this data, the platform enables economies of scale, enabling smaller companies, which might not independently meet the scale required for carbon credit markets, to participate effectively.

- **Subcomponent 2b. +ENERGIA Off-grid Finance Facility for Public Facilities (US\$1 million IDA equivalent).** This sub-component will extend energy access to key public facilities, including schools and health centers, through a close collaboration and coordination with the Health and Education Ministries. The component will aim to provide access to DRE solutions to an initial 38 facilities, with the intention to further capitalize this subcomponent in future phases. Once fully capitalised to the expected amount of *US\$30 million*, the subcomponent expects to provide access to DRE solutions to all 450 remaining off-grid health centers not targeted by EDM, as well as approximately 915 off-grid schools, representing about one-fifth of the remaining unelectrified schools off-grid. Schools will be prioritized based on a clustering approach with health centers, with secondary schools given additional priority within each cluster. This is expected to enhance education delivery and improve health services in rural and remote areas, with women and children benefitting most from the improved services. This effort will build on the experience and pilot under ProEnergia Plus bringing critical lessons and features to enhance suitability for delivering reliable, sustainable energy to public facilities.

**PBC 3: Expanded categories benefiting from fiscal benefits for solar home systems, clean cooking, and essential equipment (US\$1 million).** This PBC will make off-grid systems (solar home systems and clean cooking solutions) more affordable for households, businesses, and public facilities in remote areas.

**Component 3: Utility digitalization and performance improvement (US\$3 million IDA equivalent)** - This component aims to support EDM in improving the reliability of supply of the distribution system. reducing non-technical losses which will in turn increase its revenue recovery and decrease Greenhouse Gas (GHG) emissions. It is estimated that this activity can lead to a reduction in GHG emissions of 201,020 tCO<sub>2</sub>e over 30 years against the project baseline.. This component will support EDM to (a) update operational procedures (reengineering of processes and activities for distribution operations), including management of network operations, field crew dispatching activities, and complaints, together with the tracking of selected KPIs; and (b) fully implement the Outage Management System (OMS),<sup>1</sup> including its full integration to EDM SCADA. Once additional funds become available in subsequent phases, this sub-component will also focus on: (a) upgrading two Distribution Control Rooms (DRCs), including their operation supported by SCADA/OMS; and (b) continuing to support mapping of customers and networks on the Geographic Information System (GIS) platform. The supported activities aim to improve operational performance by improving the quality of electricity service provided to customers through optimized procedures for management of complaints and service restoration when incidents in supply occur.

---

<sup>1</sup> OMS is a tool to quickly and accurately identify location and analyze extent of an interruption in electricity supply and enable fast resolution and service restoration. It is supported by a detailed representation of the distribution network and links between points of electricity supply and network assets using a GIS.

Adopting OMS will also help EDM increase its adaptation against climate hazards to reinstall power in climate-impacted areas.

**Component 4: Technical assistance, capacity building, and implementation support (US\$7 million IDA equivalent).** This subcomponent will finance capacity building, technical assistance, and implementation support for EDM, for project management expenses such as external audit and implementation oversight. It will also include the scale-up of EDM's flagship Female Scholarship-Internship Program and EDM's Role Model Program, both already funded by ProEnergia+ and aligned with the 'Reach of Gender Equality' pillar of its strategy. Other activities will be the enhancement of EDM capacity on environmental and social standards and support the already well-established Young Professionals Program<sup>2</sup>. This component involves three subcomponents:

- *Subcomponent 4a: Technical assistance, capacity building to MIREME (US\$3 million IDA equivalent)* - This subcomponent will finance activities to strengthen the policy environment in the energy sector continuing and expanding efforts previously put in place under ProEnergia Plus. This could include (a) technical assistance and capacity building for the electrification planning unit in MIREME, (b) analytical studies and sector assessments to inform policy development and decision-making, including an update of the National Electrification Strategy.
- *Subcomponent 4b: Technical assistance, capacity building and implementation support to EDM (US\$3 million IDA equivalent)* - This subcomponent will finance capacity building, technical assistance, and implementation support for EDM, for project management expenses such as external audit and implementation oversight. The subcomponent will enhance distribution planning by financing the purchase of tools with associated training. It will also include gender mainstreaming along with the provision of an organization-wide training program to support EDM on the 'Reach of Gender Equality' pillar of its strategy, and continuation to the Role Model Program, and Scholarship Program created under ProEnergia Plus. Other activities will be the enhancement of EDM capacity on environmental and social standards and support the already well established scholarships and Young Professionals Program.
- *Subcomponent 4c: Technical assistance, capacity building and implementation support to FUNAE (US\$1 million IDA equivalent)* - This subcomponent will support the project through a technical assistance approach, including (a) capacity building to strengthen the Project Implementation Support Unit (PIU) by enhancing project management capabilities and effective project execution, including enhancing capabilities on environment and social standards; (b) management fees for the facility manager and independent verification agent to ensure proper oversight of the Grant Facility and verification of milestones; (c) continued support for policy reforms aimed at expanding the Distributed Renewable Energy (DRE) and clean cooking sectors, including off-grid regulations, fiscal incentives, and consumer awareness initiatives;

---

<sup>2</sup> To support implementation of activities related with the significant scale-up of customers and infrastructure at EDM, required to achieve universal electricity access by 2030, a Young Professional Program (YPP) was integrated under ProEnergia project, and scaled up under ProEnergia Plus. This initiative recognized the need to strengthen EDM's electrification workforce to ensure the timely and effective implementation of both current and future electrification projects. The program aimed to build a new generation workforce with enhanced leadership skills and practical experience focused on electrification projects, while also covering crosscutting areas such as financial management, procurement, and more.



- (d) development of a tailored gender training program which will culminate in the development of FUNAE's gender strategy.

## 2.2 Implementing agencies

**EDM, FUNAE and MIREME** will be the **implementing agencies** with fiduciary oversight of project activities expected to be implemented over six years, including day-to-day implementation, coordination, supervision, and overall management of project activities. These three agencies were also the implementing agencies for ProEnergia Plus and ProEnergia, under which capacity was built which can now be scaled.

The Inter-Ministerial Steering Committee, chaired by MIREME and comprising members from relevant agencies including the Ministry of Economy and Finance, established for ProEnergia Plus, will continue its functions under ASCENT to (a) provide overall policy guidance on all issues related to the project; (b) facilitate coordination among implementing agencies, relevant sectors, and agencies; and (c) ensure project alignment with the recipient's other programs, including ProEnergia Plus, and (d) provide strategic direction, ensuring adequate coordination between the Project Implementation Units (PIUs) and the line ministries and other agencies implementing portions of the project without carrying fiduciary responsibilities.

**EDM** will be the implementing agency for **Component 1, 3 and technical assistance under Component 4b**. Through ProEnergia, ProEnergia Plus and PERIP, EDM has built capacity to scale activities under the project. For Component 1, EDM confirmed that the implementation arrangements will follow the same arrangements as in the ongoing on-grid component of ProEnergia Plus, incorporating lessons learned to improve execution. Therefore, the project will be implemented by the dedicated PIU that was created under ProEnergia to implement electrification projects, which resulted in improvements in planning, procurement, and project management that continue to date under ProEnergia Plus. This dedicated team is supported by external consultants who provide technical assistance during design and implementation as required. This PIU has been continuously reinforced with additional staff (including two phases of the Young Professionals Program) and is currently under hiring an additional 20 staff (13 young professionals, two interns, and five senior specialists) under ProEnergia Plus, who will strengthen this unit's capacity in procurement, financial management, environmental and social risk management (ESRM), contract management, and monitoring and evaluation of activities. For ASCENT, there will be a dedicated coordinator for all EDM components (1, 3 and 4b), and dedicated technical focal points will be appointed to the PIU to coordinate the implementation of activities under Component 1b, and 3. The proposed ESRM structure includes four full-time specialists at the central level: one environmental, one health and safety, one social, and one GBV/SEA/SH specialist. They will be supported by several E&S technicians at the provincial level, with one environmental and health and safety technician and one social and GBV/SEA/SH technician per province, totaling 20 technicians. The central-level specialists will oversee risk management activities within their areas of expertise and coordinate with the field-based technicians, who will supervise the implementation of these activities onsite by the Owner's Engineer (OE) and Contractors to ensure they comply with ESF requirements. All four central-level specialists should be hired or appointed within one month after the project Effective Date, while the field-based technicians will be deployed in a phased manner before starting any activities in the provinces they cover.

**FUNAE** will be the implementing agency with fiduciary and ESRM responsibility for **activities under Components 2 and technical assistance under Subcomponents 4c**. Through ProEnergia Plus, FUNAE has strengthened its technical and operational capacity, gaining valuable experience in managing World Bank-funded operations. While FUNAE has developed a solid foundation, further support will be provided to ensure smooth and effective implementation of this project. A pool of experts will be established through a framework contract to provide short-term, flexible support for specific needs, particularly in project coordination. This will allow FUNAE to address challenges quickly and ensure efficient project management, improving overall execution and strengthening its operational capacity. In addition, an external Grant Facility Manager will be engaged to manage the funds and oversee operations of the +ENERGIA Facility. The Facility Manager, supported by an Independent Verification Agent (IVA), will ensure effective fund management, rigorous results-based monitoring, and streamlined implementation. By leveraging this established structure, the +ENERGIA Grant Facility ensures operational efficiency, transparency, and alignment with international best practices. The Grant Facility and the IVA will help strengthen FUNAE's institutional capacity, ensuring the sustainability and scalability of the Grant Facility. While FUNAE will maintain fiduciary and ESRM responsibility, the support provided by the Grant Facility Manager and IVA will be instrumental in building long-term institutional capacity, ensuring successful implementation and scale-up. FUNAE will appoint two full-time focal points, one environmental, health and safety and another social, prior to the commencement of the activities under Component 2 and Subcomponents 4c to ensure the E&S risks and impacts of those activities are managed in a manner consistent with ESF requirements..

**MIREME** will be the implementing agency for **activities under Subcomponent 4a**. This subcomponent primarily consists of technical assistance and training to MIREME, and especially the Integrated Unit for Electrification. Through ProEnergia and ProEnergia Plus, MIREME has strengthened its technical, procurement and financial management capacity. MIREME is currently leading the development of the Least-Cost Electrification Plan and holds an essential donor-coordination role. MIREME will appoint one full-time E&S Focal Point prior to the commencement of any activities to ensure their compliance with ESF requirements.

At the regional level under the ASCENT MPA umbrella , the COMESA and Trade and Development Bank (TDB) have been selected to implement regional activities, based on their existing working relationship with countries, private-sector companies, and financial institutions in the region, as well as their track record of implementing World Bank-financed projects, particularly in energy access under the Regional Infrastructure Financing Facility (RIFF) Project (P171967).




## 2.3 Summary description of civil works for Components 1a and 1b

The implementation of the civil works for Component 1a and 1b will follow the same general approach as ProEnergia Plus. The project area will be divided into a series of lots, which will be the basis for bidding by contractors. EDM is likely to spread the work across approximately 5 contractors, to ensure sufficient capacity to complete the work according to the schedule. Contractors will be responsible for the design of the project, being provided in the bidding phase with only a preliminary description of the scope of works, sufficient to price a bid. Prior to the contractors' appointment, no information about actual route alignments of MV and LV lines will be available.

Following completion of the design, in which the location of the line infrastructure will be accurately defined, the construction phase will begin with the definition and clearing of the right of way, followed by pole/tower

surveying and installation, conductor stringing, installation of insulators and cross arms, transformer and switchgear installation, earthing and grounding and finally service connections and testing. Technical information describing the line design and construction process is included in Annexure 1. A summary of key design elements is provided in Table 2-1.

**Table 2-1. Summary of key LV and MV line design elements**

LINE DESIGN <sup>3</sup>	
Type of infrastructure	Low voltage (0,4 kV) distribution lines Medium voltage (33 kV) lines
Total estimated length of lines	LV: 3,300 km MV: 2,700 km Connections: 5,800 km
Number of transformers	2,200
Location	All provinces but greater focus on the northern provinces, Cabo Delgado, Niassa, Nampula and Zambezia
Tower (pole) types	LV: Gum poles, 9 m high, buried 1.5 m into the ground MV: Gum poles, 12 m high, buried 1,8 m into the ground Steel Poles, 11 m high, buried 2 m into the ground. Steel poles typically used in urban areas with constrained space since they come preassembled in two sections and do not required stays – they are concreted at the base.
	 
Steel MV towers	33 kV structure (0-10°)      Excavations for LV pole
Tower spacing	Typical distance between poles: LV 40 m MV 100 m (rural); 50 m (peri-urban)
Transformers	Pole-mounted distribution transformers
Permanent row (width in meters)	3.5 m
Vegetation height permitted in RoW	LV 1 m

<sup>3</sup> Design information from NRECA International (2020). *Updating Technical Standards for Design and Construction of Electricity Distribution Infrastructure – Design and Construction for Rural and Peri-Urban Systems*. Presented to EDM, May 30, 2020

LINE DESIGN <sup>3</sup>	
	MV 3.5 m
Building structures in permanent RoW	None permitted

## 2.4 Summary description of works for off-grid energy solutions (Component 2)

The Off-Grid program for ASCENT supports a range of technologies (Component 2), enabling the deployment of flexible, multi-technology solutions based on local energy needs. By incorporating a variety of technologies, the facility ensures that energy solutions are adaptable and aligned with Mozambique's development objectives. Technologies covered under this Component include:

- **Solar Home Systems (SHS):** Residential solar systems typically ranging from 10W to 80W, designed to meet essential energy demands for households. SHS installations provide lighting, mobile phone charging, and basic appliance usage, primarily benefiting low-income households in off-grid areas. Smaller solar home systems use a mobile solar panel to charge a battery. Larger solar home systems also have batteries and can have the solar panel installed in the household roof or mounted on a pole near the house.
- **Small Mini-Grids:** Community-based renewable energy systems with capacities below 500kW, designed to supply electricity to clusters of households or small businesses. Mini-grids offer centralized energy solutions for remote communities and serve residential, commercial, and productive uses. Mini-grids are powered by a small solar array (less than 0.4 hectares) and batteries. The solar array can be placed anywhere in or near a village to avoid social and environmental risks.
- **Meshgrids:** Decentralized energy networks that interconnect multiple Distributed Renewable Energy (DRE) sources, such as solar panels and battery storage systems, allowing flexible and reliable power distribution across dispersed communities. Each household is equipped with an autonomous solar system that includes solar panels, batteries, and a smart device to manage and distribute energy, enabling any excess power to be shared with neighbouring households. This interconnection creates a mesh grid that dynamically adapts to fluctuations in demand and supply, and it can easily expand as community needs grow.
- **Standalone Solar Systems for Productive Uses:** Larger solar-powered systems designed to support commercial applications, including solar-powered irrigation, refrigeration, and other equipment essential for small and medium-sized enterprises (SMEs). These productive-use systems enable agricultural and business growth, contributing to local economic development and are similar to the ones used for households. With innovation in technology, standalone solar systems can be used to electrify small and medium enterprises (SMEs) such as solar powered egg incubation for poultry farms, solar milk chillers for dairy farms, solar powered sewing machines, solar irrigation, etc. These systems are in the 1kW to 10 kW capacity range. Such systems will either install the solar panels on the roof of the building or on the ground adjacent to the building depending on convenience.
- **Clean Cooking Technologies:** Solutions that reduce emissions and improve energy efficiency in cooking, including LPG, electric cooking devices, improved biomass cookstoves, and solar cookers. The facility initially supports Tier 2 clean cooking technologies, with a transition to Tier 3 and higher in future funding cycles, aligning with global standards for improved health and environmental outcomes. These clean cooking

solutions aim to reduce harmful emissions and improve energy efficiency, enhancing public health and sustainability. Improved cookstoves are designed to burn biomass cleanly and efficiently, meeting international performance standards.

### 3 ENVIRONMENTAL AND SOCIAL POLICIES, REGULATIONS, AND LAWS

#### 3.1 Mozambique legal framework

Section 3.1 presents the national legal and institutional framework of the GoM relevant to ASCENT Mozambique. Laws and regulations described below are the main legal instruments that the project must comply with. Other laws that have less direct relevance to the implementation of the project are listed in Table 3-1.

**Constitution of the Republic of Mozambique (2004):** The Constitution establishes several key principles and rights. It grants all citizens the right to a safe environment and the obligation to preserve it, charging national and local authorities, in collaboration with environmental associations, with adopting policies to protect the environment and ensure the responsible use of natural resources and declares all natural resources to be the property of the State (Article 90).

The Constitution also enshrines gender equality (Article 36) and prohibits discrimination by establishing the principle of universality and equality, affirming that all citizens are equal before the law and enjoy the same rights and duties, regardless of color, race, sex, ethnic origin, place of birth, religion, level of education, social position, marital status of parents, profession or political preference (Article 35). Discrimination on these grounds is punishable (Article 29).

Citizens' are guaranteed the right to freedom of expression, freedom of the press and the right to information (Article 48). They can request information from the Government on matters of direct interest and have the right to appeal if denied access (Article 25(3)).

The right to work is protected (Article 84), and forced labour is prohibited except under penal legislation (Article 84:3). Workers have the freedom to form professional associations or unions (Article 86).

On community health and safety, citizens are required to defend and promote public health and have the right to advocate for the prevention and prosecution of offenses against public health, consumer rights, and environmental and cultural heritage (Articles 45 and 81). The State must promote citizen and institutional participation in community health (Article 116), and the Council of Ministers direct public health efforts (Article 204).

Expropriation for public infrastructure, utilities, urban development, environmental protection, and socioeconomic projects is permissible only if in the public interest, and must include fair compensation for losses (Article 82(2)). This must be calculated to cover the loss of tangible and intangible property, disruption of social cohesion, and loss of production assets.

Finally, the Constitution ensures the protection of places of worship (Article 54(4)) and places archaeological heritage under the control of the State (Article 98(2)).

**Environment Law (Law 20/1997):** The law sets out the core principles for environmental management which include protection of biodiversity and ecosystems. It is the framework law for Decree 54/2015 (EIA Regulation) which requires application of the mitigation hierarchy. It is applicable to all public or private activities, capable of directly or indirectly influencing the environment. The Law prohibits pollution. The production, deposition on or below ground, the release into water or the atmosphere of any toxic and polluting substances, as well as any

other form of environmental degradation outside of legally established limits, are not permitted. Article 15 determines that the implementation of development activities is subject to the prior acquisition of an Environmental License by the proponent.

The Environment Law affirms the constitutional right to information (Article 19) and commits the government to establish educational programs to enable effective participation (Article 20). It recognizes broad participation as an important aspect of environmental management (Article 2), and requires the government to establish mechanisms to involve civil society and local communities in policy development on environmental management (Article 8).

Stakeholders may include community members within the area of direct project influence or other concerned parties. At least two consultations should take place at local level, with meetings announced 15 days in advance as part of scoping and the presentation of EIA report(s). Relevant information must be made available in an easily accessible and understandable form to ensure active and meaningful participation and consideration of alternatives. Following consultations, the consultant responsible for the project must receive comments: for Cat. A+ projects, 45 days following the consultations, and for all other projects, 15 days following the consultations. Meetings, declarations, and statements made during the consultation process must be recorded and included as part of the EIA review.

The proposed public participation process must be described in the TOR for the requirement assessment, which is to be reviewed and approved by the relevant Provincial Directorate (for Category B) or EIA Directorate (for Category A/A+). For Category A/A+ projects, the TOR is subject to public review and comment. The public participation process must be conducted as part of scoping and preparation of the EIA (or simplified environmental report for Category B) and the resulting report(s) subject to public review and comment, inclusive of the EIA and related management and/or resettlement plans. The EIA for Category A/A+ projects must contain a report on the public participation program conducted. Specific consultations apply where resettlement is required as part of the project.

**Environmental Impact Assessment Regulation (Decree No. 54/2015):** The decree provides a framework for the preparation and submission of Environmental Assessments for listed projects. Project categories that trigger environmental assessment are listed in Annexure 1 of the decree. Applicants must register their projects with the provincial office of the MTA (Provincial Environmental Services), providing information that the regulator requires to categorize the project. Projects are classified into one of four categories – A+, A, B or C. Category A+ and A projects required full ESIA and ESMPs. Category B projects require a Simplified Environmental Study (SES) and submission of an ESMP. Category C projects require only a manual of '*Good Environmental Practice Procedures*'. Category A+, A and B projects require varying degrees of public participation. Authorizations are phased, the first being a licence to construct and the second being a licence to operate. Project construction may not begin without an environmental licence issued under this statute. Category A+ projects include any proposal that impacts on areas of critical conservation concern. The ESIA for a Category A+ project must be reviewed by an independent panel of experts.

**Environmental Audit Regulation (Decree 25/2011):** The Decree provides guidance about the general content of an audit. It specifies that an environmental audit must be a documented and objective instrument for management and systematic assessment of the project's management system and relevant documentation, implemented to ensure the protection of the environment. Its objective is to assess compliance of work and

operational processes with the Environmental Management Plan, including the environmental legal requirements in force, as approved for the project.

Environmental audits may be public or private. Public audits are undertaken by MTA. Private audits are undertaken by the entity responsible for the activity being audited. All projects that are classified as Category A+, A and B must be privately audited at least once per year by an auditor registered with MTA. The audit may not be undertaken by the same individual/company that was responsible for the Environmental Assessment and may not be a member of the entity itself. It may include auditing of performance in relation to public health impacts and protections for project workers and local communities. Compliance with the recommended actions of the audit are mandatory and the audited entity must prepare an action plan to demonstrate the close out of audit findings. Both private and public developments are subject to audit requirements. There are no audit requirements for Category C projects. In the context of ASCENT, assuming that the MTA classify the project as Category C, no audits would be required, by law. Conditions for audits would need to be stipulated by the World Bank.

**Regulation for Environmental Inspections (Decree No. 11/2006):** The Decree governs the supervision, control and verification of compliance with environmental protection rules in the country. During project implementation, MTA may carry out inspections to verify compliance with environmental legislation and site management instruments (ESMP and C-ESMP). The implementing agencies are bound to facilitate the undertaking of such inspections.

**Quality of Water for Human Consumption (Ministerial Diploma No. 180/2004):** The diploma sets out the parameters that govern the standard of drinking water for human consumption. All EDM contractors will need to comply with this standard.

**Pollution Prevention and Protection of Coastal and Marine Environment Regulation (Decree 45/2006):** The Regulation is intended to protect sensitive ecosystems, including wetlands, dunes, mangroves, coral reefs, sea grass and other coastal and marine sensitive habitats and applies to all onshore and offshore ore activities that may impact the coastal and marine environments. Article 67 specifically protects mangroves and dunes, specifying that only basic infrastructure (such as electricity distribution lines, water supply pipelines or telecommunication cables) required for national development may be implemented in these types of coastal ecosystems.

**Environmental Standards and Effluent Emission Regulations (Decree 18/2004 - amended by Decree No. 67/2010):** Regulates and ensures effective control and monitoring on the quality of the environment and natural resources. It establishes specific standards and regulations on water quality (emission of effluent), atmospheric emissions and noise.

**Urban Solid Waste Management Regulation (Decree 94/2014):** Establishes rules for managing urban solid waste in Mozambique. It applies to all natural and legal persons, public and private, involved in the production and management of urban solid waste. All public and/or private entities that carry out activities related to the management of solid urban waste must develop and implement an integrated management plan for the solid urban waste they manage, based on the principles of the waste management hierarchy. Entities that produce or handle urban solid waste must have adequate packaging conditions, so that their disposal in the containers or containers intended for this purpose is done in such a way as to avoid their dispersion onto public roads. Civil works contractors who produce waste are not regarded as entities that must produce a waste management plan



under this law. They are nevertheless required to temporarily store waste in accordance with the provisions of the law. Transporters appointed to remove contractor's waste to landfill are required to be licenced with MTA. While transport of waste from a work site to temporary storage in a base camp would not be regarded as a transgression of this requirement, transfer of temporarily stored waste at a basecamp to a landfill would have to be done by a licenced waste transporter.

**Hazardous Waste Management Regulation (Decree 83/2014):** Establishes rules for the production and management of hazardous waste in Mozambique. It applies to all natural and legal, public and private persons involved in the management of hazardous waste. The obligations of producers, transporters and operators of hazardous waste facilities are the following: minimize the production of hazardous waste; ensure the segregation and adequate packaging of different categories of waste; ensure that all waste to be transported poses a minimum hazard to the workers involved in this process, and to the general public and the environment; ensure adequate treatment of waste before disposal, using good practices and viable technological options; ensure that the temporary storage and disposal of waste, within and beyond the work site, does not have a negative impact on the environment or public health and safety. Specific requirements are set out for the labelling and temporary storage of hazardous waste. Annexure IX of the decree provides a listing of wastes that are hazardous under Mozambique law.

**Land Law (Law 19/1997):** The law establishes that in Mozambique land is the property of the State and cannot be sold or, in any way, alienated, mortgaged or seized (Article 3). Most individuals and households in Mozambique, and particularly those in the rural areas acquire land access and rights through customary and/or good faith occupation. The law aims to guarantee access and use of land for the population as well as for investors, allowing for the revocation of such rights in the name of public interest, with fair compensation (Article 18 (b)). The law defines the right to use and benefit from land, including land ownership and the public domain, which encompasses partial or total protection zones with restricted uses. It also outlines the conditions for granting land use rights, the roles of State, local bodies, and communities in the title process, and the application of authorization fees based on location, size and purpose of land.

Both total and partial protection zones (PPZs) are part of the public domain, and electricity conduits and infrastructure fall under PPZ's. Article 9 states that no land use rights can be acquired in these zones, although special licences may be granted for specific activities. Projects like MV and LV line construction require a PPZ (or RoW), to ensure efficient and safe operation. The entire PPZ must be cleared of any infrastructure and trees prior to and during the construction phase and may not have any infrastructure or trees taller than 1 m in the case of an LV and 3 m in the case of an MV line, once the line is operational. The PPZ is required to protect the system from falling or flying objects due to wind or other weather events, contact with trees and branches and other potential hazards that may result in damage to the system, power failures, danger to the population and/or forest fires. In addition, the PPZ provides unrestricted access to the line, for maintenance and/or in cases of emergency.

The Land Law grants equal rights of land use and benefit to women and men (Articles 10 and 15) and ensures non-discriminatory access to land, including through inheritance, provided that customary norms and practices do not contradict the Constitution (Articles 12, line a and 15, No. 4).

**Land Law Regulation (Decree 66/1998):** outlines provisions related to publicly owned land, land use rights, the land title application process, inspection and taxes. Article 17 is particularly relevant to this project as it

determines the liability for damages and / or compensation to the land use holder when land is intended for other use by a public or private investor. The regulation details the procedures for applying and acquiring land use rights (DUAT) and establishes the obligation to pay land taxes.

**Land Registry Code (Decree 2/2018:)** This establishes provisions for the National Land Registry and Real Estate Registry and procedures for the registration of inherited land use rights and rights to customary rights-of-way.

**Resettlement Process Resulting from Economic Activities Regulation (Decree 31/2012):** The regulation stipulates the basic rules and principles associated with resettlement, as a result of public or private economic activities, performed by national or foreign, natural or legal persons, with a view to the promotion of the citizens' quality of life and the protection of the environment.

**Technical Directive on the Preparation of Resettlement Plans and the Implementation Process (Ministerial Resolution No. 156/2014):** The Directive standardizes the resettlement plans. It presents guidelines for the process, identifies the different steps that characterize the development and implementation of the resettlement plan, and sets out the contents and the results required for each phase.

This Directive stipulates that a resettlement process is developed and managed through 3 phases:

- Physical and Socioeconomic Survey (PSES);
- Resettlement Action Plan (RAP);
- Implementation of the Resettlement Action Plan (IRAP).

The timing of resettlement planning in relation to project construction schedules and ESIA submissions has been clarified in the Technical Directive on the Preparation of Resettlement Plans and the Implementation Process (Ministerial Resolution 156/14). The PSES forms part of the ESIA process and needs to be submitted to MTA together with the EIS for all projects that include any form of resettlement. Once approved, a provisional environmental licence is issued, which may then be used to apply for all subsequent and necessary licences and permits.

**The Urban Land Regulation (Decree 60/2006):** The Decree regulates urban land management and use by means of urban Structure Plans, Structure Plans, general and partial urbanization plans, and detailed plans, replacing rural land legislation in registered and planned urban areas. The various types of urban plans are organized hierarchically and once approved at the local authority/municipality level, ratified by the Minister of State Administration and Public Service, and published in the Government Gazette.

**Labour Law (Law 13/2023):** repeals the previous Law 23/2007 and establishes the principles and legal requirements for employer-employee relationships, covering all types of impacts that could occur under projects for both working conditions and OHS for most categories of workers. It is complemented by several regulatory instruments.

The law prohibits discrimination and mandates respect for workers' fundamental rights, health, and dignified working conditions. It ensures stability in employment and prohibits discrimination based on colour, race, sex, ethnic origin, place of birth, religion, social position, and political affiliation. Employers are not entitled to access private information or communications without worker consent, except under specific legal circumstances.

Employment contracts must be in writing, with fixed-term contracts not exceeding 90 days. Contracts cannot disadvantage workers and must comply with labour law. Specific rules are set out for fixed term and permanent contracts, for probation and for invalidation of contracts if not compliant with the law. Workers are entitled to safe working environments, medical assistance, fair treatment, opportunities for advancement, and non-discrimination against disabled or chronically ill workers. The minimum age for work is set at 18 years, with exceptions for minors over 15 under special circumstances. Foreign workers enjoy the same rights as Mozambican citizens.

Disciplinary actions cannot be taken against workers who refuse instructions that violate their constitutional or statutory rights, which includes health and safety. The employer must promote the adoption of appropriate measures so that workers with disabilities or chronic illnesses enjoy the same rights and comply with the same duties as other workers about access to employment, professional training and promotion, as well as working conditions suitable for carrying out socially useful activities. The employer must also create conditions that help upskill Mozambique workers and include qualified Mozambique workers in more complex technical jobs and in managerial and administrative roles. Specific limits are placed on the use of foreign workers.

Discrimination and harassment, including gender-based sexual harassment, is defined as acts disturbing or embarrassing a person, affecting their dignity, or creating an intimidating, hostile, degrading, humiliating or destabilizing environment for them. The Law regards harassment carried out by the employer, superior or agent as a very serious offense entitling the worker to compensation of 20 times the minimum wage in the sector of activity, without prejudice to legal proceedings.

The law emphasizes the importance of compliance, particularly in civil works projects involving health and safety risks. Regarding accidents, the law sets out specific requirements for the procedures to be followed and the calculation of compensation of the families of any worker fatally injured in a work-related incident, or compensation to the worker if permanently disabled in any degree. A memorandum outlining legal requirements, prepared for EDM, is included in Annexure 2 for guidance on accident procedures.

**Regulation of Work in Contractual Regime Between the Civil Construction Contractor and Their Workers (Decree 69/2016):** This decree aims to govern labor relations in the Contractual Regime between the civil construction contractor and their workers. This regulation applies only to subordinate labor relations established between the civil construction contractor and their workers. It does not cover the relations established between the contractor and the project owner.

**Regulation Establishing the Legal Regime of Work Accidents and Occupational Diseases (Decree 62/2013):** This decree characterizes work accidents and occupational diseases, the responsibilities of employers and workers regarding health and safety at work, including the competent institutions in matters of work accidents and occupational diseases. The employer is obliged to ensure occupational health and safety conditions for workers to prevent work accidents. They must also conduct training for workers on accident and occupational disease prevention standards during the construction and operation phases of the project.

**Cultural Heritage Law (Law 10/1988):** The Law seeks to protect material and non-material assets of the Mozambican cultural heritage. Material cultural assets include monuments, groups of buildings with historic, artistic or scientific importance, places or locations (with archaeological, historic, aesthetic, ethnologic or anthropologic interest) and natural elements (physical and biological formations with particular interest from an

aesthetic or scientific point of view). If archaeological objects are found during subprojects implementation, this law shall apply and the subcontractor shall communicate the finding to the appropriate cultural heritage agency immediately. Chance Finding Procedure is included in Annexure 7 for guidance

**Archaeological Heritage Protection Regulation (Decree 27/1994).** The regulation establishes the requirements for the protection of resources that have archaeological and historical value. Article 21 of the Regulation prohibit the execution of construction and demolition or any other works that may result in physical changes to the protection zones of archaeological property of high scientific value or that are important to preserve for the future generations. This Regulation establishes, *inter alia* that the finding of artefacts shall be reported to the local authorities (District Administration or Municipal Council) within a period of 48 hours.

**Table 3-1. Legal and institutional framework in Mozambique with minor relevance for the ASCENT project**

Legal area of interest	Policy/law
<i>Environmental Policy</i>	National Environmental Policy (Resolution No. 5/95)
<i>Labour</i>	Employment and Labor Law (2021)
	Labour Inspection (Decree No. 45/2009)
	Labour Relations (Law No. 23/2007)
	Law on the Protection of Persons, Workers, and Job Applicants Living with HIV and AIDS Law No. 19/2014
	ILO Convention No. 17 on Workmen's Compensation (Accidents) Convention, 1925
	ILO Convention No. 18 on Workmen's Compensation (Occupational Diseases), 1925
	ILO Convention No. 182 on the Worst Forms of Child Labor, 1999
	ILO Convention No. 138 on Minimum Age, 1973
	ILO Convention No. 111 on Discrimination (Employment and Occupation), 1958
	ILO Convention No. 105 on the Abolition of Forced Labor, 1957
	ILO Convention No. 100 on Equal Remuneration, 1951
	ILO Convention No. 98 on the Right to Organize and Collective Bargaining, 1949
	ILO Convention No. 87 on Freedom of Association and Protection of the Right to Organize, 1948
	ILO Convention No. 29 on Forced or Compulsory Labor, 1930 and the ILO Protocol of 2014 to the Forced Labour Convention of 1930, ratified on 14 June, 2018
	Convention on the Rights of Persons with Disabilities (CRPD)
	The National Action Plan in the Area of Disabilities (2012-19)
<i>Gender</i>	The National Plan to Prevent and Combat Gender Based Violence (2018-2021).
	United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), 1979. (Resolution No. 4/93 of June 2, 1993)
	The National Plan to Prevent and Combat Gender Based Violence (2018-2021).
	Law No. 29/2009 on Domestic Violence 2009
	The Law on Early and Forced Marriage (Law No. 19/2019).
	Family Law 10/2004 of 25 August 2004
	Adoption of the Beijing Declaration and Platform for Action
	Penal Code. Law No. 35/2014, of December 31.

Legal area of interest	Policy/law
	Gender Policy and Implementation Strategy. Approved by the Council of Ministers in 2006.
	National Plan for the Advancement of Women 2010-2014.
	National Strategy for the Prevention and Elimination of Early Marriages in Mozambique (2015-2019). Approved in December 2015.
	The National Plan to Prevent and Combat Gender Based Violence (2018-2021).
<i>Children</i>	The Law for the Promotion and Protection of the Rights of the Child (Law No.7/2008
<i>Human Trafficking</i>	The Law to Prevent Trafficking and Combat in Persons (Law No. 6/2008).
<i>Public Participation</i>	Methodologies and procedures for Public Participation (Ministerial Diploma No. 130/2006
	Regulation on Community Consultations (Ministerial Diploma No. 158/2011)
<i>Water Quality</i>	Water Policy (Resolution No. 46/2007)
	Water User and Use (Law No. 16/91)
<i>Pollution and Resource Efficiency</i>	Pollution Act (No. 20/97)
<i>Waste</i>	Waste Management Regulation (Decree No. 13/2006)
<i>Land</i>	Land Policy (Resolution No. 10/95)
	Land Use Rights (Law No. 19/1997)
	Protection Zones (Decree No. 66/98)
	Territorial Planning (Decree No. 23/2008)
	Territorial Planning (Decree No. 23/2008)
	Guidelines for the Expropriation Process Resulting from Spatial Planning (Ministerial Diploma No. 181/2010)
<i>Biodiversity and Conservation</i>	Protection of Biodiversity (Law No. 20/97)
	Forest and Wildlife Protection (Law No. 10/99)
	Conservation Areas (Law No. 16/2014)
<i>Climate Change</i>	Environment and Climate Change Policy - Reports (2011)
	National Strategy for Adaptation and Mitigation to Climate Change (2012)
<i>Health and Safety</i>	Law No. 19/2014 (Law for the Protection of Persons, Workers and Candidates for Employment Living with HIV and AIDS), of August 27 (repealing Law No. 5/2002 of February 5)
	Legislative Diploma No.48/73 of 5 July: General Regulation on Hygiene and Safety at Work
	Decree No. 45/2009: Regulation on General Labor Inspection
	Decree 120/71: OHS regulations for civil works
	Decree No.62/2013 of December 4 on Establishing the Legal Regime of Occupational Accidents and Diseases
<i>Electricity</i>	Electric Energy Law, Law No. 21/97, of 1 October
	Decree No. 8/2000, of 20 April – establishing procedures for the granting of concessions for the production, transmission, distribution and sale of electric energy
	Decree No. 42/2005, of 29 November – establishing rules pertaining to the national electric energy grid
	Decree No. 57/2011, of 11 November – establishing safety standards and guidelines pertaining to the design of power lines

Legal area of interest	Policy/law
	Decree 109/2014 on the Regulation of the Use of Roads and their Protection Zones
<i>Cultural Heritage</i>	Resolution on the Cultural Policy of 1997 (Resolution No. 12/97).
<i>Penal Code</i>	The revised Penal Code (Law No. 24/2019)

## 3.2 National environmental and social assessment and permitting

### 3.2.1 Environmental and social assessment process in Mozambique

The ESIA process for development projects in Mozambique is defined by the Environmental Impact Assessment Regulation (Decree 54/2015). The Ministry for Land and Environment (*Ministério da Terra e Ambiente or MTA*) is responsible for administration of the ESIA process through its National Directorate for the Environment (*Direcção Nacional do Ambiente or DINAB*).

### 3.2.2 Environmental and social assessment screening

This first phase of the EIA process involves the applicant's submission of a pre-assessment form to the MTA. The registration and categorization of projects is done jointly by DINAB at central level and by the relevant Provincial Environmental Service, *Serviço Provincial do Ambiente (SPA)*, which is a sub-directorate of DINAB<sup>4</sup>, the National Directorate of Environment in MTA. The SPA categorizes projects based on an initial assessment of the level of environmental and social risk. Projects fall into one of four categories:

- Category A+ which requires a full ESIA with review by independent expert (s), and ESMP;
- Category A which requires a full ESIA and ESMP;
- Category B which requires a Simplified Environmental Study (SES) and ESMP; and
- Category C which requires a manual of Good Environmental Management Practice Procedures.

Figure 3-1 to Figure 3-3<sup>5</sup> illustrate the assessment process and public participation requirements for Category A, B and C projects. Category A+ projects, which would be considered to be high risk, will not be considered under ASCENT financing.

<sup>4</sup> *Direcção Nacional do Ambiente*

<sup>5</sup> *Courtesy of Impacto Ltd.*

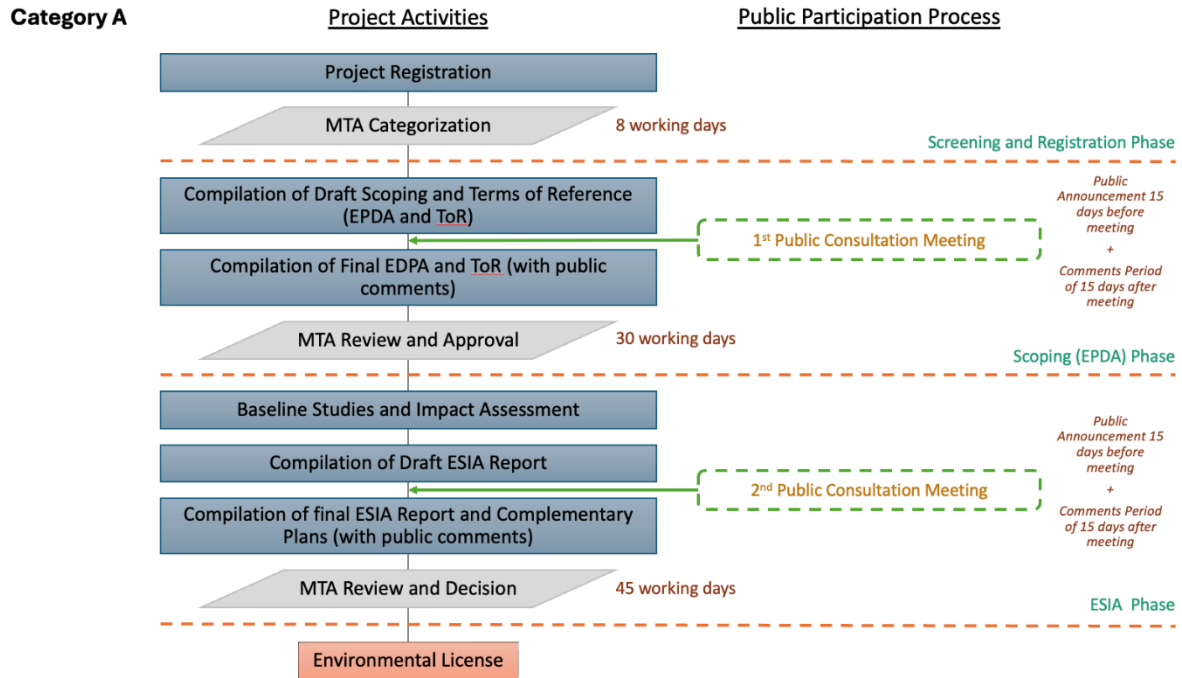


Figure 3-1. The environmental process in Mozambique for Category A projects

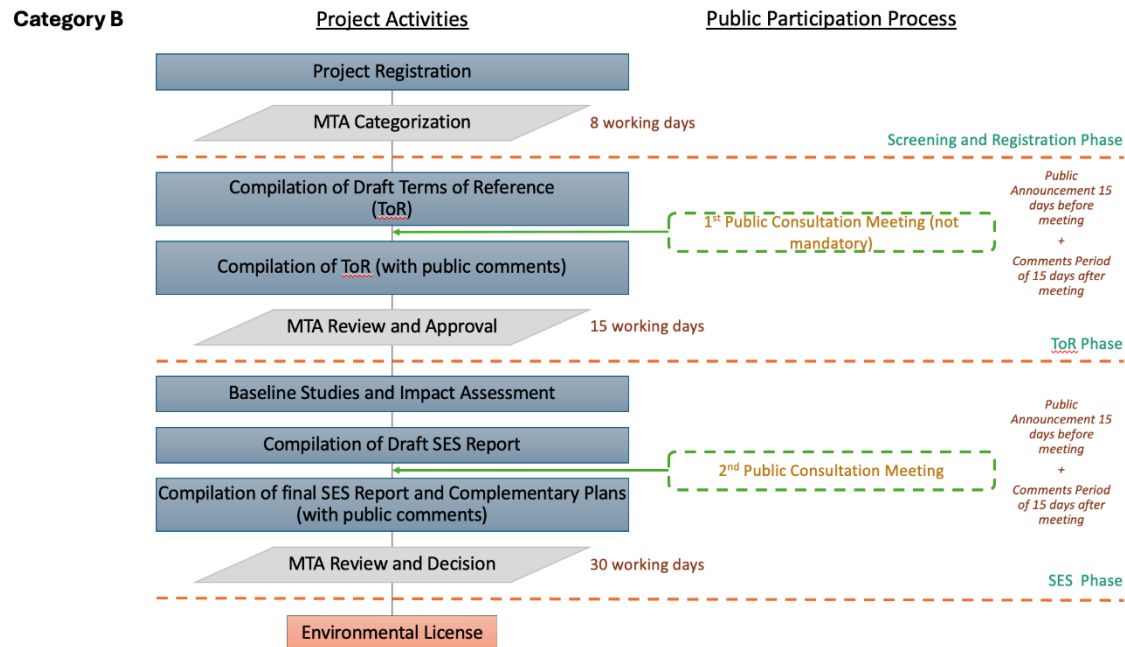
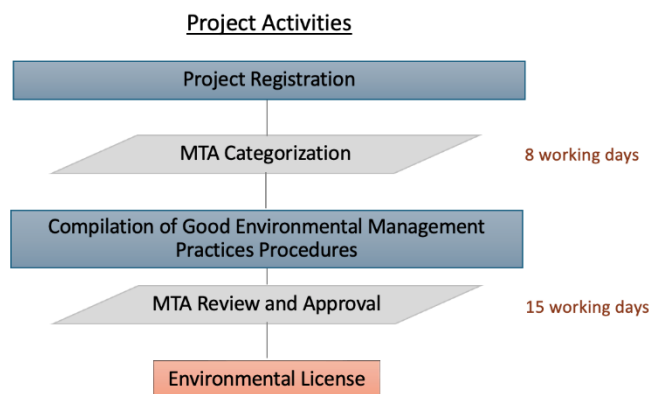


Figure 3-2. The environmental process in Mozambique for Category B projects

**Category C**

**Figure 3-3. The environmental process in Mozambique for Category C projects**

The SPA's categorization of the project is based on a high-level assessment of the significance of the environmental and social impacts that could be caused by the project, informed by the pre-assessment application. The SPA may also reject the project, in which case it is returned to the proponent for re-design. Where project interventions are in more than one province, Article 7(3) of the EIA regulation (Decree 54/2015) suggests that authorization would revert to DINAB at national level, but previous interpretation for ProEnergia has been in favour of retaining Provincial authority, since there is no infrastructure proposed for the project that actually crosses provincial boundaries. While the text of Article 7(3) does not appear to justify this interpretation, it is likely that the same approach will be followed again for ASCENT.

*For ProEnergia, EDM applied for environmental authorizations based on a broad categorization of the activities that were planned in the different provinces, excluding specific details of the location of infrastructure. The civil works components were classified by the Provincial Environment Service (SPA<sup>6</sup>) as Category C, except in Niassa Province, where the regulator classified the project as Category B, due to it exceeding an upper threshold of capital cost. The applications included the submission of a manual of 'Good Environmental Practice Procedures', prepared by a consultant (Rassul, 2020)<sup>7</sup>. The Niassa regulator did not insist upon the preparation of a Simplified Environmental Study and accepted the Good Environmental Practice Procedure as the basis for authorization. No ESMP<sup>8</sup> was required by any of the Provincial Service authorities, nor were formal conditions of authorization included in the licences.*

### 3.2.3 Environmental and social assessment scoping

All activities that fall under Category A+, A or B require scoping, but to different degrees. For activities in Category A+ and A, an Environmental Pre-Viability Study (EPDA) must be prepared. The proponent is responsible for writing the EPDA. The EPDA is intended to focus the ESIA by identifying key environmental and social issues associated with the proposed development. The EPDA Report also defines gaps in available data and develops

<sup>6</sup> *Serviço Provincial do Ambiente. This service is the provincial level equivalent of DINAB*

<sup>7</sup> *The manual is included as Annexure 4*

<sup>8</sup> *The preparation of the project ESMP was due to the intervention of the World Bank.*



the Terms of Reference (ToRs) for the specialist studies to follow in the Impact Assessment phase of the ESIA. The EPDA report is reviewed by a multi-sectoral technical review committee convened by the regulator which provides comments and asks the proponent for additional information where necessary. In some cases, scoping may be an end to the ESIA process if the risks and impacts established at the end of the process are insignificant and the proposed mitigation measures are commensurate to the likely E&S risks and impacts.

For Category B projects, scoping is also undertaken but an EPDA report is not prepared. Based on the scoping, the proponent prepares the TOR for a Simplified Environmental Study (SES) for discussion with stakeholders and submission to the regulator (Figure 3-2).

For Category C projects the proponent is not required to make any form of scoping submission to the SPA (Figure 3-3).

#### 3.2.4 Environmental and social impact assessment

The proponent is responsible for the assessment process and the preparation of the required reports. The ESIA process is guided by the approved ToR that is established during the scoping stage. The methods of the assessment undertaken in the ESIA process are specified in the ToR. The ESIA (Category A+ and A) and Simplified Environmental Report (Category B) are submitted to MTA for review and authorization.

The ESIA Report identifies and evaluates the likely extent and significance of the potential impacts on identified environmental and social receptors and resources according to defined assessment criteria. The ESIA report also details recommended measures to avoid, minimize, reduce or compensate for any potential adverse environmental effects and reports the significance of the residual impacts that remain following mitigation. The impact assessment informs the development of an Environmental and Social Management Plan (ESMP). The ESMP presents specific measures and commitments by the Project to address identified impacts.

*EDM intends to avoid MV and LV routes that are within areas of known conservation value or that result in resettlement. If it is necessary to consider a route within such areas, EDM would be required to submit to the SPA a more detailed assessment, proportionate the level of risk - either a full ESIA or a Simplified Environmental Study - as a basis for authorization, and comply with the other requirements for Category A or Category B projects specified in Decree 54/2015.*

#### 3.2.5 Public participation in the EA

Public participation is mandatory for Category A+, A and B projects. Public participation is required from the start of the conceptual phase of the project, until the ESIA (or SES) approval has been granted.

Public participation is the responsibility of the proponent. It must include at least two consultations on a local level; the first consultation must entail a presentation of the proposed project and involves collection of comments and suggestions, and the second consultation must involve presentation of the report to the public, prior to submission to the regulator. Public comment is typically consolidated into a Public Comments and Response Report which is submitted to the regulator with the ESIA or SES. If any public comment warrants changes to the Draft ESIA/SES before it is submitted to the regulator, these are made prior to submission.

The announcement for the public consultation must be done at least 15 days in advance of the event.

All parties, and specifically local communities who are directly or indirectly affected by the project must be informed so that they can participate in the consultation if they wish to. All the technical reports in relation to the scoping of the project must be available to the public before the public consultation, to guarantee their participation in the process.

The final reports including the EIA, ESMP, any other specific plans such as a Biodiversity Management Plan or Resettlement Action Plan are public documents. The regulator is responsible for disseminating these documents on a national and provincial level. Regarding resettlement of local communities, specific consultation requirements apply (see the Process of Resettlement Resulting from Economic Activities, Decree No. 31/2012, of 8 August). The regulator manages any necessary public hearings.

All comments provided during public consultation and public hearings should be registered in such a way that the integrity of its contents is preserved (written, recorded, other). The public participation must result in a final report, which must be available to previous participants and the general public.

For Category B projects, the public participation process is described in the flow diagram in Figure 3-2 Public participation as a part of submissions for environmental licensing is not mandatory in Category C projects, but is a World Bank requirement, as part of an overall Stakeholder Engagement Plan (SEP) which spans the life of the project.

*Timeline for public comments:* Timelines for public comments on Category A and B projects are provided in Figures 3-1 and Figure 3-2. For Categories B projects, the initial phase of public consultation concerning the ToR for the Simplified Environmental Study is not mandatory.

*Access to information:* During public consultation, all E&S reports must be made available for public review. Typically, a simple, easy to understand, summary is prepared for distribution to participants. Key stakeholders who have an interest in the details are provided with access to the full document set. The specialist reports supporting the ESIA report must also be available for public comment. The reports must be made available in public places and a list of sites where it can be obtained distributed through media organizations with the largest coverage and circulation in the area where the activity is to take place. The consultant or the proponent is to make the documents available for download from their websites.

### 3.2.6 ESIA review process

The multi-sectoral technical review committee that reviewed the EPDA also reviews the ESIA report in Category A and A+ projects. The committee submits a report with its comments to the Environmental Management Authority (MTA), which also considers all the comments made by the public during the review process. For Category A+ projects, the review report of the independent expert is included (this mechanism is not yet operational).

During the review process, the proponent may have to submit additional information to satisfy questions raised by the committee. The proponent has ten working days to comply with these requests. The findings of the report of the committee form the basis on which MTA grants an Environmental License and the licence conditions that are set.

The review of the Simplified Environmental Study (SES) involves the establishment of a technical committee made up of various (local) representatives and technical experts. Through the review committee, relevant

expertise from within government can be involved in the review. The committee functions in a similar way to that established for a full ESIA. Recommendations are submitted to the competent authority (MTA) which are used to support the decision.

### 3.2.7 Environmental licence

An Environmental Licence must be based upon an approved ESIA for the proposed activity. Environmental Licences are valid for a period of five years. They are then renewable for an equal period. The licence is a prerequisite for issuing any other licence or permit that may be legally required. The decision to approve a Category A+ and Category A project and issue a licence is taken by the National regulator. The provincial environmental services may issue the licence for Category B and C projects.

The licence is staged, being issued in two parts: authorization to construct the project followed by authorization to operate the project.

## 3.3 World Bank Group ESF

### 3.3.1 Applicable standards

The project will follow the World Bank Environmental and Social Standards (ESSs), as well as the World Bank Group Environmental, Health and Safety Guidelines. The applicability of the environmental and social standards to ASCENT project activities is summarized in Table 3-2.

**Table 3-2. Relevance of World Bank environmental and social standards to the project**

ESS	Relevance to the project
<b>ESS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>	<p>RELEVANT</p> <p>The operational phase of the interventions proposed under ASCENT are unlikely to result in significant adverse environmental or social impacts. However, the construction phase under Component 1 and Component 2 may lead to negative environmental and social impacts, some of them potentially significant, which must be mitigated. For most of the civil construction works, an ESMP followed by C-ESMPs prepared by the construction contractors will provide the necessary tools to manage E&amp;S risks, unless route screening during the detailed design shows a higher level of risk in specific areas, in which case alternatives will need to be considered or a higher level of impact assessment prepared as a basis for risk management. ASCENT will be required to follow the proportionate approach to risk established by the application of ESS1, which may in the cases where specific risks to areas of conservation significance are identified be more stringent than the legal requirements that are established under Decree 54/2015.</p>
<b>ESS 2: Labor and Working Conditions</b>	<p>RELEVANT</p> <p>The Project will use different types of labour for construction, including civil servants, direct workers, contract workers and primary supply workers, with risks related to health and safety of workers, labour disputes, unsatisfactory working conditions, discrimination against vulnerable groups; child labour and forced labour. These are among the most significant of all project-related E&amp;S risks. Their management must comply with the principles, rules and guidelines set out in ESS 2, the LMP for the project, existing national labour legislation, the World Bank Group Environmental Health and Safety Guidelines, EDM's OHS standards and a project-specific OHS Management Plan prepared by contractors.</p> <p>The project aligns with the objectives of ESS 2 by creating numerous job opportunities during both the construction and operational phases, contributing to local employment and skill development through training and capacity-building activities. It is designed to promote social inclusion by ensuring that vulnerable and marginalized groups have access to these employment opportunities and benefits. By stimulating local economies and creating jobs, the project will support ESS 2 by increasing household incomes, improving living standards, and contributing to poverty reduction in local communities. Additionally, providing reliable electrical energy to households and businesses supports economic growth and ensures equal access to development opportunities, which is a national priority.</p>
<b>ESS 3: Resource Efficiency and Pollution Prevention and Management</b>	<p>RELEVANT</p> <p>Civil construction works for Components 1a and 1b and Component 2 may result in community nuisance due to noise, vibration and dust. The construction works will also generate general, sanitary and hazardous wastes, with a risk of soil, surface water and groundwater pollution if not managed effectively. The construction works must comply with ESS 3 requirements for resource efficiency, following the principles of the waste hierarchy (avoid, recycle/reuse, dispose) and GIIP set out in the World Bank EHS Guidelines.</p> <p>Component 2 of the project is aligned with the climate objectives of ESS 3, seeking to provide sustainable sources of energy through solar power and more efficient cooking technology, while minimizing the loss of woodland and forest resources for firewood and charcoal.</p>
<b>ESS 4: Community Health and Safety</b>	<p>RELEVANT</p> <p>The construction of civil works may lead to increased risks of GBV/SEA/SH, increased risks of child abuse, forced labour and Sexually Transmitted Infections (STIs) due to potential labour influx, increased risks and hazards affecting community health and safety (particularly heavy vehicles and equipment working close to and amongst communities). Failure to implement effective buffer zones in previous similar projects has led to child fatalities. The net positive effect of the implementation of the project will be improved welfare and opportunity to underserved communities through the availability of electrical energy in homes, schools and health centres. Having electricity in a community can decrease violence against</p>

ESS	Relevance to the project
	women by improving public lighting, which enhances women's sense of safety and security, and by providing access to information and communication tools that can help prevent and report gender-based violence <sup>9</sup> .
<b>ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b>	<p>RELEVANT</p> <p>Compulsory DUATs (or RoWs) are automatically associated with Government linear infrastructure. For MV and LV distributions lines, the typical RoWs maintained by EDM are 3,5m wide. Typical vegetation height allowed in the RoW is 1 m high for LV lines and 3,5m for MV lines. Affected people whose crops or assets are affected by the restrictions in these RoWs must be compensated in accordance with Mozambique law. There may also be additional compensation required if damages result from contractors creating access outside of the RoWs. Depending on the circumstances, a site-specific Resettlement Action Plan (RAP) or Livelihood Restoration Plan (LRP) will be required. Guidelines for preparation and implementation of these instruments are presented in Annexure 6 of this ESMF</p>
<b>ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>	<p>RELEVANT</p> <p>The project plans to avoid areas of conservation value to the greatest extent possible, being situated mostly in peri-urban areas where habitats are modified. However, in the 10,028 km of MV lines proposed, there may be greenfield corridors which are intended to strengthen electrical energy access into previously underserved areas. Natural forests, woodlands, wetlands, rivers, coastal dunes and other sensitive environments could be affected. In valleys that are flight corridors for birds, the presence of power lines may result in collisions and fatalities. Risks to biodiversity will need to be confirmed once the mapping of the lines has been completed in the detailed designs, which will be the responsibility of the construction contractors.</p> <p>Component 2 of the project will support a reduction in biodiversity loss by reducing the clearing of natural habitat for firewood and charcoal.</p>
<b>ESS 7: Indigenous Peoples/Traditional Local Communities Historically Disadvantaged in Sub-Saharan Africa</b>	<p>NOT RELEVANT</p> <p>This standard is not relevant to the Project. In the national context and the specific Project implementation areas there are no distinct social and cultural groups identified according to ESS7.</p>
<b>ESS 8: Cultural Heritage</b>	<p>RELEVANT</p> <p>While it is unlikely that the construction activities envisaged under the project will adversely affect the built heritage, intangible heritage or natural heritage, the absence of impact will need to be confirmed during the detailed design and during construction works. A Chance Finds Procedure are presented as Annexure 7 of this ESMF, which complies with Mozambique's legal requirements and World Bank ESS 8.</p>
<b>ESS 9: Financial Intermediaries</b>	<p>NOT RELEVANT</p> <p>The project does not involve financial intermediaries.</p>

<sup>9</sup> Gunnar Kohlin;Subhrendu K. Pattanayak;Erin O'Donnell Sills;Christopher Walter Wilfong.2011. Energy, gender and development : what are the linkages? Where is the evidence?. Washington, DC: World Bank. <https://documentsinternal.worldbank.org/search/14971803>

ESS	Relevance to the project
<b>ESS 10: Stakeholder Engagement and Information Disclosure</b>	<p><b>RELEVANT</b></p> <p>A participatory, inclusive, and culturally appropriate approach must be ensured during the project life cycle. A Draft SEP has been prepared to identify key stakeholders in the project (affected parties and other parties), including vulnerable groups, and sets out guidelines and procedures to ensure that stakeholders are informed about the status of the project and can contribute to and participate in its implementation.</p> <p>During the project's life cycle, questions and complaints about the environmental and social performance of the project must be captured, together with other aspects of customer satisfaction. To receive and respond effectively to questions and complaints, a Grievance Redress Mechanism (GRM) has been developed as part of the SEP. The GRM includes specific requirements for the receipt, treatment and ethical and confidential resolution of GBV/SEA/SH-related complaints, including several accessible entry points, referral to survivor support services, and confidential survivor-centred complaint management procedures. The GRM shall be established and be operational before the start of any project activities.</p>

### 3.4. Key gaps and inconsistencies in the national legal framework

**ESS 1:** Mozambique's EIA Regulation (Decree 54/2015) provides a sufficient basis for classifying project risk and determining the subsequent level of Environmental Assessment. However, the provincial environmental services lack experienced personnel and EA authorizations may not adequately cover the expected risks associated with the project. The ProEnergia licences included no conditions of approval other than compliance with the manual *Good Environmental Management Practice Procedures*. For renewal of the licence after 5 years, the MTA Provincial Environmental Services required (a) an Environmental Performance Report (b) a recent external environmental audit (c) a report on any basic modifications to the activity. Since no details of the design of the activity were provided by the proponent as a basis for licensing, 'basic modifications' were not verifiable against an initial baseline. For ASCENT, with an estimated 8,028 km of MV lines, and 10,035 km of LV distribution lines, it is likely that some sections of route, even if outside of critical areas of conservation or cultural significance, could result in a significant biodiversity, social or cultural impact. If based on ProEnergia, the licence conditions are unlikely to make provision for screening of the design to verify that the route alignment impacts are insignificant.

**ESS 2:** Mozambique's labor legislation is consistent with the World Bank's ESS2 in most key aspects, with some exceptions, namely, requirements for employers to develop an internal grievance redress mechanism for workers, definitions for the category of community workers, and a lack of comprehensive provisions for occupational health and safety (OHS), leading to ineffective monitoring and accountability. The revised Labour Law strengthens and clarifies the required approach to compensation for workers who suffer permanent injury caused by work-related incidents, and to their families in the case of a fatality. The Law also specifies that all workers are entitled to a safe and healthy work environment. However, the legislation does not specify requirements for assessing labor conditions and health and safety impacts, and there are no standards in Mozambique to guide safe work practices in various contexts and preventative measures to minimize the risk of occupational injuries and illnesses are largely the responsibility of the organization, which must rely on its own standards and those developed by international authorities. In the present case, EDM's Project Health and Safety Requirements (Rev. 01, July 18, 2023) will apply as well as the World Bank EHS Guidelines of 2007. Labour Management Procedures have been prepared as annexure 4 to this ESMF and include the definitions of all categories of workers under this project, as well as provisions for the establishment and implementation of a workers-GRM (W-GRM). Contractors and sub-contractors shall also include LMP, as well as prepare and implement an OHS Management Plan in their C-ESMPs.

**ESS 5:** Mozambique's legal framework and protections for land rights holders are marked by ambiguity, as the Constitution lacks clear criteria for the expropriation of land and natural resource rights. Mozambique's Land Law was enacted in 1997 and a territorial Planning Law was approved ten years later in 2007. Legislation was subsequently passed to provide the process and procedures for land acquisition (1998, 2006/7/11), expropriation (2010), environmental and social impacts assessment (2014, 2015) and resettlement (2012 and 2014). The Land Law and Regulation omit provisions on involuntary resettlement, deferring this matter to future legislation and creating a legislative void. The Regulation on Resettlement Resulting from Economic Activities is too general and fails to adequately address different case types or align with international best practices, particularly in terms of avoiding or minimizing resettlement. Resettlement processes are not sufficiently linked to Environmental Impact Assessments (EIAs) and are seldom referenced in Inspections and Auditing Regulations.

Additionally, there is a lack of clear legal guidance on monitoring responsibilities for environmental and social impacts post-resettlement, resulting in accountability issues.

With construction of an estimated 10,028 km of MV lines, and 10,035 km of LV distribution lines, economic and possibly some physical resettlement could occur. The Directive on the Expropriation Process for Territorial Planning purposes (Ministerial Diploma No. 181/2010) will therefore be relevant to ASCENT, but because design information about the location of the lines will only be available after the contractors are appointed, a PSES cannot be completed for submission with EA documentation. The project will need to develop site-specific instruments (RAP and LRP), once the design is completed but prior to the start of construction and to have in place the necessary GRM/communication procedures to ensure that any accidental construction damages not catered for in the RAP are identified and promptly processed for compensation.

**ESS 10:** Mozambique's legal framework does not fully comply with international standards for involving affected and interested parties throughout all project phases, often limiting their involvement to specific instances such as environmental and land-use licensing. The country lacks specific mechanisms to ensure meaningful engagement of stakeholders, including affected persons, civil society, and vulnerable groups, throughout the project cycle, sometimes excluding them from decision-making processes. Although the law intends for stakeholder engagement to be meaningful and appropriate, a Strategic Environmental and Social Assessment (SESA) in the Gas and Mining sectors indicates a misalignment between expectations and practice, resulting in non-meaningful engagement. Additionally, Mozambican law does not require a system for registering or resolving grievances, nor does it provide a systemic approach for responding to and managing issues and conflicts as they arise. As such, a draft SEP, including a GRM sensitive to SEA/SH, has been prepared.



## 4 PROJECT TARGETED AREAS BASELINE DATA

ASCENT MZ will be implemented nationwide, targeting urban, peri-urban and rural areas across the 10 provinces. At present, the specific areas targeted by the project are not identified yet, but there will be a particular focus on the northern region, with over half of the new connections (including the construction of new MV and LV networks, the installation of transformers, and service drops to customers) in the northern provinces of Niassa, Cabo Delgado, Nampula, and Zambezia, mainly in the larger population centres where access to electricity remains low. The off-grid clean cooking solutions in Component 2 will service the more remote rural populations in the four provinces (refer to Section 2) where grid electrification cannot be justified on financial grounds.

Since the location of the project activities are unknown at this stage, the baseline description presented in this section aims to provide an overview of the country's key environmental and social features relevant for the identification of the potential risks and impacts of the project activities.

### 4.1 Physical environment

#### 4.1.1 Location of project area

Mozambique is located between 11°27'S and 26°52'S and 30°51'E and 40°51'E. The total area of the country is 801,590 km<sup>2</sup>, with a coastline of 2,470 km. The country borders South Africa and Eswatini in the south, Zimbabwe, Malawi and Zambia in the west, Tanzania in the north and the Indian Ocean in the east (Figure 4-1). More than 60% of the population lives in rural areas, subsisting off the land.

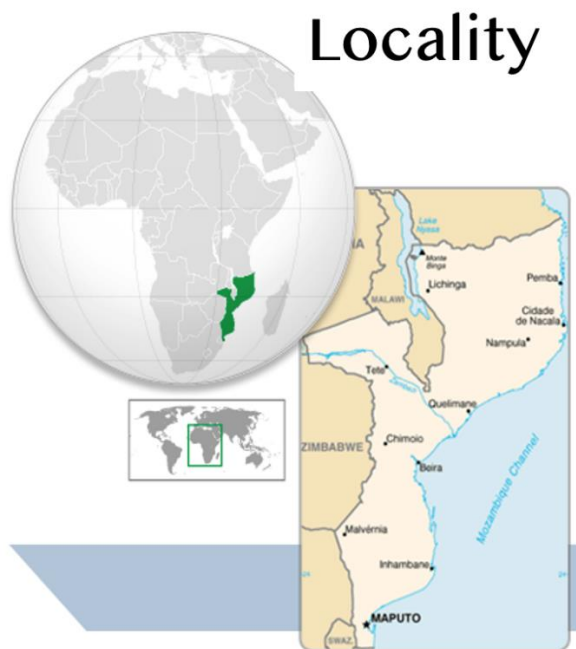


Figure 4-1. Location of Mozambique



Figure 4-2. The ten provinces of Mozambique

#### 4.1.2 Terrain

The terrain in Mozambique is diverse, consisting of mountain ranges, valleys, lowlands, and coastal plains with uplands in its centre and high plateaus in the northwest. There are also mountains in the western sector - Mt. Binga, which is part of the Chimoio highlands, is the highest peak in the Chimanimani range, reaching 2,437 masl and associated with its own microclimate. Mount Namúli is the second highest peak at 2,419 masl, located in Zambezia Province. Extensive coastal plains are associated with the major river deltas. In Niassa Province, inselbergs are common and characteristic topographic features creating landscapes of high aesthetic value.

#### 4.1.3 Climate

Mozambique has a tropical climate, with seasonal variations in temperature; a cooler dry season from April to September (the coldest months being from June to August) and a hot and humid season from October to March (the hottest months being from December to February). Climatic conditions vary depending on altitude and distance from the coast.

Maximum temperatures are regularly over 40°C and have exceeded 45°C in some parts of the country in the past (e.g.: Tete 46°C, November 26, 1976). Average annual precipitation varies from 500 to 900 mm, depending on the region, with an average of 590 mm. Rainfall is heavier along the coast and decreases in the north and south. Specific areas of high orographic rainfall occur (refer to Figure 4-3), such as in the upper catchment of the Licungo River on the Malawian border (up to 2,200 mm/a) and the upper catchment of the Pungwe River on the Zimbabwe border (1,800 mm/a) .

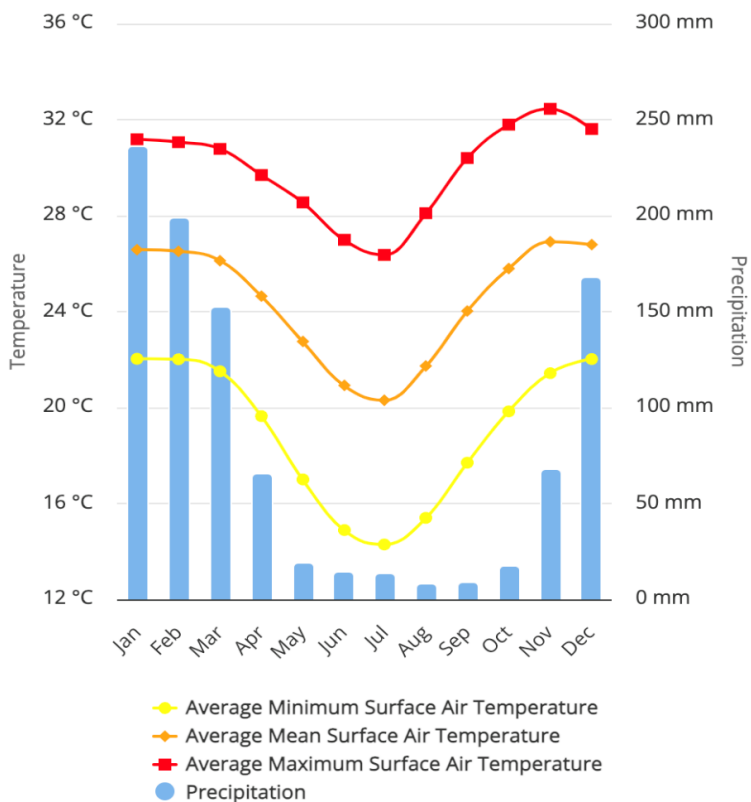
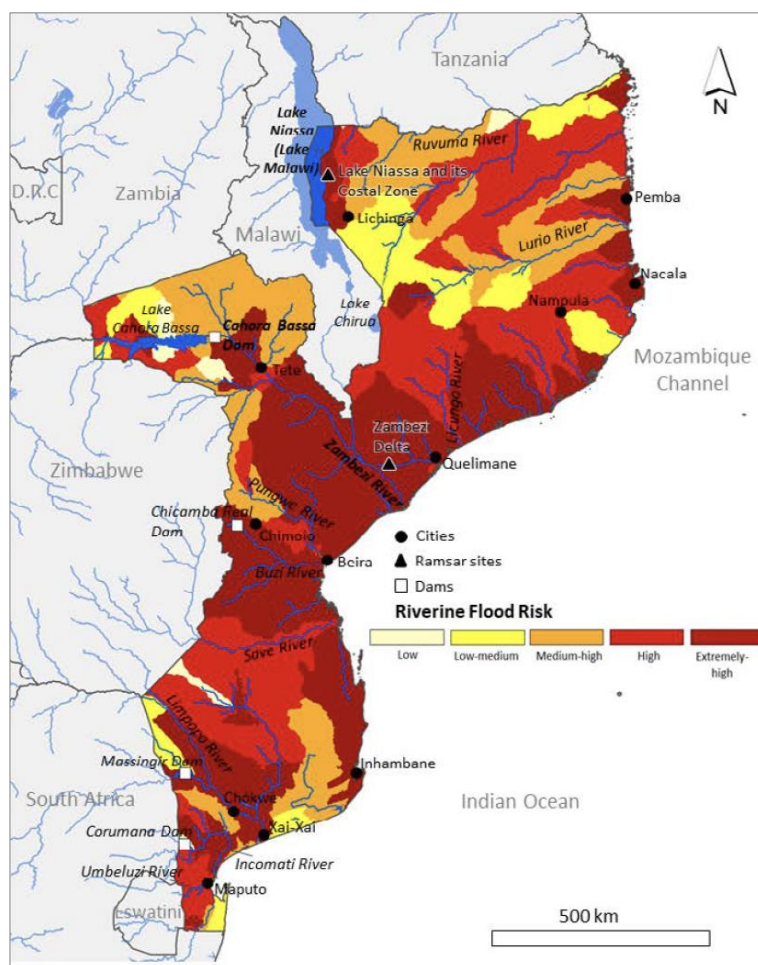


Figure 4-3. Average rainfall and temperatures in Mozambique

The country experiences high levels of climate variability and extreme weather events (droughts, floods, and tropical cyclones). Droughts are the most frequent risk, occurring every three to four years, and creating significant hardship since most of the country's population, especially the poor, reside in rural areas and rely on rain-fed agriculture. Based on 2019 data, the Global Climate Risk Index (2021) ranks Mozambique as the country most affected by climate change<sup>11</sup>. The INGC predicts that climate change will cause the weather to become more extreme with hotter and longer dry periods and more unpredictable rainfall, increasing the risks of crop failure and droughts, floods and uncontrolled fires.

Mozambique lies at the eastern end of numerous transnational river basins and flooding in its deltas is a perennial threat to both farmers and infrastructure, especially when coupled with cyclonic storm surges. Tropical cyclones and flooding are most common in the central provinces, but also occur further north in Nampula, Zambezia and Cabo Delgado (refer to Figure 4-4). This occurred in the primary project area as recently as 2019, when Cyclone Idai killed 602 people, injured more than 1,600, and damaged or destroyed more than 100,000 homes. Cyclone Kenneth in Cabo Delgado killed 38 people and damaged or destroyed more than 40,000 homes. The floods also affected roads, bridges, electricity supply and other infrastructure, which were damaged or destroyed. The most severe consequences typically affected the poorest and most vulnerable populations. Informal urban growth in the floodplains and poor design and maintenance of drainage systems has aggravated the problem of flooding. Climate-resilient infrastructure may be required in the areas of the project.



**Figure 4-4. Riverine flooding risks in Mozambique<sup>10</sup>**

#### 4.1.4 Water resources

Mozambique has 13 major river basins (nine are transboundary) and 22 smaller basins scattered along the coastline. Most of the smaller coastal basins are in the northern region, in addition to major basins such as the

<sup>10</sup> *Mozambique Water Resources Profile Overview, USAID*

<sup>11</sup> World Bank. 2023. Mozambique Country Climate and Development Report

Lurio, Licungo, and Rovuma Basins. The Pungwe, Buzi, Save, and Zambezi basins in central Mozambique are major transboundary basins (Figure 4-5). The Zambezi is the largest, spanning eight countries and with headwaters in Angola. Southern Mozambique features the Limpopo Basin, which spans four countries, as well as the Save, Incomati, Umbeluzi, and Maputo Rivers. The Zambezi River provides around 58 percent of renewable surface water, followed by the Rovuma River (13 percent). Most rivers have high water flow between December and March and low flow for the rest of the year. Mozambique also has more than 1,300 small lakes and six main artificial reservoirs. The two main lakes are Lake Niassa (Lake Malawi), which is shared with Malawi and Tanzania, and Lake Chirua (Lake Chilwa), which is also shared with Malawi.

At a National level, Mozambique has abundant surface water, although 54 percent of its freshwater resources originate in upstream countries. Water stress at the national scale is low with the total volume of freshwater withdrawn by major economic sectors being only 1.75 percent. However, water is not evenly available throughout Mozambique and many water courses are seasonal, which can contribute to regional water stress, especially in the south and during times of drought.

West-central and northern Mozambique are generally underlain by basement complexes with low groundwater productivity, although conditions can vary locally. Volcanic aquifers are present to a limited extent along the southwestern border and in the central region, although these aquifers generally have low productivity. Sedimentary aquifers are much more hydrologically productive and underlie most of the rest of Mozambique, primarily in the southern and east-central regions. The unconsolidated Mozambique Sedimentary Basin south of the Save River is most productive whereas the central Mozambique Sedimentary Basin north of the Save River is less productive. Groundwater can usually be accessed at shallow to moderate depths, although boreholes as deep as 100 m can be found in the north. In general, aquifer yields are more productive closer to the coast.

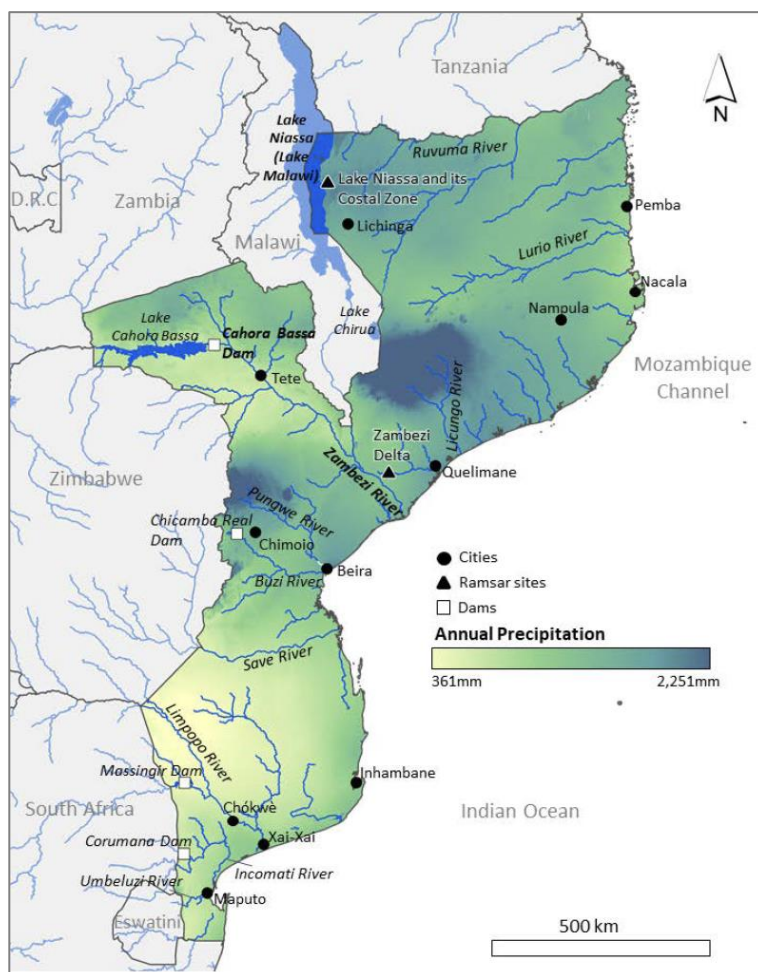


Figure 4-5. Major rivers and rainfall distribution in Mozambique<sup>12</sup>

<sup>12</sup> Mozambique Water Resources Profile Overview, USAID

Water resource risks In Mozambique can be summarized as follows<sup>13</sup>:

- Transboundary frameworks and legal instruments generally do not guarantee minimum flow or water quality on the Umbeluzi, Limpopo, Save, Buzi, and Zambezi Rivers.
- High inter-annual and inter-seasonal rainfall variability in the south, in addition to increasing irrigation and abstractions from upper catchment riparian states, constrain surface water availability.
- Biodiversity and aquatic ecosystems are at risk from reduced wet season flow and sedimentation.
- Surface and groundwater quality are not well understood. Saline groundwater can be found in coastal aquifers, possibly due to salt-water intrusion caused by over-abstraction, and there is evidence that mining is polluting surface waters with toxic heavy metals in the Limpopo and Zambezi Basins.
- Climate change will increase the frequency of drought and floods which are already severe. Catastrophic flooding has been responsible for extensive soil loss, infrastructure damage and loss of human life throughout much of the coastal zone in Mozambique. This will be important for the project to consider during the detailed design. Figure 4-4 shows zones of estimated flood risk in the country.

## 4.2 Biological environment<sup>14</sup>

About 80% of the Mozambican population directly depends on biodiversity and ecosystem services. Their livelihoods are increasingly threatened by overexploitation of biodiversity and habitat loss, the main causes being development projects, shifting agriculture, pollution, the introduction of exotic species and the effects of climate change.

Mozambique has an estimated 162 ecosystems, over 4,000 species of fauna and 6,300 species of native and/or naturalized plants. Among these, approximately 300 plant species are on the IUCN Red List, and 22% are endemic. Terrestrial fauna includes roughly 904 bird species, 176 reptile species, 90 amphibian species (of which 28 are endemic), and 3,075 insect species. Of the 162 ecosystems, 87 are threatened (critically endangered-CR, endangered-EN, or vulnerable-VU) according to the Red List of Ecosystems, and over 450 species are threatened<sup>15</sup> according to the Red List of species.

The coastline, stretching over about 2,770 km, is characterized by a diversity of habitats including sandy beaches, coastal dunes, estuaries, bays, terrestrial forests, wetlands, grasslands, mangroves, seagrass beds, and coral reefs. Forest ecosystems, consisting of native forests and woodlands, cover about 43% of the total land area, of which 67% are semi-deciduous forests, 20% are evergreen forests. Mangrove forests, which are critically important for biodiversity conservation, provision of essential goods and services to local communities, and for reducing the impact of climate change<sup>16</sup>, make up about 1%, while other forest types account for the balance of 12% of forest habitats. Forests harbour a vast diversity of fauna and flora and form unique landscapes. Miombo

<sup>13</sup> Mozambique Water Resources Profile Overview, USAID

<sup>14</sup> Most of this subsection is based on information provided on Biofund's website in a document entitled 'Our Biodiversity', with some editing and reorganization. Where sourced from elsewhere, this is stated.

<sup>15</sup> Threatened species, defined under the IUCN Red Data methodology, include species that are critically endangered, endangered or vulnerable.

<sup>16</sup> IUCN Red List of Mangrove Ecosystems.



forests are the predominant vegetation type in Mozambique, but partly because of their extent have been generally undervalued in the past<sup>17</sup>.

Terrestrial and inland water conservation Areas cover 26% of Mozambique, protecting habitats for many species of fauna and flora with local, national, and global ecological value; and in the broader sense, the natural, cultural, and socioeconomic heritage of the country (Figure 4-6). A further 2,15% of coastal and marine areas are protected<sup>18</sup>. The management of the national network of conservation areas is the responsibility of the National Administration of Conservation Areas (ANAC (<https://www.anac.gov.mz>), an entity within the Ministry of Land and Environment (MTA (<https://www.mta.gov.mz>)). According to the Law on the Protection, Conservation, and Sustainable Use of Biological Diversity (Decree 16/2014 of June 20, amended by Law 5/2017 of May 11), Conservation Areas, including other types of protection zones, are classified into different categories based on the level of protection afforded to them. They include diverse habitats and ecosystems, both terrestrial and marine.

Conservation Areas are managed by both the private and public sectors, including the increasingly common method of co-management (usually public-private). The public sector manages National Parks, Special and National Reserves, and Community Conservation Areas, with or without technical and financial partnership agreements or co-management. Other categories of Conservation Areas, including official hunting areas, wildlife farms, and hunting blocks, are generally areas intended for the development of hunting tourism managed by the private sector, but still within the ANAC management framework. Additionally, there are Forest Reserves managed by DINAF.

There is an international commitment to expand and conserve at least 10% of coastal and marine areas globally by 2030. These and other goals are part of Sustainable Development Goal 14 (SDG 14), which is one of the 17 SDGs of the United Nations' 2030 Agenda, to which Mozambique is a signatory. In 2020, the Government of Mozambique and the Key Biodiversity Areas (KBA) Secretariat designated 30 sites as KBAs, of which 84.5% are under some form of formal protection, and 15% have yet to be granted formal protection status (refer to Figure 4-7). They cover a total area of about 139,977 km<sup>2</sup>. Eighty seven percent (87%) are terrestrial KBAs, covering 134 050 km<sup>2</sup>, and 13% are in the marine environment covering 5,928 km<sup>2</sup>. Terrestrial KBAs occupy 10% of Mozambique's land area and marine KBAs occupy 1% of the country's Exclusive Economic Zone (EEZ)<sup>19</sup>.

The government is integrating KBAs, the Red List of species and ecosystems into its legal framework, the National Territorial Development Plan, as well as the Marine Spatial Plan, as areas to be conserved. The mapping of Mozambique's ecosystems has been completed, including the first mapping of the Red List of terrestrial ecosystems in Mozambique. Guidelines on *"Business and KBAs: Managing Biodiversity Risks"*<sup>20</sup> have been translated into Portuguese. These identify environmental best practices that development projects should follow when implemented in or around KBAs. While this is a welcome development, **it does not imply that local small areas of high biodiversity and conservation significance do not exist outside of the formal conservation/KBA**

<sup>17</sup> <https://www.awf.org/news/why-miombo-woodlands-matter-southern-africa>

<sup>18</sup> IUCN 2024. *The State of Protected and Conserved Areas in Eastern and Southern Africa*.

<sup>19</sup> Note Biofund's estimate of percentage area under conservation in the marine environment differs from that of IUCN, which estimates 2,15% under conservation in coastal and marine areas

<sup>20</sup> <https://www.biofund.org.mz/en/mozambique/our-biodiversity/>. New terrestrial and marine species continue to be found in Mozambique, with discoveries including bats, birds, reptiles, amphibians, mammals, slugs, and macroalgae. The government has created a biodiversity information platform for Mozambique, where all information about Mozambique's biodiversity can be found (SIBMOZ (<https://sibmoz.gov.mz/>)).

**framework. These areas are typically poorly known and have not been subject to scientific study.** Developers must demonstrate due diligence when there is a risk of disturbance of any natural habitat, regardless of its official conservation value and status.

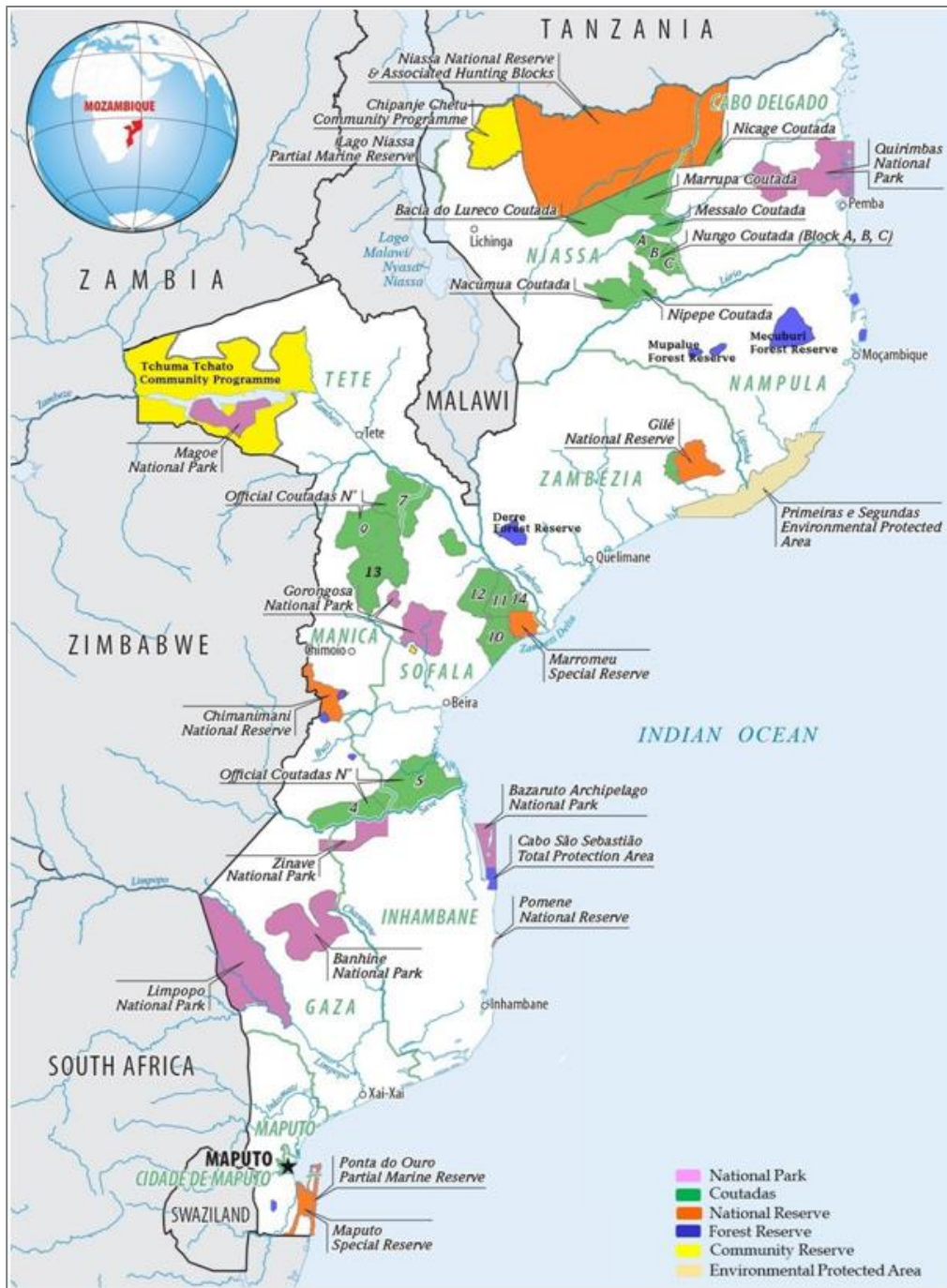


Figure 4-6. Conservation areas in Mozambique<sup>21</sup>

<sup>21</sup> <https://www.biofund.org.mz/en/mozambique/our-biodiversity/>.

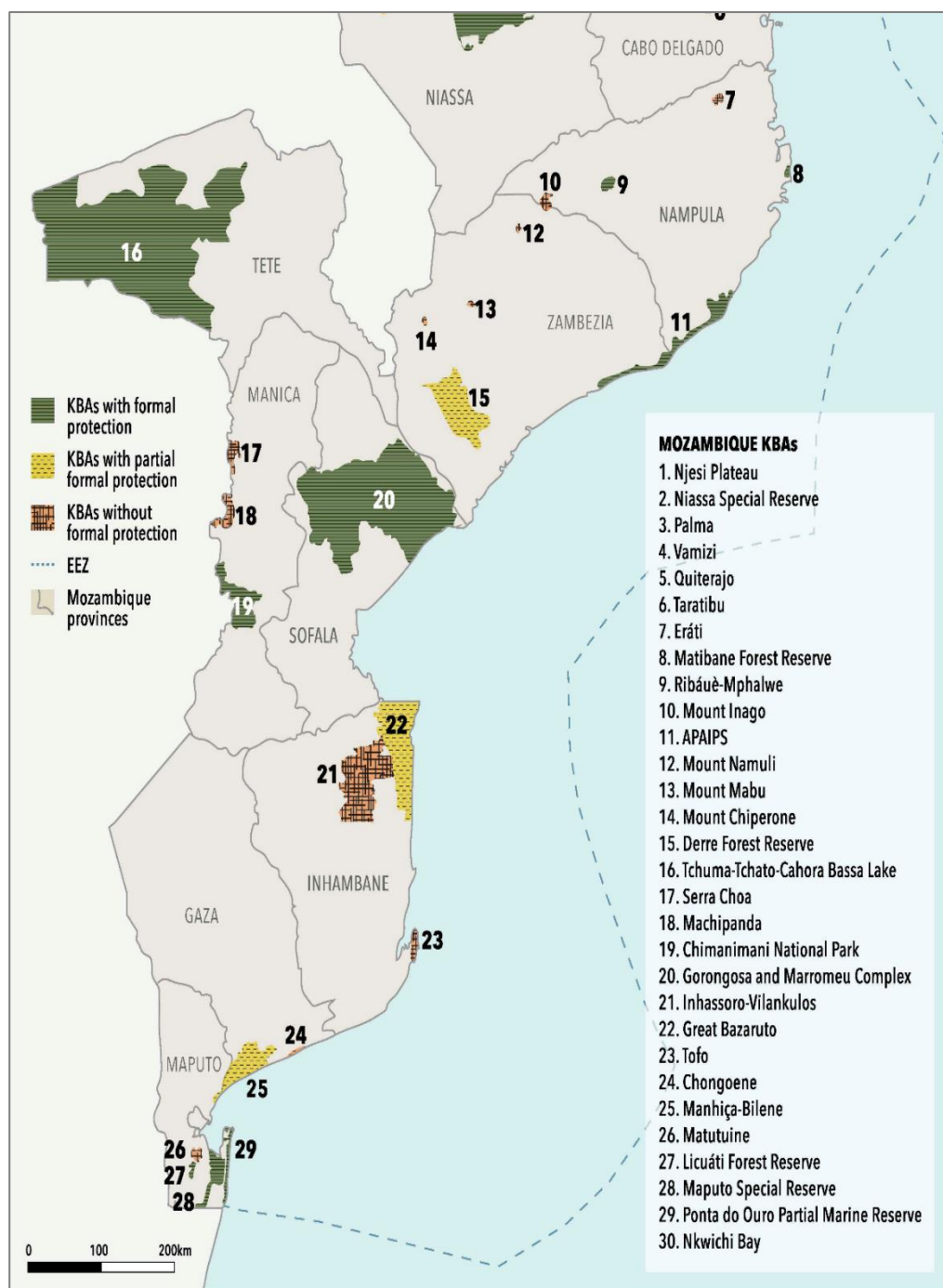


Figure 4-7. Key biodiversity areas in Mozambique<sup>22</sup>

<sup>22</sup> Impacto Ltd. Mapped from Biofund data



## 4.3 Social environment

### 4.3.1 Demography

According to the latest population census conducted in August 2017<sup>23</sup>, Mozambique has a population of 28,861,863 across its eleven provinces, as detailed in Table 4-1 below. Nampula and Zambezia account for at least 39% of the total population. The annual population growth rate is projected at 2.8% (2023)<sup>24</sup>. Of the total population, 51,9% are women.

The 2017 Census revealed that 32.6% of Mozambique's population resides in urban areas, while 67.4% live in rural areas. The population is predominantly young, with 46.6% under the age of 15. The median age is 16.6 years, indicating that half of the population is younger than this age. The elderly population (over 65 years) constitutes 3.3%.

**Table 4-1. Statistics on population by province**

PROVINCE	POPULATION	PERCENTAGE			REGION
		Total population	Women	Men	
Maputo Province	1 964 779	9%	52,1	47,9	South
Maputo City	1 118 378	4%	51,5	48,5	South
Gaza	1 420 109	5%	54,7	45,3	South
Inhambane	1 486 340	5%	54,2	45,8	South
Sofala	2 255 439	8%	51,6	48,4	Centre
Manica	1 942 781	7%	52,1	47,9	Centre
Tete	2 644 650	10%	51,1	48,9	Centre
Zambezia	5 156 587	18%	52,1	47,9	Centre
Nampula	5 750 350	21%	51,2	48,8	North
Cabo Delgado	2 316 842	8%	51,6	48,4	North
Niassa	1 808 010	6%	51,7	48,3	North
<b>TOTAL</b>	27 864 265	100%	51,9	48,1	
<b>Urban</b>	9 290 347	33%	51,5	48,5	
<b>Rural</b>	18 573 918	67%	52,1	47,9	

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

<sup>23</sup> Instituto Nacional de Estatística. 2022. *IV Recenseamento Geral da População e Habitação. Indicadores Sócio-demográficos Moçambique*. Maputo: Instituto Nacional de Estatística. Available at: <https://www.ine.gov.mz/documents/20119/44355/INDICADORES%20SOCIO-DEMOGRAFICOS%20-%20MOCAMBIQUE%2020062022.pdf/9189d534-1ea5-9d6a-cadd-51c39f67d6cd?version=1.0&t=1675764355106&download=true>

<sup>24</sup> World Bank. Mozambique Data. *World Development Indicators*. Available at: <https://databank.worldbank.org/source/2?country=MOZ>. Accessed on 13.12.2024.

**Table 4-2. Indicators of the age composition of the population by area of residence**

Indicators	Total	Urban	Rural
Number	27,864,265	9,229,347	18,573,918
Age			
0-14	46.6	41.7	49.1
15-64	50.1	55.6	47.4
65+	3.3	2.7	3.5

Source: Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

The productive age group (15-64 years) makes up 51.1% of the population. Life expectancy is 54.4 years, which is typical for developing countries characterized by high birth and death rates, and low levels of education and health.

Regarding marital status for individuals aged 12 and over, the 2007 and 2017 censuses show that the majority are in a marital union, with 42.9% and 42.0%, respectively. There are more single men (41.7%) than single women (32.8%), and more widows (6.7%) than widowers (1.0%). By area of residence, around 45% of the urban population is single, followed by 37.1% in a marital union. Meanwhile, in rural areas, around 45% of the population is in a marital union, followed by single people with 32.7%

**Table 4-3. Percentage distribution of the population aged 12 and over, by sex, according to civil status (2017)**

Marital status	Total	Men	Women
N	16336974	7665356	8671618
Total	100	100	100
Single	37	41.7	32.8
Married	13.8	14.1	13.6
Marital Union	42	41.8	42.2
Divorced/Separated	3.2	1.4	4.8
Widowed	4	1	6.7
Unknown	0	0	0

Source: Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

The average household size is 4.4 people, with urban households averaging 4.5 people and rural households averaging 4.3 people. This includes an average of 2.1 children under 15 and 2.0 adults per household. In urban areas, the average is 2.0 children and 1.9 adults per household, while in rural areas, it is 2.2 children and 2.1 adults per household.

The most common household type in Mozambique is nuclear (42.1%), followed by extended households (29.9%). In urban areas, extended households are more prevalent (38.9%), whereas nuclear households predominate in rural areas (44.8%).

In Mozambique, 26.4% of the population speak Emakhuwa as their mother tongue, followed by Portuguese (16.7%). Although Portuguese is the official language, it is the second most spoken (16.9%), after Emakhuwa (26.6%).

Religiously, 27.3% of the population are Christians, 19.1% are Muslims, and 13.5% are not affiliated with any particular religion.

In conclusion, the evaluation of project activities' social risks and impacts must consider the demographic landscape to avoid exacerbating socio-economic challenges. Factors such as high population growth, rural-urban dynamics, prevalence of certain age groups (in particular the presence of children and elderly people) and gender disparities should be carefully assessed to ensure that resource distribution, healthcare, and educational and employment opportunities are equitably addressed, and that certain groups do not face increased vulnerability to accidents and health risks.

#### 4.3.2 Education

The illiteracy rate has been falling over time. From 50.3% in 2007 to 39.3% in 2017. In general, the illiteracy rate is higher among women (49.7%) than men (27.4%). Combining gender and area of residence, it can be seen that the illiteracy rate is higher among women living in rural areas (62.9%) than in urban areas (25%).

The percentage distribution of the population aged 15 and over, by level of education completed, reveals that the majority did not complete any level (45.4%), although the proportion of the population in this reduced compared to the 2007 Census (74.8%).

The highest percentage corresponds to those who have completed elementary school (19.4%), followed by those who have completed upper elementary school (15.1%). It is important to note that, as you go up a level, the proportion of people who have completed some level of primary education decreases

In the context of the project, attention must be given to high illiteracy rates and limited educational attainment both in engagement activities and recruitment processes to prevent limitation to project participation and access to its benefits. Ensuring that educational needs, especially for women, rural populations and disabled people, are considered will help in building an inclusive skilled workforce.

#### 4.3.3 Occupation and livelihoods

Of the population aged 15 and over, 56.9% are economically active, meaning they are either employed or unemployed but available to work if given the opportunity. In urban areas, 44.8% of this population is economically active, while in rural areas, the figure is higher at 63.5%.

The provinces of Manica, Sofala, Maputo Province, and Maputo City have economic participation rates below 50%, indicating higher rates of non-economic participation (NEP). In contrast, the remaining provinces have economic participation rates between 55.0% and 64.3% among the population aged 15 and over, classified as economically active (PEA).

**Table 4-4: Economically active and non-active population, by area of residence (2017)**

PROVINCE	TOTAL		URBAN		RURAL	
	EAP	NEP	EAP	NEP	EAP	NEP
Total	56.9	43.1	44.8	55.2	63.5	36.5
Niassa	55.7	44.3	40.2	59.8	61.5	38.5
Cabo Delgado	64.3.	35.7	42	58	71.5	28.5
Nampula	59.8	40.2	44.5	55.5	67.4	32.6
Zambézia	59.8	40.2	45	55	63.4	36.6
Tete	57.9	42.1	37.2	62.8	63.2	36.8
Manica	49.2	50.8	37.3	62.7	55.6	44.4
Sofala	49.9	50.1	42.8	57.2	55.8	44.2
Inhambane	61.2	38.8	49.9	50.1	65.8	34.2
Gaza	57	43	45.8	54.2	62.1	37.9
Maputo Província	50.6	49.4	48.6	51.4	54.8	45.2
Maputo Cidade	49.5	50.5	49.5	50.5	-	-

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

The employed population is divided into nine branches of activity. The agriculture, forestry, and fishing sector absorb most of the employed population in all provinces except Maputo Province and Maputo City, where the majority work in the trade and commerce sector, with 29.5% and 34.8%, respectively.

In urban areas, almost a third of the population (31.2%) works in commerce and finance, and 28.1% in agriculture, forestry, and fishing. In rural areas, a large part of the employed population is in agriculture, forestry, and fishing (83.9%), with 9.5% in commerce and finance.

The high levels of unemployment and lack of skills within the population can exacerbate project risks by limiting local employment opportunities, generating the need for labour influx and increasing economic disparities. Ensuring that project activities support skill development and job creation is crucial to mitigate these risks.

Table 4-5. Percentage distribution of the population aged 15 and over, employed by branches of activity, by area of residence and provinces (2017)

Province and Area of Residence	Agriculture, Forestry, and Fishing	Mining Extraction	Manufacturing Industry	Energy	Construction	Transport and Communication	Commerce and Finance	Administrative Services	Other Services
<b>Total</b>	68,7	0,8	3	0,1	2,4	1,4	15,4	2,7	5,5
Niassa	80,9	0,4	1,5	0	1	0,4	11,8	2,2	1,8
Cabo Delgado	81,8	0,6	1,8	0	0,8	0,8	10,8	1,5	1,8
Nampula	77,1	0,8	2,7	0	1,1	0,7	13,9	1,4	2,4
Zambézia	83,4	0,5	1,9	0	0,6	0,5	10,4	1,2	1,5
Tete	80,2	0,6	1,7	0,1	1,1	0,7	12,1	1,4	2,1
Manica	62,2	1,9	3,7	0,1	2,5	1,7	19,8	3,2	5
Sofala	60,7	0,3	4,1	0,1	2,7	2,6	17,6	3,1	8,9
Inhambane	65,6	1,4	3,9	0,1	3,3	1,7	15,8	3	5,2
Gaza	65,4	1,3	3	0,1	5,4	1,8	14,1	3,1	5,8
Maputo Province	20,3	0,8	7,7	0,3	9,2	4,9	29,5	8,2	19,2
Maputo City	4,3	0,5	6,1	0,4	8,4	5,1	34,8	9,6	30,8

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

#### 4.3.4 Gender issues

Mozambique is ranked 183 out of 193 countries (UNDP, 2022)<sup>25</sup> on the Gender Inequality Index<sup>26</sup>. Although the country has achieved gender parity in primary education, girls tend to drop out more frequently than boys during puberty, largely due to high rates of adolescent pregnancy and child marriage. Nearly half of all adolescent girls are either pregnant or mothers by the age of 19, and 52.9% of women aged 20-24 were married or in a union before turning 18. The adolescent birth rate was 158 per 1,000 women aged 15-19 in 2021, a significant increase from 5.53 per 1,000 in 2017.

Early pregnancies limit educational and employment opportunities, leading to more children and fewer economic prospects due to the burdens of childcare and domestic work. Access to sexual and reproductive health services (SRHS) is constrained by both supply and demand issues, with adolescent girls facing stigmatization and a lack of youth-friendly services. Unequal power dynamics and gender norms restrict girls' and women's ability to negotiate safer sex and control their reproductive choices. In 2015, only 55.5% of women had their family planning needs met with modern methods. High HIV/AIDS infection rates are driven by risky sexual behaviours among young men. Engaging men in family planning, reducing risky behaviours, and enhancing women's and girls' sexual and reproductive autonomy are crucial to lowering adolescent pregnancies, HIV/AIDS rates, and high fertility rates, which threaten the country's potential demographic dividend.

While labour force participation is high for both men (79%) and women (78%), women's participation is of lower quality, with significant gender segregation in job sectors. Most women work in agriculture but have less access to land, credit, and other resources compared to men. There are significant regional and rural-urban disparities in human and economic development indicators, with poorer outcomes in the north and among impoverished and rural households. Gender gaps and challenges are more pronounced in the north, including in education access, adolescent pregnancy rates, and economic inclusion. Gender issues intersect with other forms of social exclusion, such as disability and sexual orientation and gender identity (SOGI).

The lifetime exposure to gender-based violence (GBV) is high, with over a quarter of women experiencing intimate partner violence (IPV). In 2018, 16.4% of women aged 15-49 reported experiencing physical and/or sexual violence by an intimate partner in the previous year. Women and girls with disabilities and those with non-conforming SOGI are at higher risk of violence. Early exposure to violence is common, with 32% of young women and 40% of young men experiencing physical, sexual, or emotional violence during childhood. High rates of child marriage, a form of GBV, are associated with IPV. Urban violence and armed conflict also contribute to violent behaviour.<sup>27</sup>

Mozambique's significant gender inequality and associated challenges must be carefully considered during the evaluation of social risks and impacts in Chapter 5. The high rates of adolescent pregnancy, child marriage, and gender-based violence, along with limited access to sexual and reproductive health services, severely restrict

---

<sup>25</sup> United Nations Development Programme (UNDP). Gender Inequality Index. Available at: <https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII>. Accessed on 13.12.2024.

<sup>26</sup> GDI measures gender inequalities in achievement in three basic dimensions of human development: health, measured by female and male life expectancy at birth; education, measured by female and male expected years of schooling for children and female and male mean years of schooling for adults ages 25 years and older; and command over economic resources, measured by female and male estimated earned income.

<sup>27</sup> World Bank. 2023. Gender Assessments for Mozambique, Madagascar and Mauritius (Mozambique). Washington, DC: World Bank. Available at: <https://documents1.worldbank.org/curated/en/099091823092039842/pdf/P17721>

educational and employment opportunities for women and girls. These issues are compounded by regional disparities and intersecting forms of social exclusion. Addressing these gender-specific challenges is crucial to ensure that project activities do not exacerbate existing inequalities and to promote equitable development outcomes.

#### 4.3.5 Vulnerable groups

The 2017 Census identified that 2.7% of Mozambique's 26,899,105 inhabitants have disabilities, with a higher prevalence among men (2.9%) compared to women (2.5%). Rural areas report a higher percentage of people with disabilities (2.9%) than urban areas (2.4%). Men have a higher percentage of disabilities in both urban (2.6% for men, 2.2% for women) and rural areas (3.0% for men, 2.7% for women).

The most common disabilities include amputated or atrophied legs (16.9%), followed by walking difficulties (16.4%). Disabilities are more prevalent in the 15-64 age group, but notable percentages of children aged 0-14 have mental disabilities (31.3%), memory or concentration difficulties (31.3%), and deafness (30.6%). The highest disability rate is among those aged 65 and over (13.5%).

**Table 4-6. Percentage distribution of people with disabilities, by area of residence, by type of disability (2017)**

Types of disability	Total	Urban	Rural
N	727620	209999	517621
Total	100	100	100
Blind	7,9	6,9	8,3
Deaf/Mute	9,5	7,9	10,2
Arm(s) Amputated/Atrophied	7,8	6,8	8,1
Leg(s) Amputated/Atrophied	16,9	18,1	16,4
Paralysis	6,5	7	6,3
Mental	7,3	7,3	7,2
Difficulty Seeing Even with Glasses	11,5	13,7	10,7
Difficulty Hearing Even with Hearing Aid	5,6	4,9	5,8
Difficulty with Memory or Concentration	4,8	4,3	5
Difficulty Walking	16,4	17,3	16
Other	13,1	12,7	13,2

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

**Table 4-7: Percentage distribution of people with disabilities, by age groups, by type of disability**

Type of disability	Age groups		
	0 - 14	15 - 64	65+
Blind	18,5	53,4	28,1
Deaf	30,6	58,9	10,4
Arm(s) Amputated/Atrophied	18,9	68,7	12,4
Leg(s) Amputated/Atrophied	20,2	65,5	14,3
Paralysis	25,5	57,5	17

Type of disability	Age groups		
	0 - 14	15 - 64	65+
Mental	31,3	64,2	4,4
Difficulty Seeing Even with Glasses	9,4	62,6	28
Difficulty Hearing Even with Hearing Aid	24,5	58,6	16,8
Difficulty with Memory or Concentration	31,3	60,1	8,6
Difficulty Walking	13,4	59,9	26,8
Other	27,1	62,7	10,2

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

**Table 4-8. Specific disability rates by sex and area (2017)**

Age	Total			Urban			Rural		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
0 - 14	1,2	1,4	1,1	1.2	1.3	1.1	1.3	1.4	1.2
15 - 64	3,4	3,7	3,1	2.8	3.1	2.5	3.7	4.1	3.4
65+	13,5	14	13,1	13	13.3	12.8	13.7	14.2	13.2

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

Illness is the predominant cause of disability (39.0%), followed by work-related accidents (13.5%) and traffic accidents (10.4%).

**Table 4-9. Percentage distribution of the disabled population by cause of disability (2017)**

Type of disability	Causes of disability					
	At birth	Disease	Mines/war	Military service	Road accident	Others
Blind	41,4	43,4	0,8	0.6	0.9	10.1
Deaf	56,7	34,6	0,5	0.4	0.5	6.4
Arm(s) amputated/atrophied	24,7	29,2	3,8	2.4	10.4	16
Leg(s) amputated/atrophied	40,5	29	3,6	1.8	8.5	9.7
Paralysis	32,5	48,3	0,6	0.4	1.6	11.4
Mental	49,3	36,9	0,3	0.3	1.2	11.2
Difficulty seeing even with glasses	23,4	51,5	0,9	0.8	1.4	18
Difficulty hearing even with hearing aid	43,7	41,4	0,8	0.8	1	11
Difficulty with memory or concentration	47,6	36,9	0,5	0.7	1.9	11.4
Difficulty walking	25,2	43,3	1,8	1.5	6.6	16.5
Other	37	38,1	0,9	0.7	2.1	17.6

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.



The census also revealed that 14,261,208 individuals were under 18, with 1,936,840 being orphans. Of these, 516,596 were orphaned by their mother, 1,213,379 by their father, and 206,865 by both parents. The highest concentration of orphaned children is in urban areas, with Gaza province having the highest percentage of paternal orphanhood (14.2%).

**Table 4-10. Percentage Of children 0–17 years of age, by type of organisation, by province (2017)**

Province	Orphan by father	Orphan by mother	Orphan by both
Niassa	6.2	2.9	1.2
Cabo Delgado	6.9	3.1	1
Nampula	6.4	3.2	1
Zambézia	8.7	4.1	1.7
Tete	6.7	2.5	1.1
Manica	11.3	4	1.9
Sofala	11.5	4.6	2.2
Inhambane	9.4	3.8	1.3
Gaza	14.2	4.6	2.1
Maputo Província	9.4	3.9	1.4
Maputo Cidade	9.7	4.4	1.7

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

In conclusion, the higher prevalence of disabilities in rural areas and among men, along with the significant number of children with disabilities, underscores the need for inclusive project planning. Additionally, the high percentage of orphaned children, particularly those orphaned by their fathers, highlights the importance of providing adequate social support and resources. Addressing these vulnerabilities is crucial to ensure that project activities do not exacerbate existing inequalities and to promote equitable access to services and opportunities for all individuals, including those with disabilities and orphaned children.

#### 4.3.6 Housing

According to the 2017 Census, the vast majority of the Mozambican population (99.94%) lives in private dwellings, with a nearly equal distribution in urban (99.93%) and rural (99.94%) areas. However, a small fraction of the population (0.04%) is without housing, and 0.03% lives in collective housing. In terms of ownership, a significant proportion of houses are under the freehold regime (89.7%). These dwellings accommodate most households, with approximately 90.0% of the population living in such homes.

**Table 4-11. Percentage distribution of the population, by type of dwelling (2017)**

Type of housing	Private Housing	Households	People
Own housing	89.7	89.6	91.3
Rental	5.6	5.6	4.5
House on loan	3.4	3.4	2.9
Other	1.3	1.3	1.3

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

The primary source of lighting in private homes is batteries (41.1%), followed by electricity (22.2%). In urban areas, more than half (57.2%) of homes use electricity as their main source of lighting, compared to only 5.8% in rural areas.

Nearly a third (31.8%) of private dwellings rely on an unprotected well as their main source of drinking water, followed by a borehole/protected well with a hand pump (15.7%). In urban areas, around 30% of dwellings have piped water outside the home as their main source of drinking water. In contrast, in rural areas, the most common source is an unprotected well (40.7%).

**Table 4-12. Percentage distribution of private dwellings, by area of residence, according to basic services (2017)**

Basic services	Area of residence		
	Total	Urban	Rural
<b>Energy</b>	100	100	100
Electricity	22,2	57,2	5,8
Generator / Solar panel	3,2	1,5	3,9
Gas	0,1	0	0,1
Oil / Paraffin / Kerosene	7,6	9,2	6,8
Candles	4	6,4	2,9
Batteries	5,9	1,5	7,9
Firewood	12,2	3,1	16,5
Dry cells	41,1	17,5	52,2
Others	3,8	3,5	4
<b>Water supply source</b>	100	100	100
Piped water inside the house	4,8	11,5	1,6
Piped water outside the house/yard	12	30,2	3,5
Piped water at neighbour's house	6,3	16,7	1,5
Fountain/public tap water	9,3	10,3	8,8
Borehole/protected well with manual pump	15,7	7	19,7
Protected well without manual pump	6,8	5,9	7,2
Unprotected well	31,8	12,7	40,7
Spring water	2	0,6	2,7
Surface water (river/lake/pond)	8,9	2,3	12
Rainwater	0,8	0,4	1,1
Tanker truck water/drums	0,3	0,2	0,4
Mineral/bottled water	0,3	0,5	0,2
Other	0,3	0,4	0,3
<b>Basic sanitation</b>	100	100	100
Flush toilet inside the house	4,1	10,2	1,3
Non-flush toilet outside the house	2,3	5,7	0,8
Non-flush toilet	4,1	10,5	1,2
Improved latrine	14,1	28,2	7,5
Traditional improved latrine	14,8	17,9	13,3

Basic services	Area of residence		
	Total	Urban	Rural
Unimproved latrine	36,6	20,3	44,2
No toilet / Latrine	23,3	6	31,4

Source: 2022 Instituto Nacional de Estatística – Moçambique. Iv Recenseamento Geral Da População E Habitação 2017. Indicadores Sócio-Demográficos – Moçambique.

Evaluating the impacts of project's activities on access to basic services and housing conditions in the project's intervention areas is crucial to prevent exacerbating health risks, environmental degradation, and social conflicts. Infrastructure strain can lead to resource scarcity and overcrowding, resulting in inadequate access to essential services and living conditions.

## 5 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND BENEFITS DURING PROJECT CONSTRUCTION

Table 5-1 describes the rating scale used for the assessment of risks and impacts in this ESMF. The scale applies to negative impacts. Positive impacts are discussed in Section xxx. Risks are assessed pre- and post-mitigation.

**Table 5-1. Rating scale for risks and impacts**

<b>Low Risk.</b> Activities with minimal potential environmental and social impacts that can be managed with straightforward mitigation measures.
<b>Moderate Risk.</b> Activities with moderate potential impacts, requiring a more detailed risk management approach and specific management and mitigation measures to comply with Good International Industrial Practice (GIIP).
<b>Substantial Risk.</b> Activities that can result in severe outcomes including (in the health and safety context), fatalities of workers or members of the local community, pollution events, GBV, and biodiversity loss, unless appropriate management systems are developed, implemented and monitored.
<b>High Risk.</b> Activities that can cause extremely severe outcomes, involving loss of biodiversity, significant resettlement, mitigation not fully proven with residual irreversible impacts possible or likely.

### 5.1 Grid electrification (Component 1)

Components 1a and b comprise all the major civil and known, other than that they are mainly intended to serve the larger population centres, primarily risks of grid-based infrastructure (Component 1a & b) in the four northern provinces but to a lesser extent in other provinces as well (Project Appraisal Document, V2). Most of the construction is expected to be in areas that are already modified by urban and peri-urban settlement. There may be sections of routes, particularly MV lines, that are in areas of natural habitat, as defined by the World Bank (2016), particularly for Component 1a, where some longer cross-country MV lines will be needed to strengthen the grid into these population centres. The Borrower has confirmed that the lines are not expected to involve major river crossings (e.g. Zambezi River, Pungwe River), although smaller river crossings may be necessary together with crossings of wetlands.

#### 5.1.1 Environmental, occupational health and safety and social risks, impacts and mitigation

Table 5-2 describes potential biophysical, health and safety and social risks and impacts of the MV/LV grid-based infrastructure and necessary mitigation to minimize risks.

**Table 5-2. Expanding grid electrification - potential risks and impacts/benefits of line construction activities (Component 1a and 1b)**

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
<b>ESS 1: Assessment and Management of E&amp;S Risks and Impacts</b>			
Policies, regulations, national electrification plans and strategies, feasibility studies, capability to manage of project E&S risks	Adequacy of regulatory framework for environmental assessment and Govt. regulator capacity	<b>Moderate to Substantial Risk.</b> While regulatory framework for EA is satisfactory, provincial regulator capacity is low. Authorizations provide insufficient project-specific conditions. Project categorization (Category C) may not be appropriate for the level of uncertainty and risk.	<ul style="list-style-type: none"> <li>• Prepare route screening report once detailed design of Component 1 is available. Determine areas of higher biodiversity or social risk</li> <li>• Seek alternative routes where required. If alternatives not viable, conduct ESIA to fully investigate impacts and mitigation measures</li> </ul>
	Adequacy of legal framework to support fair labour practice and worker health and safety	<b>Moderate Risk.</b> Revised labour law is aligned with important principles of non-discrimination, gender equity, prohibition of SE/SEA, fair labour practices etc.	<ul style="list-style-type: none"> <li>• Implement Project guidelines and plans for labour (LMP, SEP, SE/SEA Guidelines, EDM Project Health and Safety Requirements V.02, WB EHS Guidelines)</li> <li>• Establish and implement throughout the project workers' grievance redress mechanism (W-GRM);</li> <li>• Signature of Codes of Conduct by all project workers</li> </ul>
	Adequacy of legal framework for compensation and resettlement	<b>Moderate Risk.</b> Legal framework is procedurally misaligned with the timing of available information on some projects but reasonable provision is made to ensure that people affected by physical or economic impacts are fairly compensated.	<ul style="list-style-type: none"> <li>• Prepare site-specific RAPs as required based on detailed design. Prepare and implement LRP.</li> <li>• Monitor accidental damages during construction through the SEP and GRM and compensate affected people</li> </ul>
	Adequacy of E&S capacity of Implementing Agencies, their supervising engineers and construction contractors	<b>Substantial Risk.</b> Capacity of the implementing agencies to manage E&S risks across all Provinces (with an estimated 16 simultaneous work fronts) is insufficient. Underlying and root causes of persistent occupational health and safety failures are often related to lack of contractor management commitment, lack of capacity of key personnel, absence of a systematic approach to training, and a lack of willingness at all levels to develop and maintain a culture of safety in the workforce.	<ul style="list-style-type: none"> <li>• Develop and implement an effective, fully integrated project-level EHS management system (Implementing Agencies and OE)</li> <li>• Appoint competent staff to ensure capacity to supervise E&amp;S at all work sites and clearly define all roles and responsibilities for oversight and supervision.</li> <li>• Establish a quick response mechanism for immediate reporting and corrective action related to unsafe acts (e.g.: WhatsApp group)</li> <li>• Ensure that all contractors' contracts have adequate E&amp;S clauses defining their respective roles and responsibilities in E&amp;S management</li> <li>• Ensure Bidding Documents emphasise the requirement for competent OHS personnel on contractors' staff,</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
			<p>providing for skilled, fully trained, senior OHS Managers and sufficient site staff</p> <ul style="list-style-type: none"> <li>• Prepare and implement an OHS Management Plan as a part of the C-ESMP</li> <li>• Prepare and implement specific, proportionate, risk management procedures, focussed on identified risks related to activities being undertaken.</li> <li>• Train workers in general safety and in safety aspects specific to their job descriptions. Repeat training regularly.</li> <li>• Provide appropriate, trained, OHS site supervision at all work sites.</li> <li>• Develop, test and maintain an Emergency Response Plan.</li> <li>• Ensure that fully provisioned first aid kits are available at all work sites.</li> <li>• Maintain updated records of all relevant OHS indicators through the OHS Management System.</li> <li>• Track and report all incidents, accidents and near misses.</li> <li>• Regularly review OHS performance, near misses and incident root causes and take corrective actions</li> </ul>
<b>ESS 2 Labour and Working Conditions</b>			
<b>All EPC-Construction Related Contractor Activities</b>	OHS - Transport of workers to and from work sites	<p><b>Substantial Risk. Worker injury</b> due to vehicle overturning and collisions. Most severe safety incidents on EDM projects in Mozambique have been vehicle related. Failure to implement and monitor appropriate driver and vehicle safety management systems causes increased levels of risk. Workers are frequently transported on the back of open vehicles. Mozambique workplace accident fatality rate (FIFR) is roughly 21.6 compared with 6.4 in Canada, 5.2 in the USA, 0.8 in the UK, 3.4 in Denmark (FIFR is the number of fatalities x 1 000 000 / number of manhours worked)</p>	<ul style="list-style-type: none"> <li>▪ Ensure vehicles are well maintained according to manufacturer and Mozambique roadworthy requirements.</li> <li>▪ Use only vehicles designed for passenger transport with seat belts for all passengers. Never allow workers to travel on the back of open vehicles.</li> <li>▪ Make drivers responsible for completing a daily vehicle safety checklist.</li> <li>▪ Train competent, fully licenced, drivers on defensive driving techniques. Retrain regularly.</li> <li>▪ Determine and enforce suitable vehicle speed limits.</li> <li>▪ Test drivers for alcohol daily before work commences.</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	OHS - Felling trees / clearing bush, lifting and transferring materials from stockpiles, excavating holes for poles, working around houses.	<b>Low to Moderate Risk. Worker injury</b> from bites and stings (snakes, bees, hornets, centipedes, scorpions, spiders). Risks can be managed with appropriate PPE and behaviour.	<ul style="list-style-type: none"> <li>Wear proper overalls, safety boots, helmets and gloves (when handling materials)</li> <li>Do not disturb hives or nests without expert advice</li> <li>Maintain emergency medication at contractor's yard (adrenaline, antihistamine) and train first aiders in their use</li> <li>Identify nearest location where polyvalent serum is available and keep on record.</li> <li>Train workers in appropriate behaviour if encountering snakes or dangerous insects / arachnids</li> </ul>
<b>Survey and Design of lines</b>	OHS - Field surveying	<b>Moderate Risk. Worker injury</b> from carrying heavy survey equipment; heat exposure	<ul style="list-style-type: none"> <li>Wear appropriate non-slip safety boots, helmets</li> <li>Take rest breaks and rehydrate regularly</li> <li>Implement proper lifting techniques</li> <li>Always survey with an assistant</li> </ul>
<b>Site Preparation</b>	OHS -Bush clearing, cutting of trees along the proposed route	<b>Substantial Risk. Worker injury</b> due to chainsaw accidents (exacerbated by worker fatigue); manual handling of logs and branches causing musculoskeletal injuries such as strains, sprains, or back injuries; dehydration	<ul style="list-style-type: none"> <li>Ensure chain saw operators are wearing full PPE (gloves, long sleeves, eye protection, hearing protection, helmet, overalls, safety boots).</li> <li>Ensure that chain saw operators have undergone Govt. certification and are competent to use the chainsaw.</li> <li>Take rest breaks and rehydrate regularly</li> <li>Train workers to avoid loads that are too heavy and instead ask for assistance</li> <li>Practice proper lifting techniques</li> <li>Inspect tools before use for failed components</li> <li>Implement dust control measures such as water spraying or using dust masks to protect workers from respiratory hazards</li> </ul>
<b>Line and transformer Installation</b>	OHS -Installation of heavy poles and transformers with truck-mounted cranes or back actors, use of shackles and other lifting gear, installation of cross arms and insulators by workers at height, stringing of conductors,	<b>Substantial Risk. Worker injury</b> from multiple causes. Includes musculoskeletal injuries, strains and sprains due to multiple manual activities; pole fall injuries due to unsafe conditions / incorrect PPE when working at height; crush injuries to fingers, hands, or feet when working with heavy machinery and equipment; reversing injuries caused by vehicle/equipment/ worker interaction in	<ul style="list-style-type: none"> <li>Ensure that all lifting equipment is regularly inspected and operated by trained personnel. Use appropriate rigging techniques and maintain a safe distance from live power lines.</li> <li>Train workers in proper manual handling techniques. Use mechanical aids where possible to reduce physical strain.</li> <li>Clearly mark and maintain safe work zones around excavation sites and lifting operations to prevent</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	mechanical driving of earthing spikes into the ground, installation of switchgear using mobile lifting equipment assisted by workers at height, installing pole connections for service junction boxes for service connections, inspections and live line testing, general small scale cutting and grinding using angle grinders and other hand-operated tools.	confined spaces; electrocution injuries due to failure to implement lock out procedures and poorly maintained, electrical safety equipment and appropriate PPE; cuts, bruises and eye injuries caused by failure to wear appropriate PPE for the task being undertaken; injuries due to the use of home-made tools; injuries caused by failed ropes and lifting equipment.	<p>unauthorized entry and minimize the risk of struck-by incidents by workers.</p> <ul style="list-style-type: none"> <li>▪ Ensure that all workers operating at heights are equipped with appropriate fall protection gear, such as full-body harnesses and pole climbing clamps, and that these are used consistently and properly attached.</li> <li>▪ Ensure that all workers are adequately trained in the safe operation of equipment, the hazards involved in each work task, and emergency response procedures. Supervisors should closely monitor work to ensure compliance with safety protocols / procedures</li> <li>▪ Enforce strict adherence to lockout/tagout (LOTO) procedures, proper grounding, use of insulated tools, and ensuring all live lines within the immediate area are de-energized before work begins.</li> <li>▪ Ensure all workers involved in earthing and grounding are trained in electrical safety, including the use of LOTO procedures, recognizing live circuits, and proper grounding techniques. Check condition of live line testing tools regularly to ensure proper functioning.</li> <li>▪ Use mechanical lifting aids (cranes) and ensure workers are trained in safe manual handling techniques. Implement team lifting protocols where necessary.</li> <li>▪ Ensure use of fall protection systems (harnesses) and ladder safety practices are in place.</li> <li>▪ Provide appropriate PPE such as gloves, masks, eye protection and protective clothing, and ensure that all materials are handled according to safety data sheets (SDS) guidelines.</li> <li>▪ Ensure that all workers have at least two sets of overalls</li> <li>▪ Encourage regular breaks and rotate tasks to minimize the risk of repetitive strain injuries.</li> <li>▪ Provide sufficient water on site and rehydrate regularly</li> </ul>
<b>Employment</b>	Fair implementation of provisions of worker contracts	<b>Moderate Risk.</b> Conflicts between workers and management can disrupt project timelines and lead to strikes or work stoppages.	<ul style="list-style-type: none"> <li>• Establish clear communication channels for workers to voice concerns and negotiate.</li> <li>▪ Implement a fair and transparent grievance mechanism.</li> </ul>



Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	Payment disputes	<b>Moderate Risk.</b> Delays in payment or unfair wages can lead to worker dissatisfaction and disputes	<ul style="list-style-type: none"> <li>• Ensure timely and fair payment of wages in accordance with local laws and industry standards.</li> <li>▪ Regularly review and adjust compensation packages to remain competitive and fair.</li> </ul>
	Labour law infringements	<b>Moderate Risk.</b> Non-compliance with labour laws and ESS2 can lead to legal penalties and project delays	<ul style="list-style-type: none"> <li>• Implement robust monitoring and supervision mechanisms to ensure compliance with labour standards and ESS2 and to promptly address any issues that arise, particularly those affecting vulnerable groups</li> <li>• Conduct regular audits to ensure compliance with all applicable labour laws and regulations.</li> <li>▪ Provide training to management and staff on legal requirements and best practices in labour law compliance.</li> <li>▪ Provide internal training on workers' rights with explanations of the type of contract, duration, contract clauses, type, and conditions of work to be performed in accordance with Mozambican law, including but not limited to rights related to working hours, holidays, rest days, salary, overtime, compensation, and benefits.</li> <li>▪ Provide a work contract and code of conduct at the time of contract signing. Once signed, a copy remains with each party.</li> <li>▪ Availability and dissemination of the GRM for workers - complaint channels should be posted in visible locations.</li> </ul>
	Grievances	<b>Moderate Risk.</b> Lack of worker representation translating into the absence of a mechanism for workers to express concerns or negotiate terms can lead to unresolved grievances	<ul style="list-style-type: none"> <li>• Recognize the right of workers to form or join trade unions and bargain collectively.</li> <li>▪ Facilitate the establishment of worker committees or representation where unions are not present.</li> </ul>
	Living and working conditions	<b>Moderate Risk.</b> Lack of proper facilities, sanitation, and living conditions	<ul style="list-style-type: none"> <li>• Develop and enforce standards for worker accommodations, sanitation, and access to clean water and nutritious food.</li> <li>▪ Ensure that work schedules allow for adequate rest, including breaks and days off.</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	Discrimination of individuals or groups considered as vulnerable under project's context <sup>28</sup>	<b>Moderate Risk.</b> Unequal treatment of workers based on gender, ethnicity, or other factors	<ul style="list-style-type: none"> <li>▪ Ensure that women have access to separate toilets with internal locks.</li> <li>• Develop a clear non-discrimination policy and provide training to enforce it.</li> <li>▪ Promote diversity and inclusion in the workplace through hiring practices and cultural sensitivity training, as well as through the establishment of a minimum quota.</li> <li>▪ The recruitment process should be transparent, conducted in coordination with local authorities.</li> <li>▪ Encourage the participation of women, youth, and people with disabilities in the project.</li> <li>▪ Prioritize local recruitment and use clear recruitment procedures.</li> <li>▪ Establish and operationalize W-GRM that are accessible to all workers, including vulnerable groups, and ensure that complaints can be made anonymously and without fear of retaliation.</li> </ul>
	Child labour	<b>Moderate Risk.</b> Child labour	<ul style="list-style-type: none"> <li>• Strictly prohibit the hiring of labour under the age of 15 for project activities.</li> <li>• Hiring minors of working age (15-18 years) should be done after meeting legal provisions.</li> <li>• Establish strict age verification systems for all new hires.</li> <li>▪ Engage with local communities and schools to support educational opportunities and awareness about the harms of child labour</li> <li>▪ Conduct training on child labour and violence against children (VAC), as well as awareness raising on the code of conduct and explanation of sanctions for cases of child labour use.</li> </ul>

<sup>28</sup> The World Bank Directive: Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups defines disadvantaged or vulnerable individuals as those individuals who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or indigenous status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a projects benefits. Refer to Section 5.1.2 for further information about this issue.

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	Forced labour	<b>Moderate Risk.</b> Forced labour	<ul style="list-style-type: none"> <li>• Create and enforce policies that prohibit any form of forced or compulsory labour.</li> <li>• Set up a workers' grievance mechanisms (W-GRM) for workers to report coercion or abuse without fear of retaliation.</li> <li>• Ensure availability of written contracts with all workers at all levels (including temporary workers), defining tasks, responsibilities, contract duration, working hours, salary, and other relevant aspects.</li> <li>• Inclusion in contractual agreements with contractors on obligations and non-compliance sanctions</li> <li>• Request bidders to provide a Forced Labor Performance Declaration, covering past performance, and a Forced Labor Declaration, covering future commitments to prevent, monitor and report on any forced labour and enforcing these requirements to sub-contracts and suppliers equally</li> <li>▪ Preparation of Labour Management Plans by the contractors specifying how they will mitigate the risks of forced labour</li> </ul>
	Gender-Based Violence/ Sexual Exploitation and Abuse and Sexual Harassment (GBV/SEA/SH)	<b>Moderate Risk.</b> Increased GBV/SEA/SH at the workplace	<ul style="list-style-type: none"> <li>• Prioritize hiring of local workers.</li> <li>• Workers should be sensitized not to support/engage in prostitution.</li> <li>• Signature of a Code of Conduct (CoC) by all project workers</li> <li>• Establishment of confidential and accessible reporting channels for GBV/SEA/SH incidents and ensure anonymity and protection for those who report incidents</li> <li>• Partner with local service providers to offer medical, psychological and legal assistance as needed</li> <li>• Conduct regular training sessions GBV/SEA/SH prevention and response, the rights of employees and available support mechanisms, the W-GRM sensitive to SEA/SH, as well as on the CoC and sanctions for cases of non-compliance</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	Training of workforce	<b>Substantial Risk.</b> Inadequate training causing the risk of workers being unprepared to perform their tasks safely and efficiently	<ul style="list-style-type: none"> <li>▪ Evaluate the effectiveness of policies and interventions, and make necessary adjustments</li> <li>• Provide ongoing training programs to enhance skills and knowledge related to workers' specific job functions.</li> <li>▪ Include safety training as a mandatory part of the onboarding process</li> <li>▪ Provide targeted training and awareness programs for vulnerable workers on OHS, workers' rights, and grievance mechanism</li> </ul>
	Increased disposable income in local communities	<b>Moderate Benefit.</b> Employment of local workers at various times during the construction and operational phases. Short term employment benefits with some opportunities for upskilling of labour.	<ul style="list-style-type: none"> <li>• Seek to employ supervisors and other semi-skilled contract labour from local areas to the greatest extent possible</li> <li>• Provide upward mobility for workers who show promise (promotion, training, capacity building activities, certifications)</li> </ul>
	Increase of social inclusion	<b>Moderate Benefit.</b> Increase access to employment opportunities and benefits to vulnerable and marginalized groups	<ul style="list-style-type: none"> <li>• Develop and enforce inclusive employment policies that ensure vulnerable and marginalized groups have access to employment opportunities, including setting targets for the employment of women, youth, and people with disabilities</li> <li>• Engage with local communities to understand their needs and involve them into participatory planning processes and regular consultations with community representatives</li> </ul>
	Increased purchases of goods and services from local businesses	<b>Moderate Benefit.</b> Increased turnover in local businesses (equipment, food, services, accommodation etc.). Short term injection of capital into the Mozambique economy. Opportunities for local purchasing to increase local spend.	<ul style="list-style-type: none"> <li>• Establish procurement policies that prioritize the purchase of goods and services from local businesses Provide capacity-building support to local suppliers to help them meet the quality and quantity requirements of the project through training and assistance with certification and compliance, if needed</li> </ul>
<b>ESS 3 Resource Efficiency and Pollution Prevention and Management</b>			
<b>Site preparation and line installation:</b> Bush clearing, pole pit	Various activities generating non-hazardous waste at work	<b>Moderate Risk. Land and water pollution</b> caused by litter (poor housekeeping), pollution due to poor separation, temporary	<ul style="list-style-type: none"> <li>• Ensure that all wastes are collected at the work sites and returned daily to the contractors' yard for sorting and</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
excavation, pole erection and backfilling, line stringing, installation of insulators and crossbars, transformers and switchgear (MV lines), service connections	sites and contractors' yards	storage and disposal practices. Failure to meet the requirements of the waste hierarchy (avoid, re-use, recycle, dispose). Wastes include food packaging, plastic bottles, broken insulators, cable offcuts, other electrical scrap, waste concrete, wooden pallets, waste tyres, glass bottles, scrap metal, discarded PPE. Refer to Section 5.1.2 for more detail.	<p>segregation into reusable, recyclable and non-recyclable components.</p> <ul style="list-style-type: none"> <li>• Appoint recycling agents for collection of reusable/recyclable waste materials</li> <li>• Transport and dispose of remaining waste to landfill using a certified waste handler/transporter</li> <li>• Maintain and track records of the weight of all waste that is removed from the contractors' yard for reuse, recycling or disposal</li> <li>• Compost organic vegetable waste using pest-protected composters</li> <li>• Prepare and implement a Waste Management Plan as a part of the contractors' C-ESMP</li> </ul>
	Various activities involving the use of hazardous materials and generation of hazardous waste	<p><b>Moderate Risk. Soil and water pollution</b> caused by poor management practices, spillages, lack of effective containment, unsafe disposal. Hazardous materials stored and wastes include fuels, oils, solvents, paints acids, industrial cleaners, toxic pest control products. Safe storage procedures for materials and waste are well established and simple to implement. Quantities are small and risk of major spillages is low.</p> <p>Refer to Section 5.1.2 for detail.</p>	<ul style="list-style-type: none"> <li>• Implement strict protocols for the handling and storage of fuels, oils, and other hazardous materials to prevent spills</li> <li>• Ensure that any vehicle or equipment servicing takes place on concrete-lined surfaces draining to mechanical oil traps that are regularly maintained</li> <li>• Temporarily store all hazardous waste in accordance with Mozambique labelling, containerization and storage requirements. All temporary storage to be in a concrete bunded, lockable, facility with adequate ventilation, with capacity to contain 110% of a spill from the largest container</li> <li>• Dispose of waste regularly using a certified waste handler/transporter.</li> <li>• Record all waste by weight and type for auditing purposes</li> <li>• Maintain a hazardous waste manifest signed at point of collection and delivery</li> <li>• Bund fuel tanks to capture 110% of a spillage and provide drainage capture for accidental spillage while fuelling vehicles and equipment</li> <li>• Work teams to carry stocked spill kits of appropriate size</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>Pick up and bag all soil that is hydrocarbon contaminated for return to the contractors' yard for bioremediation.</li> <li>Maintain drip trays in all vehicles for use when necessary</li> <li>Prepare and implement a Waste Management Plan as a part of the contractors' C-ESMP</li> </ul>
	All activities resulting in <b>sanitary waste</b> generated at work sites and contractors' yards	<p><b>Moderate Risk. Faecal soil contamination</b>, with increased community health risks, caused by absence or failure to use mobile toilets at work sites; <b>soil, water and groundwater pollution</b> caused by inadequate design and maintenance of septic tank systems at contractors' yards.</p> <p>Refer to Section 5.1.2 for detail.</p>	<ul style="list-style-type: none"> <li>Maintain clean ventilated dry toilets at all worksites</li> <li>Provide separate toilets for men and women</li> <li>Enforce use of the toilets by worker teams.</li> <li>Design septic tanks and soakaways to have sufficient capacity to ensure sufficient maturation of the discharge. Design and system to a standard approved by EDM/FUNAE</li> <li>Prepare and implement a Waste Management Plan as a part of the contractors' C-ESMP.</li> </ul>
<b>ESS 4 Community Health and Safety</b>			
<b>Site survey, preparation and line installation:</b> Bush clearing, pole pit excavation, pole erection and backfilling, line stringing, installation of insulators and crossbars, transformers and switchgear (MV lines), service connections	Air pollution - movement of trucks and heavy equipment (pole and equipment transporters, hole diggers, concrete trucks, truck mounted cranes, labour transport)	<b>Low to Moderate Risk. Community exposure to dust and exhaust fumes</b> (impact will be short term and could cause nuisance but will be short term and is unlikely to be at concentrations that cause health issues in surrounding communities). Mitigation is simple and proven.	<ul style="list-style-type: none"> <li>Clearly mark and maintain work zones around RoW to avoid unnecessary loss of vegetation cover</li> <li>Enforce dust suppression techniques such as minimizing speed limits for vehicles on unpaved roads and construction sites in order to reduce the amount of dust generated up by tires</li> <li>Maintain water cart on site to damp dust in areas where nuisance is likely</li> <li>Maintain vehicles to manufacturer specifications</li> <li>Communicate in advance with community leaders and households regarding timing of construction and availability of staff to assist in any nuisance-related issues.</li> <li>Maintain grievance register and act promptly about any complaints.</li> </ul>
	Noise - movement of trucks and heavy equipment, operation of jackhammers, angle	<b>Low to Moderate Risk. Community exposure to noise nuisance</b> when vehicles and equipment are working close to residences and other noise-sensitive land use. Impacts	<ul style="list-style-type: none"> <li>Maintain vehicles to manufacturer specifications</li> <li>Communicate in advance with community leaders and households regarding timing of construction and</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
	grinders, other electric hand tools	will be short term and can be managed by easily implemented mitigation.	<p>availability of staff to assist in any nuisance-related issues.</p> <ul style="list-style-type: none"> <li>• Train drivers and work teams to be respectful of noise-sensitive locations</li> <li>• Schedule noisy activities near noise sensitive residential. uses during daytime only</li> <li>• Maintain grievance register and act promptly about any complaints.</li> </ul>
<b>Line and transformer Installation</b>	Electrocution, falling objects, stray voltage	<b>Moderate Risk:</b> Community health and safety risks	<ul style="list-style-type: none"> <li>• Engage with local communities to raise awareness about the risks associated with the activities of the project and to provide training on emergency preparedness.</li> <li>• Establish adequate prevention measures for children (e.g.</li> </ul>
<b>All EPC Site Activities</b>	General construction disturbance in and around households	<b>Moderate Risk: Disruption of daily lives of local communities.</b> Risks can typically be managed by good planning and communication with communities and courteous behaviour.	<ul style="list-style-type: none"> <li>• Engage with local communities to understand their routine and plan activities accordingly</li> <li>• Inform communities well in advance about schedules and activities</li> <li>• Appoint local liaison officers to address community concerns and facilitate communication.</li> <li>• Ensure that survey activities respect local customs and cultural practices</li> <li>• Comply with requirements described under air quality and noise</li> </ul>
	Health and Safety - movement of trucks and heavy equipment, excavation of holes, erection of poles close to households	<b>Moderate Risk. Potential pedestrian and vehicle accidents,</b> increased traffic volumes, and changes in traffic flow and speed	<ul style="list-style-type: none"> <li>• Develop traffic management measure in the C-ESMPs clearly defining allowable routes, vehicle speed limits, and temporary traffic management in work zones;</li> <li>• Prepare Road Safety Assessment for each phase of the project and monitor incidents and accidents - prepare regular reports to identify negative safety issues and establish and implement measures to resolve them</li> <li>• Undertake driver training and monitoring</li> <li>• Employ traffic calming features such as speed humps and speed limits in areas of high pedestrian activity (to be identified by the Road Safety Assessment);</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>• Prepare Emergency Response Plan in consultation with local communities, local emergency responders, and local health authorities to describe the contingencies in place for emergency assistance in the event of incidents and injuries</li> <li>• Implement safety training and incident reporting - include defensive driver reporting with reference to speed restrictions and due diligence in areas of pedestrian traffic</li> <li>• Collaborate with local communities to improve signage, visibility and overall safety of roads, particularly along stretches located near schools or other locations where children may be present</li> <li>• Minimize pedestrian interaction with construction vehicles and collaborate with local communities on education about traffic and pedestrian safety, such as school education campaigns</li> <li>• Ensure all households in the immediate vicinity of line installation are advised to keep children away from the active working areas. Train all work team members to immediately report to their supervisor any children or adults observed within active construction areas.</li> <li>• Coordinate with emergency responders to ensure appropriate first aid is provided promptly in the event of accidents</li> <li>• Use locally sourced materials to minimize transport distances and locate associated facilities to minimize external traffic</li> </ul>
	Recruitment of women	<b>Moderate Risk. Increased GBV/SEA/SH by family members or community members</b>	<ul style="list-style-type: none"> <li>• Conduct sensitization activities on GBV/SEA/SH and on the benefits of having to raise awareness amongst the communities on the socio-economic benefits for the family and community of having women working and earning incomes</li> <li>• Implement confidential and accessible reporting mechanisms for GBV/SEA/SH incidents.</li> </ul>



Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>• Ensure that support services, such as counselling and legal assistance, are available for survivors of GBV/SEA/SH.</li> </ul>
	Transport, storage and disposal of hazardous materials to and from project sites	<b>Low to Moderate Risk. Exposure to hazardous materials</b> and possible health risks associated with inappropriate storage/use of chemicals	<ul style="list-style-type: none"> <li>• Develop a Hazardous Materials and Waste Management Plan as part of C-ESMPs and implement strict controls on the storage, handling, and disposal of hazardous materials to prevent accidents and limit exposure to the community.</li> <li>• Provide training for employees and contractors on hazardous materials and waste management and emergency response procedures</li> <li>• Conduct regular emergency response drills and training for both project staff and local emergency responders to ensure preparedness.</li> <li>• Ensure that adequate safety equipment and infrastructure are in place, such as fire-fighting equipment, spill containment systems.</li> <li>• Conduct programs to inform and educate the local community about the potential risks associated with hazardous materials and wastes and the measures in place to mitigate these risks.</li> <li>• Regularly monitor and maintain equipment and infrastructure, as well as facilities and transportation vehicles for compliance with hazardous materials management procedures to prevent malfunctions that could lead to emergencies.</li> <li>• Establish clear procedures for reporting and responding to hazardous materials/waste incidents, including immediate containment and notification of relevant authorities, the Borrower and the World Bank.</li> <li>• Restrict access to areas where hazardous materials are stored or handled to trained and authorized personnel only.</li> <li>• Establish or support local healthcare facilities to provide immediate care in case of an emergency and to improve overall community health resilience.</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
Employment of foreign / Non-local workers	Labour Influx	<b>Low to Moderate Risk.</b>	
		Increased volumes of traffic and higher risk of cultural/ religious/ ethnic differences can lead to social conflicts	<ul style="list-style-type: none"> <li>• Use of local workforce</li> </ul>
		Increased spread of communicable diseases.  Vulnerable groups may face increased exposure and health issues can be exacerbated, especially among the elderly, disabled, and those with pre-existing conditions..	<ul style="list-style-type: none"> <li>• Adhere to national and international guidelines for infection prevention and control, including vaccination, use of personal protective equipment (PPE), and hygiene practices</li> <li>• Engage with communities to raise awareness about health and safety risks and to develop community emergency response procedures</li> <li>• Incorporate social and environmental mitigation measures into the civil works contract</li> </ul>
		Increased illegal behaviour / behaviour that violates social norms in the project area (for example, drug and alcohol use, violence, rates of illicit behaviour and crime)	<ul style="list-style-type: none"> <li>• Developing a CoC for workers and making it part of the employment contract, including sanctions for non-compliance, mandatory and repeated training and awareness raising of the workforce about the CoC, informing workers about national laws that make GBV/SEA/SH a punishable offence which is prosecuted</li> <li>• Adoption by contractors of a policy to cooperate with law enforcement agencies in investigating complaints</li> </ul>
		Increased GBV/SEA/SH	<ul style="list-style-type: none"> <li>• Adequate monitoring program</li> <li>• Engage with local communities to raise awareness on GBV/SEA/SH</li> <li>• Implement confidential and accessible reporting mechanisms for GBV/SEA/SH incidents.</li> <li>• Mandatory and repeated training and awareness raising of the workforce about the CoC, informing workers about national laws that make GBV/SEA/SH a punishable offence which is prosecuted</li> </ul>
<b>All Activities</b>	Civil Unrest/ Spread of conflict in the North	<b>Moderate Risk.</b> Disruption and delays of project activities due supply chain interruptions, intimidation of contract workers or looting/ vandalism. Security risks for project personnel. Refer to Section 5.1.4 for detail.	<ul style="list-style-type: none"> <li>• Preparation of a Security Risk Assessment (SRM) and Security Management Plan (SMP) to ensure that security risk mitigation measures are in place for workers and local communities.</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement			
Site preparation and all Construction Activities	Land acquisition for construction activities or for the establishment of the right-of-way easements	<p><b>Low to Moderate Risk:</b> LV and MV lines will be established within an existing Right of Way (RoW)- mainly along the roads. Risks are expected to be small in scale, with temporary and/or permanent interruption of economic activities and/or involuntary physical resettlement of households, and mobile vendors resulting in loss of livelihoods and disruption of social networks.</p>	<ul style="list-style-type: none"> <li>• Develop a detailed site-specific resettlement plan that includes compensation, relocation assistance, and livelihood restoration programs, when required.</li> <li>• Provide fair and timely compensation for lost asset, including land, structures, and income sources.</li> <li>• Implement livelihood restoration programs in a timely manner to help affected individuals and households regain their economic stability. This shall include the provision of training and support for alternative income-generating activities, when needed.</li> <li>• No works will commence prior to the implementation of the RAPs and the compensation people affected by the project (PAPs)</li> <li>• Engage with affected populations early in the planning process and conduct consultations to understand their needs, preferences, and concerns.</li> <li>• Establish a transparent and accessible RAP GRM, sensitive to SEA/SH to address concerns and disputes, and ensure that the mechanism is well-publicized and easily accessible to all affected parties.</li> </ul>
		<p><b>Moderate risk.</b> Disproportionate impacts of involuntary resettlement on vulnerable groups or marginalized populations (e.g. lack of legal recognition, difficulties in finding alternative housing, employment opportunities or resources, disruption of social networks, inadequate compensation, increased marginalization in new locations, safety concerns or health impacts due to lack of access to healthcare and social services, amongst others)</p>	<ul style="list-style-type: none"> <li>• Prepare and implement detailed site-specific RAPs and LRPs that outline compensation, relocation, and livelihood restoration measures tailored to the needs of vulnerable groups, including the provision of targeted support and/or offer of special assistance.</li> <li>• Conduct thorough social impact assessments to identify the specific needs and vulnerabilities of affected groups as part of the site-specific RAPs and LRPs;</li> <li>• Ensure meaningful consultation with affected communities, including vulnerable groups, throughout the planning and implementing process and involve vulnerable groups in decision-making processes to ensure their concerns and preferences are considered.</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
		<b>Moderate risk. Increase in GBV/SEA/SH</b> during payment of compensations or due to delays in the implementation of LRPs	<ul style="list-style-type: none"> <li>• Conduct awareness raising activities on GBV/SEA/SH, as well as on beneficiaries' rights, and all stakeholders' roles and responsibilities;</li> <li>• Signature of CoCs by all project workers and sensitization on sanctions for cases of non-compliance;</li> <li>• Establish and implement a transparent and accessible RAP GRM, sensitive to SEA/SH;</li> <li>• Ensure that LRP activities are implemented in parallel to RAP activities to avoid resettlement impacts' on women's economic activities.</li> </ul>
<b>ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>			
<b>Site Survey and Design</b>	Route Planning	<b>Moderate to Substantial Risk.</b> Refer to Section 5.1.2 for detail	<ul style="list-style-type: none"> <li>• Undertake Route Screening assessment based on high-definition satellite imagery and selected field assessment. Classify any areas of impacted high biodiversity</li> <li>• Use competent, experienced ecological consultants for the work</li> <li>• Seek alternative routes in these sections</li> <li>• If not feasible, undertake ESIA and prepare ESMP</li> </ul>
<b>Site Preparation</b>	Bush clearing	<b>Moderate Risk.</b>	<ul style="list-style-type: none"> <li>• Avoid harm to areas and species of conservation significance</li> </ul>
<b>All EPC site activities</b>	Interactions with wildlife	<b>Moderate Risk.</b>	<ul style="list-style-type: none"> <li>• Train workers to avoid (not kill) snakes and stinging insects and arachnids</li> <li>• Prohibit and monitor snaring and harassment of wild animals</li> </ul>
<b>ESS 8 Cultural Heritage</b>			
<b>Site Preparation</b>	Bush clearing and excavations	<b>Low Risk.</b> Loss or damage to cultural heritage	<ul style="list-style-type: none"> <li>• Chance Finds Procedure will be included in site-specific C-ESMPs. These will assess if there is potential for chance finds of cultural heritage in the areas of project intervention, and if so, will carry on recognized practices of field-based studies, documentation, and protection of cultural heritage, and will include requirements to verify that contractors follow same practices.</li> <li>• Site-specific C-ESMPs will be included in the bidding documents and in the construction contracts</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
<b>ESS 10 Stakeholder Engagement and Information Disclosure</b>			
<b>Determination of Service Areas and Project Scope</b>	Project Survey and Preliminary Design	<b>Moderate Risk:</b> Exclusion of vulnerable and marginalized groups from project benefits. Refer to Section 5.1.3 for detail.	<ul style="list-style-type: none"> <li>• Ensure the survey and design includes specific questions and considerations for vulnerable and marginalized groups.</li> <li>• Involve representatives from vulnerable and marginalized groups in the survey planning and design process.</li> <li>• Conduct targeted outreach to identify and engage with vulnerable and marginalized groups.</li> <li>• Use accessible communication methods, including local languages and formats suitable for people with disabilities.</li> <li>• Collaborate with local organizations that work with vulnerable and marginalized groups to facilitate their inclusion.</li> <li>• Establish a community GRM that is SEA/SH sensitive and an inclusive feedback mechanism to allow vulnerable and marginalized groups to voice their concerns and suggestions.</li> </ul>
	Information Communication/ Engagement activities	<b>Moderate Risk. Creation of unrealistic expectations</b> among local communities regarding project benefits (for example, employment opportunities, infrastructure improvements, deadlines, etc.)	<ul style="list-style-type: none"> <li>• Provide accurate information about the project's scope, timeline, and potential benefits.</li> <li>• Provide regular updates to the communities keeping them informed about project progress and any changes to the plan</li> <li>• Involve community members in planning and decision-making processes.</li> <li>• Establish before the start of any activity a grievance redress mechanism to address community concerns and complaints promptly.</li> </ul>
		<b>Moderate Risk.</b> Social conflicts and population discontent resulting from limited access to household electrification and including conflicts resulting from improper communication about project activities and timelines.	<ul style="list-style-type: none"> <li>• Develop and implement a comprehensive communication plan, aligned with the project's Stakeholder Engagement Plan (SEP)</li> <li>• Engage with local communities early and continuously through the use of multiple communication channels and the establishment of community liaison officers</li> <li>• Provide clear and accurate project information</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>• Conduct regular consultations and feedback sessions</li> <li>• Establish a transparent and accessible GRM, sensitive to SEA/SH</li> <li>• Publicize the GRM</li> </ul>
		<p><b>Moderate Risk:</b> Exclusion of vulnerable and marginalized groups from project benefits. Refer to Section 5.1.3 for detail.</p>	<ul style="list-style-type: none"> <li>• Ensure engagement activities are adequate to the specific needs of vulnerable and marginalized groups, as established in the SEP.</li> <li>• Involve representatives from vulnerable and marginalized groups in engagement activities.</li> <li>• Conduct targeted outreach to identify and engage with vulnerable and marginalized groups.</li> <li>• Use accessible communication methods, including local languages and formats suitable for people with disabilities.</li> <li>• Collaborate with local organizations that work with vulnerable and marginalized groups to facilitate their inclusion.</li> <li>• Establish inclusive feedback mechanisms to allow vulnerable and marginalized groups to voice their concerns and suggestions.</li> </ul>

Activity	Aspect	Potential risks and impacts/benefits	Mitigation / Enhancement
<b>All EPC construction works</b>	Engagement activities and recognition of grievances	<b>Moderate Risk.</b> Lack of inclusion and accessibility of vulnerable groups to engagement activities, in particular consultations and the GRM	<ul style="list-style-type: none"> <li>• Conduct targeted outreach to identify and engage vulnerable groups.</li> <li>• Use community leaders and local organizations to reach these groups.</li> <li>• Provide information in accessible formats and use various communication channels to ensure broad accessibility</li> <li>• Schedule consultations at convenient times and accessible locations</li> <li>• Provide transportation and other support to enable participation.</li> <li>• Raise awareness to vulnerable and marginalized populations about their rights, the consultation process and their active participation</li> <li>• Evaluate regularly the accessibility and inclusivity of engagement activities and of the GRM</li> </ul>
<b>Completion of all activities</b>	Stakeholder engagement	<b>Moderate Benefit.</b> Increased trust and cooperation between stakeholders	<ul style="list-style-type: none"> <li>• Implement the SEP to ensure continuous and meaningful consultation with all stakeholders</li> <li>• Establish grievance mechanisms to address concerns and complaints in a timely and effective manner</li> </ul>

### 5.1.2 Planning and design considerations for avoidance of environmental and social risks and impacts

#### Route selection of MV and LV lines

Components 1a and 1b comprise most of the major civil and electrical works proposed under the project. The nature of the construction work is described in Section 2. At present, the design is not complete and the location of the LV and MV lines is not known, other than that they are mainly intended to serve the larger population centres, primarily in the four northern provinces but to a lesser extent in other provinces as well (Project Appraisal Document, V2). Most of the construction is expected to be in areas that are already modified by urban and peri-urban settlement. There may be sections of routes, particularly MV lines, that are in areas of natural habitat, as defined by the World Bank (2016), particularly for Component 1a, where some longer cross-country MV lines will be needed to strengthen the grid into these population centres. The Borrower has confirmed that the lines are not expected to involve major river crossings (e.g.: Zambezi River, Pungwe River), although smaller river crossings may be necessary together with crossings of wetlands.

The design of the Component 1a and 1b MV and LV lines is broadly intended to avoid habitats and species of conservation significance, whether or not within legally designated conservation areas. Due to the absence of detailed design information with the necessary degree of accuracy, until prepared by the EPC contractors, the verification of design compliance with this performance criterion can only be made once the contractors have been appointed. EDM must provide evidence that Contractors have assessed the impact of MV and LV alignments and that any areas of conservation or cultural significance have been identified, assessed, alternatives considered in consultation with stakeholders, and mitigation proposed. (refer to Section 6).

#### Waste management

The project must minimize the generation and disposal of waste to the greatest reasonable extent, and in accordance with Mozambique law (Decree 94/14). The principles of the waste management hierarchy shall be applied, including the avoidance of unnecessary waste generation, separation of waste for recycling and reuse, composting of organic vegetable waste and effective measures to characterize, temporarily store, transport and safely dispose of remaining general waste and hazardous waste (Decree 83/14). Accurate records of waste shall be maintained (by weight) and presented in EDM's monthly E&S reports.

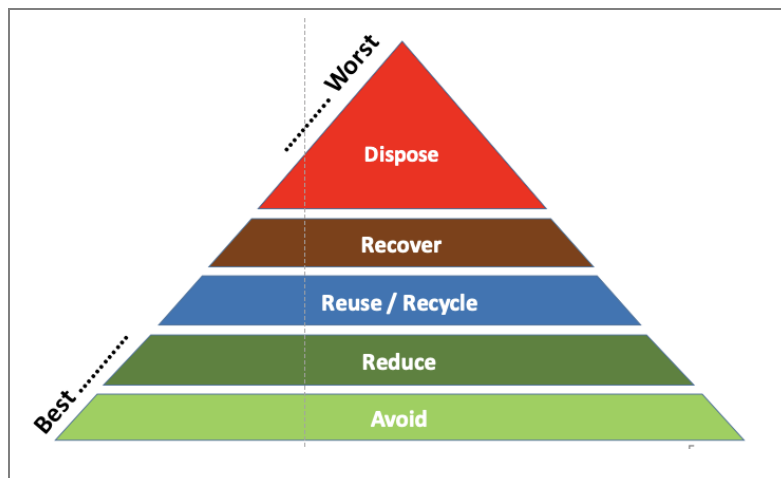


Figure 5-1. Principles of waste management – the waste hierarchy



### 5.1.3 Risks and mitigation measures specific to disadvantaged and vulnerable groups

Disadvantaged and vulnerable groups are those who may be disproportionately impacted or further disadvantaged by the project compared to other groups due to their vulnerable status in a specific context. These groups include:

- **Women and girls**, who face higher exposure to gender-based violence (GBV) and intimate partner violence (IPV), as well as gender-based discrimination, including access to employment opportunities, education, economic opportunities, and reproductive health services due to various socio-economic and cultural factors ;
- **People with disabilities**, particularly in rural areas, who face significant challenges, such as limited access to resources, services, and employment opportunities;
- **Children and adolescents**, who are vulnerable due to high rates of child marriage and adolescent pregnancies and limited educational opportunities;;
- **The elderly population**, with higher rates of disabilities and health issues, faces mobility challenges and limited access to support and care services;
- **Sexual orientation and gender identity (SOGI) minorities**, who are at higher risk of violence and social exclusion, with limited access to supportive services and legal protection
- **Economically disadvantaged individuals**, who experience higher rates of poverty, and are more vulnerable to exploitation and abuse due to their limited access to economic resources.

Project activities can exacerbate the underlying conditions of vulnerable groups in several ways. Vulnerable groups, such as the elderly, children, persons with disabilities, and those with pre-existing health conditions, are more susceptible to health risks, including exposure to hazardous substances and poor living conditions. Projects involving land acquisition or resettlement can lead to displacement, loss of livelihoods, and increased poverty. Additionally, vulnerable groups are at higher risk of exploitation, including gender-based violence, child labour, and forced labour. Environmental degradation and inadequate waste management can disproportionately affect those relying on natural resources for their livelihoods. Social exclusion and lack of participation in decision-making processes can further marginalize these groups.

To address the specific risks and impacts faced by these disadvantaged and vulnerable groups, tailored mitigation measures are necessary, which may include:

- Awareness raising activities on the rights and needs of vulnerable groups, along with training for project staff and community members on inclusivity and non-discrimination, can help create a more supportive environment;
- Conducting inclusive consultation and participation, ensuring these groups are represented in project planning and implementation;
- Provision of targeted support services as an integral part of project E&S risk management to address their specific needs, as reflected in the project SEP;
- Establishing confidential and accessible reporting channels for incidents of violence and discrimination, along with ensuring protection and support for those who report such incidents;
- Economic empowerment programs, such as skill development, and employment opportunities, to enhance the economic status of vulnerable groups;

- Regular monitoring and evaluation of the project's impact on vulnerable groups, along with adjustments to mitigation measures as needed; and
- Finally, fostering community engagement and collaborating with local organizations and stakeholders to support the inclusion and protection of vulnerable groups, ensuring they benefit equally from the project's outcomes.

#### 5.1.4 Security risks

Mozambique is currently classified as a country of Fragility, Conflict and Violence (FCV) rated as Medium Intensity Conflict due to the security situation in several regions of the country. The country is facing insurgency in parts of the gas-rich province of Cabo Delgado. The insurgency has spread to other districts and towns in the province, including Mocímboa da Praia, Palma, Macomia, Quissanga, Ibo, Meluco, and Nangade. In April 2021, insurgents attacked and occupied Palma – near major natural gas projects in northern Mozambique.

In November 2024, unrest erupted in many parts of the country during the general election. The political, social and economic situation is rapidly deteriorating resulting in significant deterioration of economic activities- business activities, transport, and movement of goods and people. The current situation is negatively impacting the ability of people and institutions to conduct business. Civil works throughout the country have been affected by supply chain interruptions and there has been some intimidation of contract workers reported. Looting and vandalism have accompanied protests in Maputo and over 20 people have been killed. To assess these risks, the project will prepare a Security Risk Assessment (SRM) and Security Management Plan (SMP) to ensure that security risk mitigation measures are in place for workers and local communities.

## 5.2 Off-Grid Electrification and Clean Cooking (Component 2)

### 5.2.1 Risk Categorization for DRE and Clean Cooking Projects

Component 2 comprises the sub-components described in Sections 2.1 and 2.4, including household solar installations, meshgrids and minigrids with battery storage (BESS), standalone solar systems for productive uses and clean cooking technologies. Each of these has its own risk profile which will require different levels of E&S intervention. Table 5-3 describes the potential construction-related risks, which may be low or moderate and in limited cases, substantial.

**Table 5-3. E&S risk categorization when assessing the construction of DRE and clean cooking businesses**

<b>Risk Categorization</b>	<b>Description / Criteria</b>
<b>Low Risk</b>	Subcomponents with minimal potential environmental and social construction risk that can be managed with straightforward mitigation measures. These projects typically involve standard Distributed Renewable Energy (DRE) technologies including household solar and clean cooking solutions, with limited scale or complexity.
<b>Moderate Risk</b>	Subcomponents with moderate potential environmental and social risk, requiring a more detailed risk management approach and specific management and mitigation measures

	to comply with Good International Industrial Practice (GIIP). These projects may involve larger installations, meshgrids, that have more complex construction requirements and may require specific instruments, dedicated site management and periodic environmental and social monitoring and review.
<b>Substantial Risk</b>	Subcomponents involving larger construction works that can result in a higher risk of severe outcomes including (in the health and safety context), fatalities of workers or members of the local community, pollution events, GBV, SEA/SH unless appropriate management systems and instruments are developed, implemented and monitored. These projects would involve only larger mini-grid solar installations with overhead connections to customers.

### 5.2.2 Preliminary Assessment of Off-Grid Electrification and Clean Cooking Risks and Benefit

Table 5-4 provides an assessment of construction risks and benefits associated with each Category 2 sub-component, and the mitigation or enhancement of impacts.

**Table 5-4. Off grid electrification and Clean Cooking - potential risks and impacts/benefits of construction activities (Component 2)**

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
<b>ESS 1: Assessment and Management of E&amp;S Risks and Impacts</b>			
Policies, regulations, national electrification plans and strategies, feasibility studies, capability to manage of project E&S risks	Adequacy of regulatory framework for environmental assessment and Govt. regulator capacity	<b>Moderate Risk.</b> While regulatory framework for EA is satisfactory, provincial regulator capacity is low. Authorizations provide insufficient project-specific conditions. Project categorization (Category C) may not be appropriate for the level of uncertainty and risk in some instances.	<ul style="list-style-type: none"> <li>• Prepare E&amp;S screening assessment when design of project sub-components is available. Determine and assess any areas of higher environmental or social risk</li> <li>• Prepare an Environmental and Social Action Plan (ESAP) proportionate to the level of assessed risk</li> <li>• For larger construction projects (e.d: large mini-grids), prepare a C-ESMP with specific subplans as defined by the screening process</li> <li>• Monitor and report on project E&amp;S performance in accordance with a quarterly monitoring template.</li> <li>• Adapt management as necessary to improve performance where required.</li> </ul>
	Adequacy of legal framework to support fair labour practice and worker health and safety	<b>Moderate Risk.</b> Revised labour law is aligned with important principles of non-discrimination, gender equity, prohibition of SE/SEA, fair labour practices etc.	<ul style="list-style-type: none"> <li>• Implement Project guidelines and plans for labour (LMP, SEP, SE/SEA Guidelines, EDM Project Health and Safety Requirements V.02, WB EHS Guidelines)</li> <li>• Establish and implement throughout the project workers' grievance redress mechanism</li> <li>• Prepare a Code of Conduct to be signed by all project workers</li> </ul>
	Adequacy of legal framework for compensation and resettlement	<b>Low Risk.</b> Legal framework is procedurally misaligned with the timing of available information on some projects but reasonable provision is made to ensure that people affected by physical or economic impacts are fairly compensated.	<ul style="list-style-type: none"> <li>• Establish and implement throughout the project a grievance redress mechanism.</li> <li>• Select construction sites that avoid impacts on community land and assets</li> <li>• If unavoidable, consult with community leaders and affected parties and prepare and implement a livelihood restoration plan.</li> </ul>
	Adequacy of E&S capacity of Implementing Agencies, the Grant Manager and Grant Beneficiaries	<b>Moderate Risk.</b> Capacity of the implementing agency / Grant Facility Manager to manage E&S risks for larger construction projects associated with mini-grids may be insufficient	<ul style="list-style-type: none"> <li>• Develop and implement an effective, fully integrated project-level EHS management system (Implementing Agency and Grant Facility Manager).</li> <li>• Appoint competent staff to ensure capacity to supervise E&amp;S at all work sites and clearly define all roles and responsibilities for oversight and supervision.</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>Establish a quick response mechanism for immediate reporting and corrective action related to unsafe acts (e.g.: WhatsApp group)</li> <li>Ensure that all grant beneficiaries have adequate E&amp;S clauses defining their respective roles and responsibilities in E&amp;S management</li> <li>Prepare and implement specific, proportionate, risk management procedures in an ESAP, focussed on identified risks related to activities being undertaken.</li> <li>Train workers in E&amp;S requirements specific to their job descriptions. Repeat training regularly.</li> <li>Provide appropriate site supervision at sites.</li> <li>Maintain updated records of all relevant EHS indicators through the Management System.</li> <li>Track and report all incidents, accidents and near misses.</li> </ul>
<b>ESS 2 Labour and Working Conditions</b>			
<b>All site activities (home solar and clean cooking)</b>	Occupational health and safety	<b>Low - Moderate Risk</b> . Household solar installations are simple, involving a few installers without any high voltage connections or other potentially harmful electrical works. OHS risks will be low - moderate subject to basic precautions. Typical warehousing / storage yard risks must be addressed (e.g.: pedestrian heavy vehicle interaction). Transport safety risks for labourers to and from site will need to be managed to ensure that workers are not transported on the back of open vehicles and that defensive driving techniques and adherence to speed limits are enforced.	<ul style="list-style-type: none"> <li>Ensure vehicles are well maintained according to manufacturer and Mozambique roadworthy requirements.</li> <li>Use only vehicles designed for passenger transport with seat belts for all passengers. Never allow workers to travel on the back of open vehicles.</li> <li>Make drivers responsible for completing a daily vehicle safety checklist.</li> <li>Train competent, fully licenced, drivers on defensive driving techniques. Retrain regularly.</li> <li>Determine and enforce suitable vehicle speed limits.</li> <li>Test drivers for alcohol daily before work commences.</li> </ul>
<b>All site activities (mesh grids and mini-grids)</b>	Occupational health and safety	<b>Moderate – Substantial Risk.</b> These activities involve larger installations and in some limited cases fairly large installations (solar fields of up to 0,5 ha with battery storage and overhead	<ul style="list-style-type: none"> <li>Provide ongoing training programs to enhance skills and knowledge related to workers' specific job functions.</li> <li>Include safety training as a mandatory part of the onboarding process</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
		distribution). In the case of these installations, additional risks relating to electrical injuries, welding, use of electric hand tools, loading and offloading of equipment and supplies etc. will increase the degree of risk. These should still be manageable with the implementation of basic rules of health and safety and specific procedures for particular activities involving risk	<ul style="list-style-type: none"> <li>▪ Provide targeted training and awareness programs for vulnerable workers on OHS, workers' rights, and grievance mechanism</li> <li>▪</li> </ul>
<b>Employment</b>	Fair implementation of provisions of worker contracts	<b>Moderate Risk.</b> Conflicts between workers and management can disrupt project timelines and lead to strikes or work stoppages.	<ul style="list-style-type: none"> <li>• Establish clear communication channels for workers to voice concerns and negotiate.</li> <li>▪ Implement a fair and transparent grievance mechanism.</li> </ul>
	Payment disputes	<b>Moderate Risk.</b> Delays in payment or unfair wages can lead to worker dissatisfaction and disputes	<ul style="list-style-type: none"> <li>• Ensure timely and fair payment of wages in accordance with local laws and industry standards.</li> <li>▪ Regularly review and adjust compensation packages to remain competitive and fair.</li> </ul>
	Labour law infringements	<b>Moderate Risk.</b> Non-compliance with labour laws and ESS2 can lead to legal penalties and project delays	<ul style="list-style-type: none"> <li>• Implement robust monitoring and supervision mechanisms to ensure compliance with labour standards and ESS2 and to promptly address any issues that arise, particularly those affecting vulnerable groups</li> <li>• Conduct regular audits to ensure compliance with all applicable labour laws and regulations.</li> <li>▪ Provide training to management and staff on legal requirements and best practices in labour law compliance.</li> <li>▪ Provide internal training on workers' rights with explanations of the type of contract, duration, contract clauses, type, and conditions of work to be performed in accordance with Mozambican law, including but not limited to rights related to working hours, holidays, rest days, salary, overtime, compensation, and benefits.</li> <li>▪ Provide a work contract and code of conduct at the time of contract signing. Once signed, a copy remains with each party.</li> <li>▪ Availability and dissemination of the GRM for workers - complaint channels should be posted in visible locations.</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
	Grievances	<b>Moderate Risk.</b> Lack of worker representation translating into the absence of a mechanism for workers to express concerns or negotiate terms can lead to unresolved grievances	<ul style="list-style-type: none"> <li>Recognize the right of workers to form or join trade unions and bargain collectively.</li> <li>Facilitate the establishment of worker committees or representation where unions are not present.</li> </ul>
	Working conditions	<b>Moderate Risk.</b> Lack of proper facilities, sanitation	<ul style="list-style-type: none"> <li>Develop and enforce standards for worker accommodations, sanitation, and access to clean water and nutritious food.</li> <li>Ensure that work schedules allow for adequate rest, including breaks and days off.</li> <li>Ensure that women have access to separate toilets with internal locks.</li> </ul>
	Discrimination of individuals or groups considered as vulnerable under project's context <sup>29</sup>	<b>Moderate Risk.</b> Unequal treatment of workers based on gender, ethnicity, or other factors	<ul style="list-style-type: none"> <li>Develop a clear non-discrimination policy and provide training to enforce it.</li> <li>Promote diversity and inclusion in the workplace through hiring practices and cultural sensitivity training, as well as through the establishment of a minimum quota.</li> <li>The recruitment process should be transparent, conducted in coordination with local authorities.</li> <li>Encourage the participation of women, youth, and people with disabilities in the project.</li> <li>Prioritize local recruitment and use clear recruitment procedures.</li> <li>Establish and operationalize W-GRM that are accessible to all workers, including vulnerable groups, and ensure that complaints can be made anonymously and without fear of retaliation.</li> </ul>
	Child labour	<b>Moderate Risk.</b> Child labour	<ul style="list-style-type: none"> <li>Strictly prohibit the hiring of labour under the age of 15 for project activities.</li> </ul>

<sup>29</sup> The World Bank Directive: Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups defines disadvantaged or vulnerable individuals as those individuals who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or indigenous status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a projects benefits. Refer to Section 5.1.2 for further information about this issue.

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>• Hiring minors of working age (15-18 years) should be done after meeting legal provisions.</li> <li>• Establish strict age verification systems for all new hires.</li> <li>▪ Engage with local communities and schools to support educational opportunities and awareness about the harms of child labour</li> <li>▪ Conduct training on child labour and violence against children (VAC), as well as awareness raising on the code of conduct and explanation of sanctions for cases of child labour use.</li> </ul>
	Forced labour	<b>Moderate Risk.</b> Forced labour	<ul style="list-style-type: none"> <li>• Create and enforce policies that prohibit any form of forced or compulsory labour.</li> <li>• Set up a workers' grievance mechanisms (W-GRM) for workers to report coercion or abuse without fear of retaliation.</li> <li>• Ensure availability of written contracts with all workers at all levels (including temporary workers), defining tasks, responsibilities, contract duration, working hours, salary, and other relevant aspects.</li> <li>• Inclusion in contractual agreements with Grant Beneficiaries on obligations and non-compliance sanctions</li> <li>• Request bidders to provide a Forced Labor Performance Declaration, covering past performance, and a Forced Labor Declaration, covering future commitments to prevent, monitor and report on any forced labour and enforcing these requirements to sub-contracts and suppliers equally</li> <li>▪ Preparation of Labour Management Plans by the Grant Beneficiaries specifying how they will mitigate the risks of forced labour</li> </ul>
	Gender-Based Violence/ Sexual Exploitation and Abuse and Sexual Harassment(GBV/SEA/SH)	<b>Moderate Risk.</b> Increased GBV/SEA/SH at the workplace	<ul style="list-style-type: none"> <li>• Prioritize hiring of local workers.</li> <li>• Workers should be sensitized not to support/engage in prostitution.</li> <li>• Signature of a Code of Conduct (CoC) by all project workers</li> <li>• Establishment of confidential and accessible reporting channels for GBV/SEA/SH incidents and ensure anonymity and protection for those who report incidents</li> <li>• Partner with local service providers to offer medical, psychological and legal assistance as needed</li> </ul>



Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>• Conduct regular training sessions GBV/SEA/SH prevention and response, the rights of employees and available support mechanisms, the W-GRM sensitive to SEA/SH, as well as on the CoC and sanctions for cases of non-compliance</li> <li>▪ Evaluate the effectiveness of policies and interventions, and make necessary adjustments</li> </ul>
	Increased disposable income in local communities	<b>Moderate Benefit.</b> Employment of local workers at various times during the construction and operational phases. Short term employment benefits with some opportunities for upskilling of labour.	<ul style="list-style-type: none"> <li>• Seek to employ supervisors and other semi-skilled contract labour from local areas to the greatest extent possible</li> <li>• Provide upward mobility for workers who show promise (promotion, training, capacity building activities, certifications)</li> </ul>
	Increase of social inclusion	<b>Moderate Benefit.</b> Increase access to employment opportunities and benefits to vulnerable and marginalized groups	<ul style="list-style-type: none"> <li>• Develop and enforce inclusive employment policies that ensure vulnerable and marginalized groups have access to employment opportunities, including setting targets for the employment of women, youth, and people with disabilities</li> <li>• Engage with local communities to understand their needs and involve them into participatory planning processes and regular consultations with community representatives</li> </ul>
	Increased purchases of goods and services from local businesses	<b>Moderate Benefit.</b> Increased turnover in local businesses (equipment, food, services, accommodation etc.). Short term injection of capital into the Mozambique economy. Opportunities for local purchasing to increase local spend.	<ul style="list-style-type: none"> <li>• Establish procurement policies that prioritize the purchase of goods and services from local businesses Provide capacity-building support to local suppliers to help them meet the quality and quantity requirements of the project through training and assistance with certification and compliance, if needed</li> </ul>
<b>ESS 3 Resource Efficiency and Pollution Prevention and Management</b>			
<b>All site activities on site and at storage yards</b>	Land and water pollution caused by spillages or inadequate disposal of hazardous/general materials/wastes	<b>Moderate Risk.</b> Land and water pollution caused by litter (poor housekeeping), pollution due to poor separation, temporary storage and disposal practices. Failure to meet the requirements of the waste hierarchy (avoid, re-use, recycle, dispose). Wastes will be generally non-	<ul style="list-style-type: none"> <li>• Collect all wastes at the work sites and return daily to the Grant Beneficiaries' yard for sorting and segregation into reusable, recyclable and non-recyclable components (where recycling agents are available).</li> <li>• Appoint recycling agents for collection of reusable/recyclable waste materials</li> <li>• Transport and dispose of remaining waste to landfill using a certified waste handler/transporter.</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
		hazardous including food packaging, plastic bottles, broken insulators, cable offcuts, other electrical scrap, waste concrete, wooden pallets, waste tyres, glass bottles, scrap metal, discarded PPE. Hazardous wastes could include small quantities of hydrocarbon waste, waste car and truck batteries.	<ul style="list-style-type: none"> <li>• Maintain and track records of the weight of all waste that is removed from the Grant Beneficiaries yard for reuse, recycling or disposal.</li> <li>• Prepare general waste management and housekeeping procedures as a part of the Grant Beneficiaries' ESAP.</li> <li>• Include waste management/housekeeping training as a mandatory part of the onboarding process.</li> <li>• Manage any hazardous waste in accordance with Mozambique hazardous waste regulations and GIIP.</li> </ul>
ESS 4 Community Health and Safety			
<b>All site activities</b>	Community nuisance (air pollution and noise)	<b>Low - Moderate Risk.</b> Community exposure to dust and exhaust fumes and noise is expected to be short term and could cause nuisance but is unlikely to be at concentrations that cause health issues in surrounding communities). Mitigation through courteous behaviour is simple and proven.	<ul style="list-style-type: none"> <li>• Maintain vehicles to manufacturer specifications</li> <li>• Communicate in advance with community leaders and households regarding timing of and nuisance-related activities.</li> <li>• Maintain grievance register and act promptly about any complaints.</li> </ul>
<b>Influx of foreign non-local labour</b>	Exposure of female workers to GBV/SEA/SH	<b>Moderate Risk.</b> Increased risks for female workers of GBV/SEA/SH by family members or community members	<ul style="list-style-type: none"> <li>• Conduct sensitization activities on GBV/SEA/SH and on the benefits of having to raise awareness amongst the communities on the socio-economic benefits for the family and community of having women working and earning incomes</li> <li>• Implement confidential and accessible reporting mechanisms for GBV/SEA/SH incidents.</li> <li>• Ensure that support services, such as counselling and legal assistance, are available for survivors of GBV/SEA/SH.</li> </ul>
	Exposure of local (and particularly vulnerable) people to communicable diseases, health issues	<b>Moderate Risk.</b> Increased illegal behaviour / behaviour that violates social norms in the project area (for example, drug and alcohol use, violence, rates of illicit behaviour and crime)	<ul style="list-style-type: none"> <li>• Adhere to national and international guidelines for infection prevention and control, including vaccination, use of personal protective equipment (PPE), and hygiene practices</li> <li>• Engage with communities to raise awareness about health and safety risks and to develop community emergency response procedures</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>Incorporate social and environmental mitigation measures into the civil works program</li> </ul>
	Community exposure to increased GBV/SEA/SH	<b>Moderate Risk.</b> Foreign / non-local workers will be in intimate contact with households and children during implementation of the project.	<ul style="list-style-type: none"> <li>Developing a CoC for workers and making it part of the employment contract, including sanctions for non-compliance, mandatory and repeated training and awareness raising of the workforce about the CoC, informing workers about national laws that make GBV/SEA/SH a punishable offence which is prosecuted</li> <li>Adoption by Grant Beneficiaries of a policy to cooperate with law enforcement agencies in investigating complaints</li> </ul>
<b>All Activities</b>	Civil Unrest/ Spread of conflict in the North	<b>Moderate Risk.</b> Disruption and delays of project activities due supply chain interruptions, intimidation of contract workers or looting/ vandalism. Security risks for project personnel. Refer to Section 5.1.4 for detail.	<ul style="list-style-type: none"> <li>Preparation of a Security Risk Assessment (SRM) and Security Management Plan (SMP) to ensure that security risk mitigation measures are in place for workers and local communities.</li> </ul>
<b>ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b>			
<b>Site preparation and all Construction Activities</b>	Land acquisition for mini grids or mesh grids	<b>Low Risk:</b> Likely that sites can be found that do not result in material loss of resources or access to land for traditional users. In a few cases it is possible that some economic losses could result (e.g: fruit trees or crops). Physical resettlement or damage to community-owned structures is highly unlikely	<ul style="list-style-type: none"> <li>Develop a livelihood restoration program, when required.</li> <li>Provide fair and timely compensation for lost assets and income sources.</li> <li>Implement livelihood restoration programs in a timely manner to help affected individuals and households regain their economic stability. This shall include the provision of training and support for alternative income-generating activities, if needed.</li> <li>No works will commence prior to the compensation of people affected by the project (PAPs)</li> <li>Engage with affected populations early in the planning process and conduct consultations to understand their needs, preferences, and concerns.</li> <li>Establish a transparent and accessible GRM, sensitive to SEA/SH to address concerns and disputes, and ensure that the mechanism is well-publicized and easily accessible to all affected parties.</li> </ul>
		<b>Low risk.</b> Increase in GBV/SEA/SH during payment of compensation or due to delays in the implementation	<ul style="list-style-type: none"> <li>Conduct awareness raising activities on GBV/SEA/SH, as well as on beneficiaries' rights, and all stakeholders' roles and responsibilities;</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
		of LRPs. Risk low due to the very infrequent occurrence of requirements for LRPs.	<ul style="list-style-type: none"> <li>Signature of CoCs by all project workers and sensitization on sanctions for cases of non-compliance;</li> <li>Establish and implement a transparent and accessible GRM, sensitive to SEA/SH.</li> </ul>
<b>ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>			
<b>Bush clearing for solar arrays</b>	Loss of habitat with high conservation value, impact on threatened species	<b>Low Risk.</b> Location of sites for mini grids can be screened to ensure that impacts on sensitive natural habitats /species are avoided.	<ul style="list-style-type: none"> <li>Undertake Screening assessment of sites based on high-definition satellite imagery and field assessment.</li> <li>Avoid areas of untransformed natural habitat (untransformed woodlands, forests, wetlands, coastal dunes)</li> <li>Seek alternative sites where necessary</li> </ul>
	Interactions with wildlife	<b>Moderate Risk.</b> Workers may harass or kill wild animals. Risk generally low because of absence of bush clearing for most activities.	<ul style="list-style-type: none"> <li>Train workers to avoid (not kill) snakes and stinging insects and arachnids</li> <li>Prohibit snaring and harassment of wild animals</li> <li>Include mandatory induction training for all workers.</li> </ul>
<b>ESS 8 Cultural Heritage</b>			
<b>Site Preparation</b>	Bush clearing and excavations	<b>Low Risk.</b> Loss or damage to cultural heritage	<ul style="list-style-type: none"> <li>Chance Finds Procedure will be included in site-specific plans where there is land take for solar arrays or other mesh or mini-grid infrastructure. These will assess if there is potential for chance finds of cultural heritage in the areas of project intervention, and if so, will carry on recognized practices of field-based studies, documentation, and protection of cultural heritage, and will include requirements to verify that Grant Beneficiaries follow same practices.</li> </ul>
<b>ESS 10 Stakeholder Engagement and Information Disclosure</b>			
<b>Determination of Service Areas and Project Scope</b>	Project Survey and Preliminary Design	<b>Moderate Risk:</b> Exclusion of vulnerable and marginalized groups from project benefits. Refer to Section 5.1.3 for detail.	<ul style="list-style-type: none"> <li>Ensure the survey and design includes specific questions and considerations for vulnerable and marginalized groups.</li> <li>Involve representatives from vulnerable and marginalized groups in the survey planning and design process.</li> <li>Conduct targeted outreach to identify and engage with vulnerable and marginalized groups.</li> <li>Use accessible communication methods, including local languages and formats suitable for people with disabilities.</li> <li>Collaborate with local organizations that work with vulnerable and marginalized groups to facilitate their inclusion.</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>Establish inclusive feedback mechanisms to allow vulnerable and marginalized groups to voice their concerns and suggestions.</li> </ul>
	Inadequate information communication / engagement activities	<b>Moderate Risk.</b> Creation of unrealistic expectations among local communities regarding project benefits (for example, employment opportunities, infrastructure improvements, deadlines, etc.)	<ul style="list-style-type: none"> <li>Provide accurate information about the project's scope, timeline, and potential benefits.</li> <li>Provide regular updates to the communities keeping them informed about project progress and any changes to the plan</li> <li>Involve community members in planning and decision-making processes.</li> <li>Establish before the start of any activity a grievance redress mechanism to address community concerns and complaints promptly.</li> </ul>
		<b>Moderate Risk.</b> Social conflicts and population discontent resulting from limited access to solar household installations and cooking solutions including conflicts resulting from improper communication about project activities and timelines.	<ul style="list-style-type: none"> <li>Develop and implement a comprehensive communication plan, aligned with the project's Stakeholder Engagement Plan (SEP)</li> <li>Engage with local communities early and continuously through the use of multiple communication channels and the establishment of community liaison officers</li> <li>Provide clear and accurate project information</li> <li>Conduct regular consultations and feedback sessions</li> <li>Establish a transparent and accessible GRM, sensitive to SEA/SH</li> <li>Publicize the GRM</li> </ul>
		<b>Moderate Risk:</b> Exclusion of vulnerable and marginalized groups from project benefits. Refer to Section 5.1.3 for detail.	<ul style="list-style-type: none"> <li>Ensure engagement activities are adequate to the specific needs of vulnerable and marginalized groups, as established in the SEP.</li> <li>Involve representatives from vulnerable and marginalized groups in engagement activities.</li> <li>Conduct targeted outreach to identify and engage with vulnerable and marginalized groups.</li> <li>Use accessible communication methods, including local languages and formats suitable for people with disabilities.</li> <li>Collaborate with local organizations that work with vulnerable and marginalized groups to facilitate their inclusion.</li> </ul>

Activity	Type of Risk/Benefit	Risk/Benefit Description	Mitigation / Enhancement
			<ul style="list-style-type: none"> <li>Establish inclusive feedback mechanisms to allow vulnerable and marginalized groups to voice their concerns and suggestions.</li> </ul>
<b>All project activities</b>	Engagement activities and recognition of grievances	<b>Moderate Risk.</b> Lack of inclusion and accessibility of vulnerable groups to engagement activities, in particular consultations and the GRM	<ul style="list-style-type: none"> <li>Conduct targeted outreach to identify and engage vulnerable groups.</li> <li>Use community leaders and local organizations to reach these groups.</li> <li>Provide information in accessible formats and use various communication channels to ensure broad accessibility</li> <li>Schedule consultations at convenient times and accessible locations</li> <li>Provide transportation and other support to enable participation.</li> <li>Raise awareness to vulnerable and marginalized populations about their rights, the consultation process and their active participation</li> <li>Evaluate regularly the accessibility and inclusivity of engagement activities and of the GRM</li> </ul>
<b>All project activities</b>	Good stakeholder engagement	<b>Moderate Benefit.</b> Increased trust and cooperation between stakeholders	<ul style="list-style-type: none"> <li>Implement the SEP to ensure continuous and meaningful consultation with all stakeholders</li> <li>Establish grievance mechanisms to address concerns and complaints in a timely and effective manner</li> </ul>

## 6 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND BENEFITS DURING PROJECT OPERATION

### 6.1 Grid Electrification (Component 1)

The operational risks of the grid infrastructure are low. Community safety issues are rare. There is a need to ensure that there is an understanding in local communities of the right of way requirements along the line and what this means for development along the boundaries. Communities are generally also insufficiently aware of the operator's policy regarding agriculture within the RoW and this should be effectively communicated.

Bird electrocution impacts are generally not considered to be an issue for the LV and MV pole structures. Bird collision risks are possible depending on the line routes. These risks must be taken into account during the route screening in the detailed design phase. If avoidance of areas of higher bird collision risk has not been possible (e.g: crossing of bird flight paths along rivers or wetlands) then monitoring of bird collision impacts may need to be a requirement of the an Operational Impact Management Plan.

### 6.2 Off-Grid Electrification and Clean Cooking (Component 2)

#### 6.2.1 E-Waste Generation and Disposal

The renewable energy industry generates significant quantities of operational waste, as solar panels and battery storage systems age and are replaced. In the context of this project, the risk is **moderate - substantial**, and must be addressed through mitigation, particularly as Mozambique's capability to comply with the waste hierarchy and manage large quantities of waste (including hazardous battery waste) is limited other than in major centres. Article 22 of the Environmental Regulation (Decree 54/2015) makes provision for renewal of operational licences every five years, but because it is likely that the MTA will classify ASCENT under Category C, an environmental licence will not be required and there will be no opportunity to use legal mechanisms to verify due diligence of waste disposal. This may change over time, and the legal requirements for waste management and the capability to manage renewable energy waste may be substantially different in 15 or 20 years, when the first phase of major infrastructure renewal is likely to start, but this is not guaranteed and it should be assumed that the project will need to make provisions for e-waste management independently of an adequate regulatory framework.

In the absence of any certainty about regulatory control, it is recommended that the Implementing Agency should commit to the use of the *World Bank /ESMAP toolkit* (World Bank, 2024) as a requirement for the identification and management of e-waste from the project.

The toolkit identifies the following risks associated with off-grid e-waste:

- The e-waste from off-grid solar components can be toxic, is not biodegradable, and accumulates in the environment, in the soil, air, water and living things. Exposure to some e-waste fractions, such as by workers working informally and without protection and training, can lead to irreversible health effects, including cancer, miscarriages, neurological damage, and diminished IQs. This means that some off-grid solar components at end-of-life bring about significant environmental and social risks when not properly handled, dismantled, or treated. In most OGS markets (including Mozambique) formal disassembly and recycling facilities and infrastructures which follow environmentally-sound practices, are often not available and those that are available are often informal and follow sub-standard health and safety practices: no personal protective equipment and ventilation, open fire burning and acid bath stripping,

environmentally unsound disposal of residues, and discarding unsalvageable parts directly in the environment.

- Printed Circuit Boards (PCBs) also pose environmental risks. PCBs are often burned after they are discarded, to remove and salvage their precious metals; a process that can release dioxins and furans, which persistently pollute the environment for many years. The informal sector also often uses dangerous chemicals like cyanide and mercury to strip the gold from used-up PCBs, which contaminate water and soil, enter the food chain, and harm the health of living beings.
- Solar panels present a significant E&S risk, particularly in the form of e-waste accumulation. While solar panels contain potentially toxic materials such as cadmium, lead, and silicon tetrachloride in silicon-based panels, and cadmium and selenium in thin-film panels, the environmental impact is low as compared to batteries, and can be mitigated through improved manufacturing processes, safe handling, and effective recycling programs. The sheer volume of panels installed, however, raises concerns about proper disposal and recycling, as improper handling may result in environmental degradation and negative public perception due to the visual presence of discarded panels. Photovoltaic (PV) cells have an average life of 15 to 20 years.
- Other components such as electrical cables, though generally safe during use, present E&S risks at the end of their lifespan, particularly if not disposed of properly. Improper treatment of cables, such as burning to recover valuable metals, releases harmful pollutants like dioxins and furans into the environment, posing risks to human health and exacerbating environmental degradation. Cables have an average lifetime of more than a decade.

It is recommended that Component 4 of the project makes provision for the development of a management plan for e-waste following the guidance of the *World Bank /ESMAP toolkit*, which includes four main steps:



It is important to understand that Step 4 is not an end-of-life requirement but includes ongoing monitoring, reassessment, communication with stakeholders and adaptation throughout the life of the project. As described in the toolkit, *“off-grid solar e-waste risks should be part of the project’s E&S performance monitoring process. Tracking should happen through regular reporting, supervision site visits, and information sharing from third parties, such as through grievance redress mechanisms and stakeholder engagement and as per the legal agreement with the Borrower. Furthermore, companies should have internal tracking mechanisms and report progress on key indicators. Projects can also envision site visits and spot checks as needed.”*

It is further recommended that the above requirements are embedded within the legal agreements with the World Bank through the ESCP.



### 6.2.2 Power Supply to Unsustainable Commercial Practices

The provision of off-grid power into areas not served by grid electricity provides an opportunity to supply specific developments that may be socially and economically beneficial locally or more regionally. Electricity supply to pump water (surface or groundwater), for heating or cooling purposes, or for a host of other commercial or industrial reasons may be considered. In such cases, the project has an obligation to ensure that the use to which the electricity will be put is not harmful, and does not conflict with the project's exclusion list. Before committing to the project, the Fund Manager must verify that all necessary environmental authorizations are in place, and that the project team has independently screened the risks to satisfy the requirements of due diligence. Should there be any concern that potentially significant risks have not been adequately addressed, the investment must be rejected or delayed until there is a sufficient understanding of the impacts and commitment to manage them.

## 6.3 Operational Phase Benefits of all Project Components

Operational impacts of the project are expected to be overwhelmingly positive and can be grouped into seven categories (the impacts below are not ranked individually but are cumulatively expected to be highly significant).

### 6.3.1 Greenhouse Gases and Climate Change (Components 1 and 2)

The operation of renewable energy for off-grid solutions (Components 1 and 2) will have a positive impact on GHG emissions, as a result of renewable energy substitution for carbon-based energy (typically burning of wood and charcoal in rural and peri-urban communities), and the preservation of woodlands and forests that retain carbon. While a reduction in carbon emissions (calculated in CO<sub>2</sub>-e tons) is a PDO indicator, this benefit will be calculated by the World Bank Climate Change Unit and the detail is outside of the scope of the ESMF. Additionally, the project will build lines in areas prone to climate hazards and incorporate enhancements such as the use of weather-resistant materials and the design of infrastructure to withstand extreme temperatures, flooding, and high winds. These improvements will significantly strengthen resilience of communities connected to the grid, enhancing their ability to adapt to climate change. By ensuring a robust and reliable power supply, the project will improve communication and access to public services, including disaster risks management and response.

### 6.3.2 Community Health (Component 2)

The clean cooking solutions (Component 2) proposed by the ASCENT project will be implemented based on the multi-criteria framework developed by ESMAP. This framework evaluates clean cooking solutions according to nine attributes, with each contributing to clean cooking in varying degrees on a tiered scale of 1-6. Attribute 8 concerns health in relation to air pollution, with Tier 0 and 1 being least preferred and typically involving cooking using biomass inside the home without smoke extraction. This has been shown to be a significant health risk for affected households, particularly for women<sup>30</sup>. The higher tier cooking solutions move away from burning of biomass (wood, dung, crop residues) through coal and paraffin to more modern energy forms, which include natural gas, LPG and electricity. ASCENT proposes to support Tier 2 technologies only initially, following which only Tier 3 and higher solutions will be considered in subsequent programs. In the context of the project, Tier 2 solutions include biomass (such as fuel wood) but only in cooking facilities outdoors or indoors with smoke extraction.

<sup>30</sup> Refer to ESMAP (2015). *Technical Report 008/15 Beyond Connections – Energy Access Redefined. Chapter 8. World Bank Group.*

### 6.3.3 Socio Economic Development and Support of Vulnerable People (Components 1 and 2)

Socioeconomic development: Improved energy access to community services will also directly support the achievement of the Sustainable Development Goals (SDGs)<sup>31</sup>. Reliable energy supply for household use and community services (such as health and education) is fundamental for socioeconomic development. It will significantly improve human capital, as healthier and more educated people with access to basic community infrastructure have better chances of escaping the poverty trap. Reliable electricity will also boost businesses and public facilities, driving local economic growth by enabling the creation and expansion of businesses. Finally, the construction, maintenance and operation of new and rehabilitated networks will create job opportunities, further stimulating the local economy. The increased economic activities resulting from a reliable electricity supply will generate downstream employment across various sectors, and contribute to overall economic development; Biodiversity Conservation (Components 1 and 2).

### 6.3.4 Gender Equality, including GBV (Components 1 and 2)

Using a gender lens for the selection of institutions to be electrified, including facilities providing relevant services for women (such as neo-natal services), and connecting female-led and/or managed businesses will ensure that the benefits of electrification are equitably distributed. This approach will empower women by improving their access to essential health services and economic opportunities. Incentive schemes under the Grant Facility will prioritize gender balance, ensuring that women are well-represented in the value chain of distributed renewable energy (DRE) and clean cooking companies. This focus on gender inclusivity will help address gender disparities and empower women economically. Electrification may also reduce the incidence and social acceptance of gender-based violence (GBV). Women in houses with electricity and television are less likely to accept Intimate Partner Violence (IPV), and they tend to feel safer in public spaces with increased lighting, thus increasing their mobility, and potentially contributing to increased labor force participation and educational attainment if walking to work or school is safer.

### 6.3.5 Reduced Inequality (Components 1 and 2)

By providing access to electricity, the project will improve the quality of life for households and communities, particularly in underserved areas. This includes better access to information, appliances, and productive uses of energy, which can enhance overall resilience and economic opportunities. The project will focus on providing access to electricity for the most vulnerable communities, enhancing their resilience to climate risks. Increased economic activities due to reliable electricity supply will generate employment in various sectors, contributing to overall economic development and reducing economic disparities amongst urban and rural populations. The project also includes measures to make energy more affordable for low-income households. This includes a zero-connection fee policy for households connected to the grid, providing ready boards to the poorest households that cannot afford internal wiring, and ensuring a social tariff bracket for low-income customers. Additionally, VAT and import tax exemptions for off-grid systems (solar home systems and clean cooking solutions) will reduce financial barriers for low-income communities, enabling broader access to reliable and sustainable energy.

### 6.3.6 Biodiversity Conservation (Component 2)

Components 1 and 2 of the project align with World Bank and other international efforts to minimise the impacts of human settlement on biodiversity loss. Clearing of woodland and forest trees for energy is a grave and

---

<sup>31</sup> SDGs 1 (No poverty), SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities).

expanding issue in Africa, affecting thousands of hectares of habitat and resulting in a reduction in species diversity and richness. The substitution of solar energy for electricity and water heating and gradual substitution of traditional biomass cooking for BLEENS-based<sup>32</sup> cooking solutions will reduce hardwood losses.

### 6.3.7 Institutional Capacity Strengthening (Components 1 and 2)

The project implementing agencies (MIREME, EDM, and FUNAE) will receive E&S management capacity building, technical assistance, and implementation support. These activities are expected to improve their planning, technical, and institutional capacities, enhancing the sustainability of electricity services in the long term. Strengthened institutions will be better equipped to support a sustainable electrification agenda of Mozambique, ensuring the project's long-term success

## 6.4 Summary risk rating of all project components

While many of the anticipated project's risks are rated as moderate or low-moderate, particularly for Component 2, the overall E&S risk rating for the project is **substantial**, for the reasons described above under Component 1. Table 6-1 summarizes the classification criteria for different levels of risk.

**Table 6-1. Summary of project categorisation based on ESF-ESS1**

Aspect	High risk	Substantial risk	Moderate risk	Low risk
Project type, location, sensitivity, scale	Complex large to very large scale in sensitive location(s).	Not as complex; large to medium scale not such sensitive location.	No activities with high potential for harming people or environment; located away from sensitive areas.	Few or no adverse risks and impacts.
Nature and magnitude of risks & impacts, available mitigation	Mitigation unproven: unable to entirely address significant risk; high residual value.	Mitigation more reliable: significant risks but possible to avoid or address.	Easily mitigated: site specific, low magnitude risks.	Nothing to mitigate- no further assessment after screening.
Borrower capacity and commitment	Challenges and concerns about track record regarding E&S issues, significant stakeholder engagement capacity, commitment, track record concerns.	Some concerns about borrower track record, engagement capacity but readily addressed.	Sufficient borrower experience, track record, stakeholder engagement capacity.	Minimal or negligible risks to and impacts on human populations and/or the environment
Context of risk relevant to ES measures	Significant effects on ability to mitigate risk - significant contextual risks outside project control impacting on E&S performance and outcomes.	Some effects on ability to mitigate risk - known and reliable mechanisms to prevent or minimize, enforcement is weak in some respects, some stakeholder engagement	No effects on ability to mitigate risk—no contextual risks with effects on E&S performance	Negligible risk.

<sup>32</sup> Biogas, liquefied petroleum gas, electricity, ethanol, natural gas, and solar.

Aspect	High risk	Substantial risk	Moderate risk	Low risk
		concerns but readily addressed.		

## 7 PROCEDURES AND IMPLEMENTATION ARRANGEMENTS

### 7.1 Environmental and social risk management procedures (Component 1)

The environmental and social risk management procedures for Component 1 will be implemented through the Project's subproject selection process. In summary, the procedures aim to do the following (Table 7-1):

**Table 7-1. Project cycle and E&S management procedures (Component 1)**

Project stage	E&S stage	E&S management procedures
<b>(a). Assessment and Analysis:</b> Subproject identification	Screening	<p>During subproject identification, ensure subproject eligibility by referring to the <b>Exclusion List in Table 7-2</b> below.</p> <ul style="list-style-type: none"> <li>For all activities, use the <b>Screening Form in Annexure 3</b> to identify and assess potential environmental and social risks and impacts, and identify the appropriate instruments to be developed to mitigation impacts caused by the subproject.</li> <li>Identify documentation, permits, and clearances required under the government's Environmental Regulation.</li> </ul>
<b>(b). Formulation and Planning:</b> Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	<ul style="list-style-type: none"> <li>Based on the <b>Screening Form</b> adopt and/or prepare relevant environmental and social instruments, procedures and plans.</li> <li>Complete all documentation and obtain all permits and clearances required under the government's Environmental Regulation. This includes the initial application for registration according to which the Government will classify the project into categories.</li> <li>Complete required EA documentation based on the Government's classification of the project (likely to be per Province and limited to Categories C and possibly Category B).</li> <li>Prepare Simplified Environmental Study (SES) for Category B classification if required by Government for any sub-components of the project.</li> <li>Develop a generic ESMP for the project</li> <li>Incorporate requirements for relevant environmental and social procedures and plans into contractor bidding documents.</li> <li>Contractors on Component 1a to include an updated Project Route Screening Report prepared by a competent consultant based on the detailed design.</li> <li>If route screening identifies significant biodiversity or social risk in places, seek alternative routes or conduct full ESIA.</li> <li>Contractors on Component 1 to include a C-ESMP to manage overall E&amp;S compliance accompanied by sub-plans / procedures, which cover those aspects of construction that involve higher levels of risk and require more detailed management control (e.g.: OHS, Waste Management) in addition to the general measures included in the C-ESMP.</li> <li>Train contractors on Borrower and World Bank E&amp;S requirements (General E&amp;S due diligence, stakeholder engagement, OHS, gender violence, gender equality, code of conduct, Grievance Redress Mechanism).</li> </ul>

Project stage	E&S stage	E&S management procedures
<b>(c). Implementation and Monitoring:</b> Implementation support and continuous monitoring for projects	Implementation	<ul style="list-style-type: none"> <li>• Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring.</li> <li>• Track grievances/beneficiary feedback.</li> <li>• Continue awareness raising and/or training for relevant staff, volunteers, contractors, communities.</li> <li>• Conduct periodic internal and external audits.</li> <li>• Prepare monthly and quarterly E&amp;S reports in accordance with the ESCP. These reports should include the current status and evaluation of E&amp;S management activities carried out during the period, as well as the analysis of challenges, proposed solutions, and lessons learned.</li> </ul>
<b>(d). Review and Evaluation:</b> Qualitative, quantitative, and/or participatory data collection on a sample basis	Completion	<ul style="list-style-type: none"> <li>• Assess whether plans have been effectively implemented.</li> <li>• Ensure that physical sites are properly restored.</li> </ul>

### 7.1.1 Assessment and analysis – subproject identification (E&S screening)

As a first step, the implementing agencies must check that the proposed activities are eligible for financing under the project. Relevant exclusion criteria are included in Table 7-2. All proposed activities must be within the boundaries of the Project's eligible activities. The project will not finance TA activities with anticipated high adverse environmental downstream implications.

**Table 7-2. E&S exclusion list for ASCENT activities**

<ul style="list-style-type: none"> <li>• Any construction in protected areas or priority areas for biodiversity conservation, as defined in national law</li> <li>• Activities that have the potential to cause any significant loss or degradation of critical natural habitats, whether directly or indirectly, or which would lead to adverse impacts on natural habitats</li> <li>• Purchase or use of banned/restricted pesticides, insecticides, herbicides, and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides)</li> <li>• Any activity affecting causing irreversible physical damage to cultural heritage such as graves, temples, churches, historical relics, archaeological sites, or other cultural structures</li> <li>• Activities that may cause or lead to forced labour or child abuse, child labour exploitation or human trafficking, or subprojects that employ or engage children, under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral, or social development</li> <li>• Any activity infrastructure on land that has disputed ownership or tenure rights</li> <li>• Any activity that will cause significant physical relocation of households or will require the use of eminent domain</li> <li>• Any activity with significant environmental and social risks and impacts that require an EPDA and full Environmental and Social Impact Assessment (Category A+ and Category A in Mozambique law)</li> </ul>
---

As a second step, the Borrower shall use the **E&S Screening Form in Annexure 3** to identify and assess relevant environmental and social risks specific to all project components and identify the appropriate next steps. The *Screening Form* shall list the various plans that are relevant to the components of the project subcomponent

(such as the Environmental and Social Codes of Practice, the generic ESMP, the Labor Management Procedures, Chance Find Procedures, Stakeholder Engagement Plan etc.) and shall identify any documentation, permits, and clearances that are required under the Government's Environmental Regulation. This will involve an initial submission to the environmental regulator in each Province (as defined by Article 7 of Regulation 54/2015), providing the information required by the regulator for categorization of the project for assessment purposes.

#### 7.1.2 Subproject formulation and planning – E&S planning

*Project Authorization by MTA:* The implementing agencies must develop the environmental and social instruments specified by the MTA at project registration. Where such instruments are required, EDM shall submit these to the World Bank for prior review and no objection before submission to the government. Depending on the requirements set out by the MTA's Provincial Environmental Services (PES), the submissions may need to be adapted to be specific to each province (refer to Section 3.2).

The PES are expected to classify Components 1a and 1b of ASCENT as Category C, for which only a manual of *Good Environmental Management Practice Procedures*<sup>33</sup> is required. Even if a cost threshold is applied, making some provincial applications Category B<sup>34</sup>, the PES are likely to waive the requirements for a Simplified Environmental Study, and an ESMP and public review, so that the submissions for environmental authorization in all provinces will be aligned, with no submissions required other than the information submitted on registration and a manual of *Good Environmental Management Practice Procedures*. At this stage of the planning, EDM has no definitive route information available for any LV or MV lines in the provinces, with only a broad indication of the communities to be served and the expected number and type of connections.

*Preparation of an ESMP:* The World Bank requires, as a minimum, the development of an ESMP for the project. This must be prepared by EDM for all project components and must include all relevant information available, based on the preliminary design. The ESMP shall include the following E&S subplans and procedures, which are already available with this ESMF having been developed for ProEnergia and ProEnergia Plus, to be used with minor modifications:

- Labour Management Plan (refer Annexure 4)
- SEA/SH Risk Assessment and Action Plan (refer Annexure 5)
- Environmental and Social Codes of Practice (ESCOPs)
- Chance Find Procedure (Annexure 7)

*Public Review of Project Instruments:* The World Bank requires public review of the project instruments prior to the appointment of construction contractors for civil works notwithstanding the probable absence of this requirement by the Government. The documents must be shared with relevant stakeholders in an accessible manner, and consultations held with the affected communities on the environmental and social risks and mitigation measures. EDM must ensure that the following communication is done as a minimum:

- Prepare a simple, easily understood, summary of the project, its expected positive and negative impacts, together with mitigation, the projects' timeline, including potential risks and uncertainties that could cause

---

<sup>33</sup> Included as Annexure 8.

<sup>34</sup> As was the case for the authorization of ProEnergia in Niassa Province.

delays. This information should be distributed to all key stakeholders (less than 10 pages). Ensure this information is also accessible in local languages, as well as in oral and visual formats for illiterate groups;

- Make copies of all E&S instruments available for review on the project website and at the PES provincial offices (instruments to include this ESMF and its Annexures);
- Invite stakeholders, including representatives of vulnerable groups, to briefing meetings convenient for access by people within the area of direct influence of the project<sup>35</sup>;
- Hold inclusive meetings and adopt adequate methods of engagement according to stakeholders' specific needs as established in the SEP.
- Record key comments and agreed actions;
- Prepare a Comments and Response Report and provide to all participants who attended the meetings;
- Maintain an action list and close out any actions recorded in the meetings, according to agreed timeframes.
- Maintain a stakeholder data bases and notify stakeholders of the close out of actions.
- Provide regular updates and transparent communication with stakeholders through meetings, reports, and updates. Ensure transparency about the project's progress and inform stakeholders as early as possible, explaining the reasons and the steps being taken to address any emerging issues.

The communications planning for review of E&S instruments must be integrated with general communicating and messaging about the project through the Stakeholder Engagement Plan (SEP) and Project's Manual of Communications.

*Preparation of Bidding Documents:* Bidding documents for the design and construction of Component 1a and 1b and Component 2 must be prepared and submitted to the World Bank for prior review and no objection. Bidding documents must contain a detailed description of the contractor's E&S obligations under the contract and include a requirement to prepare an *E&S Route Screening Report for Component 1* and a Construction Environmental and Social Management Plan (C-ESMP) for Components 1 and 2. These reports must be finalized and approved before the start of construction.

*E&S Route Screening and Selection Report:* The detailed design of the MV and LV line routes will only be available once the construction contractors are appointed. Screening of the selected routes, and avoidance of any sections of route that involve significant environmental or social risk, must be undertaken as an early deliverable of the Component 1a and 1b construction contracts. The design of all MV and LV lines must be mapped on GIS using high resolution, current, satellite imagery as a basis for the identification of any areas of environmental or social sensitivity, together with the use of other primary and secondary research, where route alternatives may need to be considered. If areas of significant risk are identified through the initial satellite image analysis and secondary data research, field visits shall be undertaken to verify the risk. Each contractor must prepare a Route Screening Report, classifying mapped routes as follows, as they pertain to route alternatives: -

---

<sup>35</sup> The engagement of stakeholders for the purposes of E&S due diligence can be consolidated within a broader program of public consultation about the project, as defined by the Stakeholder Engagement Plan (SEP).



- No constraint
- Social constraint (significant economic or physical harm resulting in a need for compensation and/or resettlement);
- Environmental constraint (any route intersecting a proclaimed nature reserve, conservation area or KBA, as defined in Section 4, or any route with an alignment involving the clearing of natural woodland with high conservation value, wetlands or river crossings, whether in a recognized area of conservation significance or not, and area in which threatened species have been identified, or any other area of high conservation value).

Alternative routes and/or mitigation of impacts of the existing route must be determined. Avoidance of impact (changes in route) shall be the preferred management option, where feasible. Management measures shall be included in the route design, where appropriate, and in the C-ESMP. Where consultation with key stakeholders has been necessary to verify the acceptability of the routes, this shall be undertaken and documented.

The contractor shall engage competent, independent consultants<sup>36</sup> to undertake the route screening work, inspect the routes and evaluate the impact of each sensitive section, as well as any available alternatives, in consultation with relevant interested parties. The report must be focused on key risks and avoid padding and irrelevant detail. Only routes which require specific additional impact management measures (for example, re-routing, specific mitigation to manage risk not included in the ESMP) shall be investigated after initial screening. The route of the final design shall not be approved prior to the satisfactory completion of this report, approved by EDM and submitted to the World Bank for prior review and no objection. The final routes must be included in the C-ESMP. If a route affects any area of known conservation, defined in Figure 4-6 and Figure 4-7, EDM shall consult with the MTA about any requirements for amendment of the environmental licence.

*Construction Environmental and Social Management Plan (C-ESMP):* Each contractor shall prepare a C-ESMP which is focused on the specific risks and impacts of the construction works. Practical, measurable, mitigation measures for each risk must be included in the plan. More detailed procedures shall be provided as Annexures to manage the following key risks:

- Occupational health and safety
- Labour management procedures and worker's grievance mechanisms, sensitive to SEA/SH
- General and hazardous waste
- Community health and safety, including SEA/SH measures
- Emergency preparedness and response

Contractors shall further comply with the existing plans that are available for the project, namely the SEP (where relevant to contractor activities), LMP, ESCOPs, Code of Conduct, Chance Finds Procedure and Safety Risk Assessment and Management Plan. The C-ESMP shall be designed as a working document and avoid all

---

<sup>36</sup> Consultants shall have proven capability in satellite image interpretation, ecological and social assessment in Mozambique. EDM should consider a mechanism to appoint a single consultant for all contractors, to ensure a consistent approach to the work and recommendations across all contracts.

unnecessary and irrelevant background. The detailed procedures shall be specific to the risks that will be experienced on the project and not general tracts borrowed from elsewhere. Details of the contractors' organizational structure and capacity and lines of authority to ensure that E&S requirements are fully implemented at each work site must be included in the C-ESMP. Contractors need to describe and establish accessible and inclusive workers' grievance mechanism, sensitive to SEA/SH. Contractors shall not start construction prior to the satisfactory completion of this report, reviewed and approved by EDM and submitted to the World Bank for prior review and no objection, and the appointment of E&S staff. A typical outline of a C-ESMP is provided Figure 7-1, with additional detail in Annexure 9.

*Training:* Staff who will be working on the various subproject activities shall be trained in the environmental and social management plans relevant to the activities they work on. EDM /FUNAE shall provide such training to field staff.

EDM shall also ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as standard operating procedures for civil works. EDM shall provide training to the selected contractors; and plan for cascading training to be delivered by contractors to subcontractors and vendors. EDM shall further ensure that the entities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

### 7.1.3 Implementation and monitoring – E&S implementation

EDM shall ensure that sufficient capacity is in place to effectively manage and monitor the environmental and social risks of project implementation. EDM shall prepare an organization chart which shows all E&S positions and responsibilities, from the PIU through the Owners Engineer to the Contractor, for prior review and no objection by the World Bank. The following prerequisites shall apply:

- EDM shall dedicate full time senior personnel to the project in the categories of (i) environmental expert (ii) social expert, (iii) occupational health and safety expert, with roles and responsibilities clearly set out. These experts shall provide oversight of E&S due diligence on the project and shall interact with the World Bank, undertake field monitoring visits and internal audits, assist in training of the OE's and Contractors' staff, prepare monitoring reports and ensure the systematic implementation of corrective action plans.
- EDM shall train and deploy 40 technicians to the project, qualified on the NEBOSH International General Certificate. The roles and responsibilities of these technicians for monitoring and reporting shall be clearly defined in relation to other human resources on site, including social and environmental officers under the OE's supervisory staff. EDM/FUNAE shall ensure that the monitoring teams are fully integrated to make the most effective use of resources on site and to ensure that all work sites have supervisory oversight of the contractors' activities.

The PIU shall ensure that monitoring practices include the environmental and social risks identified in the ESMF, ESMP's and contractors' C-ESMPs and monitor the implementation of E&S risk management plans as part of regular project monitoring. As a minimum, the reporting shall include (i) the overall implementation of E&S risk management instruments and measures (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines (iii) occupational health and safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder

engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP.

EDM shall prepare environmental and social monitoring reports at two intervals:

- a quarterly report, which summarizes E&S performance in accordance with key performance indicators, using data gathered from each of the contracts. The outline provided in Annexure 10 shall be used as the basis for the reporting.
- a monthly report, which provides a detailed account of E&S performance, performance challenges and corrective actions.

Unless otherwise agreed, EDM shall arrange and coordinate monthly E&S progress meetings with the OE and the World Bank.

EDM shall encourage the development of a culture of good environmental and social practice among all personnel working on the project. To meet this objective, the PIU shall implement and administer a WhatsApp group for all personnel involved in environmental and social management as a means of immediate communication about learnings, incidents, risk avoidance and other matters of common interest. The PIU shall further encourage good practice by implementing and widely communicating an awards system for work teams whose performance is outstanding. The criteria for this system shall be discussed with the World Bank prior to implementation.

Throughout the Project implementation stage, the PIU E&S specialists shall continue to provide training and awareness raising to relevant stakeholders, such as staff, contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures. An initial list of training needs is proposed below, in Table 7-3. Construction contractors shall develop and maintain their own detailed training plans for all E&S personnel, supervisors and site managers.

The PIU shall also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

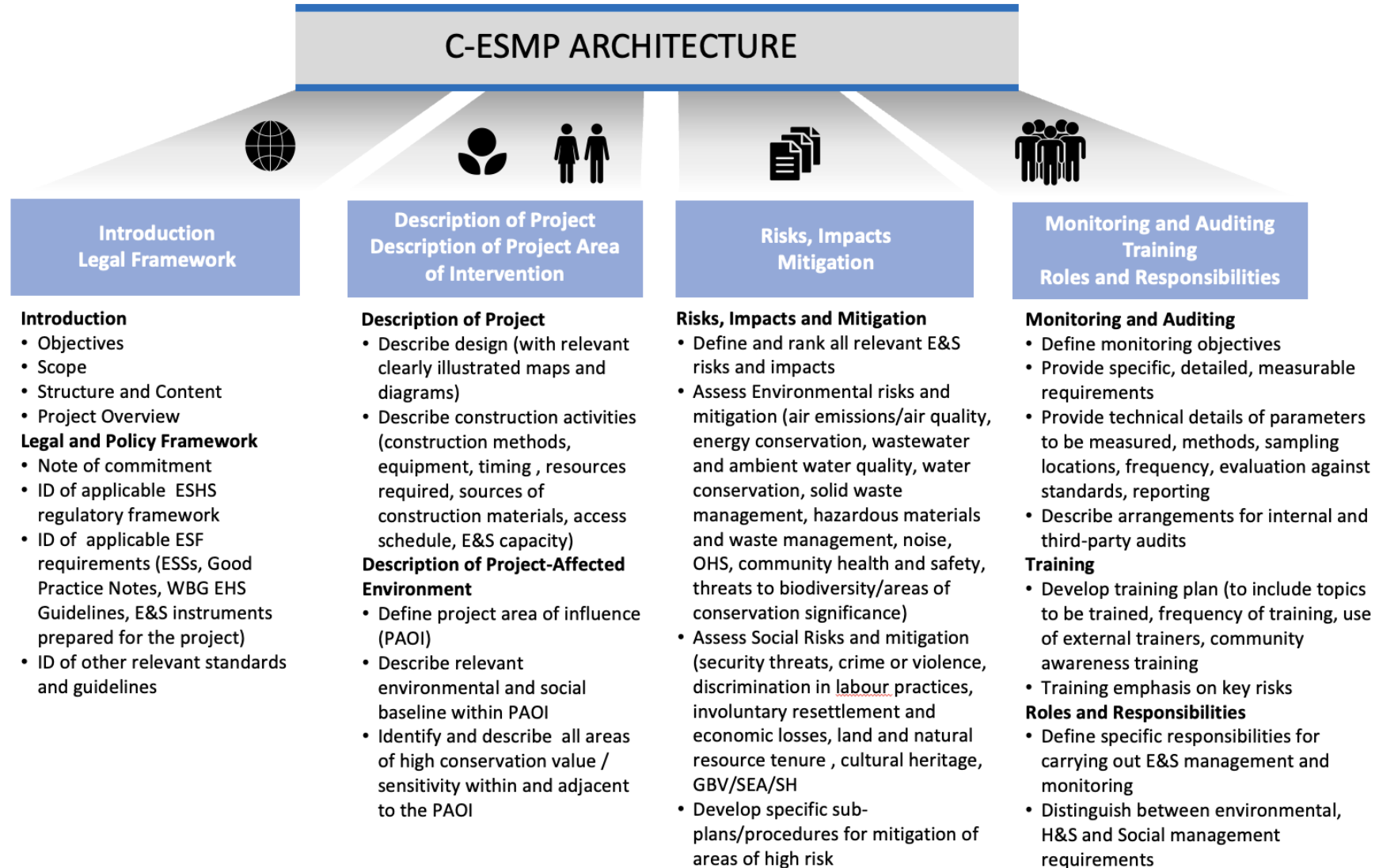


Figure 7-1. Summary of components of a C-ESMP

Lastly, EDM shall ensure that all contractors are aware of reporting and investigation requirements for incidents and accidents. All incidents and accidents shall be captured in the OHS management system in real time, including first aid and medically reportable incidents, and shall be maintained and available for review and auditing. For the purposes of regular reporting to EDM, contractors shall distinguish between first aid and medically reportable incidents as defined in Annexure 12<sup>37</sup>. Should EDM or the World Bank request data on first aid incidents, it shall be provided in a spreadsheet within 48 hours or on a regular basis, as for other incidents.

The World Bank shall be notified of any reportable incidents or accident within 24 hours, following which the Bank will provide guidance about the path which further reporting must follow. Examples of reportable social and environmental incidents other than work-related accidents and illnesses include gender-based violence, violent community protests, kidnappings, major fires and significant spills of hydrocarbons or other hazardous substances. In the case of SEA/SH incidents, survivors must be immediately referred to the appropriate service providers, as established in the SEP and SEA/AP. Subject to the Bank's classification of the accident / incident, EDM shall assemble an incident investigation team, commensurate with its degree of severity and history of similar accidents / incidents and conduct a root cause analysis as a basis for corrective action. Apart from immediate causes, particular attention shall be paid to causes which indicate a lack of capacity or commitment by contractors. All incidents subject to the World Bank ESIRT procedure shall be tracked in the monthly meetings to ensure compliance with the procedure and Mozambique's Labour Law (Law 13/23) requirements for the payment of any necessary compensation.

#### 7.1.4 Review and evaluation – E&S completion

Upon completion of Project activities, EDM shall review and evaluate completion of all required environmental and social mitigation measures. Especially for civil works EDM shall monitor site restoration and landscaping in the affected areas to ensure that the activities are done to an acceptable standard before closing the contracts, in accordance with measures defined in the ESMPs and other plans. The sites around new infrastructure must be restored to at least the same condition and standard that existed prior to commencement of works. Any pending issues must be resolved before a subproject is considered fully completed. This includes any cases where permanent disablement or fatality of a worker or a member of the community has resulted in the legal requirement for compensation payments. The PIU shall prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

#### 7.1.5 Technical assistance activities

EDM shall ensure that the consultancies, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance activities under the Project are carried out in accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs. They shall also ensure that the outputs of such activities comply with the Terms of Reference.

---

<sup>37</sup> The ESCP requires ALL incidents and accidents to be reported to the Bank, unless otherwise agreed between the implementing agencies and the Bank.

## 7.2 Environmental and social risk management procedures (Component 2)

Component 2 involves activities most of which have a lower risk profile than Component 1. E&S management procedures must be risk-based and as a rule will be simpler than Component 1, involving more reliance on general mitigation measures and standard methodologies that are well recognised in GIIP. Table 7-3 summarises the project cycle and E&S management procedures required for Component 2.

**Table 7-3. Project cycle and E&S management procedures (Component 2)**

Project stage	E&S stage	E&S management procedures
<b>(a). Assessment and Analysis:</b> Subproject identification	Screening	<p>During subproject identification, ensure subproject eligibility by referring to the <b>Exclusion List in Table 7-2</b>.</p> <ul style="list-style-type: none"> <li>For all sub-projects, use the <b>Screening Form in Annexure 3</b> to identify and assess potential environmental and social risks and impacts, and identify the appropriate instruments to be developed to mitigate impacts caused by the subproject. Screening to include (i) desktop analysis/completion of screening form based on the proposed activity (ii) confirmation of eligibility of subproject based on eligibility criteria (Table xxx) (iii) Identification of documentation, permits, and clearances required under the government's Environmental Regulation (iv) field verification of screened risks.</li> </ul>
<b>(b). Formulation and Planning:</b> Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	<ul style="list-style-type: none"> <li>Complete all documentation required under the government's Environmental Regulation to register the project, on the basis of which the Government will classify the project into a Category.</li> <li>Complete any additional assessment and documentation required based on the Government's classification of the project (likely to be per Province and limited to Category C with no additional requirements for further assessment).</li> <li><b>For all project sub-components</b> (household solar, clean cooking, mesh grids, mini grids, special applications), prepare an Environmental and Social Action Plan (ESAP). The ESAP to be short, proportional to risk and action oriented, and include:  <i>General Requirements:-</i> <ul style="list-style-type: none"> <li>Code of Conduct (CoC)</li> <li>Basic health and safety rules and procedures</li> <li>Rules and procedures for minimising health and safety risks and nuisance in communities</li> <li>Management of GBV/SEA/SH</li> <li>Waste minimization, recycling and disposal</li> <li>Emergency Preparedness and Response</li> <li>Training requirements and schedule</li> <li>Monitoring and auditing requirements</li> <li>Attachments (to include pre-existing World Bank instruments and guidelines): <ul style="list-style-type: none"> <li>+ Stakeholder Engagement Plan (SEP)</li> <li>+ Grievance Redress Mechanism (GRM)</li> <li>+ Labour Management Plan (LMP)</li> </ul> </li> </ul> <i>Specific Requirements:-</i> </li> </ul>

Project stage	E&S stage	E&S management procedures
		<ul style="list-style-type: none"> <li>- Dependent on the outcomes of screening. Any special conditions relevant to the location of the sub-project to be included.</li> <li>• Train all workers on World Bank E&amp;S requirements (as defined in the above documentation).</li> <li>• <b>For larger projects involving significant construction teams</b> (e.g: mini-grids and BESS installations), include additional procedures and capacity to manage risks based on the outcome of the screening. If necessary, upgrade ESAP to a C-ESMP. Verify that no additional instruments are required by the Government under Decree 54/2015.</li> </ul>
<b>(c). Implementation and Monitoring:</b> Implementation support and continuous monitoring for projects	Implementation	<ul style="list-style-type: none"> <li>• Ensure implementation of ESAP / C-ESMP through site visits, regular reporting from the field, and other planned monitoring.</li> <li>• Track grievances/beneficiary feedback.</li> <li>• Continue awareness raising and/or training for relevant staff, volunteers, beneficiaries, communities.</li> <li>• Conduct annual external audit.</li> <li>• Prepare quarterly E&amp;S reports in accordance with the ESCP. These reports should include the current status and evaluation of E&amp;S management activities carried out during the period, as well as the analysis of challenges, proposed solutions, and lessons learned.</li> </ul>
<b>(d). Review and Evaluation:</b> Qualitative, quantitative, and/or participatory data collection on a sample basis	Completion	<ul style="list-style-type: none"> <li>• Assess whether plans have been effectively implemented.</li> <li>• Ensure that physical sites are properly restored.</li> <li>• Ensure that any community grievances are closed out.</li> </ul>

## 7.3 Implementation arrangements

### 7.3.1 Historical challenges in the grid electrification energy programme

The risk of insufficient capacity to manage E&S risks on ASCENT Component 1 **is rated as substantial**. Lessons from Pro-Energia and PERIP have shown that weaknesses in E&S performance were rooted mainly in inadequate capacity at all levels. The World Bank's Technical Field Mission<sup>38</sup>, investigating performance issues on these two projects, found:

- The unacceptably high incidence of accidents and incidents was primarily a failure to recognize the significant risks inherent in projects of this scale
- Capacity of the PIU to manage E&S risks was low
- Capacity of the Owners Engineer (OE) to manage E&S risks was low
- Supervision of contractors and subcontractors' day to day E&S performance was limited. Staffing was inadequate for the number of active working sites on the project, resulting in the Owners Engineer's

<sup>38</sup> World Bank (2023). *ProEnergia and PERIP Technical Field Report on Safeguards Performance – with special emphasis on health and safety issues arising from the projects*.

specialists, who were based in Maputo, visiting individual contractors no more than once every six weeks to two months.

- Lines of authority and communication within supervisory teams were inadequately defined, resulting in slow response times to critical performance lapses
- Contractors were not adequately held to account for poor E&S performance
- Monthly and quarterly performance reporting by the OE was weak
- No independent audits were undertaken during the project by competent auditors as a basis for adaptive management and continual improvement .

These factors all contributed to the poor incident and accident record on the projects. Working with the Borrower in 2023, the Bank began an extended program to assist in building capacity in the project teams. On ProEnergia Plus, this has included to date:

- The appointment of a full time OHS specialist consultant to the PIU for ProEnergia Plus, whose term will be extended to ASCENT
- Strengthening of E&S capacity by deploying two interns from the Female Scholarship Internship Program full time to the PIU
- Training of 40 technicians on the NEBOSH international health and safety certification, some of whom will be deployed to site for ASCENT.
- Intensive support from the Bank to bring Contractors' understanding of and commitment to their E&S responsibilities up to the standard of Good International Industrial Practice (GIIP).

Even with increasing available E&S personnel dedicated to the project, there remain material risks affecting ASCENT. The civil works component for the project is significantly upscaled from ProEnergia Plus, with more active work sites across the country. While the bulk of the works is proposed in the four northern provinces, there will also be work in other provinces, extending the physical distances and logistical challenges affecting regular supervision of sites. Where EDM focal points have been allocated to ProEnergia Plus in each province, these individuals are not dedicated to the project and have many other responsibilities.

The central emerging limitations are (i) the need for a fully integrated systems-based approach to E&S management, and OHS in particular, with roles and responsibilities for implementation, supervision and reporting clearly defined at all levels (Implementing Agencies, Owners Engineer and Contractors). This should be captured in the Project Implementation Manual (ii) the need for a commensurate increase in E&S technical assistance for ongoing training, additional manpower and regular auditing. The present TA allocation to the project is low, being substantially less than for ProEnergia Plus, notwithstanding the increase in the scale of civil works.

### 7.3.2 Organisational structure

Table 7-4 summarises the roles and responsibilities for the implementation arrangements pertaining to environmental and social management on ASCENT.



**Table 7-4. Roles and responsibilities for implementation of the project**

Level/responsible party	Roles and responsibilities
National PIU (central level)	<ul style="list-style-type: none"> <li>• Provide support, oversight, and quality control to Provincial PIU and field staff working on environmental and social risk management.</li> <li>• Collect, review, and provide quality assurance and approval to Screening Forms and ESMPs as relevant. Keep documentation of all progress.</li> <li>• Oversee overall implementation and monitoring of environmental and social mitigation and management activities, compile progress reports from local levels/subprojects, and report to the World Bank on a quarterly [or biannual] basis.</li> <li>• Train provincial and field staff and contractors who will be responsible for implementing the ESMF.</li> <li>• Ensure that all bidding and contract documents include all relevant E&amp;S management provisions per screening forms, ESMPs, and ESCOPs</li> </ul>
Grant Facility Manager	<ul style="list-style-type: none"> <li>• Collect, review, and provide quality assurance and approval to Screening Forms and ESMPs as relevant. Keep documentation of all progress.</li> <li>• Oversee overall implementation and monitoring of environmental and social mitigation and management activities by XXX, compile progress reports from local levels/subprojects, and report to the World Bank on a quarterly [or biannual] basis.</li> <li>• Ensure that all bidding and contract documents include all relevant E&amp;S management provisions per screening forms, ESMPs, and ESCOPs</li> </ul>
IVA (Independent Verification Agent)	<ul style="list-style-type: none"> <li>• Verify the results of the activities reported by the beneficiary companies, such as off-grid connections made and products distributed.</li> <li>• Validate the information provided by the Grant Facility Manager and the beneficiary companies.</li> <li>• Prepare detailed verification reports and submit them to the Grant Facility Manager.</li> <li>• Ensure the integrity and accuracy of the data reported, following international auditing and verification standards.</li> </ul>
Local PIU and Field Staff (provincial and local level)	<ul style="list-style-type: none"> <li>• Ensure project activities do not fall under the Negative List. Work with National level to fill out Screening Forms for relevant subproject activities</li> <li>• Assist in review of Province -specific ESMPs for subproject activities for submission to MTA for project E&amp;S authorization under the Environment Regulation (Decree 54/2015).</li> <li>• Oversee daily implementation and monitoring of environmental and social mitigation measures, and report progress and performance to the national level monthly.</li> <li>• Support national specialists to provide training to local contractors and communities on relevant environmental and social mitigation measures, roles, and responsibilities.</li> </ul>
Construction Contractor (local level)	<ul style="list-style-type: none"> <li>• Comply with the Project's environmental and social mitigation and management measures as specified in ESMPs, ESCOPs, and contract documents, as well as national and local legislation.</li> <li>• Take all necessary measures to protect the health and safety of workers and community members, and avoid, minimize, or mitigate any environmental harm resulting from project activities.</li> </ul>

The organizational structure and capacity required in the PIU is set out in Table 7-5. This organizational structure and the monitoring and reporting relationships within it and between the PIU and the construction contractors shall be developed as a part of a Management System and shall be included in the Project Implementation Manual.

**Table 7-5. Organizational structure and E&S capacity for the project**

Material Measures and Actions	Timeframes
<p><b>EDM</b></p> <p><u>Central-Level</u></p> <ul style="list-style-type: none"> <li>One full-time Environmental Specialist;</li> <li>One full-time Health and Safety Specialist;</li> <li>One full-time Social Specialist;</li> <li>One full-time GBV/SEA/SH Specialist;</li> </ul> <p><u>Provincial-Level</u></p> <ul style="list-style-type: none"> <li>Ten (10) full-time Environmental and Health and Safety Technicians based one in each of the Provinces (Niassa, Cabo Delgado, Nampula, Zambezia, Sofala, Manica, Tete, Inhambane, Gaza, Maputo);</li> <li>Ten (10) full-time Social and GBV/SEA/SH Technicians based one in each of the Provinces (Niassa, Cabo Delgado, Nampula, Zambezia, Sofala, Manica Tete, Inhambane, Gaza, Maputo).</li> </ul> <p>EDM's staff allocation and location at provincial level shall be proportional to the scale of works planned per region and follow a phased approach aligned with the commencement of works. All shall be informed by the survey currently being conducted by EDM.</p>	<p>Hire or appoint the E&amp;S positions listed below within the timeline indicated below and thereafter maintain them throughout Project implementation:</p> <p><u>Central-Level</u></p> <p>No later than one month after the Effective Date</p> <p><u>Provincial-Level</u></p> <p>Before the commencement of any works in the geographic areas covered by each technician</p>
<p><b>FUNAE</b></p> <ul style="list-style-type: none"> <li>One full-time Environmental, Health and Safety Focal Point;</li> <li>One full-time Social Focal Point;</li> </ul> <p>FUNAE shall propose staff allocation considering the scale of works planned under Component 2 and Subcomponent 4c and the implementation arrangement with the Grant Facility Manager.</p>	<p>Before the commencement of any activities financed under Component 2 or Subcomponent 4c</p>
<p><b>MIREME</b></p> <p>One full-time Environmental and Social Focal Point.</p>	<p>Before the commencement of any activities financed under Subcomponent 4a.</p>
<p>All specialists must have experience and qualifications in accordance with Terms of Reference satisfactory to the World Bank and be hired or appointed based on those terms of reference.</p>	

### 7.3.3 Proposed training and capacity building

Successful implementation of the Project will depend on effective environmental and social risk management, as outlined in this ESMF. Training and capacity building must be an integral part of implementation. The proposed training and capacity building approach for the project is included in Table 7-6. An initial training and awareness raising approach is outlined, aimed at construction and operational teams and at project-affected communities.

The development of a responsible E&S culture within contractor's organizations and within the implementing agencies themselves is dependent on the effectiveness of ongoing training. Occupational health and safety and

community health and safety are particularly vulnerable to the failure to train workers and make communities aware of project construction risks. Mozambique and many other African countries suffer from a poor health and safety record on civil works contracts.

A cascading model should be implemented where information flows from the national level to the field levels. Table 7-6 describes training and awareness raising topics for the PSIU and project construction contractors and their workers, as well as project-affected communities respectively, to be implemented by the PIUs. Training needs are also supported by the World Bank.

**Table 7-6. Training and awareness raising topics to be implemented during the project**

Material measures and actions	Timeframes	Responsible entity
Provide support and training to PIU National and Regional E&S staff covering the following topics: <ul style="list-style-type: none"> <li>• Assessment and management of ESHS risks and impacts</li> <li>• Environmental and Social Management Systems</li> <li>• Preparation of effective risk-based instruments</li> <li>• Critical aspects of OHS and Community Health and Safety</li> <li>• Effective Communications and Stakeholder Engagement</li> <li>• SEA/SH and GRM</li> <li>• Other relevant ESF requirements</li> </ul>	Prior to initiating the relevant project activities involving the PIUs staff and throughout project implementation	World Bank
Prepare and implement a capacity-building plan for the PIUs staff and project workers covering the following topics: <ul style="list-style-type: none"> <li>• Assessment and management of ESHS risks and impacts</li> <li>• Labor and working conditions, including occupational health and safety</li> <li>• Community health and safety</li> <li>• Transport safety</li> <li>• Emergency preparedness and response</li> <li>• Resource efficiency, pollution prevention and waste management</li> <li>• Biodiversity conservation</li> <li>• Involuntary resettlement</li> <li>• Stakeholder mapping and engagement</li> <li>• Design and implementation of project and workers' GRMs</li> <li>• Contractors/Subcontractors/Supervising Firms ESHS performance management</li> <li>• Codes of Conduct.</li> <li>• GBV/SEA/SH</li> </ul>	Prior to initiating the relevant project activities involving the PIUs staff, with regular refresher training delivered throughout the project implementation.	EDM FUNAE, MIREME
Prepare and implement an awareness-raising plan for the project-affected communities covering the following topics: <ul style="list-style-type: none"> <li>• Project information, including E&amp;S instruments, risks and impacts, and mitigation measures</li> <li>• Communicable diseases (HIV-AIDS/STD)</li> <li>• GBV/SEA/SH</li> <li>• Road safety</li> </ul>	Prior to initiating relevant activities involving each community, with regular refresher awareness-raising delivered throughout the project implementation.	EDM, Grant Facility Manager, MIREME

Material measures and actions	Timeframes	Responsible entity
<ul style="list-style-type: none"> <li>• Emergency preparedness and response</li> <li>• Codes of conduct for project workers</li> <li>• Community engagement</li> <li>• GRM</li> <li>• Project-related employment opportunities</li> </ul>		
<p>Prepare and implement a training plan for contract workers, supervisors and site managers covering the following topics:</p> <ul style="list-style-type: none"> <li>• Assessment and management of ESHS risks and impacts</li> <li>• Labor and working conditions - worker rights and responsibilities</li> <li>• Occupational health and safety (including transport safety)</li> <li>• Community health and safety</li> <li>• Emergency preparedness and response</li> <li>• Resource efficiency, pollution prevention and waste management</li> <li>• Biodiversity conservation (do no harm)</li> <li>• Use of the project and workers' GRM</li> <li>• Codes of Conduct.</li> <li>• GBV/SEA/SH</li> </ul>	Prior to and throughout project implementation	Construction Contractors (Component 1)
<p>Prepare and implement a training plan for workers, supervisors and site managers covering the following topics:</p> <ul style="list-style-type: none"> <li>• Code of Conduct (CoC)</li> <li>• Basic health and safety rules and procedures</li> <li>• Rules and procedures for minimising health and safety risks and nuisance in communities</li> <li>• Management of GBV/SEA/SH</li> <li>• Waste minimization, recycling and disposal</li> <li>• Emergency Preparedness and Response</li> <li>• Training requirements and schedule</li> <li>• Monitoring and auditing requirements</li> <li>• Attachments (to include pre-existing World Bank instruments and guidelines): <ul style="list-style-type: none"> <li>+ Stakeholder Engagement Plan (SEP)</li> <li>+ Grievance Redress Mechanism (GRM)</li> <li>+ Labour Management Plan (LMP)</li> </ul> </li> </ul>	Prior to and throughout project implementation	Fund Service Providers (Component 2)

At the level of the construction contractors for Component 1, detailed training commitments shall be a component of their C-ESMPs. Contractor's training plans shall meet the following requirements:

- Organise training programs to cover general requirements (all workers) and special requirements (workers involved in particular tasks, such as working at heights)
- Include specialist training on particular topics, where expert knowledge is important
- Focus training on the specific risks relevant to the contractor's activities

- Include formal training sessions as well as daily toolbox / Take 5 talks
- Maintain individual training records for every worker
- Maintain a consolidated summary spreadsheet for monthly and quarterly reporting
- Include supervisors and managers in E&S training.

#### 7.3.4 Estimated Budget

Table 7-7 lists estimated cost items for the implementation for the ESMF, which have been included in the overall project budget:

**Table 7-7. ESMF implementation budget**

ESCP Ref.			ESCP Sub-Item	COSTS (US\$)				
				Year 1	Year 2	Year 3	Year 4	Year 5
Implementation Arrangements and Capacity Support	A	Organizational Structure	Hire EDM E&S staff (footnote 1)	400 000	612 000	612 000	612 000	612 000
	B	Capacity Building Plan / Measures	Prepare and Implement Capacity Building Plan for PSIU and project workers (incl. venue, travel, training materials, accommodation)	60 000	30 000	30 000	30 000	30 000
			Prepare and Implement Awareness Raising Plan (communities) prior to initiating contract activities with regular refresher awareness raising (including travel, awareness raising materials, accommodation)	50 000	30 000	30 000	30 000	30 000
Monitoring and Reporting	E	Incidents and Accidents	Accident investigation team for major incidents / accidents (travel, accommodation, reporting)		10 000	10 000	10 000	10 000
ESS1	1.1	Environmental and Social Assessments and/or Plans	Elaborate and implement LMP including worker GRM and elaborate and implement SEA/SH Action Plan	50 000	25 000	25 000	25 000	25 000
			Prepare and implement Security Management Plan	50 000	7 000	7 000	7 000	7 000
			Prepare and implement ESIA for Component 1 for MTA authorization	350 000				
			Prepare and implement ESMP for Component 2 for MTA authorization	150 000				
			Consultancy to develop e-Waste situation analysis for the project, and ID and design of risk management strategies	100 000				
	1.3	Technical Assistance	Consultancies for capacity building, training, annual external monitoring and auditing, and any other TA relevant to E&S risk management	40 000	50 000	50 000	50 000	100 000
ESS2 ESS4	PAD PBC 1	Revision of Standards	Consultancy to develop OHS and community health and safety standards for urban, peri-urban and rural areas for all EDM LV and MV electricity infrastructure	100 000				
ESS10	10.1	Stakeholder Engagement	Develop and update SEP as required	30 000	20 000	20 000	20 000	20 000
TOTAL				1 380 000	784 000	784 000	784 000	834 000
GRAND TOTAL								4 566 000
Footnote								
1	As per ESCP - 7 full time E&S specialists at US\$ 36 000 per annum and 20 E&S technicians at US\$ 18 000 per annum. Not all appointed in year 1							

## 8 Stakeholder engagement, disclosure, and consultations

Many stakeholder questions are likely to be related to the timing of access to electricity, the cost of the service and employment opportunities associated with the project. All project-related communications need to be clear, consistent, and aligned with the project's goals and timelines. The success of the project significantly depends on effective consultation, adequate engagement and responsiveness to community needs and comments to avoid the risk of spreading misinformation, creating false expectations on communities, and stakeholder opposition that may delay or halt the project's implementation and affect the achievement of its objectives.

An effective Grievance Redress Mechanism (GRM) is essential to address any concerns or issues raised by the community promptly and efficiently. Delays in resolving unintended impacts from the project and inadequate management of grievances can lead to unresolved issues and dissatisfaction among stakeholders, which can escalate to social tensions or even conflict.

This proactive approach not only helps in building trust and support among stakeholders but also enhances the project's sustainability and impact. Therefore, the importance of continuous and meaningful stakeholder engagement cannot be overstated in achieving the desired outcomes.

In this sense, a separate draft Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. The SEP is currently in draft form and an updated version will be redisclosed no later than one month after project Effectiveness.].

Due to the restricted timeline and the current internal context, we were unable to conduct consultations for the Environmental and Social Management Framework (ESMF). The draft ESMF, SEP, and the Environmental and Social Commitment Plan (ESCP) will be disclosed for stakeholder consultations along with the summary of feedback received, on the following websites:

- EDM: <https://www.edm-co-mz.flexibihost.com/en>
- FUNAE
- Facility Manager:
- MIREME

## REFERENCES

- Biofund. <https://www.biofund.org.mz/en/mozambique/our-biodiversity/>
- Global Climate Risk Index (2021). <https://www.germanwatch.org/en/19777>
- GoM (1998). Regulamento da Lei de Terras. Decreto 66/98: Boletim da Republica, Maputo.
- GoM (2004). Regulamento sobre o processo de Avaliação de Impacto Ambiental, BR, Maputo de 29 de Setembro de 2004. Decreto 45/2004.
- GoM (2012). Decree Nº 19/2012, 15 of February 2012, Internal Regulation of National Administration of Roads.
- GoM (2013): Regulamento de Reassentamento para actividades economicas e sociais. Decreto 31/2012.
- GoM. (2014). Ministerial Diploma Nº 156/2014 of 19 September - Technical Guidelines on Drafting Resettlement Plans.
- Ministério da Justiça -Gabinete do Ministro (1968): Regime Jurídico das Expropriações por Utilidade Pública.
- GoM, (2015). Decreto 54/2015: Regulamento sobre o processo de Avaliação de Impacto Ambiental, BR, Maputo.
- Climate Profile (2018). Climate Profiles of Countries in Southern Africa: Mozambique, Maputo.
- GoM, (2015). Decreto 54/2015: Regulamento sobre o processo de Avaliação de Impacto Ambiental, BR, Maputo de 31 de Dezembro de 2015.
- GoM. (2014). Ministerial Diploma Nº 156/2014 of 19 September - Technical Guidelines on Drafting Resettlement Plans.
- GoM (2013): Regulamento de Reassentamento para actividades economicas e sociais. Decreto 31/2012.
- GoM (2004). Regulamento sobre o processo de Avaliação de Impacto Ambiental, BR, Maputo de 29 de Setembro de 2004. Decreto 45/2004.
- GoM (1998). Regulamento da Lei de Terras. Decreto 66/98:Boletim da Republica, Maputo.
- Instituto Nacional de Estatística (2022). IV Recenseamento Geral da População e Habitação. Indicadores Sócio-demográficos Moçambique. Maputo: Instituto Nacional de Estatística.  
[https://www.ine.gov.mz/documents/20119/44355/INDICADORES %20SOCIO-DEMOGRAFICOS%20-%20MOCAMBIQUE%2020062022.pdf/9189d534 -1ea5-9d6a-cadd51c39f67d6cd?version=1.0&t=1675764355106&download=true](https://www.ine.gov.mz/documents/20119/44355/INDICADORES%20SOCIO-DEMOGRAFICOS%20-%20MOCAMBIQUE%2020062022.pdf/9189d534-1ea5-9d6a-cadd51c39f67d6cd?version=1.0&t=1675764355106&download=true).
- IUCN (2024). The State of Protected and Conserved Areas in Eastern and Southern Africa. Second Edition.
- IUCN Red List of Mangrove Ecosystems. <https://iucn.org/resources/conservation-tool/iucn-red-list-ecosystems/red-list-mangrove-ecosystems>
- Mozambique Water Resources Profile Overview, USAID. [https://winrock.org/wp-content/uploads/2021/08/Mozambique\\_Country\\_Profile-Final.pdf](https://winrock.org/wp-content/uploads/2021/08/Mozambique_Country_Profile-Final.pdf)
- NRECA International (2020). Updating Technical Standards for Design and Construction of Electricity Distribution Infrastructure – Design and Construction for Rural and Peri-Urban Systems. Presented to EDM, May 30, 2020

Rassul (2020). Good Environmental Management Practice Procedures. Prepared on behalf of EDM. March 2020.

SIBMOZ <https://sibmoz.gov.mz/>

USAID (2018) Climate Risk Profile Mozambique./2018\_USAID-ATLAS-Project\_Climate-RiskProfile-Mozambique.pdf

USAID Water Resources in Mozambique

World Bank (2020b). Gender Dimensions of the Covid-19 Pandemic. Urban

World Bank. 2023. Gender Assessments for Mozambique, Madagascar and Mauritius (Mozambique).

Washington, DC: World Bank. Available

at: <https://documents1.worldbank.org/curated/en/099091823092039842/pdf/P17721>

World Bank. Mozambique Data. World Development Indicators. Available

at: <https://databank.worldbank.org/source/2?country=MOZ>.

World Bank (2020). World Bank (2020). Mozambique. Climate Knowledge Portal.

<https://climateknowledgeportal.worldbank.org/country/mozambique/climate-data-historical>.

World Bank. (2016). World Bank Environmental and Social Framework. World Bank, Washington, DC.

World Bank Group (2007). Environmental Health and Safety Guidelines (General).30 April 2007.






World Bank (2024). Project Appraisal Document V2.Accelerating Sustainable and Clean Energy Access Transformation in Mozambique (P507759). As Phase 9 of the Multi-Phase Programmatic Approach




World Bank (2023). Mozambique Country Climate and Development Report

World Bank (2024). Off-Grid e-Waste Management Toolkit. A Primer. September 2024.



## Annexure 1. Technical Information Describing the Construction Process for LV and MV lines

LINE DESIGN		
Type of infrastructure	Low voltage (0,4 kV) distribution lines Medium voltage (33 kV) lines	
Total estimated length of lines	LV 10,035 km MV 8,028 km	
Location	All provinces but greater focus on the northern provinces, Cabo Delgado, Niassa, Nampula and Zambezia	
Tower (pole) types	LV: Gum poles, 9 m high, buried 1.5 m into the ground MV: Gum poles, 12 m high, buried 1,8 m into the ground Steel Poles, 11 m high, buried 2 m into the ground. Steel poles typically used in urban areas with constrained space since they come preassembled in two sections and do not required stays – they are concreted at the base.	
		
Steel MV towers	33 kV structure (0-10°)	Excavations for LV pole
		
Cross bar installation	Pulling station for MV lines	Truck mounted crane erecting LV pole

		
Prohibited modifications to vehicles for labour transport	Installing cross bars on an LV line	Security tape around an LV line
Tower spacing	Typical distance between poles: LV 40 m MV 100 m (rural); 50 m (peri-urban)	
Conductors /earthing	MV: Conductor AAAC Mulberry LV: Cable ABC 4x50 +25mm <sup>2</sup>	
Transformers	385 pole-mounted distribution transformers	
Permanent row (width in meters)	3.5 m	
Vegetation in row	LV 1 m MV 3.5 m	
Building structures in row	None permitted	
LINE CONSTRUCTION		
Warehouse and storage yard	<b><u>Material stored in containers:</u></b> insulators and fixing accessories, protection equipment, distribution and metering components, conductors and connection accessories, grounding, fuses and bases, insulating materials <b><u>Material stored outside containers:</u></b> LV, MV poles, transformers, conductor AAAC Mulberry, Cabo ABC 4x50 +25mm <sup>2</sup> , porcelain insulators, metal crossbars for wooden electric poles	
Bush clearing	Use human labour with hand tools, such as chainsaws, pruning saws, axes, sickles.	
Pole transport and erection	<b><u>Transport</u></b> <ul style="list-style-type: none"><li>▪ The poles are lifted with the help of a crane</li><li>▪ Use straps or steel cables to secure the poles to the vehicle.</li><li>▪ Transport should be carried out at a moderate speed, especially on curves or uneven terrain, to avoid moving the posts.</li><li>▪ Place the poles on a level surface to prevent rolling.</li></ul> <b><u>Erection</u></b> <ul style="list-style-type: none"><li>▪ Define and mark the exact location where the poles will be installed.</li><li>▪ Dig the hole, with depth and diameter appropriate to the size of the pole and the project specifications.</li><li>▪ Use the crane truck, steel cables or slings to lift and suspend the pole until it is embedded.</li></ul>	

Stringing of conductors	<ul style="list-style-type: none"> <li>▪ <b>Site Inspection:</b> Conduct a thorough inspection of the site to identify potential hazards such as nearby structures, vegetation, or existing utility lines.</li> <li>▪ <b>Weather Conditions:</b> Check weather forecasts to avoid working in adverse conditions such as high winds, rain, or lightning.</li> <li>▪ <b>Stringing Equipment:</b> Inspect stringing blocks, winches, and sheaves for any signs of wear or damage before use.</li> <li>▪ <b>Rigging:</b> Ensure all rigging equipment, including ropes and pulleys, are in good condition and properly rated for the job.</li> <li>▪ <b>Stringing Operation:</b> Follow established procedures for stringing conductors, including using appropriate tensioning equipment to avoid overloading.</li> <li>▪ <b>Clear Work Area:</b> Keep the area below the worksite clear of unauthorized personnel and obstacles.</li> </ul>
Construction vehicles and equipment	Truck mounted cranes, back actors, pole transport trucks, dumper trucks, excavators, concrete trucks
Personnel (per work site)	Clearing: 1 manager, 1 designer, 10 workers Pole Installation: 2 crane operators, 3 climbers, 4 workers Conductor stringing: 2 supervisors, 6 climbers, 4 workers Installation of insulators and cross arms: 4 line men Transformer and switchgear installation: 2 supervisors, 3 electricians, 2 workers Earthing and grounding: 2 electricians, 2 workers Service connections: 1 supervisor, 2 electricians, 2 climbers
Number of teams operating in different locations	Typically per site two (2) teams and one SHE REP, First Aider, Fire Fighter for each front of work. For Component 1, estimated by EDM that there will be 10 contractors and 16 teams operating at any one time in the various provinces.
Gate control/ Security guards	Subcontracted security companies for all shipyards.
Temporary stockpiles (e.g.: poles)	The security of the materials allocated to the shipyard is the responsibility of two heavily armed guards at night.
Protection of the working areas	Use of warning tape. Awareness raising in the community and onlookers to keep their distance from activities.
Lock out procedures (LOTO)	To be implemented in all cases where there is a risk of electrical shorting with live lines
Notification of the affected public	Initial and ongoing engagement with communities (objectives, benefits, duration, dangers/risks, correct ways to participate in the project).
Unexpected construction damages	May be due to: <ul style="list-style-type: none"> <li>▪ Removal of vegetation</li> <li>▪ Felling of trees</li> <li>▪ Vibrations, noise which can affect the tranquillity of communities as a result of the use of machinery</li> </ul>
Reinstatement of disturbed land	Return of land to the same condition that was present prior to construction
Compensation for losses	Compensation for all disturbed crops, felled fruit trees, other assets damaged or lost
Energising the line	Only energised after carrying out final inspections to ensure the safety and adequacy of the electrical infrastructure.
Typical rate of progress under normal construction conditions	1 km / week

## Annexure 2. Memorandum on Legal Requirements for Compensation for Permanent Disabilities and Fatalities caused by Workplace Incidents

### Prepared by: MAURO AMILTON DE CELESTINO PEDRO

(Qualified Lawyer - Mozambique) Avenida  
Maguiguana 705 - Ground Floor, Maputo City –  
Mozambique  
+258 827680244 | [mauro.pedro@outlook.com](mailto:mauro.pedro@outlook.com)  
NUIT/Tax Registration number: 117709841

#### 1. Introduction

The Work Accident legal regime in Mozambique, as established by Decree No. 62/2013 of 4<sup>th</sup> of December, provides a comprehensive framework for addressing workplace accidents and occupational diseases. This memo aims to provide a clear and concise overview of the key provisions/aspects of this regime, including definitions, insurance requirements, reporting procedures, medical assistance, compensation and benefits, and the roles of various entities involved. The information presented herein is intended to serve as a general guide and should not be construed as a substitute for professional legal advice for a specific case.

#### 2. Key Definitions

- **Work Accident:** An unforeseen and sudden event that occurs during the course of employment, resulting in bodily injury, functional impairment, or illness that leads to death or a reduction in work capacity or earnings. The definition also includes accidents that happen while commuting to and from work under specific circumstances, such as using employer-provided transportation or if the accident is a consequence of a particular danger on the normal route or other circumstances that have aggravated the risk of the same route. It also covers accidents that occur before or after work if directly related to work preparation or conclusion, during work performed outside normal hours under the employer's direction, or when performing services that benefit the employer even if not explicitly work-related.
- **Occupational Disease:** Any clinical condition, whether localized or generalized, that arises from professional activity and is directly related to it. The condition can be of chemical, biological, physical, or psychological nature. The law provides a list of recognized occupational diseases, but also allows for compensation for other conditions if a direct causal link to the work environment can be established.
- **Temporary Disability:** The temporary inability to work due to a work-related accident or illness. It can be partial, where the worker can perform some duties, or absolute, where the worker is completely unable to work.
- **Permanent Disability:** The permanent and irreversible loss of work capacity due to a work-related accident or illness. It can be partial, where the worker has some residual capacity, or absolute, where the worker is completely unable to work.
- **Responsible Entity:** The entity legally responsible for providing compensation and benefits to the injured or ill worker. This is typically the employer or their insurer.

### 3. Insurance System

- **Obligation to have Insurance policy:** employers are obliged to transfer responsibility for covering their work accidents and occupational diseases to insurance entities legally authorized in the Republic of Mozambique.
  - Employing entities may take out more favourable supplementary insurance.
- **Importance to have all workers registered/covered by the collective insurance policy:** on the date of admission to work, the employer must have a collective insurance that covers the worker, to cover their work accidents and occupational diseases.
- **Exception of transferring of liability to the employer:** if the accident is caused intentionally by the employer or results from lack of safety, the employer assumes the subsidies and compensations, which are:
  - **In cases of temporary incapacity or death:** equal to the worker's remuneration.
  - **In cases of permanent incapacity:** based on the reduction in capacity resulting from the accident.
  - In these cases, the responsibility is transferred to the employer, the insurer is only subsidiarily liable after the employer's assets are exhausted.

### 4. Reporting of work accidents and occupational diseases

- **Notification and reporting by the worker or legal representative:** The occurrence of any work accident or diagnosis of an occupational disease, as well as its consequences, must be reported to the employer or their legal representative, verbally or in writing, within forty-eight hours, by the injured worker or an interposed person, unless they witnessed it or became aware of it in the same period.
- **Consequence of no reporting within the forty-eight hours:** When the injured party does not report the accident in a timely manner and for this reason it has been impossible for the employer or their legal representative to provide them with the necessary assistance, the incapacity judicially recognized as a consequence of that failure does not confer the right to the benefits provided by the aforementioned applicable regulation.
- **Communication from the employer:** Once the employer receives the notification, it must communicate the work accidents and occupational diseases to the General Labor Inspectorate, as well as to the Ministry responsible for the sector in which the company operates.
  - **Insured workers:** the employer who has insured their workers must notify the insurance entity in writing, within the period established by the respective policy.
    - Insurance companies must notify the Public Prosecutor at the Labor Court, in writing, within three days from the date of discharge, of work accidents that have resulted in absolute or partial permanent incapacity and, immediately upon becoming aware, of those that have resulted in death.
  - **Non-Insured workers:** the employer who has not transferred their responsibility to an insurance company must communicate in writing to the Public Prosecutor at the Labor Court the occurrence of a work accident or diagnosis of an



occupational disease, regardless of the consequences resulting from it and any assessment of the legal conditions for compensation, within eight days from the date of the aforementioned notification or the date of knowledge of the accident, when the injured party has been unable to make or have this notification made within the legal deadline.

- **Other entities that have the right to notify the public prosecutor at the labour court:**
  - The injured party, directly or through an interposed person;
  - The authority that has become aware of the work accident, when the injured party is incapacitated;
  - The director of the hospital, social action or prison establishment where the injured party was, if the accident occurred in the service of another entity.
- **Mandatory notification in case of death:** All health institutions are obliged to notify the Public Prosecutor at the Labor Court and the General Labor Inspectorate of the death of any injured worker and, in the same way, notify the person in whose care they were.

## 5. Medical assistance and treatment

- **Medical Assistance and Treatment:** The employer is responsible for ensuring that the injured or ill worker receives immediate and appropriate medical care, including medication, transportation, and accommodation if necessary.
  - **Place:** the treatment should ideally be provided at the nearest health unit to the accident site or the worker's residence, whichever offers better care.
  - **Cooperation:** The worker is obligated to cooperate with the medical treatment and adhere to the prescribed course of action.
  - **Disputes:** If any disputes arise regarding the medical treatment, they can be resolved through a clearly defined process that may involve the clinical director and, if needed, the Medical Association.

## 6. Pensions and compensations

- **Compensation and Benefits:** The law provides for various types of compensation and benefits to support workers affected by work-related accidents or illnesses. These include:
- **Death Benefits:**
  - **Survivor's pension for the spouse, partner, or children,** calculated based on the deceased worker's annual salary and the relationship of the beneficiaries. The total amount of pensions cannot exceed 80% of the deceased's salary:
    - **Spouse or the person in a de facto union:** 60% of the injured party's annual remuneration.
    - **Children:** 25% of the annual remuneration for the children, including unborn children and those adopted on the date of the accident, until they reach 18, 21 or 25 years of age, if they are attending basic, secondary or higher education respectively or without age limit when affected by a

physical or mental illness that makes them absolutely incapable of working; 30% of the injured party's annual remuneration if there is only one; 50% if there are two or more, receiving double these amounts, up to the limit of 80% of the injured party's annual remuneration, if they are orphans of both father and mother;

- **Other descendants and relatives:** o descendants and any relatives entitled to inherit on the date of the accident until they reach 18, 21 or 25 years of age, while attending, respectively, basic, secondary or equivalent education or higher education, or without age limit when affected by a physical or mental illness that makes them absolutely incapable of working, provided that the injured party regularly contributed to their support: to each, 15% of the injured party's annual remuneration, and the total of the pensions may not exceed 80% of it.
  - If there is no spouse, person in a de facto union or children entitled to a pension, the relatives included in paragraph d) of the previous number and under the conditions referred to therein will receive, each one, 15% of the injured party's remuneration, and the total of the pensions may not exceed 80% of the injured party's remuneration, for which purpose an apportionment will be made, if necessary.
  - **Accumulation and apportionment of death pensions:** The pensions mentioned above can be accumulated, but their total cannot exceed 80% of the deceased's remuneration. If the pensions for relatives, added to those for the spouse/partner and children, exceed 80%, they will be subject to apportionment. If the surviving spouse dies while the pension is due to the children, their pension will be increased. The children's pensions are adjusted monthly based on the number of eligible children alive. Pensions start the day after the death.
- **Death Compensation (Lump Sum payment):** The death compensation is equal to six times the deceased worker's monthly remuneration. Half goes to the spouse/partner and half to the children, or the entire amount goes to the spouse/partner if there are no children, or to the children if there's no surviving spouse/partner. If there are no spouse/partner or children, the benefit is divided equally among the ascendants.
  - **Funeral Subsidy:** The funeral subsidy is twice the minimum wage in the deceased's sector, paid once to the surviving spouse or whoever proves to have covered the funeral expenses. If the death occurs while the worker is away from their usual residence, the transfer expenses are covered by the employer.
- **Disability Benefits**
    - **Temporary disability pensions,** which provide daily compensation based on a percentage of the worker's salary during their period of temporary incapacity. The compensation is 70% of the salary for total incapacity and 70% of the reduction in earning capacity for partial incapacity.
    - **Permanent disability pension:** can be in the form of a pension or a lump-sum payment, depending on the degree of disability:
      - For absolute permanent disability, the pension is 90% of the annual salary.
      - For partial permanent disability, the pension corresponds to 70% of the reduction in earning capacity if the disability is 30% or more, or a lump

sum redemption of that pension if the disability is less than 30%.

- **Please note:** In cases of permanent incapacity, a provisional pension is established between the day after discharge and the final pension determination. The responsible entity grants and calculates it based on the National Health Board's assessment. Any differences between the provisional and final pension are adjusted.
- **Other Benefits:**
  - Comprehensive medical, surgical, pharmaceutical, and hospital care to aid in the worker's recovery.
  - Provision or compensation for prosthetics and other necessary aids to support the worker's rehabilitation.
  - Coverage for transportation and accommodation expenses related to medical treatment or legal proceedings.

## **7. Pension updates**

- Pensions are periodically updated by the responsible entity whenever the national minimum wage changes. The updated pension cannot be less than 60% of the applicable minimum wage.

## **8. Possibility of agreement between employer and injured worker**

- The employer can reach an agreement with the injured worker or their successors regarding medical assistance, pensions, and compensation. The Public Prosecutor submits the agreement to the Labor Court.
- The Public Prosecutor's Office will send the agreement to the Labor Court together with the report, within ten days of its submission, and it must be accompanied by the examination report, if it has not yet been sent, and the discharge report, if this has been given, as well as the Incapacity Assessment Map issued by the National Health Board.

## **9. Roles of the insurance company, Social Security Institute ("INSS"), and employer**

- **Insurance Company:** employers are mandated to have collective insurance coverage for work accidents and occupational diseases. The insurance company plays a crucial role in handling claims and disbursing compensation and benefits to injured or ill workers in accordance with the policy terms and the legal provisions. The insurer also has the right to designate the attending physician for the injured worker. However, in certain situations, such as when the employer intentionally caused the accident or failed to maintain safe working conditions, the insurer's liability may be secondary to the employer's, meaning they are only responsible for paying compensation after the employer's assets have been exhausted.



- **INSS (National Institute of Social Security):** The INSS steps in when the employer has not obtained the required insurance coverage or when the existing insurance is insufficient to cover the full extent of the worker's compensation and benefits. In such cases, the INSS may, under exceptional circumstances, assume the responsibility of providing benefits to the affected worker, provided they meet the necessary eligibility criteria. This ensures that the worker is not left without support due to the employer's negligence.
- **Employer:** The employer bears the primary responsibility for ensuring the safety and health of their workers. They are obligated to provide immediate medical assistance in case of an accident or illness and to cooperate fully with the treatment process. Additionally, the employer must report all work-related accidents and illnesses to the relevant authorities within the stipulated deadlines. If the employer has insurance coverage, they must promptly notify the insurer and actively participate in the claims process. In situations where the employer is found to be directly responsible for the accident or illness, due to their intentional actions or negligence in providing a safe working environment, they are held liable for the full cost of compensation and benefits, irrespective of any insurance coverage. They may also face additional penalties or legal action.

## 10. Other Key Points

- Employers are generally required to have collective insurance to cover work accidents and occupational diseases.
- The National List of Occupational Diseases is periodically updated to reflect new medical knowledge and evolving workplace hazards.
- Pensions are periodically adjusted based on changes in the national minimum wage to maintain their value and ensure that beneficiaries are not left behind due to inflation.
- The statute of limitations for claiming benefits is one year from the date of discharge or the accident, emphasizing the importance of timely action.
- Violations of the regulations, such as failing to provide insurance or report accidents, can result in fines and other penalties, underscoring the seriousness of compliance.

## 11. Conclusion

The Work Accident legal regime in Mozambique provides a structured and comprehensive framework for addressing work related accidents and illnesses. It clearly defines the rights and responsibilities of employees, employers, and insurance companies, ensuring that injured or ill workers receive adequate compensation and support. The regime also places a strong emphasis on workplace safety, encouraging employers to implement proactive measures to prevent accidents and occupational diseases. A thorough understanding of this legal framework is essential for all.

### Annexure 3. E&S Screening Form Template



## ENVIRONMENTAL AND SOCIAL SCREENING FORM - FTAS

### SECTION A: Contact details

Responsible for Filling Out the Form	
Name	
Position	
Contact details	
Institution	
Date	
Signature	
Person Responsible for Verification/Validation	
Name	
Position	
Contact details	
Institution	
Date	
Signature	

**SECTION B: Description of the subproject**

Subproject name		
Location of the subproject		Map of the Attached S site <input checked="" type="checkbox"/> N <input type="checkbox"/>
Description of the subproject		
Approximate area of the subproject		

**SECTION C: Environmental and Social Sensitivity of the Subproject Area**

1	Working Conditions (NAS 2)	YES/NO	Observation
1.1	Is the project likely to involve the use of any form of forced labour and/or child labour?		
1.2	Are the proposed subproject activities likely to generate occupational health and safety risks for project workers, including vulnerable workers such as women, people with disabilities, children and migrant workers?		
1.3	Is the activity of the sub-project likely to result in employment discrimination for project workers that nullifies or impairs equal opportunities or treatment in employment?		
2	Resource Efficiency, Pollution Prevention and Management (NAS 3)	Answer (Yes/No)	Observation
2.1	Will the subproject involve the use, storage, transport or handling of substances or materials that may be harmful to human health or the environment?		
2.2	Would the proposed project result in the generation of waste that cannot be recovered, reused or disposed of in an environmentally and socially correct manner?		
2.3	Will the subproject potentially result in the generation of waste (hazardous and non-hazardous)?		
2.4	Will the subproject involve the handling and/or use of chemicals and hazardous materials subject to international bans or phase-outs?  <i>For example, asbestos-containing materials (ACMs), polychlorinated biphenyls (PCBs), and</i>		

	<i>other chemicals listed in international conventions such as the Stockholm Convention on Persistent Organic Pollutants or the Montreal Protocol.</i>		
2.5	Will the subproject involve the potential use of chemicals, pesticides, fungicides, herbicides in civil works?		
2.6	Is there potential for the release into the environment of hazardous materials resulting from their production, transportation, handling, storage and use in project activities?		
2.7	Will the subproject produce wastewater that requires drainage?		
2.8	Is the subproject located near sources of water used for domestic consumption, such as boreholes, water wells or springs?		
2.9	Does the subproject include activities that require significant consumption of raw materials, energy and/or water?		
<b>3</b>	<b>Community Health and Safety (NAS 4)</b>	<b>Answer (Yes/No)</b>	
3.1	Will the subproject require the use of heavy machinery or equipment?		
3.2	Is the subproject located in an area where there has already been demining, accidents or fighting during a civil war?		
3.4	Do the elements of the construction/rehabilitation, operation or decommissioning of the subproject pose potential safety risks to local communities or ecosystem services? <sup>39</sup>		
3.5	Does the subproject involve construction, rehabilitation activities or other equipment that may lead to traffic and road safety risks?		
3.6	Would the subproject result in potentially increased health risks (for example, from waterborne or other vector-borne diseases or communicable infections such as Covid-19 or HIV/AIDS)?		
3.7	Will the subproject result in gender-based violence (GBV), sexual exploitation and sexual abuse/harassment (SEA/SH) and child and forced		

	labour due to the temporary influx of induced labour of people into the subproject area?		
3.8	Is the subproject likely to increase demand and competition for local health and social services due to the potential influx of workers and followers?		
3.9	Based on the available information, is there any known prevalence of gender-based violence (GBV)/Sexual Exploitation and Abuse/Sexual Harassment (SEA/HS) and child and forced labour in the subproject area?		
3.10	Is the subproject likely to involve quarrying or excavation work, such as rockfalls or hazardous substances?		
3.11	Is the subproject likely to involve military, police forces or private security to protect the project's personnel or property?		
<b>4</b>	<b>Land Acquisition, Land Use Restrictions and Involuntary Resettlement (NAS 5)</b>	<b>Answer (Yes/No)</b>	
4.1	Will the subproject result in physical or economic displacement – i.e., temporary or permanent loss of access to livelihood resources (such as land), loss of family infrastructure, assets, or access to assets?		
4.2	Will the subproject result in the permanent or temporary loss of sources of income or livelihoods (such as crops, fruit trees, etc.)?		
4.3	Will the subproject result in disproportionate impacts on the poor, women and children or other vulnerable groups?		
<b>5</b>	<b>Biodiversity Conservation and Sustainable Management of Living Natural Resources (NAS 6)</b>	<b>Answer (Yes/No)</b>	
5.1	Are there environmentally sensitive areas (intact natural forest, rivers or wetlands) or endangered species (specify below) that could be adversely affected by the subproject?		
5.2	Is the subproject area within/adjacent to any government-designated protected area (national park or reserve)?		

5.3	Would the proposed subproject result in the conversion or degradation of natural or critical habitat?		
5.4	Are there areas of possible geological or soil instability (prone to erosion, landslides, and subsidence)?		
5.5	Does the subproject present a risk of soil degradation?		
5.6	Does the subproject involve significant extraction, diversion or containment of surface or groundwater?  <i>For example, construction of dams, reservoirs, development of watersheds, extraction of groundwater.</i>		
5.7	Will the subproject (during construction or operation) use large amounts of local natural resources such as water, wood, gravel, stones, especially any non-renewable resources or those that exist in small quantities?		
<b>6</b>	<b>Vulnerable and Marginalized Groups (NAS 7)</b>	<b>Answer (Yes/No)</b>	
	The subproject is likely to have an adverse impact on vulnerable and marginalized groups of a distinct indigenous social and cultural group and on the recognition of that identity by others, who are collectively linked to geographically distinct habitats, ancestral territories or areas of seasonal use or occupation, as well as to the natural resources of those areas.		
<b>7</b>	<b>Cultural Heritage (NAS 8)</b>	<b>Answer (Yes/No)</b>	
7.1	Is the subproject area within/adjacent to any legally protected/known cultural heritage sites or legally defined buffer zones?		
7.2	Will the proposed subproject result in interventions that could negatively impact sites, structures or objects with historical, archaeological or cultural values (tangible and intangible)?		
7.3	Will the subproject involve excavations, demolitions, earth moving, flooding, or other changes in the physical environment?		

7.4	Was the subproject activity specifically designed to support the conservation, management and use of cultural heritage?		
-----	---	--	--

#### SECTION D: Consultation and Engagement (NAS 10)

Mention relevant information about consultations carried out, their scope and interested parties and stakeholders who participated in them (If possible, attach a photograph with evidence of the consultations):

#### SECTION F: Result of Environmental and Social Risk Screening

<b>Select from the following the appropriate environmental and social risk classification for the subproject based on the answers provided in Section C</b>	
<input type="checkbox"/> High Risk	
<input checked="" type="checkbox"/> Substantial Risk	
<input type="checkbox"/> Moderate Risk	
<input type="checkbox"/> Low Risk	

Provide a brief description of the overall Risk E&S Rating of the selected subproject and provide recommendations for subsequent steps, based on the outcome of the option selected for Section F.

#### Relevant Annexes

- ☐ DUAT Title
- ☐ Environmental License
- ☐ Business Plan
- ☐ Executive Project (Works

Maps of the area affected by the project

## Annexure 4. Labour Management Procedures (LMP)

### A. INTRODUCTION

This Labour Management Procedures (LMP) aims to establish clear management procedures for Project workers. The Plan is prepared based on the assessment of potential risks to workers and associated management measures to limit the risk of accidents and ensure the protection of health and well-being of workers and the community (51 of this ESMF), as well as to comply with Mozambique's labor legislation and the requirements of Environmental and Social Standard (ESS) 2 - Labor and Working Conditions (Chapter 3 of this ESMF). The specific objectives of the LMP are to:

- Promote safe and healthy working conditions.
- Promote fair treatment, non-discrimination, and equal opportunities for project workers.
- Protect project workers, including vulnerable categories such as women, individuals with disabilities, children (of working age, in accordance with this ESS), and migrant workers, contracted workers, community workers, and primary supply workers.
- Avoid the use of all forms of forced and child labor.
- Support the principles of freedom of association and collective bargaining for project workers in a manner consistent with national law.
- Provide accessible means for project workers to raise workplace concerns.

### B. SCOPE OF THE LMP

The requirements outlined in this document apply to all workers, although differentiated according to the type of worker considered, and will be incorporated into contracts between the Project Implementation Unit (PIU) and companies and individuals contracted or subcontracted to perform any activities in the context of this Project, either as direct employees or providers of goods and services, according to ESS 2:

- **Direct workers** – All requirements are applicable.
- **Contracted workers** – All requirements are applicable.
- **Community workers** – Requirements of paragraphs 34 to 38 apply proportionally to the nature, activities, and impacts of the project. This type of worker will not be used in this project due to the nature of the activities and their implementation.
- **Primary supply workers** – Requirements of paragraphs 39 to 42 apply.
- **Public employees** – Requirements of paragraphs 17 to 20 (Protection of the Workforce) and paragraphs 24 to 30 (Occupational Health and Safety) apply, except in cases where a contractual assignment of their employment contract to the project is made.

### C. OVERVIEW OF LABOR USE IN THE PROJECT

ESS2 categorizes workers into (i) direct workers, (ii) contracted workers, (iii) community workers, and (iv) primary supply workers. The project will involve three of these categories as identified below:

#### i. Direct Workers



The project will be implemented by a PIU. The direct labor needs in the PIU are the following: (a) for EDM, there will be 04 full time specialists at the central level and 20 technical officers at the Provincial level; (b) for FUNAE, 02 focal-points based at central level; and (c) for MIREME, 01 focal point. Direct project workers will be governed by a mutually agreed employment contract that is in harmony with Mozambique's labor legislation and ESS2 and national legislation.

#### **ii. Contracted Workers**

Contracted workers will be employed, as appropriate, by contracted companies, subcontractors, and other intermediaries, whose details (quantity, mode, and period of the project) will be known when the implementation of activities begins. Activities planned in components 1 and 2, especially those involving civil works related to the construction of new networks and last-mile connections, as well as rehabilitation and reinforcement of existing networks, will be carried out by specialized companies (individuals, small, medium, and large). Contracted workers will include construction workers for civil works, technicians for installation and maintenance of electrical infrastructure, workers for the design and procurement of materials, as well as supervision support staff, amongst others. There will also be health, safety, and environmental professionals to ensure the implementation of this ESMF and other specific social and environmental instruments to be developed during project implementation.

#### **iii. Primary Suppliers**

The main suppliers of the project are companies and traders that provide materials for construction, and restoration areas under components 1 and 2. Workers employed or contracted by a primary supplier refer to workers who supply goods and materials for the project, over which a primary supplier exercises control of work, working conditions, and treatment of people. These include suppliers of electrical materials and equipment and suppliers of transformers and meters. The PIU must conduct due diligence on all local suppliers of materials, products, and equipment used in the project to ensure there are no significant risks of violating national labor legislation as well as ESS2 requirements, such as child or forced labor exploitation, occupational health and safety risks, payment of wages below the minimum wage stipulated for the sector, among other activities. If any risks related to child and forced labor, and safety are identified, the Project will prepare procedures to address these risks. This may include verification signed by the supplier regarding adherence to national laws, good environmental practices (sanitary, health, etc.).

#### **iv. Community Workers**

According to ESS2, community workers are individuals employed or engaged in community work.

For activities carried out by EDM, community leaders and other community members will be involved as initial entry points for complaints related to the project, similarly to what was implemented in the ProEnergia Plus Project. However, at this time, the number of community workers to be engaged for these activities is still unknown at this stage.

#### **v. Migrant Workers**

Given the complexity of some activities of some Project subcomponents, there may be the participation of foreign labor, whose quantity and origin are not known at this time. This information will be available after the project is effective and the companies providing services to the Project are contracted.

#### **vi. Public Employees**

Considering that the implementation of this project will involve the collaboration of various government entities, namely the EDM, FUNAE and MIREME, among others, it is foreseeable the involvement of employees from these entities, who will be allocated to the project full-time or part-time, and who will continue to be subject to the terms and conditions of their public sector employment contract or agreement (unless a contractual assignment of their employment contract to the project is made). According to paragraph 8 of ESS 2, the requirements of this standard will not apply to such public employees, except as provided in paragraphs 17 to 20 (Protection of the Workforce) and paragraphs 24 to 30 (Occupational Health and Safety). Such workers are sometimes included as direct workers, although they do not formally belong to the PIU, or alternatively, they are identified with an independent category designated as Public Employees. Currently, this is the option that has been adopted in most projects and technically seems more correct. These workers may be involved in activities in all Project components.

For EDM, in addition to the direct workers mentioned above, the allocation of 33 local coordinators for commercial and distribution operations is planned. These numbers are yet unknown for FUNAE and MIREME.

#### **vii. Worker Recruitment Plan**

The Worker Recruitment Plan for the Project has not yet been defined. However, direct workers of the PIU will be needed full-time and year-round throughout the project implementation. EDM shall hire or appoint the E&S positions, at the Central level, no later than one month after the Effective date, whereas the E&S technicians at Province level, as well as FUNAE and MIREME's focal points shall be hired or appointed before the commencement of any activities financed under their respective subcomponents. Other specialists/consultants will be hired on demand throughout the project period. The timing for the involvement of contracted workers will be known in later stages, but they will be involved depending on the implementation of various subcomponents at specific time intervals.

#### **viii. Assessment of Key Worker-Related Risks**

The main risks to workers related to project implementation include labor risks - resulting from the violation of labor legislation requirements and ESS2 requirements of the World Bank, and occupational health and safety risks that can result in work accidents and occupational diseases.

- **Labor risks associated with direct workers:** Given that the implementation units (central and provincial) are central and provincial executive bodies responsible for the project and are under the EDM, it is expected that the project implementation authorities have a high knowledge of national labor legislation and follow the provisions of national labor legislation. Additionally, the type of work to be performed by direct workers does not present high vulnerability to labor rights abuse or OHS risks. Therefore, this risk is considered low for direct workers in the Project.

- **Labor risks for contractors, subcontractors, and community workers:** These include labor influx and gender-based violence (GBV), including Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH), child labor, forced or slave labor, non-compliance with working hours, sector minimum wages, dismissals without following the prescribed legislation, discrimination in worker selection against vulnerable groups, among others, are risks associated with civil works activities, planned in components 1 and 2, which may involve a lot of labor. Another labor risk to consider is the widespread dissatisfaction of contracted labor due to poor working conditions, excessive pressure to meet deadlines, which can result in worker strikes. This risk is considered likely and of substantial impact on the Project. Compliance with labor legislation and ESS2 requirements of the World Bank is essential to mitigate this risk. The Project implementing agency should conduct due diligence on contracted companies to certify that they comply with labor legislation and have no history of serious violations. Only companies that present low risk will be contracted.
- **Occupational Health and Safety (OHS):** Given that activities involve construction of various scales, agro-processing, handling of chemicals, and others in various provinces and districts, this risk is considered substantial. OHS risks associated with project activities include falls from heights, being run over by equipment, injuries from using tools, working in confined spaces, inhalation of gases, dust, and fumes, exposure to noise and vibration, exposure to high temperatures, possible spread of COVID-19, among others. These risks can result in minor to severe injuries, occupational diseases, and even fatalities. Compliance with labor legislation and ESS2 requirements can reduce this risk to low levels.

Chapter 51 of this ESMF further describes the identified risks and impacts related to ESS2 and the respective mitigation measures.

#### **D. RESPONSIBLE PERSONNEL**

Direct Project workers who will be part of the PIU will be under the Human Resources administration departments of the EDM, FUNAE, Grant Facility Manager and MIREME, respectively, and will be governed according to the statutes of state employees. Direct project employees receive all benefits and social rights required by national legislation (i.e., overtime, salaries, paid annual leave, sick leave, maximum working hours, compensation, and benefits, etc.).

Contractors/contracted companies must have a Human Resources (HR) department that will act as a link between workers and management, being a key sector for recruitment, structuring, training, instructions, capacity building, qualification, and to mitigate and resolve labor issues at the first stage. This department must have a thorough understanding of national legislation and experience in resolving and addressing complaints or incidents arising from project activities.

The following entities are responsible for implementing these LMP:

- **Project Implementation Unit (PIU):** Responsible for overall project management, promoting the preparation of prior communication about the LMP, competitive hiring and monitoring of consultants and contractors. Ensure the integration of codes of conduct, and these E&S clauses in contracts,

ensure the functioning of the workers' Grievance Redress Mechanism (GRM), and monitor contracted and subcontracted companies.

- ii. **Environmental and Social Specialists and Focal Points of the PIU at the Central-level (EDM, FUNAE and MIREME):** Train direct workers and supervise contracted companies in implementing occupational and community health and safety aspects, environmental and social safeguard instruments, monitor the integration of codes of conduct in contracts, and implement the LMP.
- iii. **Environmental and Social Technicians at the Province level (EDM):** Ensure that construction activities adhere to the environmental and social standards established for the project. Continuous and frequent presence on construction sites is essential to ensure that all activities comply with these requirements, thereby minimizing negative impacts on the environment and society. These professionals are responsible for regularly monitoring and supervising the E&S activities onsite by the Owner's Engineer (OE) and Contractors, collaborating directly with site inspectors to verify compliance with the approved plans and documents.
- iv. **Environmental and Social Management System's (ESMS) Officer (Grant Facility Manager):** Carries out the E&S due diligence (ESDD) process for projects under the +ENERGIA Facility. ESDD involves an assessment of environmental and social risks and impacts to determine the project's adherence to applicable E&S requirements. This includes reviewing initial E&S screening findings, examining project documentation for compliance with regulations and standards, and conducting site visits to assess real-time E&S practices and risk mitigation efforts.
- v. **Human resources, environmental, social, and occupational health and safety (OHS) officers of contracted/grantee companies:** In coordination with the PIU safeguards specialists, technicians and focal points, they are responsible for coordinating the activities of their workers allocated to the Project, integrating general principles of accident prevention and occupational diseases, promoting the implementation of measures provided in these LMP, ensuring the adaptation of the LMP in response to project deviations, promoting mutual information dissemination and training on professional risks among their workers allocated to the Project, defining access conditions to the worksite, ensuring that Project activities do not pose risks to third parties, investigating incidents and work accidents, pointing out any non-compliance regarding health and safety, and implementing all necessary corrective actions, ensuring the relationship with public entities. Ensure the functionality of the workers' Grievance Redress Mechanism (GRM).
- vi. **Worksite supervisor:** Ensure that these LMP are complied with by contractors and subcontractors operating within the Project and ensure the rectification of any deviations from the requirements contained therein.
- vii. **Worker:** Responsible for complying with all contractual clauses, the code of conduct, and ensuring that their activities do not violate the requirements established in these LMP, reporting violations of the contract (by the company) and the code of conduct (by other individuals).

## **E. POLICIES AND PROCEDURES**

### **a. General Project Policies and Procedures:**

All employers with labor affected by the Project or subproject must:

- Be aware of and comply with legal provisions related to employment and labor, including child labor, and current technical and regulatory standards.
- Be aware of and comply with legal provisions related to Worker Health and Safety.
- Be aware of, train employees on, and comply with binding Project documents, including this Plan and all other documents prepared for this project.
- Have a department, sector, or personnel responsible for human resources management and labor relations.
- Document and provide each worker, upon hiring, with clear and understandable information regarding their rights under labor legislation, including rights to wages and benefits.
- Respect the conditions of collective agreements and the right to free organization.
- Document, disseminate, and keep visible to workers (on bulletin boards/strategic locations):
  - Code of conduct
  - Channels for submitting labor complaints
  - Internal regulations or similar documents that clarify: working hours (start, end, and daily breaks); weekly and monthly workload, requirements for overtime benefits, right to weekly rest and holidays, current sanctions (e.g., in case of unjustified absence), etc.
- According to the principle of equal opportunities, gender promotion, and fair treatment, do not engage in or tolerate discrimination, GBV/SEA/SH actions in any aspect of the labor relationship (recruitment, hiring, remuneration, working conditions and terms of employment, training, promotion, contract termination, and discipline).
- Provide an easily accessible grievance mechanism for workers and their organizations, independent of other legal resources, to express their concerns about working conditions, with a guarantee of feedback to complainants without any retaliation.

**b. Code of Conduct:**

A template of Code of Conduct for the employer/company, company managers, and individual workers is presented in ANNEX A. It emphasizes labor issues, Health and Safety, environmental and social issues, including gender-based violence (GBV), including aspects of Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH), and violence against children (VAC). The obligations of the code are mandatory for all workers. The individual code must be signed by each worker (including managers), preferably at the time of contract signing, and a copy must be kept by both parties (worker and employer). For workers hired before the project, they must sign during the planning and mobilization phase of the subproject, i.e., before the start of practical activities within the Project. The Code of Conduct should be a summarized document, written in simple language. It should be available in Portuguese and English and should be explained orally to the worker in the local languages of the subproject region before signing. It should also be a topic of discussion in internal training/capacity-building sessions promoted by the employer. For those who cannot write, they may sign using a fingerprint.

**c. Occupational Health and Safety Management**

**Obligations:** Contracted and subcontracted companies within the project must:

- Provide workers with a safe and healthy work environment, considering the inherent risks of their particular sector and the specific hazard classes of the work areas, including physical, chemical, biological, and radiological hazards.
- Take measures to prevent accidents and diseases resulting from, associated with, or occurring during the course of work, according to best practices, including identifying potential hazards to workers, especially those that may pose a life risk.
- Provide regular training in operational safety procedures to workers.
- Document and disclose occupational accidents, diseases, and incidents.
- Have a mechanism for emergency prevention, preparedness, and response.
- Provide Personal Protective Equipment (PPE) and Collective Protective Equipment (CPE) inherent to the risks of the activities to be developed.
- Provide workers with adequate training and demonstration of the use of PPE and CPE.
- Frequently supervise the continuous and correct use of PPE and CPE during work.
- Promote awareness campaigns on COVID-19, HIV/AIDS, and Sexually Transmitted Infections (STIs).
- Maintain the best possible conditions that ensure the quality of life and sanitation in support facilities for employees, such as living areas, dining rooms with tables and chairs, toilets, and changing rooms at the construction site.
- Ensure the availability of potable water in the necessary quantity, including at work fronts, to be provided to workers according to applicable national and WHO recommendations and guidelines.
- Ensure sanitary conditions at workplaces, camps, and construction sites.
- Ensure the presence of clean and adequate toilets for each gender for construction workers, including those operating at work fronts.
- Ensure the presence of a responsible person for occupational health and safety (OHS) in their technical team, who must adapt and implement this plan according to existing conditions and observing national legislation.
- Inform the Contractor and competent authorities, in compliance with legal standards, of all accidents, incidents, and fatalities associated with the works or involving local communities, covering worker and public safety and providing immediate assistance, as necessary, to the injured and their families.
- Have trained first aid personnel at the worksite (when applicable), with the necessary conditions to provide first aid to workers, according to current legislation in STP.
- Provide construction workers with safe and adequate accommodation, where women and men must have separate and well-equipped bathing facilities.
- At work fronts, workers must have access to break areas where they can have their snacks and meals, in places protected from the sun.
- Include an emergency assembly point at both the construction site and the worksite.

**Awareness raising:** All workers affected by the project (direct, contracted) must participate in an induction session on health and safety, conducted by the OHS Officer or another assigned person, before starting any project activities. No employee is allowed to start their field activities before attending this session. The induction should explain this Plan, its rules, as well as specific requirements of the site where the activity will be developed, which should at least consist of an introductory briefing explaining the work, general

hazards that may be encountered during activities, and control/mitigation measures. These training and awareness actions should also be carried out on the occasion of:

- Transfer or change of functions;
- Change in work equipment, or
- Introduction of new technology.

Daily or weekly briefing sessions (safety moments) should be held. The sessions will discuss occupational health and safety issues related to Project activities, nearby occurrences, incidents and accidents, human rights, and gender-related issues. Additionally, any worker concerns can be discussed, allowing workers to make suggestions and comments openly, and will be addressed to the satisfaction of the concerned person through the appropriate Project personnel.

**Inspection:** The purpose of the inspection is to maintain occupational health and safety standards and identify deficiencies in an item, procedure, or area before it becomes a hazard. All health and safety inspections must be conducted using a checklist to be prepared by the contractor's Environment and OHS Officer, which should be included in the monthly progress report. During inspections, the following should be verified, but not limited to:

- Records of Personal and Collective Protective Equipment and their condition for use.
- Records of Health and Safety training provided to workers, and attendance records.
- Records of hazardous chemicals present at the site and their storage.
- Records of the condition of machines and vehicles.
- Records of firefighting equipment.
- Presence of first aid kits (and records of available materials, medicines, and equipment).
- Records of working conditions (mitigation measures adopted to minimize possible work-related accidents) and conditions of construction sites and camps (dormitories, existence of separate bathing facilities for men and women, water supply, etc.).
- Presence of firefighting materials and verification of equipment validity.

In case of any eventuality/deviation, ensure the correct action is taken to reduce or eliminate the occurrence of incidents/accidents.

**Non-Conformity Records:** The Contractor must record as non-conformity all cases that present significant severity (requiring important corrective/preventive actions) or that, although of lesser severity, correspond to a situation of recurrence or whose corrections cannot be resolved immediately. Such non-conformities should be recorded on forms as per Annex XII, or another form that the Contractor deems better, provided it does not reduce the information referred to in this model. If the Contractor does not record a non-conformity that, in the opinion of the Inspector, should be considered as such, the Inspector must record this non-conformity, obliging the Contractor to include it in the non-conformity appendix referred to below and to comply with the order given by the Inspector. In this situation, the Inspector must include this situation in the monthly reports and for the work meetings, recording in the respective minutes the measures taken to clarify and avoid similar situations.

**Incident reporting:** All incidents, including those requiring only minor responses, near misses, and violations of human rights or gender-related issues, must be reported immediately after their occurrence to the Site Manager or the PIU. The objective is to prevent the occurrence of serious accidents that could result in significant material losses and, more importantly, irreparable human damage or conflicts between workers. No disciplinary action should be taken against an employee for reporting an incident, regardless of its category and severity. On the contrary, all workers should be encouraged to report all incidents and near misses. All incidents reported by or involving Project workers must be investigated seriously. Corrective measures will be defined, implemented, and communicated to the interested parties.

**Work Accident Records:** Whenever a work accident involving any worker in the service of the Contractor (including subcontracted companies and suppliers) occurs, an investigation must be conducted, recording all relevant information that allows a detailed analysis of the accident, including appropriate preventive measures to avoid the occurrence of a similar accident. In the case of a serious or fatal accident, the Contractor must also report it to the competent authorities - these situations require immediate notification (by phone) to the Inspector, the PIU, and from there to the financier (World Bank) within 24 hours after the accident. The work accident record should be made using the model presented in Annex XIII, or another model agreed upon by the contractor and the PIU, provided it contains precise information that allows the investigation of the accident and the preventive or corrective measures to prevent similar events from occurring. The procedures to follow in case of an incident/accident are summarized in Table 39.

#### Procedure to Follow in Case of Incident/Accident

Type of Incident	Actions to Take
Incident / near miss (no injuries and no material damage)	Analysis of the occurrence by the OHS Officer and definition of the corrective/preventive measures plan to be implemented.
Minor accident (minor scratches, minor wounds, where first aid is sufficient/minor material damage)	Communication to the Site Management by the OHS Officer and recording of the occurrence. Investigation of the accident. Definition of the corrective and preventive actions plan to be implemented to minimize or eliminate future events. Implementation of corrective actions.
Serious accident (accident with lost time resulting in the loss of the next shift/significant material damage)	Recording and communication of the accident to the Site Management and the PIU. Monitoring of the accident by the OHS Officer (without prejudice to any other actions the PIU deems necessary, or as required by law). Final investigation report. Analysis of the report in a progress meeting and definition of the preventive/corrective actions plan to be implemented. Implementation of corrective measures.
Fatal accident	Recording and communication of the accident to the Project Manager, the World Bank, and the PIU by the OHS Officer. Immediate communication to the financier (World Bank) by the PIU within a maximum of 24 hours. Notification to the competent authorities. Total isolation of the accident area. Investigation of the accident by the OHS Officer (without prejudice to



Type of Incident	Actions to Take
	any other actions the Project Owner deems necessary, or as required by law). Final investigation report. Analysis of the report in a safety meeting and definition of the corrective and preventive measures to be implemented in writing within 24 hours.

### **Alcohol and Drug Control at the Workplace**

To control accident rates and ensure fitness for work, employees and visitors should not be allowed to access/remain at the Project activity site under the influence of alcohol, drugs, or any psychotropic substance. The specific procedure for alcohol and drug control should be developed, attached, and displayed on-site and made accessible to all workers.

### **Emergency Response Procedures**

Companies involved in the Project must develop emergency response procedures to protect their activities, workers, and communities from likely emergency scenarios. The emergency response procedures aim to facilitate the identification of participants and the definition of the respective action pattern in case of an emergency. These actions allow for effective handling of the accident/incident and minimization of its consequences, ensuring the physical integrity of all persons and workers on-site. As part of the risk management system, during the Project execution, the contractor must assess potential risk situations inherent to the activities and better specify the responsible parties and actions through an emergency response preparation plan. The plan should include relevant contacts and be posted in strategic locations visible to workers. The Emergency Preparedness and Response Plan should establish the following:

- Procedures in place for identifying, reporting, and handling incidents, emergencies, and crisis situations;
- Emergency response procedures to be carried out, including the best ways to prevent/mitigate illnesses and injuries resulting from emergencies;
- Clearly defined management structures, roles, and responsibilities for dealing with emergencies or crises, including the necessary training to be given in advance for each role;
- Organization of emergency areas (e.g., emergency assembly points, first aid rooms, medical posts);
- Provisions for providing emergency medical treatment and, if necessary, medical evacuation;
- The communication plan and communication systems in place, including relevant contacts.

Workers, visitors, and external stakeholders must be trained and understand the Emergency Response Plans, their roles and responsibilities, and the use of emergency response resources. The exact training needs should be identified based on the requirements, roles, responsibilities, and capabilities of the individual(s) involved.

## **F. EMPLOYMENT AGE**

According to national labor legislation, the minimum working age in Mozambique is 18 years, with certain criteria described in the same legislation that must be followed. These include approval from the minor's

legal representative (under 18 years old) and a risk analysis showing that the minor will not be exposed to hazardous work and that the working hours will not exceed 35 hours per week and seven hours per day. However, given the practical difficulties associated with supervising that the working conditions of minors are fully complied with, as required by ESS2, the Project will only employ people over the age of 18.

Therefore, for the Project, the employer must, in coordination with the competent union body, adopt measures to provide minors with working conditions appropriate to their age, health, safety, education, and professional training, preventing any harm to their physical, psychological, and moral development, including:

- i. Before employing the minor, verify their age through their identity card or another suitable document. This process should be verified by the PIU and obtain the non-objection of the Bank.
- ii. The employment contract directly with the minor aged between fifteen and eighteen years is only valid with written authorization from their legal representative and formal approval from the PIU, accompanied by evidence of the legal representative's approval and a risk analysis showing that the minor will not be exposed to hazardous work.
- iii. The minor can only be admitted to work after undergoing a medical examination to assess their physical robustness, mental health, and fitness for the work they will be engaged in, with the mandatory presentation of the respective fitness certificate for work.
- iv. The minor's fitness for work must be subject to an annual medical inspection, and the Labor Inspection may request their medical examinations to certify whether the work they are obliged to do, by its nature or the conditions under which it is performed, is harmful to the minor's age, physical, moral, or mental condition.
- v. The employer must not engage the minor, under eighteen years old, in unhealthy, dangerous tasks or those requiring great physical effort, defined by the competent authorities after consultation with union and employer organizations, and can only be admitted after meeting the hiring requirements announced in the labor legislation, including:
- vi. In cases where the work is performed under conditions especially dangerous to the minor's health or morals, they must be transferred to another job.
- vii. The remuneration paid to the minor must be set according to the quantity and quality of the work performed, which, in no case, will be less than the minimum wage in force in the company.
- viii. If a minor is found working on the Project, the following procedure must be followed:
  - a. The activity must be immediately suspended to verify all workers of the involved contractor,
  - b. The minor must be immediately removed from the workplace and subjected to medical examinations to assess their health condition,
  - c. An incident report must be submitted to the PIU, labor authorities, and the World Bank within 48 hours.
  - d. A detailed investigation must be conducted within 7 days to explain the conditions under which the minor was employed and what corrective measures will be taken to prevent the situation from happening again. The working period for minors under 18 years old will not exceed seven hours per day and thirty-five hours per week.

Institutions receiving interns are exempt from requesting authorization, provided they have internship contracts available for quick evidence in audits and monitoring. However, for direct workers, the Project

considers 18 years as the minimum employment age, based on the general requirements for public service provision.

#### **G. TERMS AND CONDITIONS**

The terms and conditions of employment are governed by the provisions of national legislation and the requirements of the World Bank's ESS2, which must meet and not be limited to the following provisions:

- The normal working period cannot exceed forty-eight hours per week and eight hours per day, which can be extended to nine hours per day, provided the worker is granted a half-day of additional rest per week, in addition to the weekly rest day.
- The maximum limits of normal working periods can be extended for workers performing markedly intermittent functions or simple presence and in cases of preparatory or complementary work that, for technical reasons, are necessarily performed outside the normal working period, without prejudice to the rest periods provided by labor law.
- The normal daily working period must be interrupted by a break lasting no less than half an hour and no more than two hours, without prejudice to services provided in shifts.
- The employer is required to keep a record of exceptional and extraordinary work, where, before the start of work and after its completion, it must be signed by the worker who performed it. Working on a weekly rest day, additional rest day, or holiday entitles the worker to a full compensatory rest day within the next three days, unless the work does not exceed five consecutive or alternate hours, in which case it is compensated with half a day of rest. Each worker can perform up to ninety-six hours of overtime per quarter, not exceeding eight hours of overtime per week, nor more than two hundred hours per year.
- Every worker is entitled to paid leave each calendar year as established by labor law. This can be replaced by additional remuneration by agreement between the employer and the worker, with at least 6 working days to be taken, which can be taken simultaneously by all workers.
- Female workers are entitled, in addition to normal leave, to sixty consecutive days of maternity leave, which can start 20 days before the probable date of delivery, and the father is entitled to one day of paternity leave.
- Pay the worker fair remuneration at agreed periods under the individual or collective contract or customary practices, which must be equal to or greater than the minimum wage applied to the sector, respecting the necessary increments in case of overtime and exceptional work.
- In case of contract termination by the employer, project workers (direct, contracted, and primary supply workers) will receive written notice, citing the just cause for contract termination, as well as details of payment or, where applicable, timely compensation, as stipulated by labor law. By operating within the Project, workers endorse and accept national legislation and the requirements expressed in the Code of Conduct provided by the employer.

#### **H. WORKER GRIEVANCE MANAGEMENT MECHANISM**

All contractors and other companies with workers involved in the Project must have a Workers' Grievance Management Mechanism (W-GRM) synchronized with the overall Project GRM, described in the Stakeholder Engagement Plan (SEP).

The purpose of the W-GRM is to provide workers with channels through which their complaints can be received and resolved internally in a timely, fair and consistent manner. The types of anticipated complaints at the project workplace include, but are not limited to (a) Hours of work; (b) Salary; (c) Dismissal; (d) Medical care; (e) the recruitment process; (f) OHS; (g) SEA/SH.

The project will address these complaints using the following key principles:

- **Right to information:** ensure that all project workers are informed of the MGP;
- **Accessibility:** ensure that the mechanism is simple (minimum administrative procedures), free of charge, inclusive and includes multiple entry points;
- **Confidentiality:** ensure that the right to confidentiality of each complainant is respected;
- **No reprisal:** ensure that those who file complaints do so without fear of reprisal or victimization;
- **Responsiveness:** use the information gathered by the mechanism and consultations related to the MGP to improve the outcome of the project;
- **Remedies:** guarantee the complainant's right to appeal against the resolution proposed by the MGP;

Every worker must be informed of the grievance mechanism during induction immediately after recruitment and the measures in place to protect them against possible retaliation for its use.

The Human Resources (HR) Department/Unit is designated as the nodal department for handling employee grievances. The role of the HR department/unit is to take initiatives to enable simple and quality delivery of Grievance Redressal, eliminate the causes of grievances, and ensure that complaints are recorded and communicated to the inspection and the PIU. However, if complaints and grievances are not resolved or complainants are not satisfied with the proposed solution, they may escalate to the next (higher) level to present their grievance.

Steps: The W-GRM in the project will include the following steps:

1. **Step 1:** Grievance received and recorded by the contractor's HR/Implementing Agency/Unions, or the grievance can be directly recorded in the Project Grievance Management Committee (GMC) through any of the following means and, if necessary, anonymously or through third parties:
  - By landline and mobile phone to be provided
  - By email to be provided
  - By letter to the Project PIU or subproject implementing agency
  - By letter to companies/contracted consultants involved in subproject implementation
  - By complaint form/book/suggestion box - found in public institutions dealing with subprojects
  - Directly present the grievance at the PIU/UCP offices during normal business hours
  - Register the grievance on the Program's website (<https://energiaparatodos.co.mz/>)
  - Stakeholders can access the World Bank's corporate grievance redress service (<http://www.worldbank.org/GRS>; email: [grievances@worldbank.org](mailto:grievances@worldbank.org)) to present concerns and complaints arising from the project. Once a grievance is received, it must be recorded in the grievance logbook or electronic grievance database.

2. **Step 2:** Confirm receipt of the grievance, assess its complexity, categorize it as community, labor, or GBV, and assign it to the person or forum responsible for handling that type/category of grievance. If the grievance does not fall within the project or cannot be resolved, the complainant must be notified and explained why their grievance is not proceeding.
3. **Step 3:** Develop and propose a resolution and obtain approval at the subproject level (grievance management committees - GMC - should be established at these levels).
4. **Step 4:** Communicate the proposed solution to the complainant and seek agreement on the response.
5. **Step 5:** Implement the response to resolve the grievance based on the agreement reached.
6. **Step 6:** Review the implemented solution if it has not been effective according to the recommendations.
7. **Step 7:** Close the complaint if everything is agreed upon or escalate the grievance to the next level if there is no agreement. Once all possible solutions have been proposed, and if the complainant is still not satisfied, they should be informed of their right to legal recourse.

**Deadlines:** The grievance must be recorded in the PIU grievance database as the first action immediately after notification (if the online system is operational), or within 2 days (if by another means of capture) after the grievance has been presented. The subproject responsible for the grievance should strive to present a solution within 5 days.

**Levels of Appeal:** Otherwise, the following steps should be followed:

- i. The first level of appeal - intervention of the Local UT should not exceed 10 days after notification.
- ii. The second level of appeal - intervention of the Technical Committee of the Project Component in question should not exceed 15 days after notification.
- iii. The third level of appeal - Project Management Committee - should not exceed 21 days after notification.
- iv. Additionally, if one of the parties is dissatisfied, the dissatisfied party can take the grievance to court, where it will be handled according to Mozambique's legislation.

**Register:** The PIU will ensure that a centralized "Grievance Register" is created and maintained throughout the project lifecycle. Grievance records should contain:

- i. The complainant's contact details and information about the grievance itself,
- ii. The results of investigations and responses provided,
- iii. Necessary follow-up actions and internal communications made in response to grievances and the outcome.

**Budget:** Companies (and their subcontractors) and suppliers will ensure that they have sufficient resources, including financial resources, to disseminate and implement the MGP. The UGPE will do the same for direct workers.

**Recourse to Strike:**

- A strike is another channel for complaints when the claims are collective. It is important for the company to support workers in creating conditions for establishing legal strikes to avoid poorly planned illegal strikes associated with unrest. By creating this openness, the company has the

opportunity to explain to employees that, by law, they should not resort to strikes without first attempting to resolve the conflict through alternative dispute resolution means. In fact, an efficient and transparent Grievance Management Mechanism (GMM) is a powerful tool that mitigates this exhausting and costly method of resolution for the company's productivity.

- Complaints about GBV/SEA/SH Cases
- If the complaint or report is associated with Sexual Exploitation and Abuse (SEA) or Sexual Harassment (SH), the complaint procedure established in the Project's SEA/SH Action Plan should be followed, which includes notifying the Service Provider/GBV Specialist, who, among other activities, should ensure:
  - Confidentiality in handling GBV cases and other sensitive issues and refer victims to appropriate support institutions immediately after receiving a complaint directly from a survivor.
  - Specific training for project workers on how to document Gender-Based Violence cases confidentially, as well as secure and ethical documentation, respecting the nature of the public crime.
  - No identifiable information about the victim should be stored in the GMM logbook or database.
  - The PIU should immediately notify the World Bank of any GBV complaints with the survivor's consent. Any victim reporting Gender-Based Violence through a grievance mechanism of a World Bank-funded Project should receive care, regardless of whether the perpetrator is associated with the Project or not. If the perpetrator of the act is a Project worker, it is important that the case is reported to the company's management and the PIU so that the appropriate penalties associated with the action plan and code of conduct for GBV/SEA/SH prevention, as established in the SEA/SH GMM, can be enforced.

## **I. MANAGEMENT OF CONTRACTED COMPANIES**

Some specific activities of the Project will be developed and supported by contracted and subcontracted companies (suppliers of goods and services or grant beneficiaries) to ensure the achievement of the Project's objectives. Whenever necessary to proceed with hiring, a transparent tender will be opened, and the selection requirements will be disclosed, which may include previous experience in executing works of the same nature, past E&S/OHS performance (including accident rates), previous public archives, relevant E&S/OHS permits, licences and registrations, qualification of the contractor's E&S/OHS human resources and policies (e.g. codes of conduct, complaint management, gender policy, workers' qualifications, etc.), compliance with environmental, health, and safety issues, relevant E&S/OHS certifications, exclusion of child labor and forced labor. According to the selection criteria, those who best meet the requirements will be selected and contracted.

The tender documents and the contract must include clauses that require compliance with this Plan and other relevant environmental and social safeguard instruments of the Project, including codes of conduct, grievance/complaint management procedures that must be signed upon hiring and before the start of activities within the Project. During the service implementation phase, the PIU will organize planned and unplanned visits to the offices/sites where the work is being carried out. During these visits, progress achieved, occupational health and safety issues, and the situation of child and forced labor will be observed. The contractor must provide information requested by the PIU through reports or other agreed

means. On a monthly basis, the contractor will send to the inspection and from there to the PIU the Progress Report (monthly, quarterly, and annual as agreed) on environment, social, and health and safety issues, which should contain the following elements on Health and Safety:

- Health and safety statistics, including incidents and accidents;
- Number of health and safety training sessions conducted and the number of participants;
- Training records and respective evidence;
- Medical assistance records;
- Workdays and lost days;
- Number of employees and hours worked;
- Total number of complaints received, registered, processed, pending, resolved, resolved by recourse and unresolved;
- % of complaints by gender, type, location and reception channels;
- % of complainants satisfied with the resolution compared to those who are not.
- Work incidents involving workers and/or the community.

#### **J. PRIMARY SUPPLY WORKERS**

The PIU will oversee the procurement of goods and equipment and carry out due diligence procedures based on the Procurement Regulations and the Guidelines for Preventing and Combating Fraud and Corruption and other provisions stipulated in the Financing Agreements. Child labor or forced labor is not tolerated. In cases where foreign suppliers are involved, the PIU will investigate (due diligence) whether the supplier has been accused or sanctioned for any of these issues - related to child labor, forced labor, and occupational safety. Contracted companies, when subcontracting third parties for the supply of materials and equipment, are responsible for including in their hiring agreements the procurement conditions and specifications on occupational health and safety aspects, child labor, forced labor, Codes of Conduct, and must carry out the necessary supervision.

#### **K. MONITORING**

All contractors and inspection companies must provide monthly monitoring reports on environmental, social, health, and safety performance according to the metrics specified in the respective tender documents and contracts, and send these reports to the Association. This report will ensure that contractors provide details on their supervision of environmental, social, health, and safety performance, as enshrined in this ESMF, Environmental and Social Management Plan, Construction Environmental and Social Management Plans, Resettlement Action Plan, Stakeholder Engagement Plan, GBV/SEA/SH Action Plan, Labor Management Procedure (LMP), and other applicable environmental and social instruments.

### **ANNEX A – Code of Conduct Template**

#### **Introduction**

The Organization is committed to ensuring a work environment which minimizes any negative impacts on the local environment, communities, and its workers. This will be done in compliance with environmental, social, health and safety (ESHS) standards and ensuring that appropriate occupational health and safety (OHS) standards

are met. The Organization also strongly commits to creating and maintaining an environment in which Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) have no place, and where they will not be tolerated by any employee, sub-contractor, supplier, associate, or representative of the organization.

### Definitions

- **Sexual Exploitation and Abuse (SEA)**<sup>40</sup> : Is defined as any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another<sup>41</sup>.
- **Sexual Abuse**: “The actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.”
- **Sexual Harassment**:<sup>42</sup> Unwelcome sexual advances, request for sexual favors, and other verbal or physical conduct of sexual nature.
- **Sexual Harassment versus SEA**<sup>43</sup>: SEA occurs against a beneficiary or member of the community. Sexual harassment occurs between personnel/staff of an organization or company and involves any unwelcome sexual advance or unwanted verbal or physical conduct of a sexual nature. The distinction between the two is important so that agency policies and staff trainings can include specific instruction on the procedures to report each.
- **Consent** is the choice behind a person’s voluntary decision to do something. Consent for any sexual activity must be freely given, ok to withdraw, made with as much knowledge as possible, and specific to the situation. If agreement is obtained using threats, lies, coercion, or exploitation of power imbalance, it is not consent. **Under this Code of Conduct**<sup>44</sup> **consent cannot be given by anyone under the age of 18, regardless of the age of majority or age of consent locally. Mistaken belief regarding the age of the child is not a defense.** There is no consent when agreement is obtained through:
  - the use of threats, force or other forms of coercion, abduction, fraud, manipulation, deception, or misrepresentation
  - the use of a threat to withhold a benefit to which the person is already entitled, or
  - a promise is made to the person to provide a benefit.

(1) **Examples of sexual exploitation and abuse** include, but are not limited to:

- A project staff or laborer tells women applying for jobs that he will only hire them if they provide physical/sexual favors.
- A project worker working in the sight offers physical/sexual favors in exchange of providing the project resources to female beneficiaries.
- Staring, passing verbal sexual comments/offers, rape, forced physical contacts by project staff towards the female/male beneficiaries; sexual abuse and exploitation in the labor camps (male to male or male to younger boys) are among many other SEA examples.

(2) **Examples of sexual harassment in a work context** include, but are not limited to:

- Male staff comment on female staffs’ appearances in unwelcome way

---

<sup>40</sup> As defined in the UN Secretary’s bulletin – Special Measures for protection from sexual exploitation and abuse October, 9, 2003 ST/SGB/2003/13

<sup>41</sup> In the context of World Bank Financed operations exploitation occurs when access to, or benefit from a World Bank Financed good or service is used to extract sexual gain.

<sup>42</sup> Inter-Agency Standing Committee *Protection against Sexual Exploitation and Abuse (PSEA): Inter-agency cooperation in community based complaint mechanism. Global standard Operating Procedures*. May 2016

<sup>43</sup> Ibid

<sup>44</sup> In accordance with the United Nations Convention on the Rights of the Child.



- A male manager indirectly/directly demands something inappropriate from a female worker and in exchange, he will give promotion or any other favor.
- A male staff (manager, co-worker, guard, support staff) touches a female staff members' body when he passes her at work.<sup>45</sup>
- Staring at a colleague's body (opposite sex) in an unpleasant way.

Therefore, to ensure that all project participants are aware of this commitment, the company undertakes to adhere to the following fundamental principles and standards of behavior that apply to all employees, associates and third parties (companies, subcontractors, suppliers, etc.), without exception:

### General

1. The company - and therefore all employees, partners, companies, subcontractors and suppliers - undertakes to comply with all relevant national laws, rules and regulations.
2. The company is committed to fully implementing its LMP and its "Construction-Environmental and Social Management Plan" (C-ESMP).
3. The company is committed to treating women, children (persons under the age of 18) and men with respect regardless of their race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. The acts of SEA/SH and VAC are in breach of this commitment.
4. The company must ensure that interactions with members of the local community are done with respect and without discrimination.
5. Demeaning, threatening, harassing, abusive, culturally inappropriate or sexually provocative language and behaviour is prohibited among all employees, associates and businesses, including subcontractors and suppliers.
6. Third parties (companies, subcontractors and suppliers) will follow all reasonable work instructions (including environmental and social standards).
7. Third parties (companies, subcontractors and suppliers) will protect and ensure the proper use of the goods (for example, to prevent theft, negligence or waste).

### Health and safety

8. Third parties (companies, subcontractors and suppliers) will ensure that the project's occupational health and safety (OHS) management plan is effectively implemented by company personnel, as well as subcontractors and suppliers.
9. Third parties (companies, subcontractors and suppliers) will ensure that all persons on the site wear appropriate and prescribed personal protective equipment (PPE), preventing avoidable accidents and reporting conditions or practices that present a safety hazard or threaten the environment.
10. Third parties (companies, subcontractors and suppliers) undertake to:
  - i. prohibit the use of alcohol during work activities.
  - ii. prohibit the use of narcotic drugs or other substances that may impair the faculties at any time.

---

<sup>45</sup> In the Afghan culture women and men do not shake hands, however if the handshake is initiated by women, it's acceptable.

- iii. Third parties (companies, subcontractors and suppliers) will ensure that adequate sanitation facilities are available on site and in all workers' accommodation provided to those working on the project.

### Sexual Exploitation and Abuse (SEA)/Sexual Harassment (HS) and Violence Against Children (VAC)

- 11. Acts of SEA/SH and VAC constitute serious misconduct and are therefore grounds for sanctions, which may include sanctions and/or termination of employment, and if necessary referral to the police for further action.
- 12. All forms of SEA/SH and VAC, including grooming, are unacceptable, whether they take place at the work site, around the work site, in construction sites or in the local community.
- 13. Contact or sexual activity with children under the age of 18, including through digital media, is prohibited. A mistaken belief about a child's age is not a defense. Nor is the child's consent a defence or excuse.
- 14. Unless there is full consent from all parties involved in the sexual act, sexual interactions between company employees (at all levels) and members of the communities surrounding the workplace are prohibited. This includes relationships involving withholding/promising an actual benefit (monetary or non-monetary) to community members in exchange for sexual intercourse – such sexual activity is considered "non-consensual" within the scope of this Code.<sup>46</sup>
- 15. In addition to the sanctions imposed on companies, legal proceedings will be initiated against those who commit acts of SEA/SH and VAC, as appropriate.
- 16. All employees, including volunteers and contractors, are strongly encouraged to report alleged or actual SEA/SH and VAC acts by a colleague, whether in the same company or not. Reports must be made in accordance with the SEA/SH and VAC claim procedures of the project.
- 17. Managers are required to report and take action to counter alleged or actual acts of SEA/SH and VAC, as they have a responsibility to meet the company's commitments and hold their direct reports accountable.

### Implementation

To ensure that the above principles are effectively implemented, the Company is committed to ensuring that:

- 18. All managers sign the project's "Manager's Code of Conduct", detailing their responsibilities for implementing the company's commitments and enforcing the responsibilities in the "Individual Code of Conduct".
- 19. All employees sign the project's "Individual Code of Conduct", confirming that they agree to comply with ESHS and OSH standards, and not to engage in activities leading to SEA/SH and VAC.
- 20. View the company code of conduct and the individual code of conduct in workers' camps, offices and in public areas of the workspace. Examples of areas include the waiting, rest and reception areas of sites, canteen areas and health centres.

---

<sup>46</sup> Consent to any sexual activity must be given freely, not be able to be withdrawn, be done with as much knowledge as possible and be specific to the situation. Consent must be informed, based on a clear assessment and understanding of the facts, implications and future consequences of an action. In order to be able to give consent, the data subject must have all the relevant facts at the time consent is given and be able to assess and understand the consequences of an action. The individual must also be aware of his or her right to refuse to engage in an action and/or not to be coerced, and have the power to exercise it. In some cases, consent may not be possible due to cognitive impairments and/or physical, sensory or developmental disabilities.

21. Ensure that posted and distributed copies of the company code of conduct and the individual code of conduct are translated into the language used in the work areas as well as for all international staff in their mother tongue.
22. An appropriate person is designated as the company's "focal point" to handle SEA/SH and VAC issues, including to represent the company on the SEA/SH and VAC compliance team composed of representatives of the customer, contractor, control engagement and local service provider(s).
23. Ensure that an effective SEA/SH action plan is developed in consultation with the SEA/SH and VAC compliance team, which includes at a minimum
  - i. **SEA/SH and VAC allegation procedure** to report SEA/SH and VAC issues through the project's complaints management mechanism;
  - ii. **Accountability measures** to protect the confidentiality of all parties involved; and,
  - iii. **Response protocol** applicable to survivors and authors of SEA/SH and VAC.
24. That the company effectively implement the final SEA/SH and VAC agreed action plan, providing feedback to the SEA/SH and VAC compliance team for improvements and updates as appropriate.
25. All employees undergo an initial training course before starting work on site to ensure they are aware of the company's commitments to ESHS and OHS standards and the project's SEA/SH and VAC codes of conduct.
26. All employees attend a mandatory training course once a month for the duration of the contract from the first initial training before the start of work to strengthen understanding of the project's ESHS and OHS standards and the SEA/SH and VAC Code of Conduct.

**Individual signed commitment:**

*I, \_\_\_\_\_, hereby acknowledge that I have read the Company Code of Conduct and, on behalf of the Company, I agree to comply with the standards contained therein. I understand my role and responsibilities to support the project's OSH and ESHS standards, and to prevent and respond to SEA/SH and VAC. I understand that any action inconsistent with this Company Code of Conduct or failure to act in accordance with this Company Code of Conduct may result in disciplinary action.*

I acknowledge that sexual exploitation and abuse (SEA) and sexual harassment, are prohibited. As an (employee/contractor) of (contracted agency / sub-contracted agency) in Mozambique, I acknowledge that SEA and SH activities on the work site, the work site surroundings, at workers' camps, or the surrounding community constitute a violation of this *Code of Conduct*. I understand SEA and SH activities are grounds for sanctions, penalties or potential termination of employment. Prosecution of those who commit SEA and SH may be pursued if appropriate.

I agree that while working on the project I will:

- Treat all persons, including children (persons under the age of 18), with respect regardless of sex, ethnicity, color, language, religion, political or other opinion, national, social origin, gender identity, sexual orientation, property, position, disability, and other status.
- Commit to creating an environment which prevents SEA and SH and promotes this code of conduct. In particular, I will seek to support the systems which maintain this environment.
- **Not** participate in SEA and SH as defined by this *Code of Conduct* and as defined under the Anti-harassment of Women and Children, and EVAW (Elimination of Violence Against Women) Laws.

- **Not** use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- **Not** participate in sexual contact or activity with anyone below the age of 18, **regardless of the age of majority or age of consent locally**. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense. I will not participate in actions intended to build a relationship with a minor that will lead to sexual activity.
- **Not** solicit/engage in sexual favors in exchange for anything as described above.
- I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered “non-consensual” under this Code.

**I commit to:**

- Adhere to the provisions of this code of conduct both on and off the project site.
- Attend and actively partake in training courses related to preventing SEA and SH as requested by my employer.

If I am aware of or suspect SEA and SH, at the project site or surrounding community, I understand that I am encouraged to report it to the Grievance Reporting Mechanism (GRM) or to my manager. The safety, consent, and consequences for the person who has suffered the abuse will be part of my consideration when reporting. I understand that I will be expected to maintain confidentiality on any matters related to the incident to protect the privacy and security of all those involved.

**Sanctions:** I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

- Informal warning or formal warning
- Additional training.
- Loss of salary.
- Suspension of employment (with or without payment of salary)
- Termination of employment.
- Report to the police or other authorities as warranted.

Signature/Fingerprint: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Annexure 5. GBV/SEA/SH Risk Assessment and Action Plan

This document aims to assess and establish mitigation measures for the risks that may arise from the implementation of the project related to sexual exploitation and abuse and sexual harassment (SEA/SH), and other forms of Gender-Based Violence (GBV). The document will provide an assessment of potential risks and propose measures to avoid/reduce their impact on the project and the communities. The above objective will be achieved through the following specific actions:

- Identify pre-existing GBV risks and those that may be exacerbated or arise with project activities;
- Map GBV service providers in the surrounding project areas that can be used by beneficiaries;
- Identify other measures the project should undertake to reduce the risk of GBV;
- Develop an Action Plan to mitigate the identified risks;
- Disseminate the process for submitting and managing complaints related to GBV/SEA/SH to stakeholders and affected parties;
- Implement the action plan.

### A. CONCEPT - GENDER-BASED VIOLENCE (GBV)

The concept of gender refers to the socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men and women (GTZ, nd). Gender relations vary and change within the same society according to other social categories, such as race, class, age, sexual orientation, ethnicity, and religion. These factors do not act independently and create a system that reflects the "intersection" of multiple forms of discrimination (MGCAS, 2016). Gender-Based Violence (GBV) is referred to as any harmful act perpetrated against a person's will and based on socially constructed gender differences and unequal power positions between men and women sustained by patriarchy (Council of Europe, 2007). It includes acts that cause physical, mental, sexual harm or suffering, threats of such acts, coercion, and other deprivations of liberty, occurring in public or private life.

The terms violence against women and gender-based violence are often used interchangeably in literature and by women's rights advocates. However, GBV emphasizes the gender dimension, specifically the interconnection between (i) the subordinate status of women and (ii) the increased vulnerability to violence derived from unequal power relations and gender roles. The term GBV provides an opportunity to examine and understand the phenomenon of violence against women, shifting the focus from viewing women as victims to focusing on the gender and power relations between men and women created and maintained by gender stereotypes (UNFEM, 2001). In this context, women can be victims of GBV perpetrated by other women attempting to exercise patriarchal power, and it also means that men and boys can be victims of GBV, with particular attention to sexual violence, as in cases where they are considered "outside the traditional pattern" of gender roles. However, it is important to note that the vast majority of GBV victims are women.

Gender-Based Violence (GBV) can take different forms described below:

- **Physical Violence:** Results in injuries, distress, and health problems. Typical forms of physical violence include beating, strangulation, pushing, and using weapons to attack the victim.

- **Sexual Violence:** Includes sexual acts, attempts to obtain a sexual act, acts of trafficking, or other acts directed against a person's sexuality without their consent.
- **Psychological Violence:** Acts or omissions aimed at controlling a person's behavior, actions, beliefs, and decision-making ability through manipulation, intimidation, insult, threat, isolation, humiliation, etc.
- **Property or Economic Violence:** Includes barriers imposed by the perpetrator to prevent the victim from accessing money or resources. Pressure not to work and stay at home or control of resources are clear examples of economic violence.
- **Political Violence:** Any practice or act of discrimination or verbal, psychological, physical, sexual, or economic violence, as well as threats of such acts or intimidation, that prevent or hinder victims' access to public or political office or the free exercise of their political career.
- **Sociocultural Violence:** Any practice that can endanger people's self-esteem, health and lives. Examples of sociocultural violence include: female genital mutilation, early marriage, forced labor, forced sexual exposure, being prevented from socializing with other people, friends, family or neighbors, etc.

#### Some examples of GBV

- a. **Domestic violence:** includes all acts of physical, sexual, psychological and economic violence that occur in the private sphere within the family, domestic unit or between intimate partners (former or current, even when not living together);
- b. **Sexual harassment** includes unwanted verbal, physical or other conduct of a sexual nature with the purpose or effect of violating a person's dignity. It can occur in a context of unequal power relations such as a workplace and includes verbal acts, touching without the person's consent, viewing pornography, etc;
- c. **Female genital mutilation (FGM)** is the ritual cutting or removal of part or all of the external female genital organs. This violates women's bodies and often harms their sexuality, mental health, well-being and participation in their community and can even lead to death;
- d. **Forced marriage/ union** through force or coercion, including child or early marriage, when children marry before reaching the minimum age for marriage. It is important to note that in Mozambique it is more common to use the term forced union, since it is understood that a marriage by law only occurs when there is consent between two adult people;
- e. **Sexual Exploitation and Abuse:** Any actual or attempted abuse of a person's position of vulnerability, differential power or trust for sexual purposes, including, but not limited to, taking monetary, social or economic advantage of a person. Sexual abuse is further defined as “the actual or threatened/attempted physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions”.

## B. CONTEXT OF GBV IN MOZAMBIQUE

**Legal Framework:** has been described in Chapter 3 of this ESMF.

**Institutional Mechanisms:**

- a. Ministry of Health Order on Integrated Care for Victims of Gender-Based Violence: Establishes procedures to be followed by health units in caring for victims of gender-based violence, most of whom are women and girls. Establishes the relationship between the Health Unit and other services for survivors of gender-based violence, such as the Police. Determines the role of Health Agents and the protocols to be followed to identify and address cases of violence.
- b. Multisectoral Mechanism for Integrated Care for Women Victims of Violence.: Develops a holistic approach in response to violence against women and girls by Government institutions and civil society. To include different needs in the response to violence against women, this document establishes the coordination and integrated care relationship of various actors, including the roles to be played by each. The main public institutions involved in multisectoral care are the Ministry of Interior, the Ministry of Health, the Ministry of Gender, Child and Social Action, and the Ministry of Justice. The Mechanism aims to improve care for survivors of violence against women by better coordinating the work and roles of different stakeholders and defining care protocols to standardize services offered by different professionals involved.

### **Context of the GBV Situation in Mozambique**

Data from a survey conducted by the Ministry of Gender, Child and Social Action in 2004 at the national level indicated that 54% of women reported having been victims of violence at least once during their lifetime, with physical and sexual violence being the most common. In 2011, the Human Development Index further indicated that 1/3 of all women between the ages of 15 and 49 stated they had suffered physical violence since the age of 15, and 25% said they had experienced violence frequently or in the 12 months prior to the survey. In the same survey, 12% of women declared themselves survivors of sexual violence, and 46% said they were survivors of domestic, sexual, or emotional violence by their partners (DHS: 2011).

Gender-based violence, and more specifically sexual exploitation and abuse, are widespread practices in Mozambique, with women being the most affected. This can also include cases of prostitution, especially in urban areas, as a means of escaping poverty, where it is used as a way to support families, as well as situations of sexual and emotional violence involving police officers and other government officials.

As the Project involves the construction of infrastructure (civil works), training and capacity-building activities through technical assistance, and the selection of beneficiaries, these activities increase the risk of GBV/SEA/SH. Considering the small to large scale works planned under Components 1 and 2, the SEA/SH risk is currently rated as substantial. The construction labor influx is not expected to be significant as unskilled labor should be hired locally. Nevertheless, it may alter the dynamics of the community and increase the risk of illegal activities like sexual abuse and exploitation, other types of SEA/SH, and communicable and sexually transmitted STDs.

It must be noted that while in low or moderate numbers, the workers from outside the host communities are likely to exacerbate preexisting social problems and culturally accepted harmful practices like child marriage, particularly in rural areas known for high prevalence of GBV. This could increase the risks of SEA/SH associated with the project. Capacity support provided under component 4 of the project, will secure that the borrower is capable of building mechanisms and institutional capacity for responding to such risks and provide project's response to the risks.

## C. MAPPING OF GBV SERVICE PROVIDERS

### a. Public Service Providers

The Multisectoral Mechanism for Integrated Care for Women Victims of Violence was established in 2012 under the leadership of the Ministry of Gender, Child and Social Action (MGCAS) with the aim of improving access to and availability of integrated care services for women victims of violence at all levels of operation, in coordination with Government entities and with the participation of civil society. This mechanism includes the following institutions: Ministry of Gender, Child and Social Action (MGCAS), Ministry of Health (MISAU), Ministry of Interior (MINIT), and Ministry of Justice, Constitutional and Religious Affairs (MJCR).

There are three entry points to access the mechanism, namely:

1. **Integrated Care Centers (CAIS):** These centers integrate health, psychosocial, police, and legal services. There are 25 CAIS in the country, except in the provinces of Zambézia, Manica, Cabo Delgado, and Niassa.
2. **Family and Minor Victim of Violence Care Offices (GAFMVV):** These operate under the aegis of the Police of the Republic of Mozambique, with 25 offices and 351 care sections in the country.
3. **Civil Society Organizations:** At the national level and especially in areas covered by the project, there are civil society organizations, Community-Based Organizations, Non-Governmental Organizations, and other international organizations implementing initiatives in the area of GBV. It is also important to mention the role of community leaders as agents who play an important role in preventing GBV. Some programs, such as the United Nations Spotlight Initiative in some project locations like Nampula, and organizations like Pathfinder, Medicus Mundi, Save the Children, WLSA Mozambique, Muleide, Fórum Mulher, Gender Links, UN Women, UNICEF, and UNFPA, are some of the organizations working in this area.

Despite the existence of these services, there are gaps in service provision, especially at the district level, as some of these only have care offices that struggle to provide an adequate integrated response. Awareness sessions, integrated response, and case follow-up are some of the gaps. It is also important to mention that the weak criminalization of cases contributes to the low demand for services and the increase in GBV.

### b. Non-State Organizations Working in the Protection of Women's Rights and GBV

The table below presents the preliminary mapping of GBV service providers by non-state organizations (NGOs, CSOs, CBOs, Networks) at the national level. It is important to note that this mapping is subject to updates and further detailing, which is recommended to be done locally at the beginning of the project implementation.

Table 01: Non-State Organizations Working in the Protection of Women's Rights and GBV

Name	Specific Activities in the Gender Area
AMMCJ – Mozambican Association of Women in Legal Careers	Legal Assistance and Psychosocial Support to GBV victims
AMODEFA – Mozambican Association for Family Development	Sexual and Reproductive Rights



Name	Specific Activities in the Gender Area
AGA KHAN	GBV, women's economic empowerment, active voice, Promotion of gender equality in organizations
Ariel Gleiser	Sexual and Reproductive Rights and HIV/AIDS
Association of Women, Law and Development (MULEIDE)	Research and training of women in the informal sector, health training and HIV/AIDS prevention, and legal awareness training
CARE International	Gender and nutrition; Training on land law, family law, and gender-based violence; Gender and Social Inclusion in the Emergency Prevention and Response Program in Mozambique; Women's empowerment to achieve gender equality.
DKT – Íntimo	Women's Sexual and Reproductive Rights
FDC – Foundation for Community Development	Poverty eradication, advocacy, social justice, peacebuilding and national reconciliation, and social cohesion, women's, children's, and girls' rights
IREX – Media Strengthening Program	Coverage of issues related to Gender-Based Violence (Network of Focal Points in partner Community Radios)
LAMBDA	Defense of sexual minority rights
Magariro	Advocacy and defense of the rights of the most disadvantaged groups
N'weti	Communication for behavior change in health and gender; multimedia, Research, and Social Mobilization
PATHFINDER	Sexual and Reproductive Rights
Rede CAME	Prevention and combat of all forms of child abuse through education, advocacy, and awareness
WLSA – Women and Law in Southern Africa	Research on the situation of women's rights, advocacy, social mobilization on combating and preventing GBV

Source: [www.Joint.org.mz//public/assets/documentos/ongs\\_nacionais\\_que\\_actuam\\_no\\_pais](http://www.Joint.org.mz//public/assets/documentos/ongs_nacionais_que_actuam_no_pais)

#### D. RISK ANALYSIS AND MITIGATION MEASURES IN THE PROJECT CONTEXT

The project involves activities that represent GBV/SEA/SH risks, particularly in activities related to civil works, selection and hiring processes, awareness-raising, and work with public institutions and communities, among others. However, if appropriate measures and mechanisms are applied to address these risks, they can be minimized. Table 02 below presents the GBV/SEA/SH risks by Project component, mitigation measures, and verification indicators.

The project's Stakeholder Engagement Plan (SEP) describes the project's Grievance Redress Mechanisms, as well as the specific procedures to be carried in the case of SEA/SH complaints.

**Table 02: Risk Assessment and Mitigation Measures for GBV Risks in the Project**

Risks and Considerations	Recommendations, Mitigation, and Prevention Measures	Execution Indicators	Responsible Party
<ul style="list-style-type: none"> <li>• SEA/SH during training programs, information sessions, and access to electricity services due to frequent interaction, potentially creating a bond of "false trust" or through promises (material or monetary) to women and girls in rural areas, which can result in sexual involvement, early marriages, early pregnancies, or sexual harassment.</li> <li>• GBV risks may be exacerbated due to poverty levels in project implementation areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Disseminate and ensure the signing of codes of conduct that include clauses on GBV/SEA to regulate the conduct and behavior of trainers during training/sensitization sessions.</li> <li>• Disseminate and ensure the signing of codes of conduct that include clauses on GBV/SEA to beneficiaries of credit lines to regulate conduct and behavior.</li> <li>• Train trainers and facilitators in financial management on GBV/SEA and SH topics to pass on to beneficiaries in their sessions.</li> <li>• Prioritize awareness campaigns using physical and digital media, such as community radios, television, pamphlets, and prioritize local actors for awareness actions, leaders, local NGOs, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• % of trainers signing codes of conduct on GBV/SEA and SH in training and capacity-building sessions</li> <li>• # of trainers trained on GBV/SEA and SH</li> <li>• # of awareness campaigns on sanitation conducted</li> <li>• # of lectures on GBV/SEA and SH conducted</li> <li>• Criteria for locating new sanitation facilities</li> </ul>	<p>PIU Contractors</p>
<ul style="list-style-type: none"> <li>• GBV/SEA/SH related to the labor selection process (especially the hiring of female labor) where women may be enticed for inclusion in subproject activities or promises of better salaries/better positions. This risk exists in all components involving</li> </ul>	<ul style="list-style-type: none"> <li>• Establish standards to be used in the labor selection process and institute different levels of verification in the selection process.</li> <li>• Conduct GBV (prevention and sexual abuse, and sexual harassment) sessions at the workplace and inform workers</li> </ul>	<ul style="list-style-type: none"> <li>• Standards and selection requirements created and used in all projects involving direct engagement with beneficiaries for</li> </ul>	<p>PIU Contractors</p>

Risks and Considerations	Recommendations, Mitigation, and Prevention Measures	Execution Indicators	Responsible Party
<p>direct engagement with beneficiaries. People in positions of power can be the main perpetrators.</p>	<p>about the risk of being sanctioned by law in case of violation.</p> <ul style="list-style-type: none"> <li>Follow up on GBV cases that occur in the workplace and hold perpetrators accountable to discourage similar practices and protect women in the workplace. This includes complaints made by beneficiaries.</li> <li>• Preferably identify a woman in the workplace as a gender and GBV focal point to liaise and support women in case of related acts.</li> </ul>	<p>access to services and resources.</p> <ul style="list-style-type: none"> <li># of lectures on GBV/SEA and SH conducted</li> <li>% of complaints followed up on in relation to the total number of reported cases</li> </ul>	
<ul style="list-style-type: none"> <li>Risk of perpetuating GBV/SEA and SH related to the absence of complaints and follow-up on cases either due to lack of mechanisms for this purpose or fear/reluctance of the victim to suffer reprisals and lose project benefits, which makes perpetrators feel immune and continue similar acts, normalizing GBV within the project.</li> <li>The consequences of GBV/SEA can have serious consequences for the project and for women; e.g., affecting their physical and psychological health, preventing them from continuing their</li> </ul>	<ul style="list-style-type: none"> <li>Develop and create codes of conduct in all subprojects with GBV and SEA risk to be signed by all involved.</li> <li>Implement the complaint mechanism in all subprojects with potential GBV risk, some of which may be based on books or complaint boxes.</li> </ul>	<ul style="list-style-type: none"> <li>% of institutions involved in the project that have a code of conduct on SEA and SH</li> <li>Existence and implementation of complaint mechanisms that include GBV cases</li> <li>% of GBV complaints reported through the complaint mechanism and followed up/resolved</li> </ul>	UCP/IF/Implementer/Contractor

Risks and Considerations	Recommendations, Mitigation, and Prevention Measures	Execution Indicators	Responsible Party
activities, and some women and girls may even drop out of participating/benefiting from the project.			
<ul style="list-style-type: none"> <li>Better conditions provided to community workers involved in the project can lead to a high risk of early or forced marriage, especially in communities where marriage to an employed man is seen as the best subsistence strategy for a teenager. Additionally, higher wages for workers in a community can lead to an increase in transactional sex.</li> </ul>	<ul style="list-style-type: none"> <li>Community awareness on GBV/SEA, risk of early marriages, and early pregnancy</li> <li>Implement complaint management mechanisms at all levels, including their availability to the community</li> <li>Identify a woman in the workplace or community as a gender and GBV focal point to liaise and support women and girls in case of related acts.</li> <li>Engage with civil society organizations for community awareness actions and to reinforce the application of Law 24/2019 to hold perpetrators criminally accountable.</li> </ul>	<ul style="list-style-type: none"> <li>Codes of Conduct emphasizing GBV/SEA and SH issues signed by project workers</li> <li>Operational complaint lines (complaint book/box, green line for complaints)</li> <li># of GBV cases against women and girls in project implementation areas</li> </ul>	PIU Contractors
<ul style="list-style-type: none"> <li>When women are hired to carry out activities within the project, there is a risk of economic violence characterized by the retention of women's salaries by their partners, making the woman financially dependent and without control over her salary.</li> </ul>	<ul style="list-style-type: none"> <li>The project should establish links with national civil society organizations, community-based organizations, non-governmental organizations, and other international organizations that implement initiatives in the area of Gender-Based Violence and should convey knowledge about types of</li> </ul>	<ul style="list-style-type: none"> <li># of awareness campaigns conducted</li> <li># of meetings with community leaders, religious leaders, and other influential people conducted</li> </ul>	PIU Contractors

Risks and Considerations	Recommendations, Mitigation, and Prevention Measures	Execution Indicators	Responsible Party
	<p>violence and their consequences. During awareness campaigns, community leaders, religious leaders, and other influential people should be part of the knowledge transmission process.</p>		
<ul style="list-style-type: none"> <li>• Low awareness of GBV by men and women in project areas can lead to "neutralization, normalization, and silencing," perpetuating cases, which can negatively affect women's human rights and their participation and benefits from the project. This risk can be exacerbated in host communities for displaced people (focus on women and girls) from conflict-affected areas or in the case of women and girls in accommodation centers for internally displaced persons.</li> </ul>	<ul style="list-style-type: none"> <li>• Allocate and train community facilitators in different projects on GBV issues to monitor them in communities with beneficiaries, encourage/facilitate reporting and follow-up.</li> <li>• Map available services in the community and provide information about them, including a complaint flowchart.</li> <li>• Protect and provide security to victims (e.g., no job loss/demotion/retaliation) to encourage other women in the same situation to report and discourage similar acts by perpetrators (e.g., establish and implement protocols for managing confidential information related to GBV cases, including survivor (victim) and complainant data).</li> </ul>	<ul style="list-style-type: none"> <li>• # of community facilitators allocated to projects monitoring GBV cases in communities (disaggregated by sex)</li> <li>• List of organizations and services available to address GBV cases at the project site and nearby (disaggregated by type of services, victim support services)</li> <li>• % of GBV cases presented and followed up (against reported cases)</li> </ul>	<p>PIU Contractors</p>
<ul style="list-style-type: none"> <li>• Risk of sexual harassment perpetrated by project workers taking advantage of their position</li> </ul>	<ul style="list-style-type: none"> <li>• Disseminate and ensure the signing of codes of conduct that include clauses on GBV/SEA/SH to regulate</li> </ul>	<ul style="list-style-type: none"> <li>• % of workers signing codes of conduct on GBV/SEA and SH in</li> </ul>	<p>PIU Contractors</p>

Risks and Considerations	Recommendations, Mitigation, and Prevention Measures	Execution Indicators	Responsible Party
<p>of power to abuse and exploit colleagues or women and girls in the community, including other forms of violence (e.g., psychological, economic, etc.). This is a common aspect when involving people in situations of social and/or economic vulnerability, giving them little possibility to resist the pressure and report – as they fear losing the opportunities offered to them.</p>	<p>the conduct and behavior of project workers during their activities and interactions with colleagues and the community (available in the Project Labor Management Procedure).</p> <ul style="list-style-type: none"> <li>• Train project workers on GBV/SEA and SH topics.</li> <li>• Raise community awareness on GBV/SEA and SH and complaint mechanisms.</li> <li>• Implement the complaint management mechanism, including awareness for effective use and map prevention and response actors to GBV in communities adjacent to the project.</li> </ul>	<p>training and capacity-building sessions</p> <ul style="list-style-type: none"> <li>• # of awareness meetings on GBV conducted</li> <li>• # of workers from companies contracted by the project trained on GBV/SEA</li> <li>• Existence and functioning of a complaint mechanism that includes GBV/SEA cases</li> <li>• % of GBV cases related to abuse of power presented and followed up (against reported cases)</li> </ul>	
<ul style="list-style-type: none"> <li>• Risks of sexual violations and sexual abuse during work potentiated by the implementation of fragile infrastructure (sanitation) that does not meet safety requirements, especially for women (sanitation infrastructure distant from residences, lack of lighting, and without mechanisms to lock from the inside, including</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of safe infrastructure (well-lit locations, easy access) with separation for use by women and men of different ages.</li> </ul>	<ul style="list-style-type: none"> <li>• # of recommendations resulting from community consultations</li> <li>• Level of satisfaction of female workers with the use of infrastructure provided by the project</li> </ul>	<p>PIU Contractors</p>

Risks and Considerations	Recommendations, Mitigation, and Prevention Measures	Execution Indicators	Responsible Party
infrastructure for men and women close to each other).			
<ul style="list-style-type: none"> <li>The exclusion of women in components associated with construction is greater, as it involves activities generally identified as male stereotypes.</li> </ul>	<ul style="list-style-type: none"> <li>Develop guidelines to ensure that women receive equal employment opportunities and equal pay for equal work</li> <li>Create job opportunities through quotas and transparent recruitment practices, and provide adequate training for women to increase their income</li> <li>Ensure the inclusion of gender-sensitive planning, monitoring and evaluation</li> </ul>	<ul style="list-style-type: none"> <li># of women employed in various roles within the project</li> <li>% of women in skilled and unskilled positions</li> <li># of training programs conducted specifically designed for women</li> <li>Participation rate in training programs</li> <li>Existence of guideline on equal job opportunities and equal pay</li> <li># of complaints related to gender discrimination in hiring, promotion, and pay</li> </ul>	PIU Contractors

### Operationalization of these measures

These measures which are part of the SEA/SH Prevention and Response Plan included in this ESMF will be disclosed and implemented to assess and manage the risks of SEA/SH. Relevant measures and where appropriate, they will be included in the mitigation and response measures as part of the project's ESMP, which then shall be adopted and implemented by contractors as part of Contractors' ESMPs.

## Annexure 6. Guidelines for Preparation of Site-Specific Resettlement Action Plans (RAPs)

### A. Introduction

1. This document constitutes a simplified template for a Resettlement Policy Framework (RPF), consistent with requirements of the World Bank Environmental and Social Framework.<sup>i</sup> Its fundamental purpose is to establish terms of agreement between relevant authorities and the World Bank regarding principles and procedures to be used in subsequent preparation of a Resettlement Plan (RP) or Resettlement Plan (RPs).<sup>ii</sup> World Bank approval of an RP (or RPs) is required before project authorities invite bids for any contracts in which works are expected to involve physical or economic displacement as a result of land acquisition or restrictions on access or use of natural resources.
2. The RAP is intended to avoid or minimize any adverse impacts associated with physical or economic displacement, and to ensure arrangements are in place to mitigate any adverse impacts that may occur. The implementing agencies hereby agrees to apply the principles, procedures, and standards incorporated in ESS5 of the World Bank ESF if obtaining any sites for project use would cause economic displacement<sup>iii</sup> or physical displacement.<sup>iv</sup>
3. These guidelines are intended to utilize the existing legal and policy framework of Mozambique, incorporating any supplementary measures necessary to achieve consistency with ESS5 principles and standards.<sup>v</sup>

### B. Key Principles and Definitions

7. In World Bank-assisted projects, borrowers are expected to take all feasible measures to avoid or minimize adverse impacts from land acquisition and restrictions on land use associated with project development. The fundamental objective of ESS5 is to ensure that, if physical or economic displacement cannot be avoided, displaced persons (as defined below) are compensated at the replacement cost for land and other assets, and otherwise assisted as necessary to improve or at least restore their incomes and living standards.

Other ESS5 objectives include:

- a) To avoid forced eviction<sup>vi</sup>
  - b) To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure<sup>vii</sup>
  - c) To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project warrants
  - d) To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.
9. Displaced persons (ESS5, Para. 10) are defined as any persons subjected to project-related adverse impacts who (a) have formal legal rights to land or assets; (b) have a claim to land or assets that is recognized or recognizable under national law; or (c) who have no recognizable legal right or claim to the land or assets they occupy or use. The term incorporates all potential categories of persons affected by land acquisition and associated impacts; all of those adversely affected are considered “displaced” under this definition regardless of whether any relocation is necessary.



10. Replacement cost (ESS5, Para. 2, footnote 6) is defined as a method of valuation yielding compensation sufficient to replace assets, plus necessary transaction costs associated with asset replacement. Where functioning markets exist, replacement cost is the market value as established through independent and competent real estate valuation, plus transaction costs. Where functioning markets do not exist, replacement cost may be determined through alternative means, such as calculation of output value for land or productive assets, or the undepreciated value of replacement materials and labor for construction of structures or other fixed assets, plus all transaction costs associated with asset replacement. In all instances where physical displacement results in loss of substandard shelter, replacement cost must at least be sufficient to enable purchase or construction of housing that meets minimum community standards of quality and safety.

11. ESS5 also establishes key principles to be followed in resettlement planning and implementation. These include:

- a) All displaced persons are entitled to compensation for land and attached assets, or to alternative but equivalent forms of assistance in lieu of compensation; lack of legal rights to the assets lost will not bar displaced persons from entitlement to such compensation or alternative forms of assistance.
- b) Compensation rates refer to amounts to be paid in full to the eligible owner(s) or user(s) of the lost asset, without depreciation or deduction for fees, taxes, or any other purpose.
- c) Compensation for land, structures, unharvested crops, and all other fixed assets should be paid prior to the time of impact or dispossession.
- d) When cultivated land is to be taken for project purposes, the implementing agencies seek to provide replacement land of equivalent productive value if that is the preference of the displaced persons.
- e) Community services and facilities will be repaired or restored if affected by the project.
- f) Displaced persons should be consulted during preparation of the RAP, so that their preferences are solicited and considered.
- g) The RAP (in draft and final versions) is publicly disclosed in a manner accessible to displaced persons.
- h) A grievance mechanism by which displaced persons can pursue grievances will be established and operated in a responsive manner.
- i) Negotiated settlement processes are acceptable as an alternative for legal expropriation if appropriately implemented and documented.viii
- j) Land donation is acceptable only if conducted in a wholly voluntary manner and appropriately documented.ix
- k) The implementing agencies bear official responsibility for meeting all costs associated with obtaining project sites, including compensation and other considerations due displaced persons. The RAP includes an estimated budget for all costs, including contingencies for price inflation and unforeseen costs, as well as organizational arrangements for meeting financial contingencies.
- l) Monitoring arrangements will be specified in the RAP, to assess the status and effectiveness of RAP implementation.

### **C. Preparing a Resettlement Plan**

14. All projects causing physical or economic displacement through land acquisition or project-related restrictions on resource access or use are required to prepare a resettlement plan for World Bank approval. Responsibility for preparation and implementation of the RP (or RPs) rests with EDM, FUNAE and MIREME. As necessary, the implementing agencies will exercise their authority to coordinate actions with any other involved agencies, jurisdictions, or project contractors to promote timely and effective planning and implementation.

15. RAP preparation begins once the physical footprint of a proposed investment has been determined, establishing that a particular site (or sites) must be acquired for project use. The implementing agencies initially

screen proposed sites to identify current usage and tenurial arrangements and identifies the site (or sites) that will minimize physical and economic displacement. The implementing agencies subsequently carry out, or causes to be carried out, a census survey to identify and enumerate all displaced persons on the selected site (or sites) and to inventory and value land and other assets that are to be acquired for project use.

16. Each RAP is based on the principles, planning procedures, and implementation arrangements established in these guidelines,<sup>x</sup> and normally includes the following contents:

- a) Description of the project (with appropriate maps and illustrations), including explanation for the necessity of acquiring particular sites for project use and efforts undertaken to avoid or minimize the amount of land acquisition or other potential impacts deemed necessary
- b) Results of a census survey of displaced persons and inventory and valuation of affected land and assets
- c) Description of any project-related restrictions on resource use or access
- d) Description of tenure arrangements, including collective, communal, or customary use or ownership claims
- e) Review of relevant laws and regulations pertaining to acquisition, compensation, and other assistance to displaced persons, and identification of gap-filling measures needed to achieve ESS5 requirements
- f) Description of land and asset valuation procedures and compensation standards for all categories of affected assets
- g) Eligibility criteria for compensation and all other forms of assistance, including a cutoff date for eligibility
- h) Organizational arrangements and responsibilities for RP implementation
- i) Implementation timetable
- j) Estimated budget and financial contingency arrangements
- k) Consultation and disclosure arrangements
- l) Description of grievance mechanism
- m) Arrangements for monitoring implementation progress.

The RAP should be complemented by a separate set of individual compensation files for each displaced household or persons. These files are to be handled confidentially by the borrower to avoid any prejudice to displaced persons. In fragility, conflict, and violence (FCV) environments, RAPs should also clarify procedures to be applied to ensure the security of displaced persons when they receive compensation payments.

Eligibility criteria for compensation and all other forms of assistance should be clearly summarized in a table that can be used for consultation with displaced persons (see example provided in Annex).

Additional planning measures must be incorporated into RPs for projects causing physical displacement, or significant economic displacement, as described below.

17. For projects causing physical displacement,<sup>xi</sup> the RAP should include planning measures relating to the following, as relevant for project circumstances:

- a) Description of relocation arrangements, including options available to displaced persons, and including transitional support for moving or other expenses
- b) Description of resettlement site selection, site preparation, and measures to mitigate any impacts on host communities or physical environment, including environmental protection and management
- c) Measures to improve living standards and otherwise address particular needs of relocating poor or vulnerable households, including measures to ensure that replacement housing is at least consistent with minimum community standards and is provided with security of tenure

- d) Description of project design measures to improve living standards, access to or functioning of community services or facilities, or for providing other project-related benefits
- e) Any measures necessary to address impacts of resettlement on host communities.

18. For projects causing significant economic displacement,xii the RAP describes (as relevant):

- a) The scale and scope of likely livelihoods-related impacts, including agricultural production for consumption or market, all forms of commercial activity, and natural resource use for livelihoods purposes
- b) Livelihoods assistance options (for example, employment, training, small business support, assistance in providing replacement land of equivalent productive value, other) available to persons losing agricultural land or access to resources
- c) Assistance measures available to commercial enterprises (and workers) affected by loss of assets or business opportunities directly related to land acquisition or project construction
- d) Project measures to promote improvement of productivity or incomes among displaced persons or communities.
- e) F. Consultation and Disclosure Arrangements

19. The RAP summarizes results of measures taken to consult with displaced persons regarding the project, its likely impacts, and proposed resettlement measures. It also summarizes the meetings held with displaced persons (dates, locations, number of participants), including comments, questions, and concerns expressed by displaced persons during these meetings as well as responses provided to them. The [name of implementing agency] discloses a draft RP to the displaced persons (and the public) after Bank review and solicits comments from displaced persons regarding the proposed plan. Disclosure of the final RP occurs following consideration of comments received and following Bank acceptance.

#### **D. Monitoring and Evaluation**

20. The implementing agencies will make arrangements for monitoring implementation and will provide periodic monitoring reports to the Bank regarding the status of land acquisition and implementation of the RAP. For projects with significant impacts, competent resettlement monitoring professionals will monitor implementation progress and provide advice on any necessary corrective actions and will conduct an implementation review when all mitigation measures in the RP are substantially complete. The implementation review evaluates the effectiveness of mitigation measures in achieving RP and ESS5 objectives and recommends corrective measures to meet objectives not yet achieved.

#### **E. Grievance Mechanism**

21. To ensure that displaced persons can raise complaints regarding the land acquisition process, calculation or payment of compensation, provision of assistance, or other relevant matters, the RP provides for an accessible and responsive grievance mechanism. The RAP describes submission procedures, organizational arrangements, and responsive performance standards for handling grievances, and measures to be taken to inform displaced persons or communities about grievance initiation and response standards. The grievance mechanism does not preclude displaced persons from pursuing other legal remedies available to them.

22. The implementing agencies keep a record of all complaints referred to the grievance mechanism, including a description of issues raised and the status or outcome of the review process.

## **F. Approval Process**

The district government is responsible for approving Resettlement Plans. The approval of resettlement plans is preceded by the conformity opinion issued by the sector that oversees territorial planning after consultation with the agriculture, local administration, public works, and housing sectors.

**Annex A - Suggested Outline for Preparation of RP Entitlements Matrix – Example Only, to be adapted for specific project**

IMPACT	AFFECTED PERSONS	ELIGIBILITY CRITERIA	ENTITLEMENT IN PRINCIPLE	MITIGATION STANDARDS/MEASURES
<b>[A. Loss of agricultural land]</b>  - Irrigated land - Rainfed land - Pasture - Groves - Fishpond - Other	Owners	(TBD)	Compensation in kind or at replacement cost	(TBD; usually unit of currency per unit of land)
	Users with legalizable claims	(TBD)	Compensation in kind or at replacement cost	(TBD; usually unit of currency per unit of land)
	Renters/Lesseees	(TBD)	Prorated compensation for remainder of term; assistance in finding suitable alternative	(TBD; usually unit of currency per unit of land)
	Other users (squatters, encroachers)	(TBD)	Compensation for improvements; assistance in lieu of land compensation	(TBD)
<b>B. Loss of residential land</b>	Owners	(TBD)	Compensation in kind or at replacement cost	(TBD; usually unit of currency per unit of land)
	Users with legalizable claims	(TBD)	Compensation in kind or at replacement cost	(TBD; usually unit of currency per unit of land)
	Renters/Lesseees	(TBD)	Prorated compensation for remainder of term; assistance in finding suitable alternative	(TBD; usually unit of currency per unit of land)
	Other users (squatters, encroachers)	(TBD)	Compensation for improvements; assistance in lieu of land compensation	(TBD)

C. Loss of commercial land	Owners	(TBD)	Compensation at replacement cost, commercial real estate value	(TBD; usually unit of currency per unit of land)
	Users with legalizable claims	(TBD)	Compensation at replacement cost, commercial real estate value	(TBD; usually unit of currency per unit of land)
	Renters/Lessees	(TBD)		(TBD; usually unit of currency per unit of land)
	Other users (squatters, encroachers, illegal businesses)	(TBD)	Prorated compensation for remainder of term; assistance in finding suitable alternative  Compensation for improvements; assistance in lieu of land compensation	(TBD; usually unit of currency per unit of land)
D. Temporary loss of land	Owners, occupants, users	(TBD)	Compensation for duration of project use; restoration of land to prior condition	(TBD)
E. Loss of agricultural production  - crops -fruit/nut trees -timber trees -aquaculture -forest produce -livestock forage -livestock	Producers	(TBD)	Opportunity to bring to market, or compensation at market value at maturity (or compensation at net present value for trees and livestock)	(TBD)
F. Loss of productive fixed assets  -irrigation facilities				

-fencing -wells -troughs -sheds -barns -other	Asset owners/users	(TBD)	Compensation at replacement cost (non-depreciated value including labor and materials)	(TBD)
G. Loss of residential structures  (Often categorized by major building material ,fixed improvements, or other features)	Owners	(TBD)	Direct house replacement or compensation at replacement cost (non-depreciated value including labor and materials); transitional assistance	(TBD, usually specified as unit of currency per square meter of structure)
	Occupants with legalizable claims	(TBD)	Direct house replacement or compensation at replacement cost (non-depreciated value including labor and materials); transitional assistance	(TBD, usually specified as unit of currency per square meter of structure)
	Renters/Lessees	(TBD)	Prorated compensation for remainder of term; assistance in finding suitable alternative; transitional assistance	(TBD)
	Illegal structures	(TBD)	Direct house replacement or compensation at replacement cost (non-depreciated value including labor and materials); transitional assistance	(TBD)
H. Loss of commercial structures  (Often categorized by major building material,	Owners	(TBD)		(TBD)

function and capacity, fixed improvements, or other features)	Occupants with legalizable claims	(TBD)	Compensation at replacement cost for structures, fixed equipment and other improvements; transitional assistance	(TBD)
	Renters/Lessees	(TBD)	Compensation at replacement cost for structures, fixed equipment and other improvements; transitional assistance	(TBD)
	Illegal structures	(TBD)	Prorated compensation for remainder of term; compensation at replacement cost for fixed equipment and other improvements; transitional assistance	(TBD)
			Compensation at replacement cost for structures, fixed equipment and other improvements; transitional assistance	
I. Loss of agricultural livelihood	Affected agricultural producer	TBD, requires definition of significant impact caused by severity of loss or imposed changes in livelihood methods	In addition to compensation for lost lane and assets, persons whose livelihoods are significantly affected receive alternative employment, skills training, business development assistance, or other additional assistance linked to livelihoods restoration or improvement	(TBD)
J. Temporary loss of business income	Owner, enterprise	(TBD)	Payment of support for period of disruption	(TBD, based on prior reported profits or other forms of estimation)



K. Temporary loss of employment or wages	Employees	(TBD)	Payment of wages or unemployment support for period of disruption	(TBD, based on payment records or other forms of estimation)
L. Loss of public or community infrastructure, facilities or services	Public or private owners	(TBD)	Compensation at replacement cost for damage or destruction of infrastructure and facilities; assistance in restoring functionality and accessibility of services	(TBD)
M. Material assistance to vulnerable or disadvantaged	<p>Displaced illegal residents, users or occupants</p> <p>Blind or otherwise disabled</p> <p>Occupants displaced from substandard housing</p>	<p>(TBD)</p> <p>(TBD)</p> <p>(TBD)</p>	<p>In addition to applicable forms of compensation and assistance, provision of defined security of tenure</p> <p>Project design provides features relating to safety and accessibility</p> <p>Arrangements for obtaining replacement housing meeting minimum legal or community standards</p>	<p>(TBD)</p> <p>(TBD)</p> <p>(TBD)]</p>

## **Annexure 7. Chance Find Procedure**

### **A. Introduction**

The World Bank's NAS8 on Cultural Heritage recognizes that cultural heritage promotes continuity in tangible and intangible forms between the past, present, and future, and aims to: (i) Protect cultural heritage from the negative impacts of project activities and support its preservation; (ii) Address cultural heritage as a fundamental aspect of sustainable development; (iii) Promote relevant consultation with stakeholders regarding cultural heritage; (iv) Promote the equitable distribution of benefits from the use of cultural heritage.

The cultural dimension in Mozambique is a sensitive element to be considered, regarding the intrinsic relationship between the population and elements of nature, constituting the living expression of the socio-organizational and territorial dynamics structuring traditional communities. Some trees (such as Ntondo and Baobab), forests, and sacred sites are important spiritual and social focal points in the lives of traditional communities and can sometimes be considered protected areas (zones) of historical and cultural value (Forest and Wildlife Law - No. 10/99). Interference in cemeteries and trees considered sacred affects the beliefs and values of the resident population in these areas and the solidarity vision of these communities, which is the basis of social protection against situations such as natural disasters (drought and floods), food insecurity, diseases, orphanhood, and/or widowhood. The preservation of the landscape (natural) heritage and the relationship with natural elements as a sustainable preservation strategy in the region are still sources of pride, education, preservation of ancestral family heritage, or community solidarity and identity ties.

Through increasing motivation and awareness, this procedure aims to raise awareness among the target audience about the importance of preservation actions and the rescue of the local historical-cultural past. The Cultural Goods Prospecting and Rescue Procedure seeks to value the historical-cultural heritage of the region affected by the enterprise, taking into account the specificity of local cultural practices and customs, focused on socio-environmental responsibility. It also considers the dialogue and transparency of actions related to the project, conducted according to the country's current legislation and the need to understand the socio-territorial dynamics of coexistence and culture of traditional communities concentrated around the enterprise.

### **A. Objectives**

- Disseminate information about the importance of conserving local cultural heritage as an educational and socio-environmental and cultural communication strategy, among social agents directly and indirectly involved in the enterprise;
- Implement technical control and monitoring to safeguard any historical-cultural or archaeological remains that may be found during excavations or removals (Cf. Archaeological Heritage Protection Regulation - Decree No. 27/94 of July 20. Fortuitous Discovery, Article 10);
- Contribute to the development of a cultural heritage management strategy in areas of historical-cultural value to be impacted, including the use of rural cemeteries, places of worship, and trees considered 'sacred' by local communities;

- Value the historical-cultural heritage of the affected region, respecting current legislation and the specificity of local cultural practices and customs by the entrepreneur;
- Ensure the safeguarding and monitoring measures of tangible and intangible assets;
- Increase motivation and interest in valuing the archaeological, historical-cultural heritage of the region.

## **B. Control and Treatment of Possible Remains and Sacred Elements**

This process includes the following activities:

### **1. Survey and Analysis of Information for Possible Remains Found**

- The survey will be conducted during environmental impact studies or project screening by a competent team. During construction works, before opening or continuing a work front, a prior assessment of the existence of archaeological and cultural remains that may be affected by the activities will be carried out.
- If work teams encounter remains, the competent authorities must be immediately notified. A Cultural Resources Management Plan must be produced and implemented (according to national legislation) if project activities impact the site.

### **2. Systematic Periodic Monitoring and/or Verification**

- If remains are found, the following activities will be carried out:
  - Analysis and study of the physical material culture collected during excavations for prospecting, safeguarding possible remains;
  - Preparation of a conclusive technical text on the material found in coordination with local and governmental authorities (Provincial Directorate of Culture and Tourism).

### **3. Study of Specific Cases for the Replacement/Compensation of Sacred Elements According to the Cultural Resources Management Plan Produced**

## **C. Valuing the Cultural Heritage of the Region**

This program line aims to:

- Increase the awareness of various segments that make up the target audience about the importance of preservation actions of historical-cultural heritage;
- Disseminate basic notions about the regional historical and cultural context and the importance of preserving them;
- Provide information to workers involved in the work about the importance of preserving the existing natural heritage, as well as the means that will be applied for archaeological prospecting and rescue, if applicable.

It encompasses two aspects:

### **• Awareness and Sensitization Actions**

- Detailing strategies and work plans in conjunction with the communication team, articulating with the Social Communication Plan.
- Preparation of informative-explanatory didactic material.

- Conducting lectures to disseminate basic notions about the historical and cultural context of the region and its importance as cultural heritage, organized with different languages and approaches depending on the specific audiences.
- These activities can be integrated into the Environmental Education Program and the Social Communication Program.
- **Incentive Actions**
  - Holding meetings with government representatives, formal leaders, community leaders, and opinion leaders who work in the cultural area.
  - Encouraging the integration of existing cultural valorization actions and projects.
  - Encouraging cultural education measures and promoting the development and establishment of a Community Cultural Center in the impacted areas.

#### **D. Procedure**

If someone believes they have found any archaeological material or cultural heritage, they should immediately stop work and follow the procedure below:

1. All construction activity near the area must cease immediately and the area must be isolated.
2. The location of the discovery will be recorded (coordinates) and all remains will be left intact on site.
3. The project archaeologist will be contacted, or local authorities will be notified.
4. The potential significance of the remains will be assessed and mitigation options will be identified.
5. If the significance of the remains is considered sufficient to justify additional actions and there are no possibilities to avoid them, the project archaeologist, in consultation with the Government Directorate representative overseeing Archaeology issues, will determine the appropriate course of action.
6. In the case of human remains, if the remains are assessed as archaeological, then the Provincial Government Directorate overseeing Archaeology issues will be consulted to determine how to handle the matter.
7. Options may include avoidance or respectful removal and reburial.
8. If human remains are found and are not archaeological, the remains will be exhumed according to applicable legislation.
9. Activities will be halted in that work front until the removal work is completed.

#### **E. Monitoring, Follow-up, and Performance Indicators**

Performance indicators will be used to measure and monitor performance against the effectiveness of the mitigation and control measures described in this Plan. Performance indicators must be measurable against a specific goal. Table 26 describes the performance indicators applicable to the Cultural Heritage Management Procedure and describes how they will be measured, the goals, and the monitoring frequency. Only indicators that are specific and clearly measurable have been included.

**Table A7-1: Performance Indicators**

<b>Performance Indicator</b>	<b>Measurement</b>	<b>Goal/Reference</b>	<b>Monitoring Frequency</b>
Communications of casual discoveries to authorities	Record of discoveries and evidence of communications made to competent authorities	All discoveries without exception must be communicated to competent authorities	Continuous
Awareness and training on cultural heritage	Record of training and awareness actions on the requirements of this plan and the types of cultural heritage assets likely to occur in the Project areas	All workers involved in earthworks, excavations, deforestation must be trained and made aware	Monthly

## Annexure 8. Good Environmental Management Practice Procedures



### ENERGY FOR ALL PROJECT (PROENERGIA)



Good Environmental Management Practice Procedures

March 2020



PROENERGIA+

## Guidance for the Elaboration of C-ESMPs

April 15<sup>th</sup>, 2024

## Construction-Environmental and Social Management Plans (C-ESMPs / C-PGAS)

As per ESS1 of the Environmental and Social Framework (ESF):

- An ESMP consists of the **set of mitigation, monitoring, and institutional measures** to be taken during implementation and operation of a project to eliminate adverse E&S risks and impacts, offset them, or reduce them to acceptable levels.
- It also includes **actions the needed to implement these measures**.
- C-ESMPs are **site-specific**. Proposed measures must address the anticipated adverse risks and impacts identified considering the construction activities and features of the construction area.

## C-ESMPs - Indicative outline

- Introduction
- Legal framework
- Description of the project and intervention area
- Environmental and social risks and impacts
- Mitigation
- Monitoring and auditing
- Capacity development, training and awareness
- Roles and responsibilities
- Implementation schedule and cost estimates

## C-ESMPs - Indicative outline

### Introduction

- Objectives
  - Scope of application
  - Structure and content, including reference to all sub-plans included
  - Project overview (brief description of the project and its background, including identification of the proponent and Lenders - 2-3 paragraphs)
-



## C-ESMPs - Indicative outline

### Legal Framework

- Note of commitment to comply with all applicable requirements
- Identification of applicable national ESHS regulatory framework, including required permits and authorizations (a table listing relevant ESHS aspect and applicable specific legislation or regulations)
- Identification of ESF requirements applicable to the project (ESSs, Good Practice Notes, WBG Environmental, Health and Safety Guidelines), including the relevant E&S instruments priorly prepared for the project
- Identification of other relevant international standards applicable to the project

## C-ESMPs - Indicative outline

### Description of project and area of intervention

- Description of (i) the construction activities planned under the Lot and their location, (ii) ancillary infrastructure and their location (campsite(s), construction access roads (temporary or permanent), other applicable), (iii) energy and water sources for construction works and estimated quantities, (iv) sources of construction material and estimated quantities (complement description with maps)
  - Description of relevant E&S features of the project's area of intervention, focusing on those that are relevant for the identification of the adverse ESHS risks and impacts
-

# C-ESMPs - Indicative outline

## Environmental and social of risks and impacts

- Identification of all relevant E&S risks and impacts of the project, including:
  - **Environmental** risks and impacts, including
    - (i) those defined by the EHSGs (air emissions and ambient air quality, energy conservation, wastewater and ambient water quality, water conservation, hazardous materials management, waste management, noise, contaminated land)
    - (ii) those related to occupational health and safety
    - (iii) those related to community health and safety
    - (iv) any material threat to the protection, conservation, maintenance and restoration of natural habitats and biodiversity
    - (v) those related to ecosystem services and the use of living natural resources

# C-ESMPs - Indicative outline

## Environmental and social of risks and impacts

- Identification of all relevant E&S risks and impacts of the project, including:
    - **Social** risks and impacts, including
      - (i) threats to human security through the escalation of personal, communal or inter-state conflict, crime or violence;
      - (ii) any prejudice or discrimination toward individuals or groups in providing access to development resources and project benefits
      - (iii) negative economic and social impacts relating to the involuntary taking of land or restrictions on land use
      - (iv) risks or impacts associated with land and natural resource tenure and use
      - (v) risks to cultural heritage
      - (vi) GBV/SEA/SH risks
-

## C-ESMPs - Indicative outline

### Mitigation

- Identification of the mitigation measures proposed for each risk and impact anticipated, specifying the timeline and responsibility for implementation. Reference to required sub-plans (presented as annexes)
- Identification of measures must follow the mitigation hierarchy (avoidance, minimization, compensation)
- Description of the implementation requirements for specific topics or sub-plans (e.g., site management, layout and organization; waste management; pollution prevention and control; health and safety; employment and labor; security; stakeholder engagement and communication, including grievance mechanism; GBV/SEA/SH)

## C-ESMPs - Indicative outline

### Monitoring and Auditing

- **Monitoring:** Identification of the monitoring objectives and specification of the types of monitoring required (linking with the E&S impacts identified and measures proposed)  
  
Provide specific description and technical details of monitoring, including (a) the parameters to be measured, (b) methods to be used, (c) sampling locations, (d) frequency of measurements, (e) detection limits (where appropriate), and (f) definition of thresholds that will signal the need for corrective actions
  - **Auditing:** Description of the arrangements for internal audits and third-party audits
-

## C-ESMPs - Indicative outline

### Capacity development, training and awareness

- Define and describe the training plan for the Contractor (and subcontractors, if applicable) workers aiming to develop or strengthen their capacity to support the implementation of the C-ESMP. This plan should be comprehensive, covering workers induction, daily tool-box talks, periodic refreshments
- Define and describe the awareness actions targeting affected communities

## C-ESMPs - Indicative outline

### Roles and responsibilities

- Provide a specific description of the roles and responsibilities carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training)
-



# C-ESMPs - Indicative outline

## Implementation schedule and cost estimates

- For all three aspects (mitigation, monitoring, and capacity development) provide:
  - (a) an implementation schedule for measures that must be carried out as part of the project; and
  - (b) the cost estimates to implement those measures



**Thank you for your  
attention**

## **Annexure 10. Template for Periodic (quarterly) Reporting on the Environmental and Social Aspects of Projects Financed by the World Bank**

### **GUIDANCE NOTE**

#### **I. Introduction**

In all loan operations, the Borrower is required to submit periodic reports on the status of implementation of the Project financed or co-financed by the World Bank. In each progress report, a section should be devoted to the status of implementation and monitoring of the environmental and social aspects of the Project, for which a template is provided below to be followed by the Borrower's PMU or executing agency (noting that additional sections may be included as needed to meet specific project requirements). The periodic report can be used for projects that would comply with the ESF requirements (if the Project was approved after October 2018) or with the ten operational safeguard policies (if the Project was approved before October 2018).

#### **The objectives of the periodic report are:**

- Record environmental and social impacts and risks resulting from project activities and ensure the implementation of mitigation, monitoring and institutional measures identified in the Environmental and Social Commitment Plan (ESCP) and subsequently in the ESMP(s), Resettlement Action Plans (RAPs), the functionality of the project's grievance redress system, accidents and any other environmental and social instruments, for example, labour management procedures, EAS/AS Action Plans prepared for the project, in order to reduce adverse impacts and risks and increase the positive impacts of specific project activities;
- Identify and address any unexpected or unforeseen environmental and social impacts or risks that may arise during the reporting period; this may include reporting on progress during construction/operation of project components/sub-components, as appropriate;
- Address any unexpected issues that may affect project implementation or compliance with safeguard requirements (for example, contractor abandoned site, site flooded, community or worker protests, need for emergency works, etc;)
- - Ensure that project implementation complies with the World Bank's (WB) Environmental and Social Standards (ESS) in the Environmental and Social Framework (ESF) for projects approved after October 2018 or the ten operational safeguard policies for projects approved before October 2018;
- Ensuring the development and implementation of the occupational health and safety management plans necessary to identify hazards and mitigate risks, to guarantee safe workplaces and procedures;
- Report any changes in project activities that require a material change in the ESMP and/or other project instruments (for example, ESMP(s), RAP(s), MMPMP, etc.) during the monitoring period; and
- Propose mitigation and corrective measures or actions for unforeseen adverse environmental and social risks and impacts identified during the project monitoring period.

Fill in ALL the following information in the following template. If there is no applicable heading for specific information, include a section called Other or another appropriate heading and include the information. In addition, text can be included under any table or as an additional annex to justify, provide additional details on a topic as needed.

If there is more information you would like to report, please do so. If you need additional columns or rows to complete the tables, add them, as necessary. However, do NOT delete columns from the tables or sections of the template. Indicate them as not relevant or not applicable to this reporting period.

*Please delete this section of the Guidance Note when compiling the report.*

## **II. Proposed Model**

<b>Project Name</b>	
<b>Project Code</b>	
<b>Project Value (or Component Value, if relevant)</b>	
<b>Date of approval by the Council</b>	
<b>Implementing Agency</b>	
<b>Applicable Operational Safeguard Standards/Policies</b>	
<b>Monitoring Period</b>	

**1. If this is not the first report, indicate any changes compared to the previous reporting period.**

## **2. Project Activities Planned/Realized**

*Please provide in Table 1 a summary of the main Project activities planned/accomplished during the reporting period. Project activities and monitoring indicators can be taken from the PAD.*

Table 1: Summary of Project Activities Implemented During the Reporting Period

<b>Description of Work/Project Activities</b>	<b>Monitoring Indicators during the Reporting Period</b>	<b>Frequency (monthly, quarterly)</b>

### 3. Status of actions)

Use Table 2 to highlight any pending or delayed actions from the previous report (if any), as well as activities planned but not carried out in the current reporting period, indicating reasons and/or challenges and actions to deal with the delay. If there are no pending or delayed actions, mark Table 2 as not applicable.

Table 2: Status of Actions

NO.	State of Play	Activities (components, sub-components) planned but not implemented	Safeguarding requirements associated with activities	Reason for delay (for overdue activities)	Actions to be taken	
					description	deadline

### 4. Status of Implementation of the Environmental and Social Commitment Plan (PCAS)

Use PCAS in the loan agreement with the following columns in sequence in Table 3. (The Table can be set up in landscape to accommodate text or included as an appendix).

Table 3: Status of PCAS Implementation

NAS No.	PCAS obligations	Term of PCAS obligations	Implementation status	Justification for delays/deficiencies	Actions to be taken and deadline

### 5. Status of ESMP implementation, including all auxiliary sites such as quarries, access roads, etc.

This section will inform/update the status of mitigation and monitoring measures for the project's significant risks, using a matrix approach that includes the relevant community health and safety measures. Use the ESMP matrix with the following columns in sequence, as shown in table 4 below. When there are several ESMPs or SA instruments, including, but not limited to, ESIA, ESQs, SA Audit, ESMP, GBV Action Plan, etc. on a project, fill in Annex A to reflect the status of each instrument. Please record here that Annex A has been completed.



Table 4: Status of ESMP Implementation

Reference	E&S Mitigation Measures	Monitoring Indicators	Linked to Investment Activity or NAS	Implementation status	Justification for delays/deficiencies	Actions to be taken and deadline

## 6. Status of the Development and/or Implementation of the Resettlement Action Plan (RAP) (if applicable)

For RAPs under development: Please describe the current status of the RAP(s) under development, including but not limited to: (i) status of contract award to the RAP consultant; (ii) number of PAPs affected by economic displacement, physical displacement, and physical and economic displacement; (iii) estimated cost of compensation; (iv) status of stakeholder engagement; (v) grievances filed during the monitoring period; and (vi) expected timelines for completion of the RAP, etc.

For RAPs under implementation: This section will summarize the number and type of RAPs and the status of the provision of relevant entitlements to compensate for the loss of assets belonging to project-affected people during the reporting period, as well as the provision of livelihood restoration measures (as applicable) and the justification for any delays. If more than one RAP is required for the project, please complete Annex B in addition to the table below.

Table 5: Status of PAR Implementation

Category	# of Family Groups	# of People	Justification for any changes since the last reporting period
<b>1. Only physically displaced from their homes</b>			
Displacement as provided for in the resettlement plans			
Completion of resettlement/economic rehabilitation/compensation			
Pending resettlement/economic rehabilitation/compensation			
<b>2. Both physically displaced from their homes and economically displaced</b>			
Displacement as provided for in the resettlement plans			

Completion of resettlement/economic rehabilitation/compensation			
Pending resettlement/economic rehabilitation/compensation			
<b>3. Only economically displaced</b>			
Displacement as provided for in the resettlement plans			
Completion of resettlement/economic rehabilitation/compensation			
Pending resettlement/economic rehabilitation/compensation			
<b>4. Voluntary Land Donations / Negotiated Agreements (where applicable)</b>			
Displacement as provided for in the resettlement plans			
Conclusion of agreements			
Pending agreements			
<b>5. Restoring Livelihoods</b>			
Eligible for livelihood restoration plans			
Receiving livelihood restoration plans			
Pending inclusion in livelihood restoration plans			
<b>6. Community Assets (report by location)</b>			
Displacement as provided for in the resettlement plans			
Completion of resettlement/economic rehabilitation/compensation			
Pending resettlement/economic rehabilitation/compensation			

Table 5A: Delays in RAP Implementation (if relevant)

<b>Justification for any delay in payment of compensation and deadlines for resolution</b>	
<b>Justification for any delay in the provision of other benefits (for example, replacement structures, agricultural inputs, etc.) and deadlines for resolution</b>	
<b>Justification for delay in offering livelihood restoration and deadlines for resolution</b>	

## 7. Status of Implementation of the Project Complaints Mechanism

This section will inform/update on the status of registered grievances and how the Borrower is responding to concerns and grievances (including labour, social and environmental grievances) of project-affected parties related to the environmental and social performance of the project. Summarize in Table 6:

- Status of the total number of complaints registered during the reporting period;
- How many were resolved?
- How many were sent elsewhere? Is the GRC/MGR following up?
- How many issues remain unresolved and why?
- What is the plan for the unresolved issues?

In Annex D, attach copies of the MGRs for this reporting period.

Table 6: Overview of Complaints During the Reporting Period

Stakeholder	Type of Occurrence	Nature of the complaint(s)	Total Complaints	Status	Remarks/Comments
(for example, Institution, community members, local leaders, etc.)				Resolved/unresolved	

## 8. Stakeholder Engagement

This section will inform/update the status of stakeholder engagement and how the Borrower is ensuring that stakeholders are met in accordance with Project and/or EIPS requirements, as relevant. The section should describe:

- The number and type of engagement activities carried out during the reporting period and the types of stakeholders met with (for example, communities, districts, neighbouring facilities, etc.)
- The number and type of stakeholders engaged, by gender.
- The main issues raised or discussed during the meetings and their follow-up
- To what extent are stakeholders being involved during the implementation of environmental and social risk and impact management measures?
- Do they participate in monitoring the implementation of risk management measures and environmental and social impacts?
- Is the engagement/consultation organized according to the PEPI?
- Were the participants informed before the meeting and were the minutes shared with the participants?
- Cumulative data from engagements to date.

## 9. Health and safety accidents

This section summarizes in Table 7 the environmental, health and safety accidents and incidents that occurred during the reporting period. It is important to note that the section includes detailed descriptions of procedures to mitigate recurrence and prevent new injuries. The section includes reports on near misses and treats them as

incidents according to comparative accidents. The section includes a table for tracking previous accidents, incidents and near misses. Details of the OSH status should be filled in in Appendix C.

Table 7: Accidents and Incidents Report

Date and time of accident/incident	Victim's name	Description of the accident	Severity of the accident (minor/serious injury/death)	Mitigating measures taken by the contractor/proponent	Actions to be taken to prevent the accident from occurring	Accident status (open/closed)

EAS/AS incidents

#### 10. Environmental and Social Management Capacity

This section details the E&S supervision arrangements for the project and individual sites. The section includes a diagram of the reporting arrangements, as well as roles and responsibilities, any vacant positions and deadlines for filling them, if relevant. The description may require several diagrams for various project sites.

##### Administration:

Inform about any changes or updates in administrative requirements, for example, E&S personnel, location, etc; Any changes in terms of applicable national and international requirements.

##### Training:

Provide an update on any capacity building activities related to E&S safeguards carried out at any level - PIU, district, community, etc.

Indicate pending training activities and deadlines for carrying them out.

#### 11. Environmental and Social Audits, Third Party Reviews and Monitoring

This section details the environmental and/or social audits planned and conducted (independent, external/regulatory and internal) during the life of the project, also including the status/progress or findings or recommendations of Third Party Monitors (where applicable).

#### 12. Other project-specific issues to highlight, raise, report on:

For EGENCO, for example: interaction with Majete, sediment testing and management, interactions with wildlife, compliance/status with Majete MOU and safety requirements, etc.

### 13. Other Specific Issues

Answer the following questions:

- a. Does the Project Implementation Support Unit (PIU) have an adequate team of qualified and permanent E&S specialists? Do they have the resources (financial and equipment) to carry out field visits and supervisions?
- b. Do the Contractor(s) and the Owner/Supervising Engineer have qualified and permanent environmental and social personnel? Are they preparing their periodic environmental and social reports for the Owner?
- c. Is the project's RBM still robust enough to respond to complaints? How many complaints have been received and resolved (provide current and cumulative data)?
- d. What is the level of expenditure of the amounts detailed in the ESMP, including those incurred by the contractor(s)? Is there sufficient budget allocation for the implementation of the ESMP instruments?
- e. What are the restrictions on carrying out PCAS and PGAS (or others)?

### III. Conclusions and recommendations

Summarize the main conclusions during this periodic report and the recommendations for actions to be implemented in the next monitoring period. Include a summary (in a table) of the measures or activities that have been planned and carried out; and indicate the reasons why some activities are still pending.

Include a table of planned activities for the next quarter/reporting period.

### Annex A: Status of ESMPs (or other instruments where there are multiple)

Indicate the status of each ESMP or instrument within the project. Attach copies of ESMP checks or monitoring reports to the report.

Name of subproject activity	WSS instrument (for example, QGAS, EIAS, PGAS, WSS Audit)	Implementation status/progress	Justification for delays/deficiencies	Actions to be taken and deadline

## Annex B: Status of the PARs

Indicate the status of the implementation of each RAP within the project:

Name of the PAR	RAP status	Total PAPs and HH Number of PAPs and HH a) physically displaced only, b) economically displaced only and c) physically and economically displaced*	Compensation value	Other benefits to be provided	Status of the offer of compensation and/or benefits	Justification for non-payment or delay	Action to be taken and deadline
	(development, implementation, closure)				Paid/Partially Paid/Delayed/Not Paid		

\*The number of PAPS and Families in this column must be equal to the total number of PAPs and HHs reported in the previous column, i.e. each PAP or HH must appear in only one classification.

### **Annex C: Occupational Health and Safety**

(If there are several contractors and/or several OHS plans, submit a separate OHS Progress Report, reference it here, for example, Project taking place in 10 Districts and 10 different contractors each with their own OHS plan, etc.).

Summarize the status of:

- - On-site risk management (describe who the main contractor is, list subcontractors, how OHS is monitored and enforced on site, etc.)
- - Site risk assessments (including risk assessment team members, assessment notes, meeting minutes),
- - Security plans,
- - Establishment of the safety committee (including members, meeting minutes, constitution, meeting agendas, etc.),
- - Development of safety procedures,
- - Induction and participation training,
- - Employee training records,
- - Participation in lectures on tools,
- - Establishment and complaints of labour GRM,
- - Compliance with the OHS plan,
- - Accident and incident reports (information captured in GEMS/KOBO?),
- - Photos of the project construction site,
- - Reports on environmental and ecological monitoring, including water quality, air quality, fauna, flora, avifauna, etc.

### **Annex D: Complaints Received and Resolved**

Attach copies of the project GRMs for this reporting period.



## **Annexure 11. Distinction between Medically Reportable and First Aid Incidents**

Any one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters and so forth which do not ordinarily require professional medical care. Such treatment and observation are considered first aid even though a physician or registered professional personnel may administer it.

In general, first aid treatment can be distinguished from medical treatment as follows:

- First aid is usually administered after the injury or illness occurs and at the location (for example, workplace) where the injury or illness occurred.
- First aid generally consists of one-time or short-term treatment (no more than three treatments). Thereafter, the person must be referred to a medical practitioner.
- First aid treatments are usually simple and require little or no technology.
- First aid can be administered by people with little training and even by the injured or ill person.

First aid may be administered to keep the condition from worsening, while the injured or ill person is awaiting medical treatment.

The below-listed treatments are considered to be first aid regardless of the professional qualifications of the person providing the treatment; even when these treatments are provided by a physician, nurse, or other healthcare professional, they are considered first aid for record-keeping purposes.

For record-keeping purposes, there is no distinction between first aid and medical treatment cases based on the number of treatments administered. There is no distinction between various kinds of healthcare professionals, assuming they are operating within their scope of practice. If an incident requires only the following types of treatment, it is considered to be first aid:

- Using non-prescription medications at non-prescription strength.
- Administering tetanus immunizations.
- Cleaning, flushing, or soaking wounds on the skin surface.
- Using wound coverings, such as bandages, Band Aids™, gauze pads, etc. or using SteriStrips™ or butterfly bandages.
- Using hot or cold therapy.
- Using any totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc.
- Using temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or backboards).
- Drilling a fingernail or toenail to relieve pressure or draining fluids from blisters.
- Using eye patches.
- Using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye.
- Using irrigation, tweezers, cotton swab or other simple means to remove splinters or

- foreign material from areas other than the eye.
- Using finger guards.
- Using massages.
- Drinking fluids to relieve heat stress.

---

<sup>i</sup> Specifically, Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5), Annex 1B. The template is primarily intended for use in projects initially classified as Low or Moderate Risk. It may also be appropriate for use in projects with a Substantial Risk classification if risks identified as substantial do not relate directly to ESS5.

<sup>ii</sup> To ensure that the relevant authority is aware of its obligations, it is recommended that the RPF be accompanied by a provision of a transmittal letter, signed by the chief executive (or similar relevant authority) of the implementing agency.

<sup>iii</sup> As described in ESS5, Paras. 33–36.

<sup>iv</sup> As described in ESS5, Paras. 26–32.

<sup>v</sup> The RPF does not supersede provisions of ESS5 or the ESF, and the World Bank remains solely responsible for determining what is required to achieve consistency with those requirements throughout the course of project implementation.

<sup>vi</sup> Defined as the removal against the will of individuals, families, and/or communities from the homes and/or land which they occupy without the provision of, and access to, appropriate forms of legal and other protection, including all applicable procedures in ESS5.

<sup>vii</sup> Security of tenure means that displaced persons are resettled to a site that they can legally occupy, where they are protected from the risk of eviction and where the tenure rights provided to them are at least as robust as those they had prior to displacement.

<sup>viii</sup> Appropriate principles for negotiated settlement transactions include (a) intended project sites are screened to identify competing claims to ownership or use, or other encumbrances that would impede two-party negotiations; (b) if the site is collectively or communally owned or used, the negotiation process includes those individuals or households who directly occupy or use it; (c) prior to negotiations, owners or users are informed by project authorities of their intent to obtain relevant land (and other assets) for project use; (d) owners or users are informed of their rights and options to pursue legal remedies or other actions, and sign a declaration indicating willingness to negotiate; (e) at the onset of negotiations, project negotiators present the owner or user with a proposed package of compensation or other beneficial considerations, along with an explanation as to the basis of this initial offer; (f) owners or users are informed that they may make counterproposals as they may see fit; (g) negotiations are conducted without resort to coercion or intimidation in any form; (h) an agreement establishing payment amounts or other agreed considerations is written, signed, and recorded; (i) payment of compensation and provision of any other agreed considerations is completed prior to taking possession for project use; and (j) owners or users retain the right of access to the grievance mechanism if they have complaints regarding any aspect of the negotiated settlement process.

<sup>ix</sup> Any land or asset donation for project use will be consistent with these principles: (a) the potential donor is informed that refusal is an option, and that right of refusal is specified in the donation document the donor will sign; (b) donation occurs without coercion, manipulation, or other pressure on the part of public or traditional authorities; (c) the donor may negotiate for some form of payment, partial use rights, or alternative benefits as a condition for donation; (d) donation of land is unacceptable unless provision is made to mitigate any significant impacts on incomes or living standards of those involved; (e) donation of land cannot occur if it were to necessitate any household relocation; (f) for community or collective land, donation can only occur with the consent of individuals directly using or occupying the land; (g) the land to be donated is free of encumbrances or encroachment by others who may be adversely affected; (h) any donated land that is not used for its agreed purpose by the project is returned to the donor in a timely manner; and (i) each instance of land donation is documented, including a statement identifying the land or assets donated and terms of donation, which is signed by each owner or user. Persons donating land or assets for project use may use the project grievance mechanism to raise complaints regarding any aspect of the donation process.

<sup>x</sup> Additional details regarding preparation of an RP are included in ESS5, Annex 1.

<sup>xi</sup> Additional details regarding planning measures for physical displacement are provided in ESS5, Annex 1, paras. 17–23.

<sup>xii</sup> Consideration of scale of loss of productive assets as well as changes in institutional, technical, cultural, economic, and other factors may be important in determining the significance of economic displacement. In general practice, however, loss of 10 percent or more of productive land or assets from a household or enterprise often is considered significant. Additional details regarding planning measures for economic displacement are provided in ESS5, Annex 1, paras. 24–29.