

## Chapter 2

### Regulatory Framework

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## 2 REGULATORY FRAMEWORK

### 2.1 INTRODUCTION

This EIA is being undertaken in terms of the Environmental Law (Law no. 20/97 of 1 October). This Law applies for any activity which could have direct or indirect impacts on the environment. The Environmental Law notwithstanding, the purpose of this Chapter is to provide an overview of the relevant legislative requirements and standards applicable to the Project.

Regulatory instruments of Mozambique and industry Environment, Health and Safety (EHS) performance standards relevant to the Project are described below. The Project will be in compliance with the following:

- applicable Mozambique laws and regulations.
- international treaties to which Mozambique is a signatory. These include various international treaties, conventions and protocols relating to issues such as biodiversity, climate change and marine pollution.

Moreover, the Project will be aligned with the International Finance Corporation (IFC) Social and Environmental Performance Standards and EHS Guidelines, to the extent reasonable.

Finally, Anadarko Petroleum Corporation (APC) and eni have developed company policies and specifications related to EHS performance, as well as EHS performance standards, which will be implemented by the Project and these are also considered in this chapter (*Section 2.7 and 2.8*).

## 2.2 MOZAMBICAN LEGAL/REGULATORY FRAMEWORK

### 2.2.1 Overview

The Mozambican regulatory framework establishes well-defined requirements and standards for the implementation and ongoing environmental and social management of industrial and civil infrastructure developments. Environmental protection functions are carried out by different authorities at both a national and regional level.

This section outlines the current legislative framework in Mozambique as it relates to the Project and highlights specific areas of Mozambican legislation that apply to the Project or have the potential to influence the Project during planning, development and operation. The descriptions provided should not be viewed as a comprehensive review of environmental legislation in Mozambique, but as a summary of the regulatory 'drivers' for the Project. Specifically the following are outlined in this section:

- a summary of key regulatory authorities and other relevant bodies; and
- a brief overview of the current EIA and petroleum regulatory regime in Mozambique.

### 2.2.2 *Relevant Authorities in Mozambique*

The key institutions and their main roles and responsibilities in relation to environmental protection and the petroleum industry in Mozambique are summarised in *Table 2.1*.

**Table 2.1** *Mozambican Institutional Authorities and their Responsibilities*

<b>Institution</b>	<b>Roles and Responsibilities</b>
Ministry for the Coordination of Environmental Affairs (Ministério para a Coordenação da Acção Ambiental - MICOA)	<p>MICOA is responsible for directing the implementation of environmental policy, coordinating, advising, auditing and encouraging the correct planning and use of the country's natural resources. In attaining these objectives, this Ministry, among other entities, is responsible for promoting development, in a sustainable manner, in the process of using renewable and non-renewable natural resources, and proposing policies and strategies for environmental development.</p> <p>MICOA is the pertinent competent authority for this EIA and is represented at provincial level by the Provincial Directorate for the Coordination of Environmental Affairs (DPCAA).</p> <p>The entity responsible for the management of Environmental Impact Assessment with MICOA is the National Environmental Impact Assessment Directorate (DNAIA). DNAIA is responsible for proposing the appropriate legislation to direct implementation and environmental management, for environmental licensing, for managing and coordinating the Environmental Impact Assessment (EIA) process, reviewing Environmental Impact Statements (EIS's), promoting the monitoring of environmental impacts and the performance of audits and carrying out the strategic environmental evaluation of policies, plans and programs.</p> <p>DINAPOT is the National Directorate of Planning and Spatial Development within MICOA. DINAPOT is responsible for, among others; proposing policies, appropriate legislation, standards, regulations and guidelines for spatial development; for identifying the best locations for mega project developments; assessing local bodies in the preparation, implementation, control and management of land use and benefit; providing technical statements over spatial development management tools at national, provincial, district and municipal levels as well as over DUAT licenses in rural areas, settlements, villages and towns where special development management tools are absent. DINAPOT is also responsible for participating in the resettlement of communities as a result of development projects and natural disasters.</p>
Ministry of Mineral Resources (Ministério dos Recursos Minerais - MIREM)	<p>MIREM is responsible for directing and implementing policies in the context of geological research, the inventory of and exploration for mineral resources including coal and hydrocarbons. In achieving these objectives, this Ministry, among other entities, is responsible for inventorying underground resources in national territory and in the exclusive economic zone (EEZ), promoting and controlling prospecting and geological exploration activities and the rational use of mineral resources. MIREM is also responsible for promoting and controlling exploration, production, separation and processing activities for crude oil and natural gas and controlling transport of these for their delivery to export points or points for commercial sale within the country.</p> <p>Licenses required to extract inert material such as sand/gravel are granted by MIREM at a provincial level (Provincial Directorate of Mineral Resources and Energy).</p>
National Petroleum Institute (Instituto Nacional do Petróleo - INP)	<p>The INP is the regulatory entity responsible for administration and promotion of oil and gas operations.</p> <p>The INP is responsible, among other duties, for the following:</p>

Institution	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• Regulation and auditing of oil and gas exploration, production and transport activity as well as ensuring policies for development and standards related to oil operations;</li> <li>• Preservation of the public interest and the environment by establishing the required technical, commercial and environmental conditions, promoting the adoption of practices that encourage the efficient use of resources and the existence of quality standards that correspond to the service and protection of the environment; and</li> <li>• Organization, maintenance and consolidation of the accuracy of technical data and information related to the activities of the oil industry, national oil reserves and the information produced.</li> </ul> <p>INP has a delegation in Pemba, responsible for the regulation and auditing of oil and gas exploration, production and transport activities in northern Mozambique (including Cabo Delgado and Nampula Provinces).</p>
<p>Ministry of Agriculture (Ministério da Agricultura - MINAG)</p>	<p>MINAG is responsible for managing, planning and ensuring the implementation of policies in the fields of land management, agriculture, livestock, forestry, wildlife and agricultural water use. In implementing these objectives, this Ministry is responsible for, among other items, the administration, management, protection and conservation of resources essential to agricultural activity. In particular MINAG oversees land management, water, forestry, domestic animals and wildlife; the promotion of production, agro-industrialization and commercial sale of supplies and agricultural products and agricultural research, rural extension and technical assistance for producers.</p> <p>The National Directorate of Land and Forestry (DNFT) is the entity within MINAG that has authority, among others, for ensuring the implementation of national land policy, coordinating, promoting, developing, supervising and monitoring activities related to land registration including surveying lands on a large scale and storing satellite imagery.</p> <p>MINAG is represented at the provincial level by the Provincial Directorate of Agriculture. At a district level, issues related to agriculture fall under the realm of the District Services of Economic Activities. These are the competent authorities responsible for granting the Land Use and Benefit Rights (DUAT) for the proposed LNG site.</p>
<p>Ministry of Fishing (Ministério das Pescas - MPescas)</p>	<p>The MPescas is responsible for defining the principles, objectives, policies and plans for activities in relation to the management of fish and aquatic resources, of related activities and services and of fishing infrastructure, ensuring their implementation. The objectives of this Ministry are to:</p> <ul style="list-style-type: none"> <li>• Guarantee the responsible management, protection and conservation of fish resources, by promoting participatory management, among other initiatives;</li> <li>• Guarantee the protection and conservation of maritime resources and the sustainable exploration of fish resources;</li> <li>• Promote the development of fishing activity and related activities in qualitative as well as quantitative aspects;</li> <li>• Promote and develop fish production in territorial waters for the purpose of internal supply and exports; and</li> <li>• Promote the training of the sector in order to contribute to improving the quality of life of fishing communities.</li> </ul> <p>The MPescas is responsible for monitoring, controlling and inspection of fishing activities. Within the MPescas, the National Fishing Administration (ADNAP) is the entity directly responsible for the above activities, particularly focusing on inspection.</p>

Institution	Roles and Responsibilities
	<p>The National Small-scale Fishing Development Institute (IDPPE) is responsible for performing studies for the creation of development policies, strategies, plans and programs for small-scale fishing and for the study and promotion of projects for the development of small-scale fishing, relative to the socioeconomic aspects, fishing technology and technologies related to activities that complement fishing. The IDPPE is also responsible for promoting and coordinating development projects for small-scale fishing, seminars, field trips and courses intended to train and up skill professional and small-scale fishermen.</p> <p>The Fisheries Research Institute (IIP) supervises data collection and conducts most of research and studies on artisanal fisheries in Mozambique. This institute will be involved in the identification of fish species within the study area, where identification in-situ is not possible during field investigations.</p> <p>The Ministry of Fisheries is represented at the Provincial level by the Provincial Directorate of Fisheries. At District level, issues related to fisheries fall under the District Services of Economic Activities.</p> <p>These institutions shall be contacted in relation to all matters regarding fisheries and shall be involved in the monitoring of the project Environmental Management Plans (EMP), with regards to compliance of mitigation measures for the potential impacts on fisheries (especially artisanal).</p>
<p>Ministry of Tourism (Ministério do Turismo - MITUR)</p>	<p>The MITUR is responsible for the direction, planning and implementation of policies related to tourist activities, the hotel and similar industries and conservation areas for purposes of tourism.</p> <p>Its authority includes the following responsibilities:</p> <ul style="list-style-type: none"> <li>• Promotion of the sustainable development of tourism for the purpose of contributing to the social and economic development of the country;</li> <li>• Promotion of the preservation of wildlife and exploration of the same as one of the components necessary for the development of tourism;</li> <li>• Contribution to increasing Government revenue through the promotion and development of domestic and foreign tourism;</li> <li>• Promotion of increases in employment opportunities for the purpose of guaranteeing an improvement in standards of living for local populations;</li> <li>• Promotion of the development of tourism in order to contribute to strengthening the national unity to improve the knowledge of the country by its citizens and cultural exchanges with other nations;</li> <li>• Contribution to the establishment of a policy to license the expansion of gaming in hotels and similar establishments in order to improve the national tourism network and consequently to improve Government revenue; and</li> <li>• Promotion of professional training of workers to improve the quality of services provided by the sector.</li> </ul> <p>MITUR is represented at a provincial level by the Provincial Directorate of Tourism. At a district level, issues related to tourism fall under the responsibilities of the District Services of Economic Activities.</p> <p>MITUR will, together with MIREM and INP, mediate any potential conflicts of land use between tourism operators and the oil companies.</p>
<p>Ministry of Industry and</p>	<p>MIC is responsible for oversight of the trade and industry sectors.</p>

Institution	Roles and Responsibilities
Commerce (Ministério da Indústria e Comércio - MIC)	<p data-bbox="674 181 1003 209">MIC's responsibilities include:</p> <ul data-bbox="674 240 2045 544" style="list-style-type: none"> <li data-bbox="674 240 1480 268">• Oversight of implementation of the State's manufacturing sector policy;</li> <li data-bbox="674 272 2045 331">• Encouragement, assistance and due location of entrepreneurial activities in the scope of the processing industry of national raw materials, in particular concerning production intended to replace imports or add greater value to exportable products;</li> <li data-bbox="674 336 2045 395">• Promotion of initiatives towards recovering and upgrading the existing national industrial park as well as profitability of new investments;</li> <li data-bbox="674 400 1704 427">• Oversight of State's policy in respect of agricultural trade, supply and provisions of services;</li> <li data-bbox="674 432 1816 459">• Promotion of actions required for an efficient distribution of consumable goods and production factors;</li> <li data-bbox="674 464 1720 491">• Oversight and boosting of the external trade in coordination with further State organisms; and</li> <li data-bbox="674 496 2045 544">• Promotion of an entrepreneurial basis for exports in the country and encouragement of initiatives destined for increasing and diversifying exports.</li> </ul> <p data-bbox="674 576 2045 639">MIC is represented at a provincial level by the Provincial Directorate of Trade and Industry. At a district level, issues related to the trade and industry sectors are the responsibility of the District Services of Economic Activities.</p>
National Naval Institute (Instituto Nacional da Marinha - INAMAR)	<p data-bbox="674 671 2045 863">INAMAR is responsible for activity in the areas of maritime safety, protection of port facilities and vessels, maritime transport, negotiation and stowage, maritime personnel, preservation of the marine environment and maritime administration. In attaining these objectives, this Institute is responsible, among others, for exercising maritime authority in maritime, lake and river jurisdictional areas, and in the public maritime domain, promoting the establishment and maintenance of maritime safety conditions for performing marine activities and promoting and encouraging specific and economic efficiency in the interest of the service providers and users.</p> <p data-bbox="674 895 2045 1023">In the area of preservation of the marine environment, INAMAR is responsible for proposing legislation and regulations to prevent, reduce, control and combat pollution coming from vessels or from other floating or stationary resources at sea, directing and coordinating activities to prevent and fight marine pollution and participating in international forums to establish rules and standards in this respect.</p>
National Institute of Hydrography and Navigation (Instituto Nacional de Hidrografia e Navegação - INAHINA)	<p data-bbox="674 1118 2045 1214">INAHINA is responsible for conducting technical and scientific activities in the context of oceanography, hydrography and maritime navigation in waters under national jurisdiction for the purpose of ensuring navigation and contributing to the development of the country in scientific areas and defense of the environment.</p> <p data-bbox="674 1246 2045 1324">INAHINA also provides technical recommendations to projects involving new dredging techniques, hydraulic maritime works and other works that could affect the hydrographic patterns of ports and coastlines.</p>

Institution	Roles and Responsibilities
Mozambican Dredging Company (Empresa Moçambicana de Dragagem - EMODRAGA)	<p>EMODRAGA is a public entity of the Mozambican Government responsible for conducting dredging throughout the country.</p> <p>Their main objective is to maintain the channels and access routes open to national ports. EMODRAGA also conducts construction dredging for enlarging or deepening access channels to ports and participates in hydraulic works in ports and waterways.</p>
Ministry of Health (Ministério da Saúde - MISAU)	<p>The primary objectives of the Ministry of Health are to:</p> <ul style="list-style-type: none"> <li>• Promote and encourage the resolution of health problems;</li> <li>• Project and develop programs for promoting and protecting health and prevention and combating disease;</li> <li>• Provide health care to the population through the public health sector;</li> <li>• Promote and support the private, non-profit sector;</li> <li>• Promote, supervise and support a community system for the provision of health care; and</li> <li>• Provide a policy for pharmaceutical formulation and guidance for its implementation.</li> </ul> <p>Community health is a priority of the Ministry of Health which has a National Office of Public Health as well as a Department of Community Health in order to develop various programs at the community level including providing better access to health services, community participation, provision of human and financial resources and education/training in preventive and curative care. The primary focus of these programs is around malaria and HIV/AIDS, infant health and malnutrition.</p> <p>MISAU is represented at national level by the National Directorate of Health, at provincial level by the Provincial Directorate of Health and at District Level by the District Directorate of Health.</p>
National Aviation Institute (Instituto de Aviação Civil de Moçambique - IACM)	<p>The IACM is an autonomous entity responsible for safety, security and regulation of civil aviation. The Institute exercises the role of the civil aviation technical and economic regulator setting and applying policies overseeing the sector by enforcing the country regulations and the recommendations of the International Civil Aviation Organization (ICAO). It is responsible for the certification of airport infrastructures, issues aeronautical and para-aeronautical permits and administers helicopter use.</p>
Mozambique Ports and Railways Company, E.P. (Caminhos de Ferro de Moçambique - CFM)	<p>CFM is responsible for governing the ports and railways in Mozambique. Pemba Port falls under CFM North division, comprising the Ports of Pemba and Nacala and the associated railway lines, serving Malawi.</p>
National Roads Administration (Administração Nacional de Estradas - ANE)	<p>The ANE is an autonomous public entity responsible for the management of the classified road network of Mozambique. ANE is responsible for the design, construction and maintenance of all classified roads as well as the selection of the contractors and respective contract management. As for non-classified roads, ANE is responsible for proposing the rules to be observed by the local municipalities in the development and maintenance of urban roads as well as proposing rules to be observed by the state local bodies during road rehabilitation and maintenance roads. The District Administration is, at district level, the entity responsible for non-classified roads.</p>
Regional Water	<p>The ARA's are the entities responsible for water resource management throughout the country and include ARA Sul, ARA-</p>

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<b>Institution</b>	<b>Roles and Responsibilities</b>
Administrations (Administração Regional de Águas - ARA)	Centro ARA-Zambeze, ARA-Centro Norte (from the Zambeze River Basin to the Lurio River Basin, inclusive) and ARA -Norte (from the Lurio River Basin to the northern limit of Mozambique). ARA-Norte is responsible for the management of water resources in the project area.  Its responsibilities include, among others, analysis of requests for use and benefit of water, discharge of effluent, groundwater and issuing of permits.

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This section summarises the provisions of Mozambique's national legislation that is relevant to the petroleum industry and potential impacts of a project on the environment. A number of laws and decrees governing environmental and social protection of natural resources that are linked directly or indirectly to the petroleum industry are set out below.

In Mozambique, an EIA process is a legal requirement under the Environmental Law (Law no. 20/97 of 1 October) for any activity which may have direct or indirect impacts on the environment. These are regulated by the Environmental Impact Assessment Regulations (Decree no. 45/2004 of 29 September and Decree no. 42/2008 of 4 November, which amends some articles of Decree no. 45/2004).

Article 2 of Decree no. 45/2004 states that EIAs required for oil, gas and mineral resource related activities or developments are regulated by specific regulations.

In Mozambique, there are regulatory requirements specific for petroleum (oil and gas) operations which outline the need for an EIA for petroleum activities. In respect of petroleum operations, the EIA process is set out by Decree no. 56/2010 of 22 November, which approved the Environmental Regulations for Petroleum Operations. The Project is committed to undertake all activities in accordance with the applicable Mozambican legislation. Therefore the EIA process for this Project complies with the Environmental Regulations for Petroleum Operations (Decree no. 56/2010 of 22 November), as well as the Petroleum Law (Law no. 3/2001 of 21 February) and the Regulations on Petroleum Operations (Decree no. 24/2004 of 20 August). This EIA is also in compliance with the Licensing Regulations for Petroleum Installations and Activities (Ministerial Decree no. 272/2009 of December 30), applicable to concessionaires, operators, their contractors and subcontractors and other individuals or entities involved in petroleum operations and activities in Mozambique. These are discussed further below.

#### *Environmental Law (Law no. 20/97 of 1 October)*

The Environmental Law aims to define the legal basis for the sound use and management of the environment and its components for the purpose of forming a system of sustainable development in Mozambique. The Environmental Law is applicable to all public or private activities, which may influence the environment either directly or indirectly.

The law requires that activities, that by their nature, location or dimensions, are likely to cause significant environmental impacts be licensed by MICOA, based on the outcomes of an EIA process. Some of the core principles for environmental management contained in the Environmental Law and applicable to this Project are:

- the rational management and use of environmental components that envisage the improvement of the quality of life of the citizens and the protection of biodiversity and ecosystems;
- the recognition and valuation of traditions and the knowledge of local communities;
- the priority for establishment of systems to prevent actions that are harmful to the environment;
- a holistic and integrated perspective of the environment;
- the importance of public participation;
- the polluter pays principle; and
- the importance of international co-operation.

Article 8 of the Environmental Law requires that the Government creates adequate mechanisms so as to involve the various sectors of civil society, local communities and environmental protection organizations in the preparation of policies and legislation for the management of the country's natural resources.

Article 9, related to environmental pollution prohibits the production and deposit of any toxic and polluting substances on soils, sub-soils, water or atmosphere as well as the conduct of activities that will tend to accelerate erosion and desertification, deforestation or any other form of environmental degradation beyond the limits established by law.

*Petroleum Law (Law no. 3/2001 of 21 February)*

The Petroleum Law (Law no. 3/2001 of 21 February) establishes the regime for the granting of rights for the conduct of petroleum operations in Mozambique.

The Preamble to the Law states that *"petroleum resources are assets whose proper use can contribute significantly to national development."*

Paragraphs 4 and 5 of Article 20 respectively discuss issues around compensation:

*"4 The holder of a right to conduct petroleum operations who, by virtue of the exercise of petroleum operation rights in the contract area, causes damage to crops, soils, building and improvements or requires the relocation of the legal users or occupants of the land within the respective contract area, has the obligation to compensate the holders of title to the assets and the persons relocated.*

*5 Subject to the payment of the compensation due, the holder of the right to conduct petroleum operations may require the right of way in accordance with*

*the legislation in force in order to have access to the locations where petroleum operations are conducted."*

Article 23 provides stipulations for environmental protection and safety applicable to petroleum operations in Mozambique. This article states that in addition to carrying out operations in accordance with good oilfield practice, all holders of exploration and production rights shall conduct petroleum operations in accordance with environmental and other applicable legislation in order to:

- ensure that there is no ecological damage or destruction caused by petroleum operations, but where unavoidable, ensure that measures for protection of the environment are in accordance with internationally acceptable standards. For this purpose, the holder of a right shall prepare and submit to the relevant authorities for approval environmental impact studies (including mitigation measures for the environmental impacts);
- control the flow and prevent the escape or loss of petroleum discovered or produced within the contract area;
- avoid damage to petroleum reservoirs;
- avoid destruction to land, the water table, trees, crops, buildings or other infrastructure and goods;
- clean up the sites after the closure of petroleum operations and comply with the environmental restoration requirements;
- ensure the safety of personnel in the planning and conduct of petroleum operations and take preventive measures if physical safety would be at risk; and
- report to the appropriate entity the amount of operational and accidental discharge, leakage and waste resulting from petroleum operations.

In addition, Article 23 states that "[a] holder of a right under this Law shall act in a secure and effective manner when conducting petroleum operations in order to guarantee the disposal of polluted water and waste oil in accordance with approved methods, as well as the safe plugging of all boreholes and wells before these are abandoned".

*Regulations on Petroleum Operations (Decree no. 24/2004 of 20 August)*

Among others, Article 90 of the Regulations on Petroleum Operations states that environmental impact assessments, including environmental mitigation measures, shall be carried out for all areas affected by the petroleum operations and establishes the following obligations to the operator:

- prevent (i) accidents and material damage in connection with its activities and the operation of the installations; (ii) damage or the threat of damage to third parties' personnel and assets; (iii) damage to animals, vegetation, marine life and monuments; (iv) pollution of the sea and any fresh water sources discovered in the course of petroleum operations; (v) air pollution; and (vi) damage to petroleum reservoirs;
- monitor and reduce the effect of all operational and accidental discharge, handling of waste and emissions into the air, sea, lakes, rivers and soil;
- take corrective measures and repair damage to the environment when petroleum operations endanger the physical safety of people or property or cause pollution or other environmental damage harmful to people, animals, marine life, monuments or vegetation;
- when selecting materials and chemicals, choose those that are less hazardous to health and the safest in use so that the risk to people, to the environment and to the installations is minimized; and
- give attention to the health of employees, as well as qualification requirements applicable to health personnel.

Local content is briefly discussed in Article 38, paragraph 3 outlining the responsibilities of the operators: *"The Operator shall give preference to the purchase of local goods and services provided that such goods and services are of internationally comparable quality, are available at the time, in the quantity required, and their prices, including taxes, are not more than ten percent higher than those of available imported goods"*.

*Environmental Regulations for Petroleum Operations (Decree no. 56/2010 of 22 November)*

Under the Environmental Regulations for Petroleum Operations,, petroleum operations are defined as *"all or some of the operations related to exploration, development, production, separation and treatment, storage, transport and sale or delivery of petroleum at the agreed supply point in the country, including the operations of natural gas processing and the closure of all operations concluded"*. These Regulations clearly set out the procedures for the EIA for petroleum operations and the measures to be followed with regard to prevention, control, mitigation and rehabilitation of the environment.

The Environmental Regulations for Petroleum Operations were established to promote the correct and efficient environmental management of petroleum resources with a view towards the sustainable development of Mozambique.

Article 5 of Decree no. 56/2010 defines three project categories (A, B and C) on basis of which the type of EIA is required, as follows:

- Activities that fall into **Category A** require an Environmental Impact Study (EIS).
- **Category B** comprises activities for which a Simplified Environmental Study (SES) is required with the exception of some cases as specified in Article 17 of the Regulations.
- Activities included in **Category C** are exempted from an EIS and SES being subject to rules of sound environmental management generally accepted and considered best practice in the petroleum industry.

Public Consultation is an integral part of the EIA process for projects classified as Category A as laid out in Article 19 of the Environmental Regulations for Petroleum Operations. The regulations require that at least 15 days' notice shall be given for public meetings and entitles all direct or indirectly interested or affected parties to take part in the EIA process. All reports produced within the scope of the EIS must be made available to MICOA and published on the internet. The proponent shall prepare a final report containing all the comments received during the Public Participation Process. For further information regarding the Public Participation Process undertaken for this Project, see *Annex A*.

#### Timeframes for Decision-making

In accordance with Decree no. 56/2010, MICOA must comply with the following time limits for decision-making:

- Pre-assessment - up to 7 business days;
- Environmental Pre-Feasibility Study and Scope Definition (EPDA) and Terms of Reference (ToR) - up to 20 business days; and
- EIS - up to 45 business days.

#### Fees Applicable

According to Decree no. 56/2010, a fee of 0.01% of the total amount of the investment is due for environmental licensing for a Category A project and is made available to the State Budget (60%), the Environment Fund (20%) and the National Institute of Petroleum (20%).

*Licensing Regulations for Petroleum Installations and Activities (Ministerial Decree no. 272/2009 of December 30)*

These regulations are applicable to concessionaires, operators, their contractors and subcontractors and other individuals or entities involved in Petroleum Sector Operations and Petroleum Sector Activities in the National Territory.

The Regulations establish procedures for applying for Construction, Operations, Alterations and Decommissioning Licenses as well as specific petroleum sector activities Licenses and technical supervisor.

Article 4 describes compulsory licensing requirements and states that the licenses under the scope of this regulation shall only be granted to natural or legal persons involved in the petroleum operations and petroleum activities. Such a license is issued by the National Petroleum Institute (INP), as per Article 6. Application for the licenses requires the applicant to provide, among others, an Environmental license or approved environmental impact assessment, where relevant.

#### **2.2.4 *Other Mozambican Legal Considerations***

This section outlines other legal considerations related to the environmental legal framework, water use, waste, effluent management, air emissions, terrestrial and marine environment, transport, social receptors, protected areas and species and infrastructure relevant to the Project. The Project will take these requirements into consideration in the design, construction and operation of the Project activities.

**Table 2.2** *Other Relevant Mozambican Legal Considerations*

<b>Regulations/Laws</b>	<b>Detail</b>
<b>Environmental Legal Framework (beyond the provisions outlined in Section 2.2)</b>	
Constitution of the Republic of Mozambique, November 16, 2004	Article 98.1 specifies that any natural resources located in the soil and subsoil, in domestic waterway, in territorial ocean waters, on the continental shelf and in the exclusive commercial zone are the sole property of the State. Article 102 authorizes the State to promote knowledge and inventory and assessment of natural resources and determination of the conditions for their use and enjoyment with protection of the interests of the country.
National Environmental Policy (Resolution no. 5/1995, dated August 3)	This Policy establishes the bases for the sustainable development of Mozambique through an acceptable and realistic commitment to socio-economic development and environmental protection. It is intended to manage natural and environmental resources in general so as to maintain their functional and productive capacity for current and future generations.
Regulation regarding the Environmental Auditing Process (Decree no. 25/2011, dated June 15)	This Regulation defines environmental auditing as a management tool for the systematic, documented and objective evaluation of the operation and organization of the management system and the environmental protection and control processes.
Regulation for Environmental Inspection (Decree no. 11/2006, dated June 15)	This Regulation is intended to regulate supervisory, control and auditing activity related to compliance with environmental protection standards at the national level.
<b>The Sea</b>	
The Sea Act (Law no. 4/1996, dated January 4)	This Law defines the legal context of jurisdictional rights regarding strip of sea along the coast of Mozambique and contains provisions regarding the normative bases for regulating the administration and maritime activities of the country, and it establishes sovereignty rights of the State for purposes of exploration and enjoyment of its natural resources.
Regulation for the Prevention of Pollution and Marine and Coastal Environmental Protection (Decree no. 45/2006, dated November 30)	The purpose of this Regulation is to prevent and limit pollution resulting from illegal discharges by ships, platforms or from land-based sources along the Mozambique coast and to establish the legal bases for protection and conservation of areas that are in the public domain of seas, lakes, rivers, beaches and fragile ecosystems. A summary (for reference purposes) of the Rules of the International Convention for the Prevention of Pollution by Ships of 1973, as modified by the Protocol of 1979 (the "MARPOL 73/78") relative to discharges of hydrocarbons and harmful liquid substances is attached to the decree.
Regulation on Standards for Environmental Quality and Effluent Discharges (Decree no. 18/2004, dated June 2)	The purpose of the Regulation is to establish environmental quality and effluent emission standards for the purpose of controlling and maintaining the acceptable levels of pollutant concentrations in environmental components.
Decree no. 67/2010, dated December 31 (amendments to	This Decree amends the Standards for Receiving Entities (sea/ocean), now including Table 1 relative to potentially hazardous chemical substances and Table 1A, relative to potentially harmful chemical substances (pesticides).

Regulations/Laws	Detail
<p>Appendix V to Decree no. 18/2004, dated June 2)</p> <p>Regulation on Maritime Commercial Transport (Decree no. 35/2007, dated August 14)</p>	<p>This Regulation deals with practical and operational aspects of legal nature for commercial shipping, including its licensing, in the waters under the jurisdiction of Mozambique.</p>
<p><b>Water Resources</b></p>	
<p>Regulation for the Prevention of Pollution and Marine and Coastal Environmental Protection (Decree no. 45/2006, dated November 30)</p>	<p>This Regulation prohibits the discard or discharge of any wastewater of a toxic or harmful nature as well as any other substances or waste that may in any way pollute water, meadow or banks in violation of the relevant legal provisions.</p>
<p>Regulation regarding Standards for Environmental Quality and the Discharge of Effluent (Decree no. 18/2004, dated June 2)</p>	<p>This Regulation defines the environmental quality and effluent emission standards for receiving bodies of water, treatment technologies, systems and methods. It governs the elimination of liquid industrial effluent into the receiving environment, which must be carried out through an appropriate entity. The final effluent must be discharged in accordance with certain emission or discharge standards. It requires the location of the point of discharge or emission be determined during the environmental licensing process so that there is no change to water quality in the receiving body. The discharge of liquid effluent or pollutants that affects or may affect swimming areas must be controlled based on sanitary quality monitoring of the respective waterways and beaches.</p>
<p>Regulation regarding the Quality of Water for Human Consumption (Ministerial Diploma no. 180/2004, dated September 15)</p>	<p>The purpose of this Regulation is to establish quality parameters for water intended for human consumption and the procedures for controlling the same in order to protect human health from the harmful effects resulting from any contamination that may occur at the various stages of the water supply system from source to the point where it is made available to the consumer.</p>
<p>National Water Policy (Resolution No. 46/2007, dated October 30) and Water Law (Law no. 16/1991, dated August 16)</p>	<p>Based on the principles of environmental sustainability, the Water Law establishes the water resources that correspond to the public domain, water management principles, the need to inventory all water resources that exist in the country, the general regime for their use, general rights of users and the corresponding obligations, among other items.</p>
<p>Regulation regarding water licensing and concessions (Decree no. 43/2007 dated October 30)</p>	<p>The Regulation on the water licensing and concessions regulates the process to obtain the rights of private use and benefit of water. This regulation gives special attention to environmental issues, requesting an EIA, Environmental License or its official exemption as a condition to obtain the rights for water use.</p> <p>The discharge of effluents, is also subject to a specific license or concession. The surface water body or aquifer where the effluent will be discharged must be identified, or where these will be discharged on land, the following parameters are identified: the discharge point, quantity, volume and frequency, as well as the nature and composition per volume unit and the known temperature, proposed treatment methods, equipment and facilities required. The methods proposed to measure the effluents and the expected impacts on the environment as well as the methods that will be used for analysis and control shall also be included.</p>

<b>Regulations/Laws</b>	<b>Detail</b>
<b>Atmospheric Emissions and Air Quality</b>	
Decree no. 67/2010, dated December 31 (amendments to Appendix I and inclusion of Appendices 1A and 1B to Decree No. 18/2004, dated June 2)	This Decree, among other items, amends Air Quality Standards and adds Appendices 1A and 1B which cover Organic and Inorganic Carcinogenic Atmospheric Pollutants and Substances with Odorous Properties, respectively.
Regulation regarding the Management of Substance that Destroy the Ozone Layer (Resolution no. 78/2009, dated December 22)	This Regulation prohibits the import, export, production, sale and transit of substances that destroy the ozone layer including the following: <ul style="list-style-type: none"> <li>• Chlorofluorocarbon (CFCs);</li> <li>• Halogenated substances (Halon-1211, Halon-1301 and Halon-2402);</li> <li>• Carbon tetrachloride (CCL<sub>4</sub>); and</li> <li>• Other substances defined by the Montreal Protocol as Substances that destroy the ozone layer, ratified by Resolution no. 8/93, of 8 December)</li> </ul>
The Environment Law (Law no. 20/97, dated October 1) and the Regulation regarding Environmental Quality and the Discharge of Effluent (Decree no. 18/2004, dated June 2)	This Law is intended to establish the environmental quality and effluent emission standards intended to control and maintain admissible levels of pollutant concentration in environmental components.
<b>Solid Waste Management</b>	
The Environment Law (Law no. 20/97, dated October 1)	This Law prohibits the import of trash or hazardous waste into Mozambique.
Regulation for Waste Management (Decree no. 13/2006, dated June 15)	This Regulation establishes the rules relative to the production, discharge into the soil and subsoil, into water or the atmosphere, of any toxic and polluting substances as well as the conduct of activities that accelerate the degradation of the environment so as to prevent or minimize their negative impacts on health and the environment.
Regulation for Biomedical Waste Management (Decree no. 8/2003, dated February 18)	This Regulation establishes the rules relative to biomedical waste management, aiming at safeguarding medical service employees' health and safety and the public in general as well as minimizing impact of such waste on the environment. This regulation is applicable to medical units, research institutions, companies or people that a) produce or handle biomedical waste; b) transport biomedical waste; c) remove biomedical waste; d) are employed in a medical unit that produces, handles or removes biomedical waste and e) are patients, employees or visitors in a medical unit that produces, handles transports or removes biomedical waste. It requires all medical units, research institutes and companies covered by this regulation to develop a biomedical waste management plan.
<b>Protection of Biodiversity and Conservation Areas</b>	
Land Law (Law no. 19/97, dated October 1) and Enabling	This Law establishes complete and partial protection zones. Complete protection zones include areas intended for nature conservation and protection activities and defence and safety of the State. Partial protection zones include, among

Regulations/Laws	Detail
Regulation of the Land Law (Decree no. 66/1998, dated December 8)	<p>others;</p> <ul style="list-style-type: none"> <li>• Interior waters, the territorial sea and the maritime exclusive economic zone (EEZ);</li> <li>• The continental platform;</li> <li>• The strip along the maritime coast and around islands, bays and estuaries which is measured from the maximum high tide line to a mark 100m inland;</li> <li>• The strip of land up to 100m surrounding a source of water;</li> <li>• The strip of land up to 250m along the edge of dams and reservoirs; and</li> <li>• A 2km strip along the territorial border.</li> </ul> <p>For public infrastructure, the partial protection zones include, among others:</p> <ul style="list-style-type: none"> <li>• Secondary and tertiary roads and the 15m strip alongside them;</li> <li>• Primary roads and the 30m strip alongside them;</li> <li>• Aerial, surface, underground and underwater installations and pipelines for electricity, telecommunications, petroleum, gas and water and the 50m strip of land alongside of them; and</li> <li>• Airports and aerodromes and the 100m strip of land surrounding them.</li> </ul>
Forests and Wildlife Law (Law no. 10/99, dated July 7)	This Law defines protection zones such as national parks, national reserves and zones for use and zones of historic and cultural value.
Fisheries Law (Law no. 3/90, dated September 26)	This Law defines the legal framework relative to the planning and management of fishing, the implementation of licensing systems, the adoption of resource conservation measures, the auditing of fish products quality intended for export and oversight of fishing activity auditing. Specific Fishing Policies and Strategies are included in Section G1.3 of Annex G (Volume III of the EIA Report).
Enabling Regulation of the Forests and Wildlife Law (Decree no. 12/2002, dated June 6)	This Act defines a list of protected animals – eg dugongs, certain species of coastal and marine birds and sea turtles.
Regulation regarding Sport and Recreational Fishing (Decree no. 51/99, dated August 31)	This Regulation defines a list of protected marine species, eg dugongs, whales and dolphins, sea turtles and some species of fish, bivalves and gastropods.
Decree that determines areas potentially adequate for marine aquaculture (Decree no.71/2011 of 30 December)	This Decree establishes marine reserves for the development of marine aquaculture in areas identified as having potential for aquaculture, including in Palma Bay. Management of these reserves is the responsibility of the Ministry of Fisheries. According to this Decree, “other socioeconomic projects are allowed to be undertaken within these reserves , if they present comparative advantages or are a complement to aquaculture activities, subject to approval by the Minister of Fisheries.

Regulations/Laws	Detail
Regulation regarding the Control of Invasive Alien Species (Decree no. 25/2008, dated July 1)	<p>Article 8 of this Decree prohibits restricted activities involving invasive alien species without prior authorization and states that ‘after hearing the Inter-institutional Group for the Control of Invasive Alien Species, the National Authority (MICOA) can prohibit the performance of any activity which, by its nature, may influence the propagation of invasive alien species’.</p> <p>‘Restricted activities’ include the following:</p> <ul style="list-style-type: none"> <li>a) Importing any kind of invasive alien species, whether by sea land or air, into the country;</li> <li>b) Possessing any kind of invasive alien species;</li> <li>c) Developing, creating, or otherwise propagating any kind of invasive alien species; and</li> <li>d) Transporting, moving, or otherwise relocating any kind of invasive alien species.</li> </ul> <p>Article 11 of the Decree suggests that appropriate methods should be taken to control and eradicate listed invasive alien species.</p>
<b>Archeology and Cultural Assets</b>	
Law for Protection of Cultural Assets (Law no. 10/88, dated December 22) and Enabling Regulation for the Protection of Archaeological Assets (Decree no. 27/94, dated July 15)	The purpose of these is to ensure the lawful protection of tangible and intangible cultural assets of Mozambique, eg monuments, buildings with historic significance, artistic and scientific sites and natural elements of scientific and noteworthy aesthetic interest.
<b>Land</b>	
Land Law (Law no. 19/97, dated October 1) and Enabling Regulation of the Land Act (Decree no. 6/1998, dated December 8) and National Land Policy (Resolution no. 10/95, dated October 17)	This Act establishes the terms for the establishment, exercise, modification, transmission and termination of rights for the use and enjoyment of land. It establishes as a fundamental principle, the sustainable use of natural resources to guarantee the quality of life for current and future generations, ensuring that total and partial protection zones maintain environmental quality and the special purposes for which they were established.
Law of Territorial Ordinance and respective Regulations (Law no. 19/2007 dated July 18 and Decree no. 23/2008 dated July 1)	This Law establishes sustainability principles to add value to physical space and equality in access to land and natural resources. It establishes preventive systems to minimize significant or irreversible impacts on the environment. The Law places responsibility on public or private entities for any intervention which may cause damage to, or affect the quality of the environment, by ensuring that any adverse effects to quality of life are reversed or compensated.
<b>Labour</b>	
Labour Law (Law no. 23/2007, dated August 1)	This Act defines the general principles and establishes the legal system applicable to individual and collective subordinate labour relationships.

<b>Regulations/Laws</b>	<b>Detail</b>
Regulation for the Contracting of Foreign Citizens in the Petroleum and Mining Sectors (Decree no. 63/2011, dated December 7)	<p>Establishes the legal regime including mechanisms and procedures for contracting foreign citizens for work purposes in the Petroleum and Mining sectors provided that the performance of such activities has been approved by the competent authority.</p> <p>Decree no. 63/2011 establishes, inter alia, that short term assignments not exceeding 180 days, employment of foreign work force may be done without an authorisation from the Minister of Labour, but this must be communicated to the Ministry of Labour within fifteen days from the foreigner entering the country. Also, in petroleum and mining investment projects approved by the Government foresee a percentage of foreigners to be hired greater or lesser than the one foreseen in the quota regime provided, work authorization is not required and communication to the Ministry of Labour shall suffice.</p>
<b>Ports/Harbours</b>	
Regulations for Harbour Operations (Portaria no. 18630/1965, dated April 24)	<p>These regulations mainly govern harbour activities and operations and embarking/disembarking from vessels although a few articles refer to environmental protection, health and safety.</p> <p>Article 42 refers to the necessity to control land-based activities that, through run-off, may affect the marine waters of the harbour. Article 47 refers to the necessity to display the correct signalling flag on a vessel carrying any explosive or hazardous substance. The Regulation states in Articles 123 and 124 that all products undergoing deterioration that may pose a health hazard must be removed.</p> <p>Within the Regulations, only these few articles refer to environmental and safety issues. The regulations are considered out-of-date and are inadequate to ensure environmental health and worker safety and health.</p>
<b>Airports</b>	
Civil Aviation Law (Law no. 21/2009, dated September 28)	This Law defines the basis and general principles for civil aviation in Mozambique in order to ensure safety, regularity and effectiveness in the aerial transport operations. One of the main objectives of this Law is to ensure compliance with international safety standards and implementation of the guidelines and practices recommended in the annexes to the International Civil Aviation Convention.
Technical regulations and implementation guidelines of the International Civil Aviation Convention (Decree no. 73/2009, dated December, 15)	This Decree defines the requirements for construction, modification, licensing and certification of airports/aerodromes. It adopts the technical regulations and implementation guidelines of the International Civil Aviation Convention.

*Regulations on the Resettlement Process resulting from Economic Activities  
(Decree no. 31/2012 of 8 August)*

New regulations on the resettlement process have recently been approved by Decree no. 31/2012 of 8 August. The regulation establishes the basic rules and principles on the resettlement process for the purpose of providing the opportunity to improve the quality of life of affected households.

Article 4 lists the principles guiding the resettlement process resulting from the public and private activities. These are:

- **Principle of Social Cohesion** –resettlement must ensure social integration and improve the living standards of those affected to a better living standard;
- **Principle of Social Equality** –all those affected by resettlement are entitled to restoration or creation of conditions equal to or above the previous living standard;
- **Principle of Direct Benefit** – those affected should be given the opportunity to benefit directly from the undertaking and its socioeconomic impacts;
- **Principle of Social Equity** – when resettling populations to new areas, access to their means of subsistence, to social services and availability resources must be taken into account;
- **Principle of Non-Change of the Income Level** – allow those resettled to have the opportunity to re-establish their previous basic income;
- **Principle of Public Participation** – ensure the resettlement process should include consultation with local communities and other interested parties affected by the activity;
- **Principle of Environmental Accountability** - whoever pollutes or degrades the environment is obliged to restore or compensate for resulting damages; and
- **Principle of Social Responsibility** – the investor is required to create social infrastructure aimed at promoting learning, leisure, sport, health, culture and other projects of community interest.

The Decree also notes that a Resettlement Action Plan should be completed in time to submit together with an EIA Report to MICOA. During a meeting on 14 June 2013 with the National Directorate of Planning and Spatial Development (DINAPOT), it was noted that the Mozambique LNG Project EIA commenced in 2011 before the promulgation of Decree no. 31/2012. Prior to the promulgation of Decree no. 31/2012, project proponents were only required to submit a Resettlement Policy Framework as part of the EIA

process. Given that the EIA for the Project began, and the ToR for the EIA was approved before the Decree was promulgated, DINAPOT advised the Project to submit an Initial Resettlement Plan (IRP) to MICOA with the EIA Report. The IRP is included in this EIA (*Annex I*) and was also available for public comment as part of the consultation process on the Draft EIA Report. The IRP describes the approach, principles and procedures that will be followed to manage all unavoidable displacement. It is structured according to Article 21 of Decree no. 31/2012 and provides the framework for the future development of a full Resettlement Action Plan (RAP). The RAP will be prepared in accordance with Mozambican legislation and the International Finance Corporation's Performance Standard 5: Land Acquisition and Involuntary Resettlement (IFC PS 5) in close consultation with the affected communities. The RAP will be consistent with the goals, objectives, principles and processes described in this IRP and will be designed to address the specific conditions, characteristics and needs of the people and enterprises affected by physical and economic displacement.

### 2.3

#### *INTERNATIONAL CONVENTIONS*

The Project is obliged to ensure that its operations comply with international conventions to which the Government of Mozambique is a signatory. These conventions are listed in *Table 2.3* below.

**Table 2.3**      **Relevant International Conventions**

<b>Year Ratified</b>	<b>Convention</b>
<b>Air Quality</b>	
1985	Vienna Convention for the Protection of the Ozone Layer
1987	Montreal Protocol on Substances that Deplete the Ozone Layer (including 1990 and 1999 amendments)
1992 and 1997	United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, 1992 & 1997
<b>Habitats and Biological Diversity</b>	
2003	African Convention on the Conservation of Nature and Natural Resources. Revised Version
1968	African Convention on the Conservation of Nature and Natural Resources
1985	Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, 1985, and the Protocol for Protected Areas, Wildlife and Vegetation; and Protocol for the Cooperation in the Combat of Pollution in Emergency Situations
1979	Convention on the Conservation of the Migratory Species of Wild Animals, 1979, and amendments
2001	Protocol for the Fisheries of the SADC
1975	Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)
2001	Agreement related with the application of the Dispositions of the United Nations Convention on the Law of the Sea regarding the Conservation and Management of Straddling and Highly Migratory Fish Species
2001	Protocol for the Fisheries of the Southern Africa Development Community, in annex, signed in Blantyre, on the 14 <sup>th</sup> of August 2001
1992	Convention on Biological Diversity (CBD)
1998	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
<b>Water Resources/Maritime Activity</b>	
1973/ 1978 and 1975	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) Annex I, Prevention of Pollution by Oil. MARPOL include the requirements for the International Oil Pollution Prevention (IOPP) Certificates
1954	The discharge of oil or oily mixtures into the sea from vessels is regulated by the terms of the International Convention for the Prevention of Pollution of the Sea By Oil (OILPOL).
1990	International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC)
1974	International Convention for the Safety of Life at Sea (SOLAS)
1972	Convention on the International Regulations for Preventing Collisions at Sea (COLREGs)
1992	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND)
1982	UN Law of the Sea Convention (UNCLOS)
1976	IMO International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW)
1979	IMO International Convention on Search and Rescue (SAR)
1972, 1996	International Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972 (London Convention) and the 1996 Protocol (the Protocol)
1992	International Convention on Civil Liability for Oil Pollution Damage, (CLC Protocol)
1974	Convention for the Prevention of Marine Pollution from Land-based Sources (Paris Convention)

<b>Year Ratified</b>	<b>Convention</b>
1979	International Maritime Organization. The Republic of Mozambique signed the Convention that established the International Maritime Organization and ratified it on the 17 <sup>th</sup> of January 1979. .
2004	International Ship and Port Facility Security Code
2001	Regional Cooperation and Coordination of Maritime Search and Rescue and Global Maritime Distress and Safety System (GMDSS) and corresponding Annex 1 that establishes Sub Regional Search and Rescue Centres, for Coastal African Countries located both in the Indian and Atlantic Oceans
1989	Convention on the International Maritime Satellite Organisation (INMARSAT)
<b>Archaeology and Cultural Heritage</b>	
1972	UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage
<b>Hazardous Waste</b>	
1992	Basel Convention on the control of transboundary movements of hazardous wastes and their disposal
1991	Convention on the Ban of the Import into Africa and the Control of Transboundary Movements and Management of Hazardous Wastes within Africa, Bamako
<b>Aviation</b>	
1977	The Convention on International Civil Aviation, also known as the Chicago Convention.
<b>Piracy</b>	
2003	SUA Convention 1988 and SUA Protocol 1988 are two IMO instruments on the Suppression of Unlawful Acts against ships at sea.
<b>Other</b>	
2002	Stockholm Convention on Persistent Organic Pollutants adopted in Stockholm

## 2.4 GOOD INTERNATIONAL INDUSTRY PRACTICE

### 2.4.1 Introduction

In planning and implementing the Project, AMA1/eni will be aligned with good international industry practice, to the extent reasonable, notably the environmental and social performance requirements as defined by the Equator Principles (*Section 2.4.3*) and the International Finance Corporation (IFC) Social and Environmental Performance Standards.

### 2.4.2 International Finance Corporation (IFC) Performance Standards

The IFC has a Sustainability Policy and set of Performance Standards on Social and Environmental Sustainability. These came into force in July 2006 and were recently revised and updated in January 2012. The revised Performance Standards are listed in *Box 2.1*.

#### Box 2.1 IFC Performance Standards (PSs)

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- PS 1: Assessment and Management of Social and Environmental Risks and Impacts;
  - PS 2: Labour and Working Conditions;
  - PS 3: Resource Efficiency and Pollution Prevention;
  - PS 4: Community Health, Safety and Security;
  - PS 5: Land Acquisition and Involuntary Resettlement;
  - PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
  - PS 7: Indigenous Peoples; and
  - PS 8: Cultural Heritage.
- 

The objectives of each of these IFC Performance Standards are presented in more detail in the box below.

#### Box 2.2 Objectives of IFC Performance Standards

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##### PS 1: Assessment and Management of Social and Environmental Risks and Impacts

- To identify and evaluate environmental and social risks and impacts of the project.
- To adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment.
- To promote improved environmental and social performance of clients through the effective use of management systems.
- To ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately.
- To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.

##### PS 2: Labour and Working Conditions

- To promote the fair treatment, non-discrimination, and equal opportunity of workers.
  - To establish, maintain, and improve the worker-management relationship.
  - To promote compliance with national employment and labour laws.
  - To protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain.
  - To promote safe and healthy working conditions, and the health of workers.
  - To avoid the use of forced labour.
-

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**PS 3: Resource Efficiency and Pollution Prevention**

- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
- To promote more sustainable use of resources, including energy and water.
- To reduce project-related GHG emissions.

**PS 4: Community Health, Safety and Security**

- To anticipate and avoid adverse impacts on the health and safety of the Affected Community during the project life from both routine and non-routine circumstances.
- To ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.

**PS 5: Land Acquisition and Involuntary Resettlement**

- To avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs.
- To avoid forced eviction.
- To anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
- To improve, or restore, the livelihoods and standards of living of displaced persons.
- To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

**PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resource**

- To protect and conserve biodiversity.
- To maintain the benefits from ecosystem services.
- To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

**PS 7: Indigenous Peoples**

- To ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples.
- To anticipate and avoid adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts.
- To promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner.
- To establish and maintain an ongoing relationship based on Informed Consultation and Participation (ICP) with the Indigenous Peoples affected by a project throughout the project's life-cycle.
- To ensure the Free, Prior, and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples when the circumstances described in this Performance Standard are present.
- To respect and preserve the culture, knowledge, and practices of Indigenous Peoples.

**PS 8: Cultural Heritage**

- To protect cultural heritage from the adverse impacts of project activities and support its preservation.
  - To promote the equitable sharing of benefits from the use of cultural heritage.
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### 2.4.3

### *Equator Principles*

Private sector banks working in project finance developed 10 environmental and social Principles in 2003, called Equator Principles, to apply globally when addressing environmental and social risks in project financing. These

Principles, shown in *Box 2.3* reflect the IFC-inspired environmental and social best practice guidelines in the financing of large projects and have been revised to adhere to the new IFC Performance Standards. To date the Principles are adopted by over 80 financial institutions and are used in determining, assessing and managing environmental & social risk in project financing. The Principles were revised in 2006 and again in 2013. The '*Equator Principles III*' are in effect as of June 2013.

**Box 2.3** *The Equator Principles*

- 
1. Review and categorisation
  2. Environmental and social assessment
  3. Applicable environmental and social standards
  4. Environmental and social management system and Equator Principles action plan
  5. Stakeholder engagement
  6. Grievance mechanism
  7. Independent review
  8. Covenants
  9. Independent monitoring and reporting
  10. Reporting and transparency
- 

**2.4.4** *IFC Environmental, Health and Safety (EHS) Guidelines*

The IFC EHS Guidelines are technical reference documents providing general and industry-specific examples of good international practice in environmental management. These guidelines represent the performance standards normally considered acceptable by the IFC and most finance institutions and generally considered to be achievable in new facilities at reasonable cost by existing technology. When host country regulations differ from the levels and measures presented in the EHS Guidelines, the IFC recommends that projects should achieve whichever is more stringent (see *Section 2.6*).

The IFC EHS Guidelines <sup>(1)</sup> considered relevant to the Project are summarised in *Box 2.4*.

(1) The IFC EHS Guideline can be found here:  
[http://www1.ifc.org/wps/wcm/connect/Topics\\_Ext\\_Content/IFC\\_External\\_Corporate\\_Site/IFC+Sustainability/Sustainability+Framework/Environmental,+Health,+and+Safety+Guidelines/](http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/Environmental,+Health,+and+Safety+Guidelines/)

**1. Environment**

- 1.1 Air Emissions and Ambient Air Quality
- 1.2 Energy Conservation
- 1.3 Wastewater and Ambient Water Quality
- 1.4 Water Conservation
- 1.5 Hazardous Materials Management
- 1.6 Waste Management
- 1.7 Noise
- 1.8 Contaminated Land

**2. Occupational Health and Safety**

- 2.1 General Facility Design and Operation
- 2.2 Communication and Training
- 2.3 Physical Hazards
- 2.4 Chemical Hazards
- 2.5 Biological Hazards
- 2.7 Personal Protective Equipment (PPE)
- 2.8 Special Hazard Environments
- 2.9 Monitoring

**3. Community Health and Safety**

- 3.1 Water Quality and Availability
- 3.2 Structural Safety of Project Infrastructure
- 3.3 Life and Fire Safety (L&FS)
- 3.4 Traffic Safety
- 3.5 Transport of Hazardous Materials
- 3.6 Disease Prevention
- 3.7 Emergency Preparedness and Response

**4. Construction and Decommissioning**

- 4.1 Environment
- 4.2 Occupational Health and Safety
- 4.3 Community Health and Safety

**Industry Sector Guidelines**

- Offshore Oil and Gas Development
- Liquefied Natural Gas (LNG) Facilities
- Ports, Harbours and Terminals

**2.5****REQUIREMENTS OF OTHER INTERNATIONAL INSTITUTIONS OF RELEVANCE****2.5.1****Introduction**

Good International Industry Practice guidelines and standards have also been produced by a number of marine, conservation and oil and gas industry bodies, in terms of the environmental impacts and impact assessment methods associated with onshore and offshore gas extraction. This section summarises key documents, principles and approaches that are of relevance to the Project and with which the Project will align, to the extent reasonable.

## 2.5.2 *International Association of Drilling Contractors*

The International Association of Drilling Contractors (IADC) Guide is designed to supplement company Health, Safety and Environmental programs and operating procedures. It is based on experience and careful study over many years. Practicability has been substantiated by the adoption of the safe operating procedures by many drilling contractors and government regulatory bodies. It provides a basis for the drilling contractor to develop a Health, Safety and Environmental programme.

Of particular interest for the present Project is Chapter 12, related to Offshore Safety, covering aspects such as medical evacuation and rough weather procedures; and Chapter 14, related to the Protection of the Environment covering air emissions, waste management, spill prevention and control amongst others.

The Guide also covers aspects related to Fire Prevention and Control, Personal Protective Equipment and Emergency Action Plan(s).

## 2.5.3 *International Oil & Gas Producers Association (OGP)*

The OGP is an association of oil and gas companies, associations and major upstream service companies whose members produce more than half the world's oil and about one third of its gas. It was formed to develop effective communications between the upstream industry and the network of international regulators. It represents the industry in the International Maritime Organisation and the Commission for Sustainable Development and works with the World Bank and with the International Organization for Standardization (ISO). Part of its remit is to help achieve continuous improvements in safety, health and environmental performance. It has produced a number of guidelines relating to the environmental impact of oil and gas developments including 'Guidelines for waste management with special focus on areas with limited infrastructure'<sup>(1)</sup>.

## 2.6 *NUMERICAL STANDARDS AND GUIDELINES RELEVANT TO THE PROJECT*

A comparison between Mozambican and international limits and standards relevant to the Project are presented in this Section in a tabular manner. These include IFC General EHS Guidelines and relevant EHS sector specific guidelines (see *Section 2.4.4*), World Health Organisation (WHO) Guidelines and Mozambican legislative requirements.

Often host country limits and standards differ from corresponding international limits and standards. In accordance with good international industry practise, projects in all cases must comply with host country standards (in this case, the Mozambican limits and standards). International

(1) OGP Guidelines for waste management with special focus on areas with limited infrastructure - Report No. 413, rev1.1 September 2008 (updated March 2009)

good practice in EIA suggests that where international standards are more stringent, projects should seek to benchmark against these international standards.

### 2.6.1 Air Quality

Air quality standards for the purposes of this guideline are framed within the Regulations on the Emission of Effluents and Environmental Quality Standards (Decree no. 18/2004 dated June 2) and Decree no. 67/2010, dated December 31 (amendments to Appendix I and inclusion of Appendices 1A and 1B to Decree no. 18/2004). However, these guidelines are not applicable to non-stationary sources (eg vehicles). The IFC EHS LNG Facility Guidelines defer to the WHO Air Quality Guidelines Global Update, 2005 as set out in Table 2.4 <sup>(1)</sup>.

**Table 2.4 Air Quality Guidelines**

Pollutant	Averaging Period	Guideline Value ( $\mu\text{g}/\text{m}^3$ )	
		WHO	Mozambique Decree no. 67/2010
SO <sub>2</sub>	1-year		40
	24-hour	125 (Interim target-1)	100
		50 (Interim target-2)	
		20 (guideline)	
1-hour		800	
NO <sub>2</sub> *	10-minute	500 (guideline)	500
	1-year	40 (guideline)	10
	24-hour		
		1-hour	200 (guideline)
TSP	1-year		60
	24-hour		150
PM <sub>10</sub>	1-year	70 (Interim target-1)	
		50 (Interim target-2)	
		30 (Interim target-3)	
		20 (guideline)	
	24-hour	150 (Interim target-1)	
		100 (Interim target-2)	
PM <sub>2.5</sub>	1-year	75 (Interim target-3)	
		50 (guideline)	
		35 (Interim target-1)	
		25 (Interim target-2)	
	24-hour	15 (Interim target-3)	
		10 (guideline)	
CO	8-hour average		10 000
	1-hour average		30 000
	15-minute		100 000
	30-minute		60 000
Ozone	8-hour daily maximum	160 (Interim target-1)	120
		100 (guideline)	

(1) World Health Organization (WHO). Air Quality Guidelines Global Update, 2005. PM 24-hour value is the 99th percentile.

Pollutant	Averaging Period	Guideline Value ( $\mu\text{g}/\text{m}^3$ )	
		WHO	Mozambique Decree no. 67/2010
Benzene	1-hour average		160
	24-hour		50
	One-year mean		4.4 x 10 <sup>-6</sup>

\*MICOA has authorised the Project to use the WHO NO<sub>2</sub> standard instead of the Mozambican NO<sub>2</sub> standard.

The Project will comply with the limits shown in **bold**.

Mozambique does not have specific standards for air emissions from ships and vessels. As such the Project will comply with Annex VI of the MARPOL Convention, adopted in September 1997. The regulations in this annex set limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibit deliberate emissions of ozone depleting substances.

#### *Greenhouse Gases/ Carbon Emissions*

According to the methodology of the UN Framework Convention on Climate Change (UNFCCC), the total GHG emission forecast is presented as tonnes of CO<sub>2</sub> equivalent (CO<sub>2</sub>-e). IFC Performance Standard 3 for Resource Efficiency and Pollution Prevention states that where more than 25,000 tonnes CO<sub>2</sub>-equivalent is produced annually for a single project or development, the Project will quantify direct emissions from the facilities owned or controlled within the physical project boundary, as well as indirect emissions associated with the off-site production of energy used by the project. In the absence of a GHG emissions threshold in Mozambique, the Project will align with IFC requirements.

#### 2.6.2

#### *Noise*

Noise emission standards have not been established within Mozambique. In such a case, standards considered applicable to this Project are those described by the IFC EHS General Guidelines, the WHO Noise Guidelines <sup>(1)</sup>. Noise impacts should not exceed the levels presented in *Table 2.5*, or result in a maximum increase in background levels of 3dB at the nearest identified noise sensitive receptor.

(1) Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, World Health Organization (WHO), 1999.

**Table 2.5** *Applicable Noise Standards for the Project*

Receptor	One Hour LAeq (dBA)	
	Daytime 07:00 – 22:00	Night time 22:00 – 07:00
Ambient Conditions	Maximum increase in background levels of 3 dB at the nearest receptor location off-site	
Residential/Institutional/Educational <sup>(1)</sup>	55	45
Industrial/Commercial	70	70

**2.6.3** *Potable Water*

Potable water quality guidelines considered relevant to the Project include the Mozambican Water Quality Standards for Human Consumption (Ministerial Diploma no. 180/2004, of 15 September) and the IFC EHS General Guidelines. With respect to the latter, the guideline does not provide specific standards but refers to the World Health Organisation (WHO) Guidelines for drinking-water quality (WHO, 2011). The specific water quality standards are presented in *Table 2.6* below.

**Table 2.6** *Potable Water*

Constituent	Unit	WHO (2011)	Mozambican Guideline (Ministerial Decree no. 180/2004)
<b>Major Ions</b>			
Calcium as Ca	mg/l		50
Magnesium as Mg	mg/l		50
Potassium as K	mg/l		
Sodium as Na	mg/l	200	200
Fluoride as F	mg/l	1.5	1.5
Sulphate as SO <sub>4</sub> <sup>2-</sup>	mg/l	500	250
Chloride as Cl	mg/l	250	250
Nitrate as NO <sub>3</sub>	mg/l	50	50
Nitrite as NO <sub>2</sub>	mg/l	3	3
Ortho Phosphate as PO <sub>4</sub>	mg/l		
Ammonium as NH <sub>4</sub>	mg/l		1.5
Total Nitrogen as N	mg/l		
Total Alkalinity as CaCO <sub>3</sub>	mg/l		
Total Hardness as CaCO <sub>3</sub>	mg/l		500
<b>Trace Elements (Metals)</b>			
Aluminium as Al	µg/l	200	200
Antimony as Sb	µg/l	20	
Arsenic as As	µg/l	10	10
Barium as Ba	µg/l	700	700
Beryllium as Be	µg/l	12	
Bismuth as Bi	µg/l		
Boron as B	µg/l	2400	300
Cadmium as Cd	µg/l	3	3
Total Chromium as Cr	µg/l	50	50
Cobalt as Co	µg/l		
Copper as Cu	µg/l	2000	1000

(1) For acceptable indoor noise levels for residential, institutional, and educational settings refer to WHO (1999).

Iron as Fe	µg/l	2000	<b>300</b>
Lead as Pb	µg/l	10	<b>10</b>
Lithium as Li	µg/l		
Manganese as Mn	µg/l	400	<b>100</b>
Mercury as Hg	µg/l	6	<b>1</b>
Molybdenum as Mo	µg/l	70	<b>70</b>
Nickel as Ni	µg/l	70	<b>20</b>
Selenium as Se	µg/l	40	<b>10</b>
Zinc as Zn	µg/l	3000	<b>3000</b>
<b>Hydrocarbons</b>			
Benzene	mg/l	<b>0.01</b>	
Toluene	mg/l	<b>0.7</b>	
Ethylbenzene	mg/l	<b>0.3</b>	
Xylenes	mg/l	<b>0.5</b>	
Naphthalene	mg/l		<b>0.0001*</b>

Notes: \* Guideline value for polycyclic aromatic hydrocarbons

The Project will comply with the limits shown in **bold**.

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#### 2.6.4 *Soil*

Soil quality guidelines have not been established under Mozambican Law or by the IFC Performance Standards. Therefore the Project will apply international good practice with respect to housekeeping, proper storage and spill/leak prevention to avoid contamination beyond baseline soil levels described in *Chapter 8*.

#### 2.6.5 *Effluent and Wastewater*

The guidelines considered applicable for the treatment and/or discharge of effluent and wastewater includes:

- Regulations on the Emission of Effluents and Environmental Quality Standards (Decree no. 18/2004, dated June 2);
- Decree no. 67/2010, dated December 31 (amendments to Appendix I and inclusion of Appendices 1A and 1B to Decree no. 18/2004, dated June 2);
- Regulation for the Prevention of Pollution and Marine and Coastal Environmental Protection (Decree no. 45/2006, dated November 30) including MARPOL Convention, Annex II and IV ; and
- IFC EHS Guidelines for LNG Facilities, to the extent reasonable.

Mozambique does not have EHS guidelines or standards specifically for LNG facilities and as such, the Project will propose effluent and wastewater standards based on existing Mozambican standards for other similar industries and IFC guidelines.

Discharge standards for the following wastewater streams are described further below:

- hydrotest water.
- stormwater runoff.
- cooling water.
- produced water.
- domestic/ residential sewage.

While Mozambique has not established specific guidelines or standards for all these wastewater streams, in the absence of such, the Project will propose effluent and wastewater standards based on existing Mozambican standards for other similar industries and IFC guidelines.

#### *Hydrotest Water*

Effluent levels for discharge of hydrotest waters to surface waters or land in accordance with IFC EHS Guidelines for LNG Facilities are set out in *Table 2.7*.

**Table 2.7** *Hydrotest Fluids Discharge Limitations*

<b>Parameters</b>	<b>Units</b>	<b>Effluent Limits</b>
Total hydrocarbon content	mg/l	10
pH		6 - 9
BOD	mg/l	25
COD	mg/l	125
TSS	mg/l	35
Phenols	mg/l	0.5
Sulfides	mg/l	1
Heavy metals a.	mg/l	5 Total
Chlorides	mg/l	600 average, 1200 maximum

#### *Stormwater Runoff from Process Areas*

Stormwater runoff should be treated through an oil/water separation system able to achieve a maximum oil and grease concentration in accordance with all the applicable standards, regulations (national and international) and/or approval or authorization. Management of stormwater runoff from vessels will be in accordance with MARPOL.

#### *Cooling Water*

In accordance with IFC EHS Guidelines for LNG facilities, the effluent should result in a temperature increase of no more than 3°C at edge of the zone where initial mixing and dilution take place. Where the zone is not defined, use 100m from point of discharge. Free chlorine (total residual oxidant in estuarine / marine water) concentration in cooling / cold water discharges (to be sampled at point of discharge) should be maintained at 0.2 parts per million (ppm).

### *Produced Water*

Oil and gas reservoirs contain water (formation water) that is produced when brought to the surface during hydrocarbon production. The disposal of produced water will be in compliance with all the applicable standards, regulations (national and international) and/or approval or authorization.

### *Domestic /Residential Sewage*

In Mozambique, sewage discharges are regulated by Annex IV of Decree no. 18/2004, dated June 02. Annex V of this Decree applies to any domestic effluent discharges into the sea or ocean. Similarly the Regulation for the Prevention of Pollution and Protection of the Marine and Coastal Environment, Decree no. 45/2006, dated 30 November, which references the standards set out in MARPOL's Annex IV -Prevention of pollution by sewage. The disposal of sewage wastewater will be in compliance with all the applicable standards, regulations (national and international) and/or approval or authorization.

## **2.6.6 Waste Management**

The section provides guidelines for the design, construction and operation of facilities for the management of hazardous and non-hazardous waste, including landfills, incinerators and other waste management systems.

The Mozambican Waste Management Regulations (Decree no. 13/2006) establish rules on the production, emission or disposal of any toxic or polluting substance so as to prevent or minimize its negative impacts on health and the environment. This applies for all individual or collective persons, public or private, and lays down powers on waste management.

The IFC EHS Guidelines for Waste Management Facilities (December 2007) applies to projects that generate, store or handle any quantity of waste and is applicable to general and hazardous waste management. The planning, design, construction and operation of any general waste landfill site should be in compliance with the Mozambique Waste Management Regulations and will follow IFC EHS Guidelines for Waste Management Facilities (December 2007), to the extent reasonable.

The Regulation on Waste Management (Decree no. 13/2006, dated June 15) makes reference to landfill sites within Appendix 1 where details on landfill specifications and dimensions are cited.

The Mozambican Waste Management Regulations (Decree no. 13/2006) establish rules on the production, emission or disposal of any toxic or polluting substance to prevent or minimize negative impacts on health and the environment. Wastes are classified as hazardous or non-hazardous. Wastes are classified as hazardous base its flammability, corrosiveness, reactivity, toxicity and pathogenicity characteristics. This regulation defines

the obligations of the bodies that produce and manage waste, laying down rules for the collection, movement, preparation (establishing the identification code of hazardous waste), treatment and re-use of waste. Finally, the regulation defines the infractions and respective sanctions for failure to comply.

## 2.7

### *ANADARKO COMPANY POLICY*

AMA1's objective is to gather, process, and export (in liquefied form) natural gas found in Area 1. As a subsidiary of Anadarko Petroleum Corporation (APC), AMA1 recognises the responsibility it has to conduct its business as a responsible corporate member of society, to observe the laws of Mozambique to respect and protect the safety and health of the public, employees, contractors and the environment and adopts APC's EHS Policy. APC's EHS Policy is provided in *Figure 2.1*.

Figure 2.1 APC's EHS Policy



**ENVIRONMENT, HEALTH AND SAFETY  
AT ANADARKO PETROLEUM CORPORATION**

**Mission:** To respect and protect the safety and health of the public, our employees, our contractors and the environment in all countries and communities in which we conduct our business.

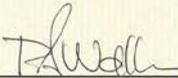
**Vision:** To achieve excellence in our safety, health and environmental performance.

**Policy:** In achieving our *Mission* and *Vision*, our *Policy* is to:

- Promote a culture that allows for employee involvement in maintaining a safe work environment while recognizing that safety, health and environmental incidents are preventable;
- Strive for zero injuries and incidents;
- Be a recognized leader in environmental stewardship;
- Promote continuous improvement in our processes, reducing risk to safety, health and the environment; and
- Adhere to applicable laws, regulations, Company policies and procedures, and recognized standards.

**Everyone has the responsibility, and will be held accountable, to work safely and in an environmentally sound manner.**

- Our number one priority is the safety and well-being of the public, our employees, and contractors.
- Our business activities will be conducted to minimize our environmental impact.

  
RA Walker  
Chief Executive Officer

## 2.8 ENI'S COMPANY POLICY

The Health, Environment and Safety Policy of eni S.p.A. states that its businesses and operational activities must be conducted in a manner to promote excellence in the following actions:

- protection of health and safety of its employees and local communities;
- development and contribution towards well-being of communities with which company works;
- protection of environment and adoption of principles and values for environmental sustainability; and

- continuous improvement of quality of processes, services and product inherent to company's activities and operations.

eni's EHS Policy for Mozambique is provided in *Figure 2.2*.

**Figure 2.2** *eni's EHS Policy*



**Eni East Africa**  
Mozambique branch

Health Safety & Environment Policy



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**Eni East Africa - Mozambique Branch** is an Oil & Gas Company representing its shareholders in hydrocarbon, exploration, development and production activities from onshore and offshore locations in Mozambique.

**Statement:**  
**Eni East Africa - Mozambique Branch** is committed to conduct all business in line with the eni Code of Ethics, eni ten policies and eni HSE Management System Guideline, and to pursuing the goal of no Harm to People, protecting the Environment and promoting Sustainable Development principles.

This commitment statement applies to all operational and project activities under **Eni East Africa - Mozambique Branch**'s control through their whole life-cycle, including activities carried out by contractors.

**In accordance to this statement, Eni East Africa - Mozambique Branch is committed to:**

- Manage HSE matters with the same level of attention as other critical business activities in a way that protects not only production, equipment and materials, but also the safety and the health of all our employees and contractors, and the environment.
- Establish an HSE culture within the organization - through positive and continuous commitment from the top and line management - in which all **Eni East Africa - Mozambique Branch** employees and contractors feel responsible for the prevention of incidents involving themselves, their co-workers or the environment.
- Prevent all causes of Incidents, near misses and unsafe conditions identifying, evaluating and controlling the risks and the impacts associated with all our activities, through the application of the best HSE practices.
- Continually assess and mitigate the potential health impacts of our operations, granting all measures to ensure healthy working condition.
- Conduct a responsible environmental management into all our operations phases to support sustainable development, biodiversity conservation, the prevention of pollution and the reduction of waste generation in compliance with current applicable HSE legislation and other requirements that apply to the oil industry in the Country.
- Remain committed to sustainable development and the welfare of our host communities.
- Achieve continuous improvement in health, safety, environment and quality performances, through the implementation of requirements of the HSE Integrated Management System in projects, and complying with relevant legislation and other requirements to which **Eni East Africa - Mozambique Branch** subscribes.
- Develop and maintain communication channels with our stakeholders and publicly report on our HSE performance, within the applicable petroleum industry regulations and legislations in Mozambique.

The HSE Statement (Policy) and objectives are communicated to every person working in **Eni East Africa - Mozambique Branch** through Management interaction and communication and training.

**A Eni East Africa - Mozambique Branch** é uma Empresa do ramo de Gás & Petróleo representando os respectivos accionistas em hidrocarbonetos e actividades de exploração, produção e desenvolvimento em offshore de Moçambique.

**Declaração:**  
**A Eni East Africa - Mozambique Branch** compromete-se a dirigir as suas actividades de acordo com o Código de Ética da eni, das dez políticas da eni, e das HSE Management System Guideline da eni, orientando-se de modo à não prejudicar as Pessoas, proteger o Meio Ambiente e os princípios de Desenvolvimento Sustentável.

A presente Declaração de compromisso aplica-se à todas as actividades do projecto e operações sob controlo da **Eni East Africa - Mozambique Branch**, durante todo o seu ciclo de vida, incluindo as actividades levadas a cabo por contratados.

**De acordo com a presente declaração, Eni East Africa - Mozambique Branch compromete-se a:**

- Gerir os assuntos de HSE com o mesmo nível de atenção que as outras actividades críticas do negócio por forma a proteger não só a produção, o equipamento e os materiais, mas também a segurança e a saúde de todos os nossos trabalhadores e contratados, assim como o meio ambiente.
- Estabelecer uma cultura de HSE dentro da organização (através de compromisso positivo e contínuo a partir do topo e da gestão directa) na qual todos os trabalhadores e contratados da **Eni East Africa - Mozambique Branch** se sintam responsáveis pela prevenção de incidentes em que estejam envolvidos eles mesmos, seus colegas ou o meio ambiente.
- Prevenir todas as causas de incidentes, perdas e condições pouco seguras, identificar, avaliar e controlar os riscos e o impacto associado com todas as nossas actividades através da aplicação das melhores práticas de HSE.
- Avallar continuamente e mitigar o potencial impacto da saúde das nossas operações, tomar todas as medidas para garantir condições saudáveis de trabalho.
- Desenvolver uma gestão ambiental responsável em todas as nossas fases de operações para apoiar o desenvolvimento sustentável, a conservação da biodiversidade, a prevenção da poluição e a redução na geração de resíduos em conformidade com a actual legislação de HSE e outros requisitos que se aplicam à indústria petrolífera no País.
- Continuar comprometido com o desenvolvimento sustentável e o bem-estar das comunidades.
- Realizar um melhoramento contínuo em saúde, segurança, meio ambiente e desempenho de qualidade através da implementação de requisitos do sistema de Gestão Integrada de HSE em projectos, e cumprir com a respectiva legislação e outros requisitos a que a **Eni East Africa - Mozambique Branch** subscreve.
- Desenvolver e manter canais de comunicação com os nossos accionistas e fazer relatórios de desempenho sobre a nossa execução de HSE dentro dos regulamentos da indústria petrolífera e das legislações aplicáveis em Moçambique.

A Declaração (Política) de HSE e os objectivos são comunicados à todas as pessoas que trabalham na **Eni East Africa - Mozambique Branch** através da interacção, comunicação e formação da Gestão.



**F. Trujillo**  
Managing Director  
Director Geral

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May 2013

