

環境チェックレポート

(1) プロジェクト名

ガス田開発・LNGプロジェクト

(2) 実施場所

モザンビーク共和国/カーボデルガード州

(3) プロジェクト概要

ガス田開発及びLNGの製造・販売

(4) カテゴリ分類

カテゴリ A

(5) カテゴリ分類の根拠

本事業は、環境ガイドラインに掲げる影響を及ぼしやすいセクター（石油・天然ガス開発セクター、パイプラインセクター、石油・ガス・化学物質ターミナルセクター、道路、鉄道、橋梁セクター、空港セクター）に該当し、影響を及ぼしやすい特性を持ち、影響を受けやすい地域あるいはその近傍に立地するため。

(6) 環境許認可

モザンビーク共和国制度に基づき環境影響評価書が作成され、2014年6月に当局より付帯条件付きで承認を取得済である。

(7) 汚染対策

大気質、水質、廃棄物、騒音・振動等に対して、適切な措置が講じられている旨、確認されている。

(8) 自然環境面

自然環境面への影響に対して、適切な措置が講じられている旨、確認されている。

(9) 社会配慮面

本プロジェクトにより社会経済的な影響を受ける住民等への配慮について、対応計画が策定され、適切な措置が講じられている旨、確認されている。

(10) 適用国際基準

IFC パフォーマンススタンダード

(11) その他・モニタリング

上述の環境レビューを踏まえ、環境影響評価書に係る付帯条件の遵守状況、その他許認可の取得状況及び付帯条件の遵守状況、住民移転実施状況、並びに大気質、水質及び騒音等につきモニタリングを実施する予定。

以 上

## Questions

**Q1.** Please provide the address of the project site.

Address of the project site: Cabo Delgado Province, the Republic of Mozambique

**Q2.** Please provide brief explanation of the project.

Mozambique Gas Development Project in northern Mozambique and transport the gas (in liquefied form) to international markets.

**Q3.** Will JBIC loan be applied to a new project or an executing project? In case of an executing project, please inform of strong claims by stakeholders such as local residents, as well as improvement guidance or cessation orders for construction work / operations, from environmental authorities.

- New Project  Executing Project (with Claim etc.)  
 Executing Project (without Claim etc.)  Others (Please specify )

**Q4.** In case of this project, is it necessary to execute Environmental and Social Impact Assessment (ESIA) based on the laws or regulations of the country where the project is to be implemented? If necessary, please inform the progress of ESIA.

- Required (completed)  Required (under execution or under planning)  
 Not Required  Others (Please specify )

**Q5.** In case that ESIA is already completed, please inform whether ESIA report is already approved based on the environmental and social impact assessment system of the country where the project is to be implemented or not. If ESIA report is already approved, please provide the date and name of authorities of the approval.

- Approved (without conditions)  Approved (conditional)  
 Under approval process  Others (Please specify )

Date of Approval : June 16, 2014

Name of Authorities : MICOA – Ministry of Coordination of Environmental Affairs

**Q6.** If environmental permit(s) other than ESIA is required, please provide the name of required permit(s). Have you obtained required permit(s)?

- Obtained  Required, but not obtained yet  
 Not required  Others (Please specify )

Name(s) of required permit(s) : Resettlement Plan (RP)

**Q7.** Will the loan be used for the undertaking that cannot specify the project at this stage (e.g. export or lease of machinery that has no relation with specific project, or Two Step Loan that cannot specify the project at the time of loan agreement)?

(Yes  No)

If you answered "Yes", it is not necessary to reply to the following questions.  
If you answered "No", please reply to the following questions.

Q8. Are there any environmentally sensitive area shown below in and around project site?

(Yes) / No)

If you answered "Yes", please select applicable items by marking, and reply to following questions.  
If you answered "No", please reply to questions 9 and after.

- (1) National parks, protected areas designated by government (coastal areas, wetlands, habitats of minorities or indigenous populations, heritage sites, etc.)
- (2) Ecologically critical forests areas (including primeval forests and tropical natural forests)
- (3) Ecologically critical natural habitats (including coral reefs, mangrove, tidal flats, etc.)
- (4) Habitats of endangered species of which protection is required under local laws and international agreements.
- (5) Areas that have risks of large scale increase in soil salinity or soil erosion
- (6) Desertification areas
- (7) Areas with special values from archaeological, historical and/or cultural viewpoints
- (8) Habitats of minorities, indigenous populations, nomadic people with traditional lifestyle (including areas used for cultural and/or spiritual purposes), or areas with special social value

Q9. Does the project involve following characteristics?

(Yes) / No)

If you answered "Yes", please describe the scale of applicable characteristics, and reply to the questions 10 and after.

If you answered "No", please reply to questions 11 and after.

- (1) Involuntary resettlement and/or loss of means of livelihood  
(Number of affected people: approximately 500 families / 2,500 persons)
- (2) Pumping of groundwater (Scale: 120,000 m<sup>3</sup>/year)
- (3) Land reclamation, development and/or clearing (Scale: 3,000 ha)
- (4) Deforestation (Scale: \_\_\_\_\_ ha)

Q10. Under the environmental and social impact assessment system of the country where the project is to be implemented, do the applicable characteristics from (1) – (4) above and their scale serve as basis for executing an ESIA for the project?

- They do  They do not
- Others (Please specify \_\_\_\_\_ )

Q11. Will JBIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC loan equal or less than SDR 10 million? (In the case of additional support for a past project, this shall be the accumulated total amount)

(Yes) / (No)

If you answered "Yes", it is not necessary to reply to the following questions.  
If you answered "No", please reply to questions 12 and after.

Q12. Does the project belong to either of the sectors that impacts on the environment and the society is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansive renovation project, acquisition of rights and interests without additional capital investment)?

(Yes ~~No~~)

If you answered "Yes", it is not necessary to reply to following questions.  
If you answered "No", please reply to the questions 13 and after.

**Q13.** Does the project belong to the following sectors?

(Yes ~~No~~)

If you answered "Yes", please specify the sector by marking, and reply to questions 14 and after.  
If you answered "No", it is not necessary to reply to the following questions.

- (1) Mining
- (2) Oil and natural gas development
- (3) Pipelines
- (4) Iron and steel (projects that include large furnaces)
- (5) Non-ferrous metals smelting and refining
- (6) Petrochemicals (manufacture of raw materials; including complexes)
- (7) Petroleum refining
- (8) Oil, gas and chemical terminals
- (9) Paper and pulp
- (10) Cement plants (including a greenfield quarry)
- (11) Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
- (12) Thermal power
- (13) Nuclear power
- (14) Hydropower, dams and reservoirs
- (15) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging or submarine electrical cables
- (16) Roads, railways and bridges
- (17) Airports
- (18) Ports and harbors
- (19) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their vicinity
- (20) Waste management and disposal
- (21) Agriculture involving large-scale land-clearing or irrigation
- (22) Forestry
- (23) Tourism (construction of hotels, etc.)

**Q14.** Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, please explain whether an execution of ESIA is required on account of the large scale of the project in the country where the project is implemented.

The Project is located in the Afungi peninsula in the Cabo Delgado Province, 30km south of the Tanzanian border. The exploration activities have resulted in 50 to 70+ trillion cubic feet (Tcf) of estimated recoverable gas.

The Land for Liquefaction Facilities is approx. 64 square kilometers on Afungi Peninsula and the Anadarko LNG facilities shall include 2 trains of nominal 6 mmtpa production capacity each. The Land Area has been designated as an LNG Park with space for future trains and other operators.

The Project scope includes (i) offshore gas development (ii) marine facilities (iii) onshore Gas processing and liquefaction (iv) supporting infrastructure as described below:

- (i) Offshore gas development
  - Subsea production wells
  - Subsea gathering manifolds
  - Pipelines connecting the offshore field to the onshore processing facilities
- (ii) Marine facilities
  - Marine offloading facility
  - LNG Export jetty and berthing areas
- (iii) Onshore gas processing and liquefaction
  - Two 6 nominal mmtpa liquefaction trains
  - Gas processing and treating facilities and
  - LNG storage tanks
- (iv) Supporting infrastructure
  - Utilities, accommodation, access roads, aerodrome

In the frame of this project the completion of an EIA is required. A comprehensive EIA (including social impacts) was conducted from 2011 through 2013, the draft was released for public review and comment, and the final EIA was approved by MICOA on June 16 2014.