

環境チェックレポート

- (1) プロジェクト名  
天然ガス開発プロジェクト
- (2) 実施場所  
カタール ラス・ラファン工業地帯
- (3) プロジェクト概要  
天然ガス田開発、ガス処理及びガス製品の販売
- (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、パイプラインセクター）に該当し、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  
当局からの必要な環境許認可を取得済。
- (7) 汚染対策  
大気質、水質、廃棄物及び騒音・振動への影響に対して、適切な措置が講じられている旨、確認されている。
- (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  
本件に伴う住民移転は発生せず、適切な措置が講じられている旨、確認されている。
- (10) その他・モニタリング  
大気質及び海洋生態系保護活動につきモニタリング予定。

以 上

## Questions

Q1. Please provide the address of the project site.

Address of the project site: Ras Laffan Industrial City, Plot W18, Qatar

Q2. Please provide brief explanation of the project.

The objective of Barzan Project is to supply domestic gas to meet the State of Qatar's energy needs to sustain its infrastructure development and industrial growth.

The gas from Qatar's North Field will be extracted and exported to an onshore gas treatment plant. Onshore, produced water and field condensate will be removed from the wet gas in the onshore slug catcher. The gas will be treated to remove impurities and then refrigerated and processed to extract natural gas liquids (NGL), leaving residual methane gas for pipeline sales. The NGL will be fractionated into saleable products including ethane, propane, butane and condensate. Elemental sulfur will be extracted from sulfur containing compounds, removed from the produced gas in Sulfur Recovery Units (SRUs) and routed, in liquid form, to the Common Sulfur Project (CSP) located at the RLC Port.

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 Impact Assessment (EIA) based on the laws or regulations of the country where the project is to be implemented? If necessary, please inform the progress of EIA.

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

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

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

Date of Approval:  
Name of Authorities:

Q6. If environmental permit(s) other than EIA 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) : \_\_\_\_\_

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)?

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

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) Primeval forests, tropical natural forests  
 (3) Ecologically important habitats (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 life style, or areas with special social value

Q9. Does the project involve following characteristics?

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 (Number of resettlers : )  
 (2) Pumping of groundwater (Scale: m/year)  
 (3) Land reclamation, development and/or clearing (Scale: ha)  
 (4) Deforestation (Scale: ha)

Q10. Under the environmental 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 EIA for the project?

- They do                                     They do not  
 Others (please specify)

Not applicable

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)

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 impact on the environment is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights and interests without additional capital investment)?

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

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) Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
- (11) Thermal power
- (12) Nuclear power
- (13) Hydropower, dams and reservoirs
- (14) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging or submarine electrical cables
- (15) Roads, railways and bridges
- (16) Airports
- (17) Ports and harbors
- (18) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their vicinity

- (19) Waste management and disposal
- (20) Agriculture involving large-scale land-clearing or irrigation
- (21) Forestry
- (22) 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 EIA is required on account of the large scale of the project in the country where the project is implemented.

The total onplot project area is approximately 3,055,000 m<sup>2</sup>. The area allocated to plants and buildings is approximately 1,744,000m<sup>2</sup>.

The Barzan Project will provide for the following production capacity:

- HP and MP Sales Gas: 2,130 MMscfd
- Ethane: 90 MMscfd
- Propane: 1,548 MT/d
- Butane: 1,156 MT/d
- Plant Condensate: 9,315 Bbl/d
- Field Condensate: 39,795 Bbl/d
- Sulfur: 5,799 MT/d

Units: MMscfd: Million standard cubic feet per day  
MT/d: Metric tonnes per day  
Bbl/d: Barrels per day

Execution of an EIA is required by the State of Qatar Ministry of Environment for large scale projects such as the Barzan Project. Refer to the Ministry of Environment 2005 Executive By Law No.4 of Law 30 of 2002 that provides a list of categories of projects for which an EIA is required.