

環境チェックレポート

(1) プロジェクト名

地熱発電プロジェクト

(2) 実施場所

インドネシア共和国 北スマトラ州

(3) プロジェクト概要

地熱発電所を建設・所有・操業するもの

(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

インドネシア共和国制度に基づき、EIA(環境アセスメント報告書)が作成され、同国北スマトラ州環境保護庁より、付帯条件付で承認されている。事業会社は付帯条件について適切に対応する計画である。

(7) 汚染対策

大気質、水質、廃棄物及び騒音・振動対策について、現地基準等に沿った適切な対応計画を策定・実施している。

(8) 自然環境面

本プロジェクトサイトに保護区は存在しない。
本プロジェクトサイト内及び周辺地域において保護種が生息する可能性があるが、影響を軽減する等の適切な配慮がなされる計画である。

(9) 社会配慮面

本プロジェクトの建設用地について、住民移転は生じない。社会面への影響についても適切な配慮がなされている。

(1 0) 適用国際基準

IFC パフォーマンススタンダード

(1 1) その他・モニタリング

上述の環境レビューを踏まえ、EIA に係る付帯条件の遵守状況、保護種に関する当局からの指摘等の有無等についてモニタリングを行う。

以 上

Questions

Q1. Please provide the address of the project site.

Address of the project site:

... Pahae, Jae and Pahae Julu Sub-District, North Tapanuli Regency, North Sumatra, Indonesia

Q2. Please provide brief explanation of the project.

Geothermal IPP Project

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.

- | | |
|--|--|
| <input type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim etc.) |
| <input checked="" type="checkbox"/> Executing Project (without Claim etc.) | <input type="checkbox"/> 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.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Required (completed) | <input type="checkbox"/> Required (under execution or under planning) |
| <input type="checkbox"/> Not Required | <input checked="" type="checkbox"/> Others (Addendum is being prepared for approval) |

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.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Approved (without condition) | <input type="checkbox"/> Approved (conditional) |
| <input type="checkbox"/> Under approval process | <input checked="" type="checkbox"/> Others (Addendum is being prepared for approval) |

Date of Approval : 12 Aug 2009

Name of Authorities : Governor of North Sumatra Province

[We consider AMDAL as EIA]

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

- | | |
|--|---|
| <input type="checkbox"/> Obtained | <input type="checkbox"/> Required, but not obtained yet |
| <input checked="" type="checkbox"/> Not required | <input type="checkbox"/> Others (Please specify) |

Name(s) of required permit(s) : _____

[We consider AMDAL as EIA]

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) Primeval forests, tropical natural forests
- (3) Ecologically important habitats (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 life style, 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 (Number of resettlers:)
- (2) Pumping of groundwater (Scale: approximately 100,000m³/year)
- (3) Land reclamation, development and/or clearing (Scale: approximately 150ha)
- (4) Deforestation (Scale: approximately 30ha)

[1. As of the date hereof, we have not identified any involuntary resettlement.]

[3. Scale of land clearing may vary depending on growth of vegetation]

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)

[Please refer to answers to Q14]

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 impact on the environment 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) 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.

Generation capacity (Net): approximately 330MW
Total land area required: approximately 200ha

In Indonesia, "AMDAL (Analisis Mengenai Dampak Lingkungan)", an Indonesian term for environmental impact assessment is required for all kinds of projects and/or operations bearing important/significant impact on environment.