

Results of Environmental Review

- (1) Reference Number
16-017
- (2) Project Name
Expansion of LNG Plant
- (3) Project Site
Papua Barat Province, Indonesia
- (4) Project Outline
Expansion of existing LNG Plant
- (5) Category
Category A
- (6) Reason of Categorization
The project falls into the large-scale oil, gas and chemical terminals sector, also has sensitive characteristics and is located in a sensitive area under the Environmental Guidelines.
- (7) Environmental Permission/Approval by the Environmental Authority
The Environmental Social Impact Assessment has been developed in accordance with the Indonesian regulations, and approved by the Ministry of Environment in Indonesia as of July 24, 2014 with the conditions.
- (8) Anti-Pollution Measures
It is assessed that the appropriate measures against pollutions, including air quality, water quality and noise, will be taken properly.
- (9) Natural Environmental Considerations
It is assessed that the appropriate measures for the protection of natural environment will be taken properly.

(10) Social Considerations

Appropriate measures for social considerations are properly managed. The project does not involve involuntary resettlement.

(11) Applicable International Standards

World Bank Safeguard Policy

(12) Monitoring

The project proponent plans to monitor the environmental items including air quality, water quality, and noise. The monitoring results are supposed to be reported to relevant authority on a regular basis.

End

Questions

Q1. Please provide the address of the project site.

Address of the project site: Tanah Merah Village, Teluk Bintuni Regency, Papua Barat Province, Indonesia

Q2. Please provide brief explanation of the project.

Tangguh LNG is a two train natural gas liquefaction facility that currently operated in Teluk Bintuni, Papua Barat, Indonesia. The existing facility includes associated onshore infrastructure, two offshore platforms, pipelines and twelve wells.

Tangguh LNG plans to expand its operations by developing a single LNG train (Train 3) at the existing Tangguh site. The scope of the expansion will consist of new offshore facilities, including wellhead platforms and pipelines, and onshore development on the existing Tangguh brownfield site. The new onshore facilities will include one additional natural gas liquefaction train of a similar design and capacity to the existing trains, an onshore receiving facility (ORF), a new LNG and condensate loading berth, additional boil off gas (BOG) recovery, utilities, flares and infrastructure to support logistics.

Q3. Will NEXI insurance 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 checked="" type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim etc.) |
| <input 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 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.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Required (Completed) | <input type="checkbox"/> Required (Under execution or under planning) |
| <input type="checkbox"/> Not Required | <input type="checkbox"/> 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 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.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Approved (without condition) | <input type="checkbox"/> Approved (conditional) |
| <input type="checkbox"/> Under approval process | <input type="checkbox"/> Others (Please specify) |

Date of Approval: 24 July 2014

Name of Authorities: Ministry of Environment- Government of Indonesia

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

☒ Obtained
☐ Not required

☒ Required, but not obtained yet
☐ Others (Please specify)

Name(s) of required permit(s):

I. Obtained :

Environmental Permit (24 July 2014)

II. Required, but not obtained yet:

- a. Wastewater Discharge to Sea Permit
- b. Wastewater Discharge to Surface Water Permit
- c. Treated Wastewater Utilization Permit
- d. Temporary Hazardous Waste Storage Permit
- e. Hazardous Waste Treatment Permit
- f. Hazardous Waste Utilization Permit
- g. Drilling Cuttings and Used Mud Dumping Permit
- h. Drilling Cuttings and Used Mud Reinjection Permit, etc

Q7. Will the insurance 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(s) shown below in and around project site(s)?

(Yes) (No)

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

- ☒ (1) National parks, nationally-designated protected areas (coastal areas, wetlands, areas for ethnic minorities or indigenous peoples and cultural heritage, etc. designated by national governments)

The nearest national park/protected areas around Tangguh site is Cagar Alam Teluk Bintuni which located ±80km from Tangguh site area, which was designated as national park according to Decree of Minister of Agriculture No. 820/Kpts/UM/11/1982 and Decree of Minister of Forestry No. 891/Kpts-II/1999.

- ☐ (2) Forests with important ecological value (including primary forests and natural forests in tropical areas)
☐ (3) Habitats with important ecological value (including coral reefs, mangrove wetland and tidal flats)
☐ (4) Habitats of rare species requiring protection under domestic legislation, international treaties, etc.
☐ (5) Areas in danger of large-scale salt accumulation or soil erosion
☐ (6) Areas with a remarkable tendency towards desertification
☐ (7) Areas with unique archaeological, historical or cultural value
☐ (8) Areas inhabited by ethnic minorities, indigenous peoples or nomadic peoples with traditional ways of life (including areas which are used for cultural or spiritual purposes) and other 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 the questions 11 and after.

☒ (1) Involuntary resettlement and/or loss of means of livelihood

There is no involuntary resettlement that planned to be conducted as part of the project. However, loss of means of livelihood is expected to occur as an impact of the project activity. The most affected community is expected to be fishermen from north shore and south shore.

(Number of affected people: more than 500 people; ±370 from north shore and ±170 from south shore)

☐ (2) Pumping of groundwater

(Scale: m3 /year)

☒ (3) Land reclamation, development and/or clearing

Land clearing activity will be done within Tangguh LNG site property fence.

(Scale: maximum land clearing is 500Ha; with max. 490Ha of lowland forest area and max. 10Ha of mangrove area)

☐ (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) of the questions 9 and their scale serve as basis for executing an ESIA for the project?

☐ They do ☒ They do not

☐ Others (Please specify)

Q11. Will the value insured by NEXI in the export, loan or investment project be equal or less than 5% of the total project cost, or 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 the questions 12 and after.

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

(Yes / ☒ (No))

If you answered "Yes", it is not necessary to reply to the 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 the 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) Manufacturing and transport of toxic or poisonous substances regulated by international treaties, etc.
- ☐ (12) Thermal power
- ☐ (13) Nuclear power
- ☐ (14) Hydro power, 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 hotel, 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.

Scale of the project:

The Train 3 Expansion onshore facilities will utilize the existing 3,600ha Tangguh LNG site on the south shore of Bintuni Bay, Papua Barat.

Facilities include:

- One additional natural gas liquefaction train (Train 3) with capacity of 3.8 mtpa
- Steam turbine generators (STGs) provide electricity (3 x 26 MWe).
- A new integrated onshore receiving facility (ORF)
- A new Integrated Condensate Stabilization Unit
- New marine loading facilities for LNG and HC condensate, including new Boil Off Gas recovery compressor integrated with existing system.
- Hydrocarbon disposal, waste water treatment and utilities (steam and power generation, fuel gas, air and nitrogen, water systems, and waste water disposal)
- Integrated waste management facility
- Infrastructure to support operations and logistics
- Accommodation for the associated increase in the temporary workforce (during construction) and permanent workforce (during operation)

Offshore gas production facilities will also be developed.

Facilities include:

- Two offshore platforms (ROA and WDA)
- Two subsea pipelines
- Future offshore development (to be discussed)

According to Decree of Minister of Environment No. 05 of 2012 regarding Type of Business/Activity Plan that Require an Environmental Impact Assessment (AMDAL); LNG plant establishment with production scale of ≥ 550 MMSCFD (equivalent to ≥ 3.8 mtpa) is categorized as activity that requires an Environmental Impact Assessment (AMDAL).