PRE-BID MEETING

ENVIRONMENTAL IMPACT ASSESMENT (EIA) STUDY

FOR BETANO REFINERY PROJECT

ITB/TG/015/002

DILI, 05 AUGUST 2015

Outline

1. Introduction
2. Objective EIA Study
3. Project Description
4. EIA Study Plan
5. EIA study Deliverables
6. Technical Evaluation Criteria

1. Introduction

- TIMOR GAP, E.P. is Timor-Leste's National Oil Company which was established in 2011 under the Decree Law No. 31/2011. Its main objective is to act, in conducting business within the petroleum and gas sector both Onshore and Offshore and national to international.
- The Betano Refinery will be the first refinery in Timor-Leste. The objective of the Refinery is to turn the self-own crude to finished petro products for Timor-Leste domestic fuel demand. The project will provide energy security and add value to raw crude oil sale
- The Environment Impact Assessment (EIA) study project as part of the requirement of the GoTL Decree Law No.5/2011 on "Environmental Licensing".
- The project has approval by National Directorate of Environment (NDE) as **Category A Project**
- **ITB Announce\Appendix IV - Scope of Work (EIA Flow Chart for Category A).pdf**

2. Objective EIA study

- To identify the nature and extent of major environment impact
- To identify significant environment impacts (both positive and negative)
- To identify social and economic impacts that resulted from the proposed project
- To identify the qualitative environment cost and benefits
- To recommend mitigation measures.

3. Project Description

There are 2 components

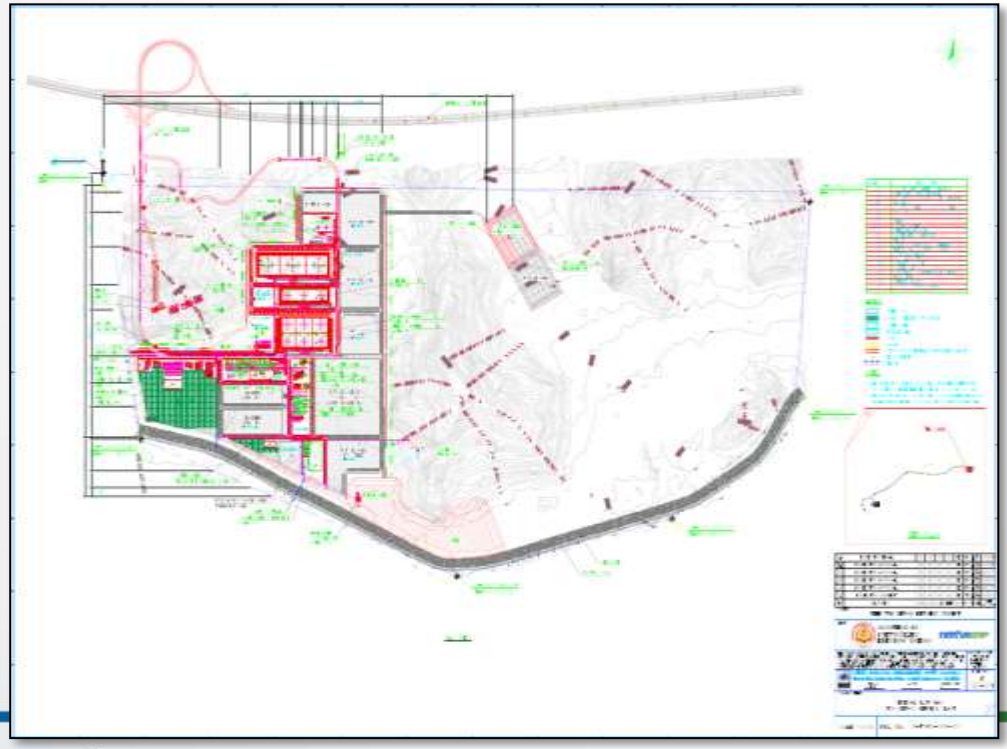
1. **Component 1 – Betano Area**

a. Refinery Plant

- Feedstock : Bayu Undan Condensate
- The capacity refinery 30 KBD, critical equipment is designed 40 KBD
- will produce: Diesel, Naphtha -/+, Gasoline & LPG

b. Water Supply System

The source water for operation from the Quelan River thought 10”/d of underground pipeline



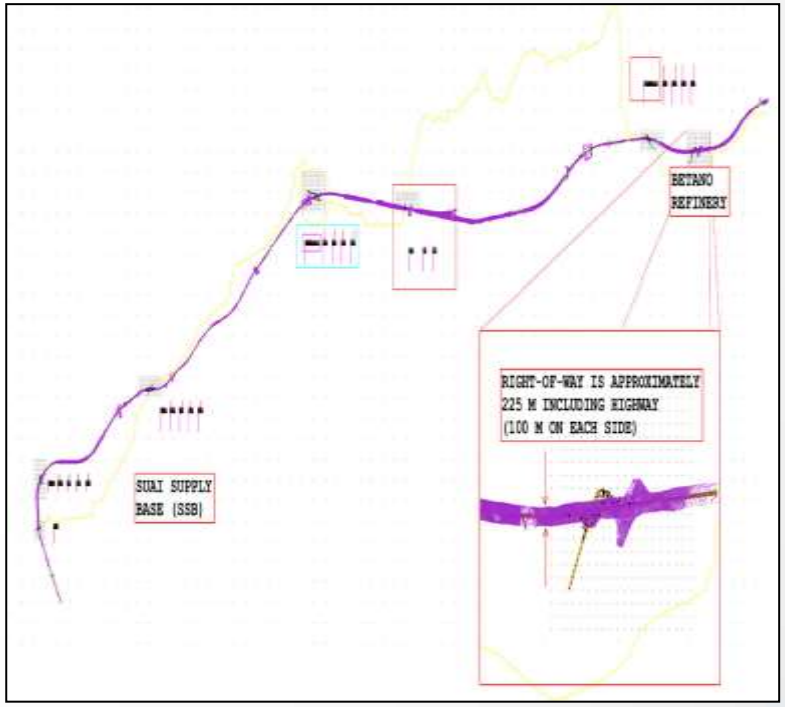
Project Description...*Con'd*

c. Nova Betano

A new city, Nova Betano will contain several land uses: offices, commercial areas, Hospitality areas, single & multiple family residences, etc. Nova Betano will resettlement area of Refinery

2. Component 2 – Pipeline Route Betano Suai

There will be pipelines to transport the condensate & Products Connecting refinery in Betano & Jetty facility in Suai Supply Base



4. EIA Study Plan

a. Previous Study

No	Study	Consultant	Area Encompasses
1	Front End Engineering Design (FEED)	Toyo Thai -Thailand	Refinery plant - Betano; Suai Jetty and Tank Farm - Suai
2	Water Supply System	ATT - Thailand	Quelan River - Betano
3	Land Development	ATT –Thailand	Refinery Plant - Betano
4	Topography	KWK -Timor Leste	Refinery plant - Betano
5	Soil Investigation	Geotechnical-Timor Leste	Refinery and Nova Betano - Betano
6	Earthquake studies	Rimes – Thailand	East Timor, but greater attention on the South Coast
7	Tsunami studies	AIT – Thailand	South Coast Ocean
8	Strategic Environment Impact Assessment (SEIA)	Worley Parsons	Refinery Plant and Nova Betano - Betano
9	Preliminary, Detailed Engineering Design, Environmental and Social Economic Assessment for Highway Roads from Suai to Beaço (Environmental Study)	PT.Wirama Karya- Indonesia	Highway Road from Suai to Beaco
10	EIA for SSB & EMP	Worley Parsons	Suai

4. EIA Study Plan…*Con'd*

b. EIA Study Area

- Betano Refinery Plant, the refinery site is approximately 230 hectares of land
- Water Supply System, The source of water for the operation of the refinery is approximately 10 km away from the refinery
- Nova Betano, The new petroleum city, Nova Betano, is approximately 1,190 hectares of land and located about 7 km North West of the refinery.
- Condensate and products pipeline from Suai- Betano, The pipelines for both condensate and products between Betano and Suai will run along the proposed highway where Suai is approximately 78 km

c. Public Consultation

Project team recognizes the importance the public consultation to the community and other relevant parties affected by proposed project, for the assignment & preparation for EIS & EMP.

4. EIA Study Plan…*Con'd*

d. EIA scope of Work

- Carry out detailed impact assessment for the various components/aspects that are likely to be affected by the proposed project during the project lifecycles including air quality impact assessment; health impact assessment; waste management including treatment type for all kind of wastes generated by the proposed project;
- Propose mitigation measures to avoid, reduce and mitigate all the adverse impacts generated by the proposed project;
- Design appropriate monitoring measures for the identified impacts and calculate the cost estimate for the monitoring system;
- Carry out any other impacts and aspects deemed necessary to meet the minimum requirement of the Decree Law No.5/2011 of Environmental Licensing
- To provide clarification and review the EIA study, if Necessary, as requested by NDE after delivery of the EIS & EMP documents, expected to be 91 days

5. EIA study Deliverables

No	Type of deliverables	Project Timeline	Responsible
1	Submit **Four Draft Progress Reports** of the EIS and EMP for each Project Component (1 and 2) to TIMOR GAP, E.P. for review and comments.*	Two and a half month of the project execution (Mid-December 2015)	Consultant and TIMOR GAP, E.P.
2	Submit **Four Separate Final Reports** for each Project Component (1 and 2) of the EIS and EMP for: 1. TIMOR GAP, E.P. acknowledgement (one hard copy only) 2. NDE (in both soft and one hard copy) to be reviewed and approved	End-December 2015	Consultant and TIMOR GAP, E.P.
3	Obtaining **Two Separate Environmental License** for Project Component 1 and 2	End of March 2016	Consultant and NDE
4	4.1 Deliver Four Final Reports of EIS and EMP for each Project Component to TIMOR GAP, E.P. in form of 5 hard copies and 1 soft copy. 4.2 All the primary data and data from any secondary source used during the EIA study shall be made available to TIMOR GAP, E.P.	End of March 2016	Consultant

Summary of project timeline

SUMMARY												
No	Year	2015 - 2016										
	Month	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	ITB Preparation												
2	Procurement Process												
3	Project Execution												
4	Submission of Final Report												
5	Obtaining EIA License												

6. Technical Evaluation Criteria

I. Technical Competence & Expertise of the Firm

- Company Profile (Experiences, Skill & Knowledge in Similar Work Nature and/or relevant experiences in the region)
- Nominated work to the specified standard's or has acceptable Internationally recognized standards
- Financial resources (Liquid assets, bank deposit, lines of credit)

II. Key Personnel

- Project Manager (5-7 years experiences)
- Chemical Engineer (3-5 years experiences)
- Hydrologist (3 -5 years experiences)
- Ecologist/ Zoologist (3- 5 years experiences)
- Environmentalist (3-5 years experiences)
- Quality Safety & Occupational Health Engineer (3- 5 years experiences)

The relevant document of key staff must be attached such as: an update CV, Diploma and other relevant certificate.

6. Technical Evaluation Criteria... *Cont'd*

III. Methodology & Execution Strategy

- Overall & Detailed Execution Plan
- Work method statement encompasses the requirement of the investigations
- Suitability and availability of the equipment nominated for the work

IV. Local Development

The consultant should be provide their method and plan on the local content or local participant

Thank you
Q/A