



REPUBLIC OF INDONESIA
MINISTRY OF NATIONAL DEVELOPMENT PLANNING/
NATIONAL DEVELOPMENT PLANNING AGENCY


PUBLIC PRIVATE PARTNERSHIP

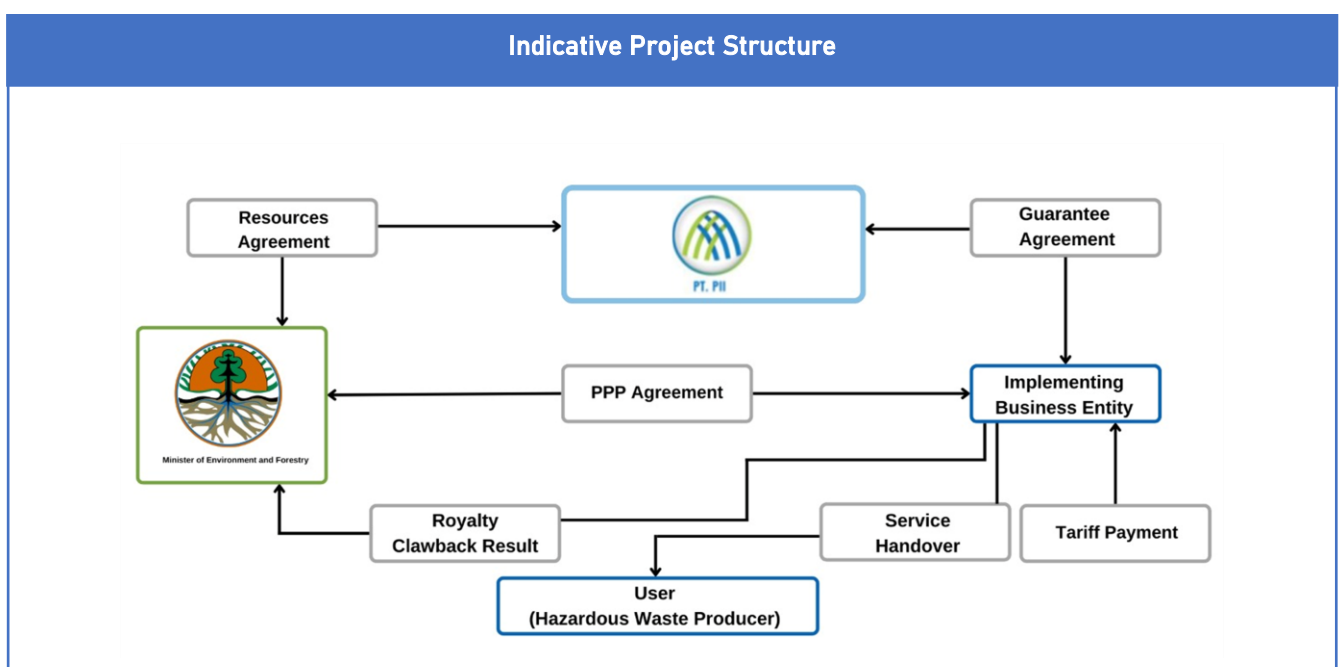
INFRASTRUCTURE PROJECTS PLAN IN INDONESIA

2022

Integrated Hazardous and Specific Waste Management Facility in Sumatera

Location : North Sumatera Province

Sector : Waste Management	Sub-Sector : Hazardous Waste Management
	<p>Description: This project aims to develop the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area with PPP scheme. The project scheme implemented will be build-operate-transfer. The proposed location for this project will be at Simalungun Regency, North Sumatera (indicative option).</p> <p>Estimated Project Cost: USD 69.08 Million</p> <p>Financial Feasibility: IRR : 15.7% NPV : USD 32.91 Million</p> <p>Estimated Concession Period: 10 years</p>
<p>Government Contracting Agency: Minister of Environment and Forestry</p> <p>Type of PPP: Solicited</p> <p>Return of Investment: User Charge</p>	



Project Digest

Project Title	Integrated Hazardous and Specific Waste Management in Sumatera
Government Contracting Agency	Minister of Environment and Forestry
Implementing Agency	Directorate General for Solid Waste, Hazardous Waste and Hazardous Substance Management
Preparation Agency	Directorate General for Solid Waste, Hazardous Waste and Hazardous Substance Management (National Development Planning Agency Facilitate the OBC)
Project Cost	USD 69.08 Million
Estimated Concession Period	10 years
Location	Simalungun Regency, North Sumatera

1. The Opportunity

1.1. Project Background

The types of industrial waste that often cause environmental problems and are difficult to treat are those that categorize into hazardous and toxic materials (Bahan Berbahaya dan Beracun / "B3"). To process this waste, a high-quality technology is required that will affect on more expensive investment and operational costs. Many industries have not been able to do their waste treatment because of these constraints, and it is feared that some industries dispose their waste carelessly. B3 waste, when it discharged directly into the environment, has the potential to cause adverse impacts and will accumulated in nature so that the levels become increasingly significant.

To achieve B3 waste management that could be done collectively and efficiently, the government needs to develop an infrastructure facility called B3 Waste Management Center. For the first step, B3 waste generated from industry will be separated from other non-B3 waste, and it will sent to the B3 Waste Management Center. In this facility, B3 waste will be sorted into recyclable and non-recyclable materials, so that each material can be processed using the right method. B3 Waste Management Center needs to be built on a location that meets specific technical requirements so that the risk of pollution impacts can be minimized. Considering the substantial risks posed by B3 Waste, the government is trying to manage B3 Waste in a comprehensive, integrated, and sustainable manner. Therefore, the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area is developed.

1.2. Project Description

The development of the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area with PPP scheme aims to manage hazardous and specific waste, including storage, collecting, transporting, processing, utilization, and stockpiling, as elaborated on the Project Technical Specification. The Business Entity will receive a return of investment in the form of user charge, during the 10 years of cooperation period. The project scheme implemented will be build-operate-transfer.

1.3. Project Objectives

This project objectives are as follow:

To prevent and mitigate the environmental pollution/damage caused by the hazardous waste and the restoration of environmental quality that has been polluted, so that it is in accordance with its original function;

1. A comprehensive, integrated and sustainable management of hazardous waste;
2. Accelerating the procurement of the Hazardous Waste Management and Specific Waste on a large scale

2. Business Entity's Scope of Work

The business entity shall be responsible for the management of hazardous and specific waste, including storage, collecting, transporting, processing, utilization, and stockpiling, as elaborated on the Project Technical Specification during concession period. The project scheme implemented will be Design-Build-Finance-Operation-Maintenance-Transfer.

However, considering the land availability, potential location of users, and existing transportation business, it is necessary to reassert the following in carrying out the finalization of the scope of services:

1. Transportation activities are only from the Transfer Station.
2. The possibility of carrying out the transportation activities in accordance with the licenses issued by the Regional Government.
3. The possibility of land being provided by the Regional Government for the use of Transfer Station in each service area, so the services provided by Business Entity in the Project did not include the provision of the Transfer Station.
4. The possibility of the inclusion of a specific waste (e-waste) into one of hazardous waste to be managed.

3. Technical Specification

The technical specifications for this project are as follows:

No	Item	Specification
1	Storage	The activity of temporarily storing the hazardous waste carried out by the hazardous waste producers
2	Collecting	Collecting hazardous waste from the hazardous waste producers before it is submitted to the hazardous waste users, processors, and/or hoarders
3	Transporting	Transporting hazardous waste from the waste collector or producer to the processing facility
4	Processing	Process to reduce and/or eliminate the hazardous and/or toxic nature of the waste
5	Utilization	Reuse, recycling and/or recovery activities aimed to turn the hazardous waste into a substitute product to a safe material for human health and the environment
6	Stockpiling	Placing the hazardous waste on the landfill facility so it doesn't endanger human health and the environment.

4. Environmental Impact Assessment (EIA/AMDAL) Findings

The Project falls under the 'Hazardous Waste management service industry which conducts a combination of 2 (two) or more activities including utilization, processing and/or landfilling of the Hazardous Waste' category, which requires an AMDAL. The AMDAL needed is a Category A AMDAL (if the stockpiling is included).

5. Land Acquisition and Resettlement Action Plan

No land acquisition is needed. The Project will be conducted on a Local Government Property.

6. Project Cost Structure

Estimated Project Cost		USD 69.08 Million
Indicative Debt to Equity Ratio		
- Debt Level		70%
- Equity Level		30%
IRR		15.57%
NPV		USD 32.91 Million

7. Government Support and Guarantee

Government support are in the form of:

- Land provision, central government provides land for construction of the project in Sibaganding village, Girsang Sipangan Bolon, Simalungun, North Sumatera
- Permittance, the government is committed to provide necessary permits for the investors in the implementation of this project.
- Support from central government:
 - Ministry of Public Works and Housing in providing potential access road from main road to the location;
 - National Electric company (PLN) in providing in connecting electricity supply from the grid to the project
- Support in the policy on building an integrated waste management infrastructure.

To mitigate the project's risks from changes in demand risk and shifts in political scenario, government guarantee may be required. In this regard, the level of risk perceived from investors will be determined at market sounding.

8. Contact Information

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