

Expansion Plan of Indramayu Coal-fired Power Plant in West Java, Indonesia

1. Project Overview

Purpose: Electricity Supply for Java-Bali grid by coal-fired power plants (Ultra Super Critical: USC)
with capacity of 2,000 MW (1,000 MW × 2) *JICA's role in this project is only for the 1st Unit, or 1,000 MW

Place: Indramayu Regency, West Jawa
(Proposed project site size for 2 units = 275.4 ha)

Project cost (estimated): Around USD 2 billion (for only 1 Unit)

Project Implementer: Indonesia's state-owned electricity company (PLN)

Financer: Japan International Cooperation Agency (JICA)

Operation Schedule (proposed): Year 2026

Affected people: - Farmers (Paddy, red onion, and other various vegetables)
According to the community¹ = around 1,500 tenants / farm workers to be affected
- Fishing families



2. JICA's Involvement (for the 1st Unit, or 1,000 MW)

1) Preparatory studies (2009-2010)

2) Engineering Service (E/S) Yen Loan (Loan agreement concluded in March 2013)

= Support the consulting service

(Basic design, tender assistance, construction supervision and environmental monitoring etc.)

= Loan amount = 1,727 mil Yen (USD 15.7 mil) (around 620.2 mil Yen has been disbursed as of Nov. 2019)

* The Japanese government applied the special condition "Yen Loan for Climate-friendly Finance" for this E/S loan, which was denounced globally in COP 20 (2014).

3) Technical Cooperation Assistance (Dispatched an expert in 2016)

= Support PLN to develop the Land Acquisition Plan (Consulting fee: 17,636,400 Yen or USD 160,330)

4) Main Yen Loan (Still waiting for an official request from the Indonesian government)

3. Main Concerns

1) Impact on climate change

JICA claims that the plant is more efficient and climate-friendly, showing its comparison of CO₂ gas emission in its preparatory studies

(See the Table). But if the plant (the 1st Unit) is in operational, it will emit more than 5 million ton per year for decades, which is huge threat from the viewpoint of climate issue.

Table 9.4.20 Comparison of performances

Type	Subcritical technology	Ultra supercritical technology
Plant gross efficiency, (%)	38.08	40.16
Capacity factor (%)	80	80
Carbon content in coal (wt. %)	41.79	41.79
Coal Consumption (t/year)	3,970,000	3,752,000
CO ₂ gas emission (t/year)	6,083,200	5,749,200
Reduction of CO ₂ gas emission (t/year)	Base	334,000

Note, Conversion: 1kWh = 3.6MJ

Source: JICA's preparatory studies (2009-2010)

2) No social acceptability among the local community

Local farmers and fishermen are strongly opposing the project as they are concerned about the project impact on their livelihood and health.

3) Illegality

Local community filed a lawsuit to demand the revoke of an environment permit for the project. The district court made the decision in favor of the community and declared the permit as invalid in 2017. Though the higher courts rejected the community's demand, they are preparing another lawsuit to point out the illegality of the project.

4) Severe Human Rights Violations

After the said court decision to cancel the environment permit, the repression to the local community by Indonesian authority has been intensified. Four and three farmers who are opposing the project have been put in jail for 5 to 6 months in 2018 in separate cases, due to criminalization, or the false accusation by the Indonesian authority.

5) Oversupply of electricity in Java-Bali grid

The electricity reserve margins in the Java-Bali grid have already reached around 30 percent surplus. It is highly questionable if the project is necessary, at the cost of local life and environment as well as global climate.

¹ According to JICA, the number of affected landowners is 434, the number of farmers (tenants and farmworkers) is 955, and the number of fishermen is 61.