



5 reasons why Government of Japan should not support Matarbari coal-fired power project (Phase 2)

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Summary:

The Government of Japan is currently considering an Official Development Assistance (ODA) to Matarbari coal-fired power project (Phase 2) in Bangladesh. However, for the following 5 reasons, the Government of Japan should not support the project.

1. Supporting the project is not consistent with the Japan's Long-term Strategy under the Paris Agreement (approved by the Cabinet in June 2019).
2. Supporting the project is not consistent with the Japan's Strategic Energy Plan (approved by the Cabinet in July 2018).
3. The actual reserve margin in Bangladesh consistently exceeds the targeted reserve margin until 2041, therefore there is low demand for building a new coal-fired power plant.
4. Building a new coal-fired power plant is not consistent with the Nationally Determined Contribution (NDC) of Bangladesh.
5. Matarbari coal-fired power project (Phase 1) has not been meeting JICA's Guidelines for Environmental and Social Considerations.

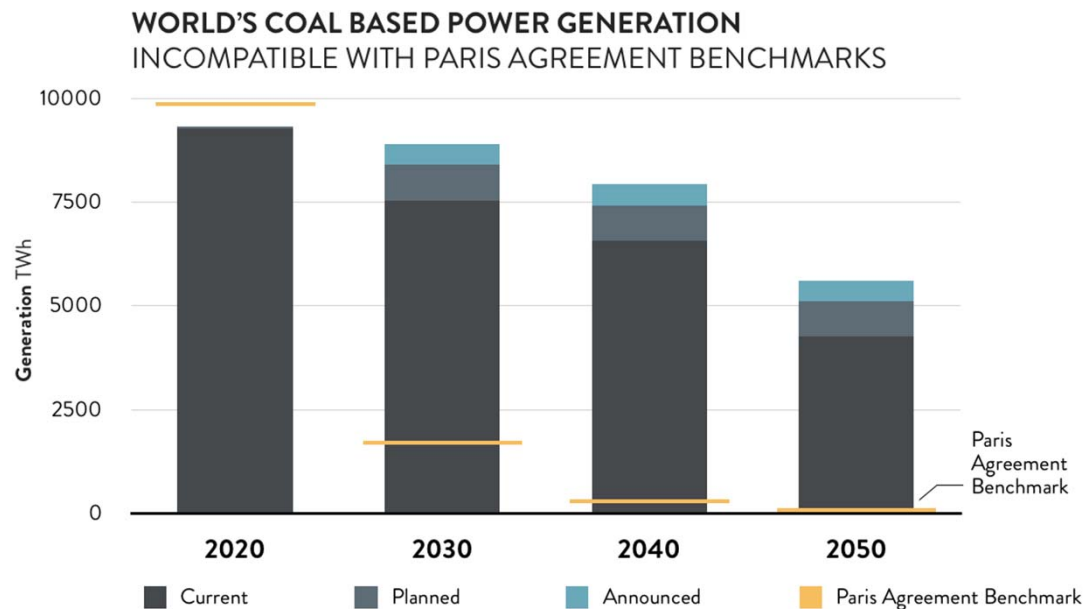
Overview: Matarbari Ultra Super Critical Coal-Fired Power Project



	Phase 1	Phase 2
Generation capacity	Unit 1 and 2 (1200MW in total)	Unit 3 and 4 (1200MW in total)
Total project cost	Approx. 700 billion yen	To be determined
Total Japan's ODA loan	Approx. 500 billion yen (Approx. 300 billion yen out of a total of 500 billion yen is already under contract)	To be determined
Current status	Under construction due for start of operation in 2024	Under consideration of conducting feasibility study in the process of JICA's preparatory survey for cooperation

Reason 1: Supporting the Matarbari Phase 2 is not consistent with the Japan's Long-term Strategy under the Paris Agreement (approved by the Cabinet in June 2019).

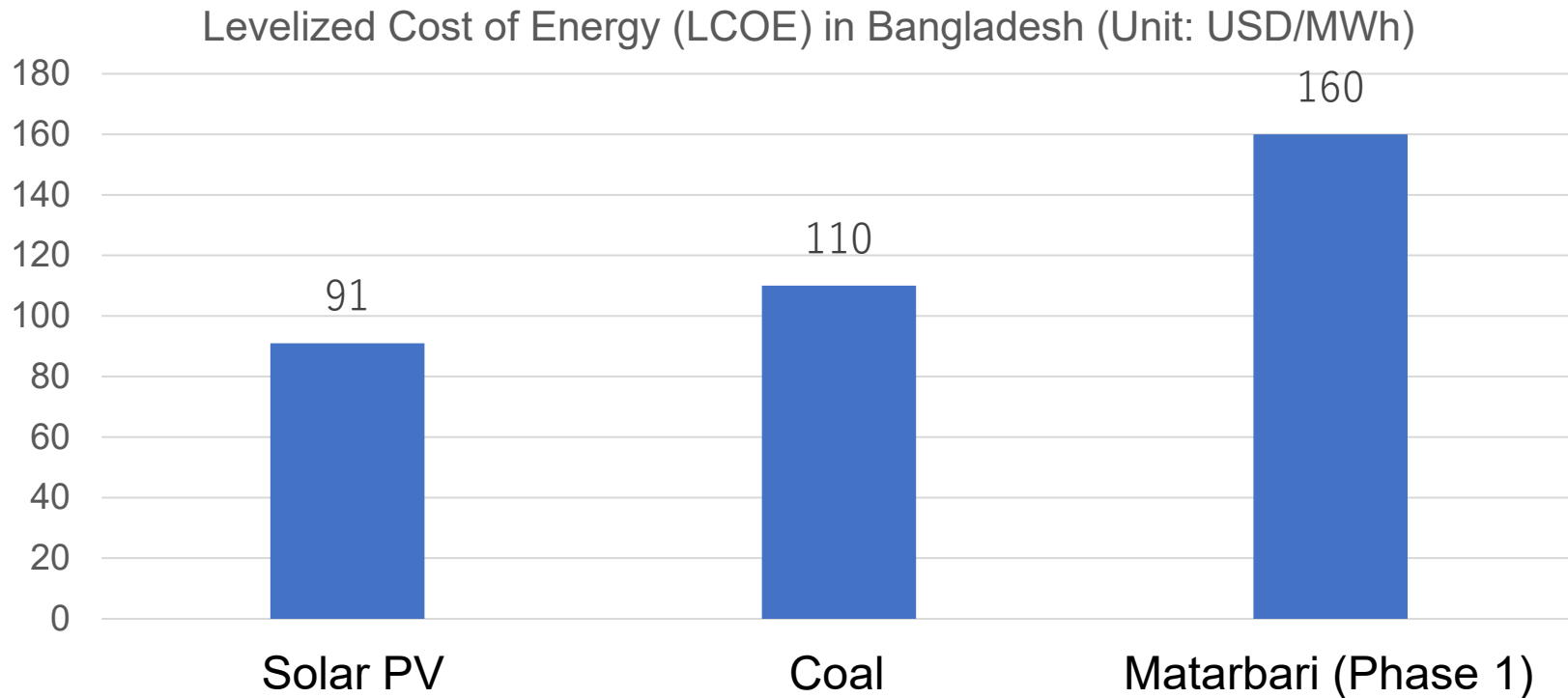
- In Japan's Long-term Strategy under the Paris Agreement (approved by the Cabinet in June 2019), it states that "the Government will promote the development and investment of energy infrastructure abroad in order to contribute to the global reduction of CO2 emissions consistent with the long-term goals stipulated in the Paris Agreement."
- To achieve the Paris goals, it is necessary even for developing countries like Bangladesh to completely stop the operation of coal-fired power plants by 2040. It is obvious that the building of new coal-fired power plants, even with high efficiency next-generation technology, is inconsistent with the Paris goals.



Source: Climate Analytics, Global and regional coal phase-out requirements of the Paris Agreement: Insights from the IPCC Special Report on 1.5° C

Reason 2: Supporting the Matarbari Phase 2 is not consistent with the Japan's Strategic Energy Plan (approved by the Cabinet in July 2018).

- In Japan's Strategic Energy Plan (approved by the Cabinet in July 2018), it states that the government provides assistance to coal-fired power projects "when the nations have no choice but to use coal as their energy source from the standpoint of energy security and economic efficiency." However, in Bangladesh, levelized cost of energy (LCOE) for solar PV is expected to be US\$91/MWh while coal-fired power generation costs US\$110/MWh on average – there is no economic rationality in building a new coal-fired power plant in Bangladesh.



Sources:

Kenji Shiraishi, etc. "Identifying High Priority Clean Energy Investment Opportunities for Bangladesh" (February 18, 2018)
IEEFA, "Bangladesh's coal expansion plans stir criticism" (June 26, 2019)

Reason 3: The actual reserve margin in Bangladesh consistently exceeds the targeted reserve margin until 2041, therefore there is low demand for building a new coal-fired power plant.

- According to Revisiting Power System Master Plan (PSMP) 2016 (published in November 2018) by Ministry of Power, Energy and Mineral Resources, the actual reserve margin is anticipated to reach up to 69%, and the actual reserve margin in Bangladesh consistently exceeds the targeted reserve margin until 2041; therefore, there is low demand for building a new large-scale coal-fired power plant at the moment.

Figure 19: Year-wise Total Demand, Net Generation and Actual Margin-Low Case (2017 to 2041)

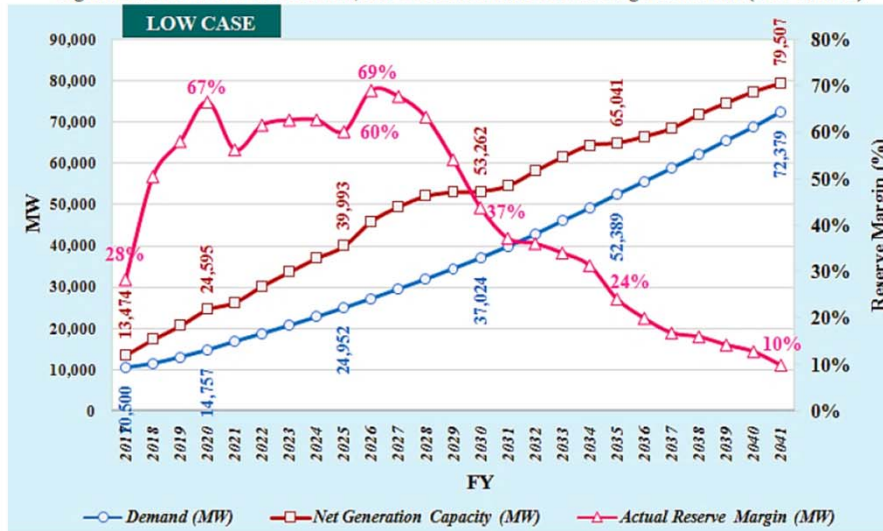
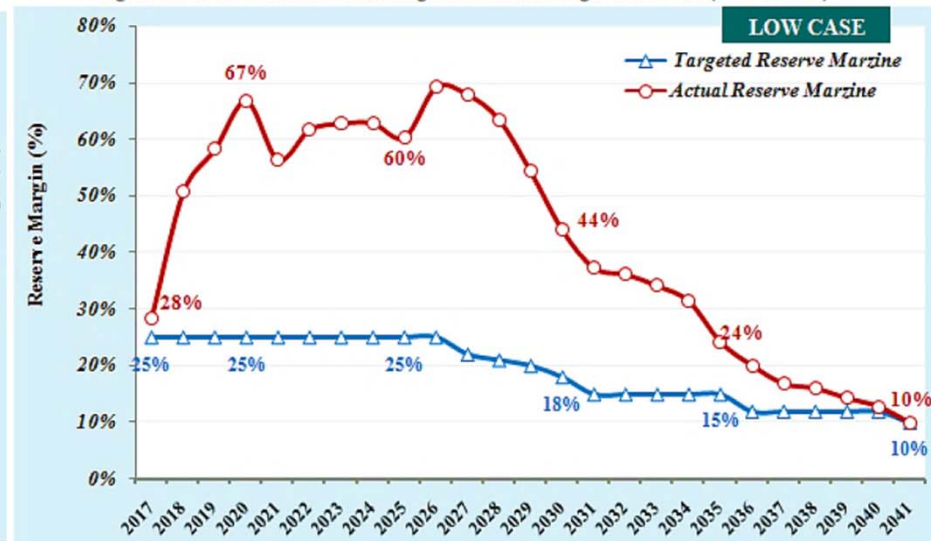


Figure 20: Year-wise Actual and Targeted Reserve Margin- Low Case (2017 to 2041)



Source: Ministry of Power, Energy & Mineral Resources, Revisiting PSMP 2016, November 2018

https://powerdivision.portal.gov.bd/sites/default/files/files/powerdivision.portal.gov.bd/page/4f81bf4d_1180_4c53_b27c_8fa0eb11e2c1/Revisiting%20PSMP2016%20%28full%20report%29_signed.pdf

Reason 4: Building a new coal-fired power plant is not consistent with the Nationally Determined Contribution (NDC) of Bangladesh.

- The government of Bangladesh established Renewable Energy Policy in 2008, aiming to increase the ratio of renewable energy generation to 10% by 2020. This target was also set in NDC, which was submitted to the United Nations Secretariat in 2015.
- Although the Renewable Energy Policy requires to build capacity to generate about 2500MW of renewable energy, in reality, the current generation capacity is less than 330MW. Hence, building a new coal-fired power plant is not consistent with the climate change policy of Bangladesh.

Table 29: Achievements of Renewable Energy Projects

Technology	Off-grid (MW)	On-grid (MW)	Total (MW)
Solar	286.72	39.1	325.82
Wind	2	0.90	2.90
Biogas to Electricity	0.68	0	0.68
Biomass to Electricity	0.40	0	0.40
Total	289.80	40	329.80

Source: SREDA, November 2018.

Source: Ministry of Power, Energy & Mineral Resources, Revisiting RSMP 2016, November 2018
https://powerdivision.portal.gov.bd/sites/default/files/files/powerdivision.portal.gov.bd/page/4f81bf4d_1180_4c53_b27c_8fa0eb11e2c1/Revisiting%20PSMP2016%20%28full%20report%29_signed.pdf

Reason 5: Matarbari coal-fired power project (Phase 1) has not been meeting JICA's Guidelines for Environmental and Social Considerations



Left: alternative houses under construction for displaced local residents; Center: a trace of canal at the center of the north of project site; Right: drainage running from the east of project site to Kohelia River (Photos taken in December 2018)

- In JICA's Guidelines for Environmental and Social Considerations, it states “[p]rior compensation, at full replacement cost, must be provided as much as possible. Host countries must make efforts to enable people affected by projects and to improve their standard of living, income opportunities, and production levels, or at least to restore these to pre-project levels.”
- However, the Matarbari Phase 1 has not been meeting the requirement, for the delay in paying compensation and providing alternative houses. Also, the project is causing a lot of problems including worsening of floods because of a destruction of water channels for agriculture and water gates, damage of community roads, an increase in traffic accidents, and inflow and accumulation of sediment in surrounding rivers, which has significant adverse impacts on livelihoods of local communities. The local communities have been demanding project owners and JICA of solving problems over and over again, however, it is taking quite a long time to improve situations mentioned above.
- Because the Matarbari Phase 2 will use the same land initially acquired at the Phase 1, the Government of Japan should not support the Phase 2 unless the conditions of Guidelines for Environmental and Social Considerations are fully met.