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Policy Brief on the Integrated Energy and Power Master Plan (IEPMP) of Bangladesh

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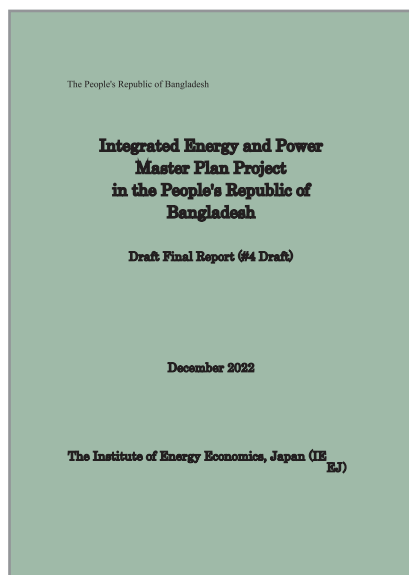
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It ignored the commitment of the honorable Prime Minister, excluded local experts and harmful for Bangladesh's national plan, economic development and Energy Security,

Cancel the Integrated Energy and Power Sector Master Plan (IEPMP)

Formulate a Master Plan involving Local Experts and Ensuring National Ownership



JICA and IEEJ-proposed Integrated Energy and Power Mater Plan (IEPMP)

- Contradicts the Mujib Climate Prosperity Plan;
- Against the declaration of the Honorable Prime Minister
- Technologically unproven
- Destructive for local environment
- Harmful for national economy

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The Institute of Energy Economics, Japan (IEEJ) is currently formulating the Integrated Energy and Power Master Plan (IEPMP) for Bangladesh with assistance from the Japan International Cooperation Agency (JICA). JICA supported the formulation of the Power System Master Plan in 2010 and 2016 with overreliance on imported fossil fuels, especially coal and Liquefied Natural Gas (LNG). In the post-pandemic economic crisis, Bangladesh is facing a serious shortage of fossil fuels. A big number of power plants have to be kept idle due to fuel shortage, although the government spends hard-earned foreign exchange reserves for importing fuels. The problems could have been resolved by spending for Renewables earlier.

There is a serious lack of transparency and accountability in the IEPMP formulation process. Neither JICA nor the Government disclosed the project's budget, which clearly violates the Paris Declaration on Aid Effectiveness. There was no meaningful participation also. 47 Japanese experts are involved directly with the IEPMP formulation process without involving any Bangladeshi expert.

IEEJ & JICA has not organized any consultation meetings in different zones of Bangladesh; energy users, Renewable Energy (RE) developers, small businesses, domestic consumers, ethnic minorities, gender groups and youths have not been consulted in the process. Even the parliamentarians, especially the Parliamentary Standing Committee on the Ministry of Power, Energy & Mineral Resources; Ministry of Environment, Forest and Climate Change; Parliamentary Standing Committee on the Ministry of Planning; and Parliamentary Standing Committee on the Ministry of Information, are kept in the dark. JICA organized two consultation meetings and one dissemination meeting with the participation of CSOs. But none of their recommendations have been reflected in the document.

Due to the overestimation of demand in earlier PSMPs, Bangladesh is currently facing serious overcapacity in the power sector. Currently, the total installed capacity in the power sector is 24,143 MW, while the maximum demand is 15,648 MW. That means 8,495 MW of installed capacity, or 54.3% of the demand, was idle year-round. In the last 12 years, the Government had to pay BDT 1,32,268.20 crore (USD 16 billion) as the capacity charge for these stranded assets and will pay around BDT 23,000 crore (USD 2.12 billion) in FY 2022-23.

In the fourth draft of IEPMP (December 2022), IEEJ estimated the total demand for power as 97 GW (installed capacity 111.14 GW) in 2050, which is further overestimated, according to Bangladesh's energy and economic experts. This over-estimation will put further pressure on the national economy.

The Government of Bangladesh formulated the Mujib Climate Prosperity Plan (MCP) in September 2021, and on 27 February 2023, the Cabinet approved

it to implement. MCPP targets implementing 30% Renewable Energy in the energy mix by 2030, 40% by 2041 and 100% by 2050 towards a decarbonized Bangladesh. The honorable Prime Minister of Bangladesh echoed the target in December 2021 during the UN Climate Conference (COP26).

The Goal of IEPMP is thematically aligned with MCPP through the Goal “a low/zero carbon energy demand/supply system will be established based on the premise of ensuring energy security and economic viability,” while the purpose is “to establish a low/ zero carbon energy demand/ supply system, with energy security and economic viability, by the introduction of policy and technologies for low carbon/ carbon neutral society, towards sustainable development of Bangladesh.”

But the IEPMP (fourth draft) contradicts the MCPP and the declaration of the honorable Prime Minister. It pronounced the target as “Clean Energy in 2041 is up to 40%,” which violates the honorable Prime Minister’s commitment. According to the plan, fossil fuels (led by coal and LNG) will contribute 30.7% of the installed capacity, followed by so-called ‘Advanced Technologies’ (32.8%), where RE will contribute only 17.1% by 2050. In an undisclosed power development plan, IEEJ prescribed keeping 43% fossil fuel in the energy mix by 2050, followed by RE (24%) and unproven Advanced Technologies (15%).

Overreliance on the imported fossil fuel will neither ensure ‘zero carbon’ nor ‘energy security’, let alone ‘economic viability’. The pollution from highly emitting coal will seriously affect the lives and livelihoods of the local inhabitants. Moreover, Bangladesh will have to import expensive coal and LNG by draining its foreign exchange reserves collected with great difficulties to fulfill the power demand. All fossil fuel power plants come with an additional cost called ‘capacity charge’, which will further weigh down the economy of Bangladesh. It is to mention that the RE power Plants run on ‘No Electricity No Pay’ approach. So, the Government does not need to pay any capacity charge for RE power plants.

IEEJ also proposed so-called ‘Advanced Technologies’ to initiate with 20% Ammonia cofiring from 2035, 20% liquid hydrogen from 2037, hydrogen-fired thermal power plants from 2040 and Carbon Capture & Storage (CCS) technology from 2040. These technologies are not proven enough till now. Even developed countries like Canada, the

United Kingdom and the United States refused to accept it. Secondly, these technologies will only extend the life of coal and fossil gas, contributing to destroying our climate. Thirdly, these technologies are 300% more expensive than the current electricity price in Bangladesh; fourthly, Bangladesh will have to import these technologies from energy-exporting countries, harming the national economy.

As per the latest proposal, only 26,230 MW of RE power plants will be installed by 2050, with 37% solar and 63% wind. But, according to the draft National Solar Energy Roadmap, Bangladesh has enough space to install 25,000-40,000 MW of solar energy. The US National Renewable Energy Lab (NREL) estimated the country could get an additional 30,000-60,000 MW of energy from onshore wind only.

It is also to mention that the generation cost of fossil fuel-based electricity is increasing while the cost of RE-based electricity is decreasing by 10% yearly. The current cost of electricity generated from Diesel is BDT 36.61 per kWh, followed by furnace oil (BDT 16.86) and Coal (BDT 13.40). On the other hand, the generation cost of solar power is BDT 13.30, which is reduced very fast from 19.40 in 2017. The cost of solar power will be USD 7.90 per kWh, according to the latest agreement signed.

The installation cost of RE power plants (i.e., Solar Photovoltaics) is also lower than fossil fuel power plants. The construction cost of the coal-fired power plant is USD 1.48 per megawatt, which is USD 0.78 million for fossil gas and only USD 0.63 million for solar power plants.

Therefore, to ensure the economic development, energy security and safe environment according to the Vision 2041, we demand to:

- Cancel the IEEJ-formulated Integrated Energy and Power Master Plan (IEPMP) which is against the national interest of Bangladesh; and
- Formulate our own long-term master plan for the energy sector considering national ownership, energy security, participation of local experts and targets of the Mujib Climate Prosperity Plan.

We also request the Government of Japan to support us for achieving 100% Renewables by 2050, not the corporates and their false solutions.

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