

BANGLADESH LNG UPDATE | Contact [Munira Chowdhury](#)

# Japan's pollution exported to Bangladesh

15 May 2024

Japan's role as a promoter of costly, polluting fossil gas like Liquefied Natural Gas (LNG) to emerging economies, including Bangladesh, is of grave concern for the global community.

The recent G7 [Climate, Energy and Environment Ministers' Meeting Communiqué](#) reaffirmed the commitment to the 1.5-degree Celsius warming goals of the Paris Agreement and supported analysis under the [International Energy Agency's Net-Zero Emissions by 2050 Scenario](#) requiring a reduction of fossil fuel demand of more than 25 percent by 2030.

**We urge you to raise the potential LNG expansion in Bangladesh in your engagements with Japanese officials and companies.**

This briefing will detail:

- the associated economic, sovereign and financial risks around the 4 to 5 times growth of energy supply capacity and the scale of the fossil-fuel buildout proposed under the Japan-authored Integrated Energy and Power Master Plan (IEPMP) for Bangladesh,
- of the potential impact on climate, environmental, health and human rights risks, and
- the potential for a cost-effective, alternative renewable energy future for Bangladesh



Climate activists call on G7 leaders and Japan's Prime Minister Kishida to end fossil fuels in developing countries during the 2023 G7 Summit in Hiroshima, Japan. Photo Credit: (Left) [Nonie Reyes](#) (Right) [FOE Japan, OCI, 350 Japan](#)

# Japan's Master Plan for Bangladesh

Bangladesh's [Integrated Energy and Power Master Plan \(IEPMP\)](#) forecasts demand and supply for the next few decades, with the estimated **energy supply growing 4 to 5 times by 2050, ranging between 111 gigawatts (GW) to 138 GW of installed capacity** under varying economic growth scenarios. One of those scenarios sees up to 63 GW of gas and LNG-fired power and 22 GW of hydrogen-fired power by 2050. This [plan](#) is formulated by the Japanese government's aid agency Japan International Cooperation Agency (JICA) and the energy think tank Institute of Energy Economics, Japan (IEEJ). **The IEPMP has faced major criticism from [energy experts](#) and civil society [nationally](#) and [internationally](#).** Critics point to the Master Plan's over-estimation of future energy demand and heavy reliance on import-based fossil fuels like coal and LNG in the energy mix. Expensive and economically unproven technologies like hydrogen, ammonia, and carbon capture and storage (CCS) are bundled under "clean energy" in the IEPMP.

## LNG build-out poses economic and financial risks

**Market Forces research finds [41 new LNG power plants](#) totalling 37.4 GW proposed to be built in Bangladesh.** The proposed projects would lock in Bangladesh to decades of dependency on imported LNG given domestic [gas](#) supply is limited.

Bangladesh is already [struggling](#) to ensure a stable gas supply for power generation, and is [unable to afford](#) expensive fossil fuel imports, including LNG, due to a US dollar shortage. In fiscal year 2023, the government paid [Taka 171.56 billion](#) (~US\$ 1.5 billion approx.) in [capacity charges](#). [New LNG power plants](#) are expected to add to the capacity charges as they are not operating due to overcapacity. The Bangladeshi government is required to pay a [US\\$454,000 per day](#) capacity charge if Bangladesh's existing LNG import terminals in Chattogram are out of operation. Energy experts [warn](#) if the Japan-backed IEPMP power supply-demand projection is followed, the already existing overcapacity gap of roughly 40% will worsen. Adding more LNG projects would only make the burden on Bangladesh's economy worse. **End users would bear the brunt of rising energy costs and capacity charges with higher electricity bills at a retail level.**

# Carbon catastrophe in Chattogram, Bangladesh

Known throughout Bangladesh for its beautiful beaches and mountainous terrains with deep tropical forests, the Chattogram division of Bangladesh is planned as the site of about 20 GW of LNG to power projects and at least four LNG terminals. These projects threaten to cause immense impacts on **our climate**. The proposed Chattogram power buildout would add **1.3 billion tonnes of carbon dioxide equivalent (CO<sub>2</sub>-e)** to the atmosphere throughout the plants' operational lifetime. This is equivalent to more than **five years of Bangladesh's national emissions**.

More than half of Bangladeshis live in areas deemed **highly vulnerable** to climate impacts. In a scenario where global warming is limited to 2°C by 2050, the entirety of Matarbari and the coastal areas of Chattogram are **projected** to be inundated, demonstrating **unacceptable physical risk** to any infrastructure in the area, including planned gas and LNG projects.

The projects also **spell disaster for the local communities and livelihoods**. The construction of the controversial Japan-backed **Matarbari 1 coal power plant** has already caused loss of fishing, shrimp and salt farming livelihoods, and displaced local communities. The community fears the harm further expansion of fossil fuels would have on their lives.

The Matarbari coal plant's construction **filled up and narrowed the local Kohelia river**, resulting in more than 2,000 fishermen losing their livelihoods, with no compensation.



*"I have no reason to lie, I have the official notice. The [coal plant] authorities did not give us any compensation other than a house to live in."*

**- Rohima Begum,**

Displaced by Japan-funded Matarbari 1 coal power plant

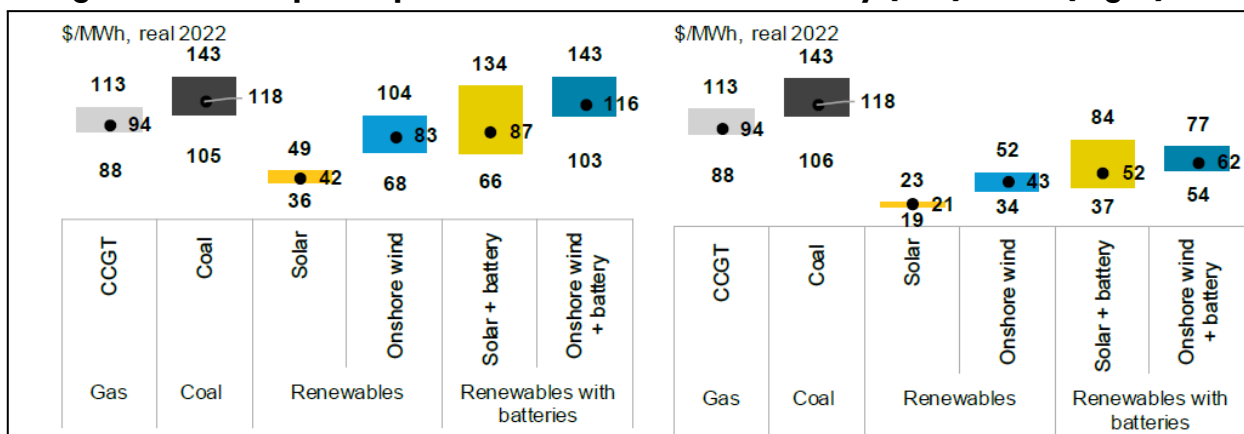
The proposed LNG projects require heavy industrialisation of coastlines, further damaging irreplaceable coastal ecosystems. It would also harm **biodiversity** in surrounding areas. Chattogram is home to at least **26** globally threatened species that live in the hill tracts including the great Asian Elephant, Clouded Leopard and Chinese pangolin, among others.

# Low-cost renewable energy solutions

Bangladesh has **100% electricity coverage** and the potential to meet any new energy needs with renewable sources like wind and solar.

According to **BloombergNEF (BNEF)**, the cost of new onshore wind in Bangladesh is expected to outcompete new gas plants as early as the end of this decade. Onshore wind power paired with batteries, which provides dispatchable and flexible power, would be cheaper than new gas power plants by the mid-2030s. BNEF also finds blending hydrogen with natural gas would not be a cost-effective approach for Bangladesh, and would still produce more emissions than renewable alternatives. The proposed new LNG power plants will have operating lives of approximately **30 years**, locking in Bangladesh to decades of imported LNG dependency. Renewables provide the most **favourable** option for Bangladesh, as dependency on imported, **expensive fossil fuels like LNG** poses sovereign risks, and a burden of increasing electricity prices on end users.

**Bangladesh's new power plant levelized cost of electricity (Left) 2030; (Right) 2050**



Source: [BNEF](#)

**We urge you to raise the potential LNG expansion in Bangladesh in your engagements with Japanese officials and companies.** If you have any questions or wish to meet for a discussion of further details, please do not hesitate to contact [Munira Chowdhury](#).

## Disclaimer

The information provided in this document does not constitute financial advice. The information is of a general nature only and does not take into account your individual financial objectives, situation or needs. It should not be used, relied upon or treated as a substitute for specific professional advice. Market Forces recommends that you obtain your own independent professional advice before making any decisions in relation to your particular requirements or circumstances. This is a non-commercial product for public dissemination only. Not for sale.

## Note

All dollar figures are in USD unless otherwise stated.