

THE TROUBLE WITH GAS IN BANGLADESH

Will the World Bank Group support a sustainable renewable energy transition in Bangladesh?



There is <u>US\$379 billion of new gas</u> <u>infrastructure</u> planned in Asia. At the same time, countries are transitioning away from fossil fuels to meet the goals of the <u>Paris</u> <u>Agreement</u>. <u>Planned gas investments in Asia</u> <u>include \$189 billion of gas-fired power plants</u>, \$54 billion of gas pipelines, and \$136 billion of new liquefied natural gas (LNG) import and export terminals. If built and run at full capacity, these would contribute to pushing the world way beyond 1.5°C of warming.

The World Bank Group (WBG) must heed the conclusion of the <u>International Energy Agency</u>, that "there is no need for investments in new fossil fuel supply in our net zero pathway". It must further acknowledge the role it has played in expanding fossil fuel investments in Bangladesh and apply the "<u>Polluter-Pays</u> <u>Principle</u>" to its existing and future portfolio. This commonly accepted principle demands that those who produce pollution should bear the costs of managing it to prevent damage to human health and environment.

World Bank gas expansion plans for Bangladesh

The World Bank and its private sector arm, the International Finance Corporation (IFC) have substantially supported the development of fossil gas and LNG infrastructure, including through financing gas-fired power stations, pipelines and LNG regasification plants in Bangladesh. Both institutions bear responsibility for Bangladesh's unsustainable and volatile gas-based energy model. In June 2021, the World Bank Group (WBG) released the <u>Climate Change Action Plan</u>, <u>2021-25</u>. In it, the WBG committed to aligning financing flows with the Paris Agreement starting on 1 July 2023.

<u>The World Bank itself recognises</u> that "Bangladesh is extremely vulnerable to the effects of climate change, and measures to buffer shocks and mitigate greenhouse gas emissions are urgently needed". The <u>Systematic Country Diagnostic (SCD) Update for Bangladesh 2021</u> was published on 8 November 2021 and will form the basis of the World Bank's strategy for investing in the country – Bangladesh Country Partnership Framework 2022–26. It contains two worrying references to accelerating the use of fossil gas. First, it claims that "domestic and imported gas is still better than coal". But this is widely <u>contested</u> and contradicts scientific evidence. Fossil gas has devastating health and environmental impacts as well as climate impacts from methane leakages along pipelines and in processing. Methane is a significantly more powerful greenhouse gas (GHG) than CO2. The World Bank must phase out all finance for fossil fuels and support decarbonisation and a transition to sustainable, renewable energy.

The SCD also makes the unsupported claim that there has been an "inadequate exploration of domestic gas resources" in Bangladesh. Whilst Bangladesh has potential unexploited off-shore gas, the impact of exploiting these reserves on the people, environment and climate should mean this option is off the table.

Bangladesh also has considerable potential for sustainable renewable alternatives, including off-shore wind and solar. The World Bank must put its efforts to supporting the government of Bangladesh towards a green recovery and towards net zero emissions.

The World Bank and IFC's role in fossil gas

In 2015, the World Bank funded the <u>Siddhirganj Gas-Fired Power</u> <u>Project</u> at a cost of \$422 million. An <u>environmental assessment</u> showed the plant produced dust, vibrations, emissions, and noise pollution, adversely affecting the health and performance of local school children. The <u>World Bank</u> <u>funded a new school</u> further from the power plant because it recognised these harms.

Alarmingly, the <u>Environmental</u> <u>Impact Assessment (EIA) for this</u> <u>project</u> states that "It was not possible to conduct a power plant



emission modelling due to time constraints". It went further to recommend that the contractor should conduct emission dispersion modelling. It is impossible to verify if this crucial modelling took place as this information is not available for scrutiny. This lays bare the World Bank's apparent disregard for the power plant's operational carbon emissions at the time of project investment.

Whilst Bangladesh has potential unexploited off-shore gas, the impact of exploiting these reserves on the people, environment and climate should mean this option is off the table.

The IFC's long-standing support for Summit Power:

The IFC financed the <u>Khulna gas power plant in 1999</u> through Summit Power, followed by an investment of <u>\$75 million</u> in Summit's Bibiyana II gas power plant in 2015. The IFC considered this investment a "<u>positive signal to other potential private sector players</u> in Bangladesh planning to develop efficient power projects aimed at expanding access to power".

Summit Power is an energy utility company which sources 100% fossil fuels. It is a holding company incorporated in Singapore operating only in Bangladesh. In 2022, its <u>operating assets in fossil gas</u> include one LNG floating regasification unit, two combined cycle gas turbines and ten gas fired power plants. It also operates heavy fuel oil operations. It has no renewable energy projects in its current operations or in its pipeline.

In 2016, IFC's Emerging Asia Fund (EAF) <u>invested \$175.50 million in Summit</u>. This also gave the EAF a seat on Summit's board until <u>it sold its stake to Japan's JERA Co in 2019</u>. The IFC claimed it would continue to be a large lender to Summit. In 2018, IFC had also invested in Summit's Meghnaghat II gas power plant which is estimated to <u>contribute with between</u> <u>3.3% to 6.3% of Bangladesh's total GHG emissions</u> from the electricity sector.

The IFC classified its <u>investments in Summit as high-risk</u> because of potential impacts on air and water quality, including from associated gas pipelines and transmission lines. There is no information on GHG emissions from the new plants apart from for Meghnaghat II.

The IFC also mobilised up to \$136.3 million in equity and debt financing for Summit for the <u>Moheshkhali Floating Liquefied Natural Gas (LNG) project</u> - Bangladesh's first LNG import terminal. Summit received a concession from Petrobangla, Bangladesh's state-owned company, to develop this facility comprising a storage and regasification unit connected to shore by an under sea pipeline. This project increased fossil gas supply in the country by 20%.

The World Bank Group uses a range of lending instruments, including direct project finance, policy lending and technical assistance, and through loans, grants and guarantees to private companies like Summit listed above. It also provides finance through financial intermediary lenders including private banks and infrastructure funds.

Recent Development Policy Finance (DPF) includes a World Bank Bangladesh First Recovery and Resilience Development Policy Credit for US\$250million which went to the Board for approval in March 2022. DPF is non-earmarked finance to a government that may be used for a variety of policies, including the energy sector or other development priorities. The World Bank agrees these priorities with the recipient government, subject to conditions known as prior actions.

This DPF has a stated aim of "improved efficiency of energy transmission [that] will help lower greenhouse gas and other pollutant emissions in the energy sector". However, given that the World Bank still considers gas to be a "transition fuel", energy experts in Bangladesh are concerned that this might open the door to new gas and LNG investments in the context of Covid recovery.

The World Bank supporting the renewable energy transition:

The World Bank should be a key enabler for Bangladesh's <u>transition to renewable energy</u>. This would accelerate economic development, keep energy access reliable and affordable, and improve health and quality of life. This would also support the World Bank to deliver on it's twin goals of poverty alleviation and shared prosperity. Solar energy is abundant, and the <u>World</u> <u>Bank already supports rooftop and utility scale solar</u> with efforts being undertaken to exploit this resource through off-grid and grid-connected solutions. A <u>2018 wind</u> <u>energy study</u> also outlines Bangladesh's wind energy potential.

Against the backdrop of the WBG's investments in gas expansion in Bangladesh, its efforts to help Bangladesh to transition to renewable energy are welcome, but much more is needed.

For example, in December 2021 the World Bank approved a \$500million dollar credit plus a \$15million technical grant for a <u>Bangladesh Electricity Distribution and Modernisation</u> <u>Programme project (P174650)</u>.

This project emphasises increasing the capacity of distribution networks as well as increasing their readiness to integrate renewable energy resources. It highlights the economic benefits of replacing expensive diesel-based self-generation and fossil fuel generation, meeting growing demand, and improving the efficiency and reliability of the power system.

It also aims to increase the share of renewable energy in Bangladesh's energy mix; eliminate fossil-fuel subsidies, invest in battery storage, and focuses on importing renewable energybased electricity from neighbouring countries, including expansion of cross-border transmission.

Bangladesh's Energy Mix

In the 2016 <u>power sector system master plan</u> which is due for revision in 2022, the government sets the primary fuel mix at 70% coming from coal and gas and only 30% from other energy including liquid fuel, renewable, nuclear and other sources.

In 2018, Ramboll, an engineering and consultancy agency, <u>released a gas sector master plan</u> that was sponsored by the World Bank. This concluded there was a large unmet demand for gas in Bangladesh. But the scenarios it developed did not adequately respond to the decarbonisation agenda or predict the price of imported gas and LNG sky-rocketing. <u>LNG costs reached record high levels in 2021</u> forcing the Bangladesh Power Development Board (BPDB) to pay significantly higher fuel costs. The excessive dependency on costly LNG will not only lead to increased carbon emissions but also create unsustainable pressure on the national economy.





Bangladesh Power Development Board (BPDB) Annual Report. HFO = Heavy Fuel Oil, HSD - High-speed diesel.

Source: IEEFA 2021, Examining the cracks int emerging Asia's LNG to Power Value Chain

Bangladeshi energy experts are extremely concerned that the government has engaged the Japan <u>International Cooperation Agency (JICA)</u> to formulate a new integrated energy and power master plan by December 2022. It is unlikely that JICA will make the necessary bold moves to help the government of Bangladesh fast-track its transition to energy security and sustainable renewables. Japan is still expanding coal-fired power overseas, as evidenced by its controversial funding of a new 1,200-megawatt coal plant at Matarbari, Bangladesh. This is in spite of the commitment Japan made at the G7, to end funding for "unabated" coal power overseas by the end of 2021.

Bangladesh's current plan to increase power capacity, based on a switch to expensive imported coal and LNG, is putting the power system on course for deeper financial stress as well as increasing its carbon emissions.

While chair of the Climate Vulnerable Forum (CVF), Bangladesh's Prime Minister Sheikh Hasina commissioned the <u>Mujib Climate Prosperity Plan</u> <u>2030</u>. This forms a framework for investment to support the country to transition to 30% renewable energy by 2030 and set the country on a trajectory towards 100% zero carbon by 2050. The WBG should pay close attention to this plan and support the government of Bangladesh to make the energy transition it requires. Against the backdrop of the WBG's investments in gas expansion in Bangladesh, its efforts to help the country transition to renewable energy are welcome, but much more is needed.

THE WORLD BANK GROUP MUST:



Remove any references to exploration of domestic gas resources and importing LNG as priorities in the planned Bangladesh Country Partnership Framework 2022-26 and support the government of Bangladesh to meet its goal as chair of the <u>CVF countries to achieve 100% renewable energy by 2050</u>



Redesign its country-level interventions in line with a sustainable development approach that emphasises energy security built on locally-sourced sustainable renewable energy



Stop all finance through the IFC to clients and financial intermediaries that are developing fossil gas and LNG infrastructure in Bangladesh



Urgently reorientate its priorities and financing to rapidly scale up the energy transition that leapfrogs fossil gas 'from coal to clean' in Bangladesh, based on the Polluter-Pays Principle

[i] This case study gives a snapshot of some of the ways the World Bank Group has supported the expansion of gas in Bangladesh, and is not a comprehensive list of all World Bank Group finance for gas in the country.



STOP FUNDING GAS

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