

THE END GAME FOR FOSSIL GAS:

How to make World Bank Development Policy Finance align with the Paris Agreement

With case studies of Bangladesh and Senegal



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With case studies of Bangladesh and Senegal

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Cover photo from Getty Images Signature. An LNG tanker docked at Dakar Port, Senegal.

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1.0 Introduction

This report provides a critical analysis of one increasingly important lending instrument of the World Bank – Development Policy Financing (DPF). This is a financing instrument where borrowing countries agree to undertake specific conditions in exchange for budget support loans, grants or guarantees. These form an influential dimension of the Bank's approach to energy sector reform.

The World Bank is still stuck in the fossil era rather than evolving into a climate leader. It is still providing vast amounts of finance through DPF as well as through other forms of direct and indirect finance that support countries to invest in outdated energy models. This in turn is putting increased financial pressure on countries and is leaving debt vulnerable countries with stranded assets.

A low-cost renewable energy future is available that will disconnect countries from volatile gas markets and increase access to energy. The World Bank must ensure that its finance that supports energy sector strategies provides the critical resources that will help countries leapfrog into a new era of sustainable renewable energy.

As the world moves towards decarbonisation and renewable energy technologies become more cost-competitive investments in gas infrastructure will become economically unviable. This will result in significant financial losses for both the governments and private investors involved in these projects.

The World Bank must wake up to the fact that gas is not inherently a "clean" fuel, and its environmental impact can be extreme. **New gas power generation projects are not aligned with the 1.5°C target since forecasted generation from gas power plants already in operation is expected to deliver more emissions that would**

be consistent with a 1.5°C pathway. The International Energy Authority (IEA) emphasised that no new oil, gas, or coal development projects should be approved beyond those already committed as of 2021. The time for action is now!

Gas cannot claim to be a clean source of energy because of methane leakage in the production, processing, and transportation of fossil gas. Even small leaks can negate the climate benefits of burning fossil gas compared to coal or oil. Also, incomplete combustion of gas releases other pollutants such as carbon monoxide and nitrogen oxides, which contributes to air pollution and has adverse health effects.

The World Bank, through their DPF operations, also needs to stop short of financing energy sector strategies that prolong the life of fossil gas. For example, hydrogen blending and co-firing of power stations offer partial emission reductions compared to burning fossil fuels alone, but they fall short of fully mitigating climate change. This approach still produces significant CO₂ emissions, requires costly infrastructure modifications, and diverts resources from fully renewable energy solutions. Moreover, most hydrogen is currently produced from gas, which is carbon-intensive.

This research provides two detailed case studies that demonstrate that DPF is a major loophole that supports the continued expansion of fossil gas, and to demonstrate that fossil gas (composed primarily of methane found underground) and LNG (gas that has been cooled to a liquid state for easier transport and storage, primarily for shipping long distances) are neither cost-effective nor lower carbon than coal and oil when life-cycle emissions of methane and CO₂ are taken into consideration.

2.0 Understanding World Bank Development Policy Finance (DPF):

Development Policy Financing (DPF) is a World Bank lending instrument that provides credits, loans, grants or guarantees to a borrowing country through non-earmarked budget support. It is issued by the International Development Association (IDA), the Bank's low-income country arm, and the International Bank for Reconstruction and Development (IBRD), the Bank's middle-income country arm.

DPF is not earmarked for specific projects, but instead supports targeted policy reforms and provides finance directly to a borrowing country's general budget. This budget support comes with conditions, as each loan contains policy conditions that borrowing countries must fulfil – these are known as Prior Actions. DPF operations tend to focus on areas such as governance, public financial management, social sector policies, and economic management.

According to the World Bank website, between 2015 and 2021 DPF accounted for \$81bn, or 26% of the World Bank's finance and is complemented by Program for Results (PforRs) and Investment Project Financing (IPFs) in the Bank's lending instruments toolkit. It is therefore a very important lending instrument that has far-reaching policy influence, particularly in relation to energy sector reform.

An April 2024 report from Bretton Woods Project: Gambling with the Planet's Future? articulates how energy sector conditionality in DPF from fiscal years 2018 to 2023 has promoted neoliberal reforms in many countries' energy sectors. These reforms aim to separate out power utilities and increase private sector involvement – with recent years seeing a growing emphasis on addressing climate change and decarbonising energy systems. The report questions the feasibility of aligning investor interests with a just energy transition that puts the rights of citizens in Lower and Middle Income Countries (LMICs) at its core.

World Bank DPF also comes under scrutiny from civil society organisations because of inadequate Poverty and Social Impact Analyses (PSIAs), which are essential to understanding the effects of policy reforms on vulnerable populations. The lack of transparency and meaningful community participation in the preparation of DPF operations often leads to decisions being made behind closed doors. This raises concerns about the democratic legitimacy and accountability of the reforms promoted through DPF, as well as the potential long-term negative impacts on the energy sector, the environment and local communities.

2.10 World Bank DPF and the Paris Alignment Sector Note

On 1 July 2023 the World Bank operationalised its Paris alignment methodology. The Paris alignment sector notes that form part of this outline how each financing instrument of the World Bank will align their financing and operations with the goals of the Paris Agreement. The sector note for DPF is not nearly ambitious enough to fulfil the requirements of the Paris Agreement, and this needs to be urgently revised. The World Bank DPF must provide support to countries to transition to zero carbon renewable energy sources such as sustainable wind, solar, and hydroelectric power, which are essential for achieving long-term climate goals and reducing greenhouse gas emissions.

The case studies below which focus on Bangladesh and Senegal articulate how the [World Bank Paris Alignment Method for DPF](#) leaves the door open to fossil gas through Prior Actions (or conditionalities), and how these loopholes need to be closed if the World Bank is to deliver on its commitment to tackle the climate crisis.

Overall, a DPF Prior Action is considered aligned with the Paris Agreement's mitigation goals when it actively contributes to decarbonisation or leads to negligible greenhouse gas (GHG) emissions, which is a positive overarching goal, but the loopholes are also clearly defined:

Loophole 1: The World Bank Paris Alignment Method for DPF considers a Prior Action to be Paris aligned if it:

“generates significant GHG emissions but is in line with the country's long term decarbonisation pathway and has a low risk of locking in carbon-intensive patterns”.

This is at odds with the letter and the spirit of the Paris Agreement and the objective set at United Nations Climate Talks, COP28, in Dubai 2023 to phase out fossil fuels. Overall, the Paris Alignment methodology is compromised by its commitment to support (rather to raise ambition within) countries' Nationally Determined Contributions (NDCs). These are climate action plans submitted by countries under the Paris Agreement to outline their efforts to reduce national emissions and adapt to the impacts of climate change; however, when taken collectively, the current NDCs put the world on a trajectory that could result in a significant increase in GHG emissions, far exceeding the limits needed to keep global warming well below 2°C, ideally 1.5°C.

In this way, the methodology allows for DPF to support the expansion of fossil fuels that would lock countries into carbon-intensive energy models instead of prioritising mitigation ambition and a just and sustainable renewable energy transition.

Loophole 2: The Paris alignment method stipulates that:

“a significant increase in GHG emissions may be allowed for if there are no viable alternative pathways with lower GHG emissions that achieve equivalent Development Objective(s), accounting for the specific country and sector context, and as long as the risk of creating significant and persistent barriers to transition is low”.

This is concerning, firstly because [DPF Operations Policy](#) and Paris Alignment sector notes are ambiguous about the need for rigorous alternatives that could identify viable alternative pathways to sustainable renewable energy, and there is a lack of transparency in this area to enable accountability. Also, the World

Bank emphasises the question of 'viability' without defining it methodologically. This creates an accountability loophole because civil society cannot hold the World Bank to account on it if the definition of 'viability' is open to interpretation.

Secondly, the narrative of "lower GHG emissions" can still be synonymous with the expansion of gas and liquefied natural gas (LNG) and does not necessarily imply a sustainable renewable energy transition. Therefore, DPF Prior Actions or loans for a country's energy sector may fail to adequately consider or promote alternative energy sources and sustainable energy transitions. This could perpetuate a reliance on fossil gas and delay the adoption of cleaner, renewable energy technologies that are essential for addressing climate change and achieving sustainable development goals.

Loophole 3: The fungibility of capital provided by DPF means that there are significant complexities in tracking financial flows once they are disbursed to a country. So DPF, including technical assistance for the energy sector may be used by governments to finance fossil fuels, including upstream coal and oil, or gas pipelines, if adequate ring-fencing is not applied.

Loophole 4: The Paris Alignment Methodology highlights the risk of carbon lock-in, but still allows for the expansion of gas and LNG. Given the complexity of major LNG projects it is not unusual for a project to take five to ten years from inception and first gas delivery. So DPF that supports LNG infrastructure now is building infrastructure that may not come on stream until 2034, with an expected life span of functioning and emitting carbon of 20 to 30 years. But even by the time it is built, sustainable renewable options such as wind and solar will be far outstripping gas as cost effective market leaders. This will inevitably lead to stranded gas and LNG assets in countries that can ill afford them in their energy mix.

2.2 World Bank DPF and Fossil Gas

As we will see in the two case studies below about Bangladesh and Senegal, when the World Bank supports a country's Energy Sector Strategy or its Gas to Power Strategy, DPF operations can distort energy markets and encourage the continued production and consumption of fossil gas. Gas can therefore become an increasingly prominent component of the country's energy mix, displacing investment in sustainable renewable energy, and undermining transition to new jobs and revenue offered by modern, renewable energy systems.

DPF operations in these countries have also promoted policy reforms that support fossil fuel industries or infrastructure through deregulation or privatisation measures. DPF operations are currently being used to de-risk investments, provide financial guarantees, or support efforts to enhance the attractiveness of LNG projects to private investors in several countries. This has in some cases resulted in the relaxation of environmental regulations and the promotion of fossil fuel extraction and production at the expense of renewable energy alternatives.

DPF should prioritise support for developing countries to shore up their own decarbonised development pathways, shifting off fossil fuels or leapfrogging directly to sustainable renewable energy.

It is essential that in assessing potential DPF support for a country's energy sector, the World Bank prioritises concerns about the environmental and social impacts of fossil gas development, including the risk for locking in carbon-intensive infrastructure, and the urgent need to target limited public finance to support sustainable renewable energy and energy efficiency.

2.3 An Energy Transition for Gender Equity

The gas sectors in [Bangladesh](#) and [Senegal](#) are marked by extremely variable and high prices, and environmental damage. Both countries have experienced record-high prices for energy and this has been exacerbated by global LNG market volatility. This economic strain is felt most acutely by the country's most vulnerable populations, including women, who often [bear the brunt of increased living costs](#) and resource scarcity.

DPFs for Bangladesh and Senegal need to identify opportunities to develop renewable energy sectors that offer more sustainable and equitable economic opportunities for women. Renewable energy projects have the potential to provide non-toxic, clean, and more stable sources of power while also offering employment opportunities in new sectors, thereby contributing to a more gender-equitable economic landscape. [The International Renewable Energy Agency \(IRENA\) highlights](#) that the renewable sector employs a larger percentage of women than traditional energy industries. Specifically, women represent 32% of the workforce in renewables, versus 22% in traditional energy sectors like oil and gas. This is significant, considering the broader socio-economic benefits of growing employment in the renewable energy sector, which is expected to increase from 10.3 million jobs in 2017 to nearly 29 million by 2050.

The energy transition not only promises cleaner, more stable sources of power but also fosters gender equity by opening up diverse employment opportunities along the value chain, requiring different skill sets and talents.

Moreover, DPF for smaller-scale, [devolved renewable energy solutions](#) can empower women by providing access to electricity needed for small businesses, lightening the burden of domestic work, improving girls' education, and improving night-time safety. However, this cannot be realised if DPF continues to be channelled into fossil fuels.

3.0 Bangladesh

Bangladesh's historic contribution to global greenhouse gas emissions is very small, but its emissions are **currently growing rapidly**. Meanwhile the **severe impacts of climate change** on the nation underscore the broader necessity for all countries, particularly industrialised nations, to drastically reduce their carbon emissions. At the same time, Bangladesh must continue to advance its energy policies towards renewable sources, and this is the role that DPF could play more effectively to enable a more rapid energy transition. This shift not only aligns with global efforts to combat climate change but also enhances Bangladesh's own energy security and resilience against climate vulnerabilities.

3.1 DPF and Gas in Bangladesh

World Bank DPF has played a significant role in shaping policy reforms in Bangladesh's energy sector in the context of **Bangladesh's on-going energy sector reform** and stabilisation efforts.

Bangladesh's energy sector is facing significant challenges, including dependency on fossil fuels, inadequate infrastructure, and inefficiencies in energy production and distribution. To address these issues, the **World Bank, through DPF, has required reforms** aimed at enhancing efficiency, liberalising the energy market, and promoting the use of cleaner energy sources. But these reforms have sometimes prioritised **the development of gas projects** aimed at expanding the country's LNG import capacity, including the development of LNG terminals and related infrastructure, because of the **false narrative** that it is a cleaner alternative to coal. Gas is overtly promoted as a transition fuel, including in



World Bank:
STOP locking
Bangladesh into
fossil gas

the [World Bank Group's Emerging Markets Compass](#) where it claims "gas-fired power plants in combination (with renewables) will generally be the lowest cost, low-carbon solution to the growing energy requirements of emerging markets".

Gas is [misleadingly framed](#) as a stepping stone to solar and wind power, for which Bangladesh holds considerable potential. Investments in natural gas infrastructure, such as pipelines and LNG terminals, create long-term dependencies that can delay the transition to truly renewable energy sources. Once built, these infrastructures are likely to be used for decades, potentially slowing down the adoption of renewables.

[Bangladesh has traditionally relied on gas](#) as its main source of electricity generation, making the energy transition challenging. Gas made up 59% of Bangladesh's energy supply in 2020 and fuels more than two-thirds of electricity generation. However, the country's reserves of gas are declining, while electricity demand is increasing. In 2022, the government estimated that domestic gas supplies would last for less than 11 years. In 2016, the government set out a plan to address this shortfall, laying out a vision for a huge growth in imports of LNG. The plan set a target of starting LNG imports in 2019 at a level that would meet 17% of the country's gas demand, rising to 40% in 2023 and 70% in 2041.

[Bangladesh's dependence on imported fossil gas](#) meant it was severely impacted by the war in Ukraine, as richer European countries rushed to buy more liquefied fossil gas in international markets, driving up prices. As a result, the current account deficit increased from -1.1% of GDP in 2020–21 to -4.1% in 2021–22, and foreign exchange reserves fell from 5.8 months of imports in 2020–21 to 4.6 months in 2021–22.

Bangladesh's energy sector is at a critical juncture, facing the dual challenge of ensuring energy security and transitioning towards a more sustainable and self-reliant energy mix. However, the Paris

alignment DPF sector note allows for an emphasis on LNG imports and planned expansions of gas infrastructure, as highlighted in the [2023 budget speech in the Bangladesh parliament](#). This raises concerns about the alignment of these policies with Bangladesh's overarching development goals, and with the World Bank's own COP28 commitment to transition away from fossil fuels.

It is notable that [Bangladesh nearly tripled its coal-fired power output](#) in 2023, at the expense of cleaner fuels, as the government struggled to pay for costly LNG imports, furnace oil and diesel imports because of shrinking dollar reserves and a weakening currency.

3.2 Bangladesh First Recovery and Resilience Development Policy Credit (DPC)

In 2022, the World Bank approved a \$250m loan for Bangladesh entitled "[Bangladesh First Recovery and Resilience \(Development Policy Credit\) \(DPC\)](#)". The "[Bangladesh Second Recovery and Resilience DPC](#)" is in the approvals pipeline. The total value of these two DPCs is \$750m.

The first Development Policy Credit (DPC) aimed to provide support for the eighth Five-Year Plan (FY21/25) and bolster policy reforms "to ensure a robust recovery from the COVID-19 pandemic, to sustain economic growth, and to enhance resilience to future shocks, including climate-change". The DPC programme has two development objectives:

- i. strengthening fiscal and financial sector policies to sustain growth;
- ii. enhancing resilience to future shocks, including climate change.

This case study focuses on investment incentives in the World Bank's policy reforms supported by this DPC programme.

◎ **Tariff Policy Reform**

This DPC encourages the simplification of import and export tariffs to enhance international competitiveness. One of the Prior Actions in the DPC required the Bangladesh Ministry of Commerce to approve a National Tariff policy to reduce tariffs and simplify the tariff structure. This duly took place in August 2023 when [Bangladesh formulated its first tariff policy](#). This was aimed at improving participation in global value chains and attracting more investment.

The policy does not yet have an action plan yet which would determine how the tariff will be rationalised. However, the customs duties for LNG and coal are currently at 0%. It is critical then that, given the push for LNG utilisation and the presence of the Matabari coal-fired power plant in the Eighth Five Year Plan, that the forthcoming action plan and rationalised tariffs avoids lowering or removing tariffs for materials for gas and coal power production. The emphasis must be on lowering tariffs for renewable energy components to help make renewable energy infrastructure more competitive.

To ensure balanced economic growth aligned with environmental sustainability goals, tariff policy reforms must include specific provisions that equally or more favourably target renewable energy technologies to prevent a disproportionate flow of investments into fossil fuel-based projects.

◎ **Transitioning to a Low-Carbon Growth Model**

The directive in Prior Action 9 of the DPC to that resulted in the [cancellation of 8,451MW](#) of planned coal-fired power generation investments aligns with [Bangladesh's Nationally Determined Contributions \(NDCs\) 2021](#)¹, and marks an important pivot away from coal. However, this shift has consolidated the reliance on LNG and gas rather than directly bolstering renewable energy adoption. Shifting to gas dependency will undermine the ambition for the new NDC for 2035 (due to be agreed by COP30 in December 2025) as it will limit the options for Bangladesh to further reduce its climate emissions.

[Public-Private Partnerships \(PPPs\)](#) are also promoted within the DPC. As the DPC facilitates private sector participation in power transmission projects, it raises questions about [the nature of the finance](#), about who it benefits and where the profit goes. Eurodad's Report "[History RePPPeated: Why Public-Private Partnerships are not the solution](#)" shows that PPPs often come at a high cost for the public purse and citizens, with an excessive level of risk for the public sector and have a negative impact on democratic governance.

The focus and application of policies that facilitate engagement with the private sector must be monitored to ensure they support a genuine transition to renewables rather than extending the lifespan of fossil fuel infrastructure. Of serious concern, particularly in the context of a growing debt crisis, is that they can create a 'hidden debt' (this is debt that is not recorded on a government's financial statements, potentially masking the true extent of liabilities) for the government, which adds to their overall indebtedness.

¹ NDCs are an integral part of the Paris Agreement, requiring each party/country to report on their post-2020 efforts to reduce emissions and adapt to climate change.

3.3 Support for the Mujib Climate Prosperity Plan (MCP) and the Energy Transition

The DPC required the Government of Bangladesh to adopt the [Mujib Climate Prosperity Plan](#), which includes retrofitting the built environment to adapt to the impacts of climate change. The MCP has the stated aim of guiding Bangladesh towards climate resilience and economic prosperity. It underscores the importance of transitioning to greener energy sources.

⦿ **Gas/LNG and Green Hydrogen Blending**

The MCP advocates for leveraging Bangladesh's existing gas network infrastructure by introducing green hydrogen blending with LNG. This strategy to blend green hydrogen with fossil gas/LNG consolidates a problematic reliance on fossil fuel infrastructure. This perpetuates the energy sector's dependency on fossil fuels. By investing in and reinforcing the existing fossil gas infrastructure, the plan diverts crucial resources and attention from sustainable renewable energy solutions.

Furthermore, in order for hydrogen to be classified a 'green hydrogen', the energy source must come from renewables, often in the form of wind power. Current processes to produce green hydrogen consume a disproportionately high amount of renewable energy relative to the power it can generate and at much greater cost than direct renewable energy electrification. While green hydrogen can potentially enable the decarbonisation of some heavy industries (often called 'hard-to-decarbonise' sectors), its application remains limited, which raises concerns about the viability of using such a renewable energy-intensive fuel source. There are no analyses that show that this will ever work technically (supply and use) or be cost effective.

⦿ **The Paradox of Energy Security and Fossil Fuel-Renewable Synergy**

The MCP emphasises energy security and the transition towards a greener economy and sets a visionary goal for Bangladesh. While the MCP aims to achieve energy security through a mix of fossil fuels and renewable energy, this dual approach inherently conflicts with the imperative of rapid decarbonization and is leading to carbon lock-in and stranded assets.

In fact, the country's [increased reliance on imported LNG](#), combined with very low domestic renewable generation, has left Bangladesh highly vulnerable to global energy supply shocks. At its worst point in [October 2022, blackouts affected 75%–80% of Bangladesh](#), leaving 130 million people without power, as a third of the country's gas power units faced a gas supply shortage. The electricity that could be supplied also came at a huge cost and electricity generation costs rose by 47% from financial year 2020/21 to 2022. The impacts of this on Bangladesh were significant. Industrial production, [including the garment sector, fell by a reported 25%–50%](#), placing further pressure on the country's balance of payments.

In 2022 in Bangladesh, the energy shortages, shutdowns and planned blackouts were the result of [LNG suppliers turning to higher-priced markets in Europe](#), leaving the Global South starved of gas. This is an extreme example of how fossil gas can cause energy insecurity.

⦿ **A Missed Opportunity for Decisive Change**

The MCP's vision to convert fossil fuel plants into energy hubs for biomass and waste-to-energy illustrates a reluctance to abandon fossil fuel-based infrastructure.

Experts do not consider [biomass to be a sustainable option](#) because its carbon neutrality is questionable due to the combustion of organic materials that releases CO₂ into the atmosphere, contributing to climate change.

Additionally, biomass energy generation can compete with food production for agricultural land, potentially exacerbating food security issues. [Waste-to-energy](#) approaches are also problematic because they emit pollutants such as greenhouse gases, heavy metals, and dioxins, albeit at lower levels than traditional waste incineration. Moreover, there are concerns about the [financial viability of waste-to-energy projects](#), as they often require significant upfront investment and may not always be cost-competitive compared to other renewable energy sources like solar or wind.

While these initiatives suggest a transition, they also indicate a continued commitment to fossil fuel use and false solutions, delaying the necessary leap towards a renewable energy future. This incremental approach risks cementing fossil fuel dependency at a time when bold and immediate actions are required to combat climate change.

◎ **Investment Shifts: Inadequate Response to the Fossil Fuel Crisis**

The MCPP's intent to reduce reliance on coal, oil, diesel and gas imports is an important commitment but falls short of the transformative changes needed to confront the climate crisis. The continued role for fossil gas in the energy transition is at odds with the urgent need for aggressive investment in renewable energy technologies. This not only fails to

effectively insulate the economy from the volatility of global commodity markets, but also from the escalating environmental and health costs associated with fossil fuel consumption.

While the government achieved targets for increasing LNG, it was nowhere near as successful in meeting its targets for renewables. In 2008, the government set a target of meeting 10% of electricity demand with renewable sources by 2020, with similar targets included in the 2016 power plan. By 2022, renewables generated just 2% of Bangladesh's electricity, according to analysis by the [Centre for Policy Dialogue](#), making up just 3.75% of installed capacity.

However, in the [Integrated Energy and Power Master Plan 2023 \(IEPMP\)](#) the share of renewable energy in the final power generation mix is projected at 11 and 16 percent in 2041 and 2050, respectively, in an Advanced Technology Scenario. In contrast, in her national statement at COP26 in Glasgow in 2021, Prime Minister Sheikh Hasina declared, "We hope to have 40 percent of the country's energy from renewable sources by 2041."

In 2025 at COP30 Bangladesh will be expected to present a new NDC for emissions reduction by 2035, when real time emissions from the country should be going down (and not the current upwards trajectory) This will require a rapid increase in renewable energy, and a move away from fossil gas.



Renewable biogas is a cleaner, cheaper, and fairer option for communities in Bangladesh.
Credit: Vidura Jang Bahadur / UN Women Asia and the Pacific

4.0 Senegal

4.1 Energy Transition in Senegal

Senegal is classified as a Least Developed Country (LDC) and therefore has extended timelines to phase out fossil fuels compared to more developed nations. This is in recognition of the country's low carbon emissions and lack of historical responsibility for the climate crisis. In this context fossil fuels can still be used to support its economic growth and energy access. The [2020 Nationally Determined Contribution](#) under the UNFCCC for Senegal has an unconditional emissions reduction target of 7% and a conditional target of 29% by 2030. Senegal's commitment to international agreements like the Paris Agreement underscores its dedication to tackling climate change in a collaborative global effort.

Prolonged fossil fuel use can severely impact public health through air pollution, contribute to climate change, and degrade local environments. These negative consequences can exacerbate poverty, strain healthcare systems, and reduce the resilience of communities to climate-related disasters, ultimately hindering sustainable development goals.

Senegal has therefore embarked on an ambitious energy transition journey aimed at bolstering resilience and sustainability while meeting growing energy demands. Central to this is the [National Renewable Energy Plan 2023](#) (Programme National d'Electrification - PNER), which outlines strategies to diversify the energy mix, enhance energy access, and mitigate GHG emissions. By harnessing its abundant renewable resources, including solar, wind, and biomass, Senegal aims to reduce its reliance on fossil fuels, bolster energy security, and spur economic growth through the development of a robust renewable energy sector.



A floating production storage and offloading (FPSO) vessel for the BP-operated Grand Tortue Ahmeyim LNG project in Senegal and Mauritania. Credit: BP www.bp.com/en_sh/senegal/home

☉ Senegal's Gas Rush

However, since 2015 Senegal has made significant discoveries of offshore gas reserves. One of the most notable discoveries is the Grand Tortue Ahmeyim gas field, located in the deepwater portion of the Mauritania-Senegal-Gambia Bissau-Conakry (MSGBC) Basin. The [Grand Tortue Ahmeyim field](#) is estimated to hold substantial reserves, with estimates suggesting it could contain over 15 trillion cubic feet of recoverable gas.

In order to access the gas reserves, the government of Senegal needs to attract foreign investment and secure financing for these projects, which can be challenging in a competitive global market. Senegal's requirements for gas producers to prioritise supplying the domestic market, either through direct sales or through agreements with domestic utilities or industrial consumers has been a disincentive to multinational gas exploration companies. As a result, in November 2023 BP exited the [Yakaar-Teranga offshore gas field offshore](#) after a disagreement with the local government.

Senegal's emphasis on gas for export rather than for domestic use is further highlighted in the April 2024 example of the [Grand Tortue Ahmeyim LNG project](#), which, in collaboration with Mauritania, is set to start producing 2.5 million tonnes of LNG annually by the third quarter of 2024. Notably it is primarily targeting export to Europe, and only minimally aimed at energy security and access for the people of Senegal.

Senegal is already taking important steps to transition rapidly away from heavy fuel oil (HFO), but its newly found reserves of offshore gas are an impediment to the energy transition. In this context World Bank support for a full, cost effective and clean transition to fully renewable energy is more important than ever. There is no room for damaging, debt inducing (due to the upfront costs and the ongoing damages) offshore gas sector.

The World Bank DPF should support Senegal to adopt a holistic approach that encompasses investment in renewable energy infrastructure, energy efficiency measures, and stakeholder engagement.

4.2 How World Bank DPF incentivises gas expansion in Senegal

The World Bank Group should halt its support for fossil gas as a transition fuel in Senegal through its second DPF for [Senegal - Second Equitable and Resilient Recovery Development Policy Financing](#). This DPF for Energy Sector Reform in Senegal explicitly supports the [Gas Code 2020](#), which aims to boost investor confidence and facilitate the growth of Senegal's gas industry. By requiring the implementation of the Gas Code the World Bank is incentivising the expansion of gas at the expense of providing its public finance for an energy transition that leapfrogs to sustainable renewable energy.

Prior Action 8 of the World Bank's DPF states that "To reduce costs and increase sector sustainability, the Recipient has adopted decrees that implement the Gas Code defining the legal and regulatory framework for investment in the midstream and downstream segments of the gas subsector". The Gas Code serves as the legal framework governing the exploration, import, export, re-export, gas aggregation, LNG supply, transportation, and distribution of gas resources in Senegal. Supporting the gas code through DPF therefore explicitly supports the development of the gas sector in the country.

The DPF goes further in demonstrating its continued promotion of gas rather than sustainable renewables by stating that it is supporting the gas-to-power and investment programme: "implementing decrees for the new gas code (Prior Action 8) define the planning, regulation, and institutional arrangements of both midstream and downstream segments, which are critical instruments forming the gas-to-power strategy and investment program. These implementing decrees will contribute to reducing costs and ensuring the sustainability of the sector".

Senegal's Gas Code:

- ⦿ provides the regulatory framework for the gas sector, including licensing procedures, environmental regulations, and fiscal terms;
- ⦿ includes a regulatory framework aimed at attracting final investment in gas exploration and production.

The World Bank DPF is requiring the implementation of a conducive investment and regulatory environment for gas exploration and production by supporting the Gas Code. It is requiring the government of Senegal to promote measures aimed at creating a more open and competitive market environment for gas exploration, production, and distribution, as well as facilitating the construction of gas infrastructure. This support could spur further gas expansion in Senegal at a time when public finance is sorely needed to promote the expansion of sustainable renewable energy.

Articles 7 and 8 of the Gas Code state that a licence is granted to any legal entity under Senegalese law that can demonstrate the technical and financial capacity necessary to carry out the activities of importing, exporting, re-exporting, aggregating, processing, storing, supplying natural gas, and transporting and distributing liquefied and compressed natural gas. This indicates that the World Bank is facilitating private sector engagement in the gas sector, not only for energy access and development goals in Senegal but also for export.

⦿ Limiting Gas Flaring

Note that Prior Action 9 of the DPF requires an amendment to the Environmental Code to limit routine flaring and venting of gas. While good environmental safeguarding is welcome in the energy sector, ending methane emissions should be the urgent focus.

The DPF itself highlights some very serious impacts of gas flaring and therefore gas in general on human health and households. The DPF document states that several studies demonstrate that flaring produces carbon monoxide, nitrogen oxides, particulate matter, and volatile organic compounds. These are all pollutants that have a negative impact on human health such as asthma and leukaemia.

The DPF document claims that the planned revision and adoption of the Environmental

Code curbing the routine flaring and venting of natural gas "should help manage the potential adverse effects". But given their own significant evidence cited above, a better approach would be to help Senegal to transition more rapidly away from fossil fuels to a sustainable renewable energy model and not to shore up gas expansion that will also lead to the expansion of flaring.

⦿ A Lower-Carbon Alternative?

The Government of Senegal is aiming to change its energy mix from a sector that was 83% reliant on expensive, imported and carbon intensive HFO and diesel generation in 2018, to a sector that has a mix of lower cost and lower carbon renewable energy (31%) and gas (54%), with the remainder coming from the already existing Sendou 125MW coal-fired power plant (15%) by 2026.

In June 2023 Senegal and the International Partners Group (IPG) including France, Germany, Canada and the European Union announced a [Just Energy Transition Partnership \(JETP\)](#). The JETP aims to support Senegal in increasing its renewable energy capacity to 40% of its electricity mix by 2030. This partnership involves a financial commitment of €2.5bn, primarily through preferential loans and grants, to accelerate the deployment of renewable energy projects such as solar and wind. But the plan's inclusion of natural gas as a transitional energy source contradicts its long-term goals of reducing greenhouse gas emissions and achieving climate resilience.

One of the reasons cited in the World Bank's DPF for supporting Senegal to use gas as a transition fuel is the need to reduce energy subsidies, which are a significant fiscal burden for the Senegalese government. The DPF states that it is relying on the roll out of the Senegalese gas-to-power strategy to enable governance reforms and reduce production costs, and it considers gas to be a "lower carbon alternative" to HFOs. However, there is significant evidence that demonstrates that gas is not lower carbon, particularly when taking into account methane leakage from the production and transport of gas (see above). It appears that the World Bank DPF is supporting an energy transition that first goes to gas and then must transition again to renewables in a couple of decades.

For the World Bank, the Senegal [Gas to Power Strategy](#) is an "ambitious plan to create the condition for cheaper, more reliable electricity and contribute to addressing climate change", but it includes a caveat "provided that the sector also follows other needed reforms and new generation options are developed following a least-cost approach". However, the least-cost approach analyses the financial costs, but fails to account for the cost to human health and the environment and the financial costs associated with mitigating those impacts.

The Senegal DPF rightly states that a change in generation mix is key to turning around the financial situation of the sector, and hence delinking the sector's

dependence on imported fuels, bringing down the costs of supply and the need for subsidies. But in reality it is progressing plans for importing hydropower and for converting all fuel oil generation to gas as well as to build new gas-fired generation. The DPF notes the substantial gas discoveries off the coast of Senegal in Sangomar, Tortue and Yakaar/Teranga reserves and how they are suitable to deliver gas for domestic power generation.

[The final section of the DPF considers what it calls "Renewable energy reform options", yet even within a section on renewable energy it continues to focus on gas as a transition fuel by focussing on converting all fuel oil generation to gas as well as building new gas-fired generation.](#)

It is incumbent upon the World Bank to stop supporting fossil gas in Senegal and instead use its limited public finance to help fast-track a change in the energy system towards a sustainable renewable energy future. By focusing on gas, the DPF is missing out on opportunities to harness [Senegal's abundant renewable energy resource](#) and its potential for solar, wind, and hydroelectric power, which could provide clean and sustainable energy for the country.

DPF for Senegal could support a just and fair phase out of subsidies for fossil fuels, including gas and LNG, to level the playing field for renewable energy and incentivise the transition to cleaner energy sources. Redirecting subsidies towards renewable energy incentives, energy access programmes, and social safety nets will help mitigate the socio-economic impacts of subsidy reform and support vulnerable populations.

By adopting these strategies and leveraging domestic resources, international partnerships, and financial support from multilateral development institutions like the World Bank and the African Development Bank, Senegal can accelerate its transition away from gas and LNG towards a more sustainable, resilient, inclusive, and cost-effective renewable energy system.

5. Conclusion: Risks of continued World Bank Support for Gas Expansion in Bangladesh and Senegal

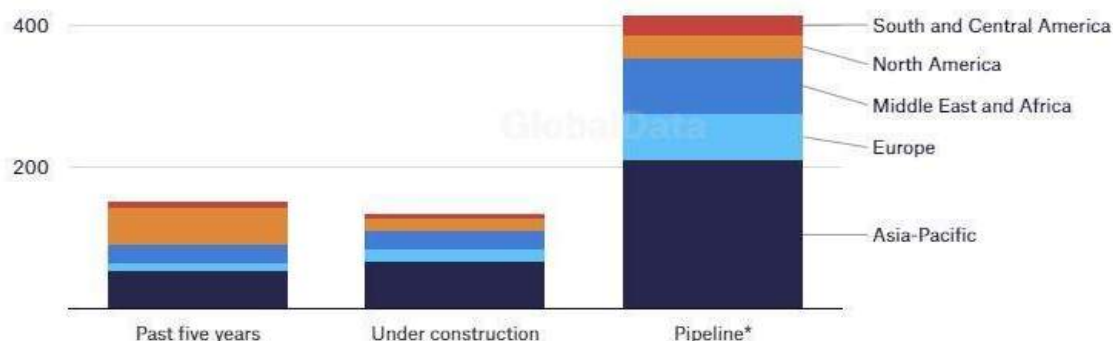
The World Bank is presenting itself as a significant route for climate finance but continues to invest in climate damaging fuels in highly climate vulnerable countries. DPF and DPC continue to support the expansion of gas infrastructure in Bangladesh and Senegal.

The World Bank frames gas as a cleaner alternative to traditional fossil fuels such as coal or oil, but inadequately recognises its contributions to GHG emissions and how the development of gas infrastructure perpetuates dependence on finite resources. Continued investment in gas infrastructure not only undermines efforts to transition towards a low-carbon economy but also locks Bangladesh and Senegal into fossil fuel-based energy systems for decades to come. The World Bank is remaining a climate dinosaur and advising countries on outdated energy models, rather than becoming a climate leader.

Moreover, supporting gas development through DPF and DPC carries a serious risk of creating stranded assets in the future. New combined-cycle gas fired power stations built today can have a **40 year life span** taking us well beyond 2050 when the world must achieve net-zero emissions according to the **Intergovernmental Panel on Climate Change (IPCC)**. As the world moves towards decarbonisation and renewable energy technologies become more cost-competitive, investments in gas infrastructure will become economically unviable. This will result in significant financial losses for both the governments and private investors involved in these projects.

There are more gas power stations in the pipeline than completed over the past five years

Regions of the world by gas-fired electricity capacity completed over the past five years, under construction, and in the pipeline* (GW)



Pipeline includes units that are permitting, financed and announced.

Chart: Nick Ferris/Energy Monitor • Source: GlobalData

Source: *Energy Monitor 29 January 2024 Exclusive: Gas-fired power sector booming like there is no tomorrow*

Continued investment in gas infrastructure contributes to the worsening impacts of climate change, which disproportionately affect vulnerable communities in developing countries. In other words, the World Bank's continued support for gas infrastructure in Bangladesh and Senegal through DPF and DPC is incompatible with the sustainable development goals, climate change mitigation efforts, and the long-term interests of those countries. World Bank DPF should align its investments with Bangladesh and Senegal's climate goals and prioritise projects that support the transition to renewable energy and reduce greenhouse gas emissions.

World Bank DPF and public finance is needed to support sustainable renewable energy as a far better alternative to gas to meet Bangladesh and Senegal's growing electricity demand. Despite their lower Levelised Cost of Energy (LCOEs), renewables are sensitive to capital costs and market risks, so investment in for-profit utility scale renewable generation relies on state subsidies that provide a guaranteed price or employ public funds to ensure stable profitability. This means that there is a central role for public finance and the state intervention in fostering a sustainable renewable energy transition.

An illustration of a person with dark hair, wearing a teal shawl and teal earrings, holding a large black sign with white text. The background is a textured, greyish-blue surface.

**WORLD BANK:
FINANCE
RENEWABLES!
NOT COAL TO
FOSSIL GAS!**

6. Recommendations



The World Bank Paris alignment sector note for DPF should be urgently improved to close the loopholes and to make it align with the ambitious goals of the Paris agreement and the commitment of COP28 to mark the beginning of the end of the fossil fuel era: These are the loopholes that must be closed:



The World Bank Paris Alignment sector note for DPF must not consider a Prior Action to be Paris aligned if it **generates significant GHG emissions** – if a Prior Action generates significant GHG emissions, and there is no accompanying assessment of how these emissions will be reverted in the future then it cannot be considered Paris aligned.



The Paris Alignment sector note for DPF must exclude all forms of support including finance and technical assistance for the energy sector that enables a country to expand fossil fuels.



The Paris Alignment sector note for DPF must recognise that any form of support for fossil fuels including fossil gas is not Paris aligned.



The Paris alignment method must define what is meant by no 'viable' alternative pathways so that they can be held to account by civil society.



World Bank DPF should be directed to support developing countries to shore up their own decarbonised development pathways, shifting off fossil fuels and leap-fogging directly to sustainable renewable energy.



World Bank DPF Prior Actions should not foster the expansion of gas and LNG through energy sector strategies and policies.



World Bank DPFs need to identify opportunities to develop renewable energy sectors that offer more sustainable and equitable economic opportunities for women.



In assessing potential DPF support for a country's energy sector, the World Bank must prioritise concerns about the environmental and social impacts of fossil gas development, including the risk for locking in carbon-intensive infrastructure.



World Bank DPF should stop supporting mechanisms that lead to the expansion of fossil fuels, such as through tariff reform, a 'low-carbon' growth model that considers gas as low-carbon, through incentivising the private sector that might not respond to the need to urgently transition to renewables, and to stop false solutions that will lock countries into carbon intensive energy models, such as gas and renewables 'blending'.