



THE TROUBLE WITH GAS IN VIETNAM

International Energy Agency World Energy Outlook (IEA WEO) 2021: “Beyond projects already committed as of 2021, there are no new oil and gas fields approved for development in our [net zero] pathway, and no new coal mines or mine extensions are required”.

Introduction

The World Bank and its private sector arm, the International Finance Corporation (IFC), are continuing to massively support fossil gas and liquefied natural gas (LNG) build out in Vietnam as part of a so-called “renewable energy transition”.

Promoting fossil gas, including LNG, through energy sector reform is a false solution to the climate and energy crisis because fossil gas is a fossil fuel. Not only is it locking Vietnam into an energy system with high carbon greenhouse gas emissions and toxic pollution but is also diverting vitally needed public funding away from the sustainable renewable alternatives that are urgently needed. Volatile LNG prices on the spot market are also leading to high fuel prices making it harder for countries in energy transition to achieve energy security.

Fossil gas is a problem because:



There is significant leakage of methane, a potent greenhouse gas, from the processing, transport, liquefaction, cooling, regasification and consumption of gas. Methane is 83 to 86 times stronger over 20 years than carbon dioxide (CO₂) as a greenhouse gas. As a result of the liquefaction, cooling, transportation, and regasification process, LNG is extremely energy intensive.



Fossil gas affects air quality and hazardous air pollutants have harmful effects on health and the environment.



Fossil gas infrastructure, including pipelines, leaks harmful chemicals into the environment and water supplies. LNG facilities can explode and when they do, they can cause mass destruction because facilities handle immense amounts of fossil gas that can become explosive when exposed to the atmosphere.



The continued support for gas, including LNG, is not only locking countries into a high-carbon and polluting energy model, but it also drains investments that could be used for a renewable energy transformation.

To be economically viable, fossil gas infrastructure is built with an expected operational horizon of 30-40 years, which is locking countries into a carbon intensive energy model.

Vietnam Energy Context

Vietnam has made significant commitments to end all investments in new coal power generation, scaling up deployment of renewable energy, and phasing out coal power by the 2040s.

Today no LNG-fired power plants are yet in operation in Vietnam and but 15 GW of new LNG-fired power plants are expected to be constructed by 2030 according to the [Vietnam Energy Outlook Report 2021](#). LNG Terminals typically take 2 to 5 years to construct, by which time new renewable energy opportunities will be coming on stream. The opportunity is therefore being lost not to stop Vietnam falling into an unreliable, financially volatile, imported form of fossil fuel (i.e. LNG) that could jeopardise Vietnam's long-term energy security.

The World Bank's own [Systematic Country Diagnostic Update 2021](#) for Vietnam describes the challenges of carbon emissions in the country. It notes that since the 1990s Vietnam has emerged as one of the fastest-growing per capita greenhouse gas emitters in the world, leading to a level of air pollution in the country's major cities that far exceeds the health and safety levels recommended by the World Health Organisation. It paints a disturbing picture of rising sea levels in the Mekong Delta, more severe and frequent natural disasters, and higher and variable temperatures that are all destroying assets and human lives.

In response to this challenging context, at the 2021 UN Climate Talks (COP26) Vietnam's Prime Minister Pham Minh Chinh announced a national target of net-zero emissions by 2050. In doing so Vietnam has joined the global effort to end all investment in new coal power generation, scale up deployment of clean power generation, phase out coal power by the 2040s, and make transitions away from coal power that benefit workers and communities.

The Vietnamese Government's [Draft National Power Development Plan 8 \(PDP8\)](#) for the period 2021-2030 sets out Vietnam's commitment to a renewable energy target of 15-20% in the energy mix by 2030, to be increased to 25-30% by 2045. But while the November 2021 version of the PDP8 envisaged a levelling off of coal and fossil gas after 2035, there is an exponential increase in the planned expansion of LNG from 3,500 in 2025 to 55,750 by 2045.

The PDP8 includes seven additional LNG import terminals and 22 LNG-to-power projects. The government has pushed for LNG development, and this push has been informed by the [Vietnam Roadmap for Natural Gas Market Development 2017](#) financed by the World Bank. This has drawn investor interest into the LNG sector, including significant interest from the United States. The United States is a country with interests in LNG expansion globally given its role as a major exporter of LNG.

Table 1: Installed capacity by sources for 2025 - 2045 period (Draft PDP8, November 2021)

Installed capacity (MW)	2025	2030	2035	2040	2045
Coal	29,679	39,699	43,149	43,149	43,149
Gas	10,907	14,783	14,783	14,783	14,783
LNG	3,500	22,400	36,750	51,150	55,750
ICE+SCGT	0	200	3,200	11,100	20,700
Oil	898	138	0	0	0
Hydro (including small power)	25,529	26,113	28,826	29,736	30,936
Wind	12,070	17,338	25,538	31,638	38,838
Offshore wind	0	4,000	10,000	23,000	36,000
Solar (including RTS)	18,040	21,390	35,740	50,540	63,640
Biomass and others	1,170	1,520	3,890	4,650	5,250
Storage	0	2,400	3,900	7,500	13,500
Import	4,728	5,742	7,742	10,242	11,042

In August 2022 the PDP8 was still pending approval from the Prime Minister Pham Minh Chinh and Deputy Prime Minister Le Han Thanh, who cited concerns about the high ratio of renewables in the energy mix in comparison to other countries and the difficulties in distribution given Vietnam's geography.

The "Review and gap analysis of the existing abatement scenarios for Vietnam" by the Vietnam Initiative for Energy Transition (VIET) and RMI for the UN's Energy Transition Partnership (ETP) outlines four different scenarios for the energy transition, with differing energy mixes - these are characterized as:

- Business as Usual (BAU) with coal and gas remaining constant and an increase in LNG;
- Blue with no new coal, compensated by LNG and offshore wind;
- Green with no new coal, no LNG development, and only renewable energy;
- Cyan with a mix of blue and green methodology with coal and gas levelling off and a slower transition to wind, but compensated by LNG.

The Green scenario laid out in this report demonstrates that it is technically feasible for Vietnam to transition to clean energy without any new LNG development. While this will require significant upfront investments, in the long-term this pathway will represent cost savings as compared to the other scenarios.

With these scenarios identified, the role of public finance from the World Bank Group is even more crucial in supporting Vietnam to realise its ambitious goals to transition away from coal, to leapfrog a gas phase of development and invest in a sustainable, renewable and energy secure future.



The World Bank Group's Country Climate and Development Report 2022

The World Bank Group's 2022 Country Climate and Development Report (CCDR) for Vietnam presents a frank examination of Vietnam's climate adaptation and mitigation challenges. The need for massive public and private finance to support the shift from coal to renewable energy in Vietnam is laid out clearly. However, rather than focusing on sustainable renewable energy options, the CCDR also supports fossil gas expansion:

Phasing out the use of coal in two decades will be challenging. Natural gas is a lower-carbon fuel frequently used to replace coal, to provide flexible dispatch and backup capability for integration of renewables, and to meet peak load demand.

This statement within the CCDR is highly contested by civil society groups and energy experts who have demonstrated that fossil gas is neither a low-carbon nor low-cost alternative to coal. The gas industry globally has promoted the narrative that gas is needed as a baseload for renewable energy. In fact, today battery storage systems and energy efficiency measures can provide the energy back up that is needed when renewable energy is not being generated. The cost of electricity from new gas-fired power plants is also significantly higher compared to solar and wind.

The Accelerated Decarbonisation Scenario in the CCDR however, identifies fossil gas as a transition fuel. Fossil gas features in the generation mix under all scenarios in 2040, "until other clean technologies become more cost-efficient". The CCDR itself states that developing natural gas to power must factor in the risk of long-term carbon lock-in. In doing so the World Bank is acknowledging a high-carbon fossil fuel solution which contradicts its efforts to support the decarbonisation of Vietnam's energy system.

It further notes that given limited domestic gas resources; Vietnam's gas supply will rely on imported liquified natural gas (LNG). Vietnam has the potential to decarbonise its energy system, particularly by massively scaling up offshore wind and solar energy. Therefore it is hugely disappointing to see fossil gas in the form of imported LNG considered as the holy grail in the World Bank's CCDR for the energy transition in Vietnam.

The 2018-2022 World Bank Country Partnership Framework for Vietnam (the strategy that determines World Bank support for Vietnam) has contributed to locking Vietnam into an energy system that relies on fossil gas and LNG. It went as far as specifically supporting Vietnam's Gas Sector Strategy as part of its technical assistance (or Advisory Services and Analytics) and in 2017 financed the Vietnam Roadmap for Natural Gas Market Development that has an implementation horizon of 2035.

Technical assistance provides the policy framework for future finance. The Bank's Technical Assistance "Addressing the constraints of LNG investments in Vietnam" March 2018-2019 for example, facilitated Vietnam's strategy of importing LNG. It noted how, given the outlook for domestic production in 2019, Vietnam would need to import significant volumes of LNG beginning in the following 5-10 years, necessitating at least US\$7-9 billion of investment in LNG import infrastructure. At this point the foundation for the World Bank's strategy to expand LNG in Vietnam was laid.

The World Bank's Vietnam Maximising Finance for Development in the Energy Sector 2018 report shows how Vietnam's Gas Master Plan (GMP) forecasted a doubling of demand for gas between 2020 and 2025. It also noted plans to further expand and diversify industrial uses of gas into petrochemical activities, including production of ammonia and extraction of ethane. This World Bank analysis notes that much of the fossil gas demand would be met by new gas fields. But dwindling domestic gas supplies would lead to a phase in of LNG imports aimed to begin in the early 2020s.

The World Bank Systematic Country Diagnostic (SCD) Update for Vietnam 2021 forms the basis for the World Bank's new Country Partnership Framework for Vietnam that sets the World Bank strategy for the next four years (from 2022). It is of note that the SCD provides an alternative narrative, stating that climate change is a financial sector risk in Vietnam. It states that shocks can come not only from sudden changes in policy, technology, but also from consumer preferences that leave carbon-intensive assets and fossil fuel reserves obsolete and stranded. This observation should form the basis of a strategy rethink in the promotion of fossil gas in Vietnam.

The SCD also identifies the potential of sustainable renewables, indicating that private investments in solar power projects have accelerated since August 2020, making Vietnam one of the fastest growing markets in the world (more solar power capacity was added than in all the Association of Southeast Asian Nation (ASEAN) countries combined during 2020).

The SCD's findings must shape the new World Bank Country Partnership Framework 2022 - 2026 so that it no longer supports fossil gas in its energy sector priorities, nor provides for technical assistance to Vietnam's gas sector policy. It should also draw on the examples of World Bank Development Policy Finance (DPF) that specifically seek to fast track the renewable energy transition in Vietnam as well as supporting sustainable and green growth.

The International Finance Corporation (IFC) and fossil gas in Vietnam

In September 2021 World Bank Group's Private Sector arm, the IFC, developed its Vietnam Country Private Sector Diagnostic. This lays out very clearly how the IFC intends to accelerate the use of LNG in Vietnam. On fossil gas and LNG it states that "Natural gas will play a critical role in meeting future energy demand in the power and industrial sectors". The diagnostic estimated that the cumulative investment needs for the period 2015-35 were around US\$20 billion, including upstream production facilities, pipelines, gas treatment facilities, and LNG infrastructure. In September 2021, the IFC claimed that a growing reliance on LNG would reduce the costs and emissions required in using coal plants and would increase the flexibility of supply.

In May 2022, [IFC stated](#) that it is stepping up its support to Vietnam to promote sustainable finance and spur private sector participation, supporting the country's climate goals and driving sustainable growth. This commitment hides a misguided assumption that supporting Vietnam's climate goals can still include a massive expansion of fossil gas and LNG. Such an approach would devastate Vietnam's ability to meet its mitigation targets.

As an example of contradictory policy and practice, the IFC is currently considering support to the [Chan May LNG Joint Stock Company \(CML\)](#) for its development of a 4GW LNG-to-power facility in the Thua Thien Hue province of Central Vietnam. The [Chan May LNG website](#) states "Chan May is working hand-in-hand with the Vietnamese government and the International Finance Corporation ('IFC') to develop a 4,000MW integrated liquefied natural gas (LNG)-to-power facility with total investment estimated at US\$6 billion."

Civil society organisations are opposed to this project and argue that IFC's investments in LNG act as a catalyst for other private sector investment in LNG. This sets the energy sector up for long-term dependency on a costly, environmentally unsustainable model.

Just Energy Transition Partnership for Vietnam

Following Prime Minister Pham Minh Chinh's net-zero emissions commitment a planned [Just Energy Transition Platform \(JETP\) for Vietnam](#) was ratified at the G7. This multilateral initiative (which is likely to include support from the World Bank Group) is designed to help the country fulfil its ambitious decarbonisation goals to transition away from coal. However, [the first JETP in South Africa has been criticised for not disclosing sufficient information](#) on the negotiations. Civil society has not been adequately and meaningfully included in the process, which has led to a dampening of trust and accountability.

If implemented in a truly just fashion, the JETP could provide an opportunity for Vietnam in terms of supporting its energy transition. But if it is to truly support Vietnam it must be developed in a genuinely transparent, inclusive and accountable way. It must enable the country to leapfrog from coal to sustainable renewable energy, and not provide finance for the false and costly solution of a fossil gas and LNG sector build out.



Repression of environmental activists

As the UK, Japan, US and EU try to secure the JETP deal, significant concerns surround Vietnam's decision to sentence a prominent environmental leader and Goldman Prize awardee, [Nguyễn Thị Khanh](#), to two years in prison alongside other climate and environmental leaders. The voices of civil society leaders advocating for a renewable energy transition should not be silenced. It is incumbent upon the World Bank to support the call for the release of these environmental leaders and to ensure freedom of speech and democratic participation. An active and engaged civil society that is free from threat and repression is crucial.

CONCLUSIONS AND RECOMMENDATIONS:

The World Bank Group should stop supporting LNG and fossil gas and instead be fully and unconditionally supportive of rapid, equitable and just transition to 100% renewable energy in Vietnam which has significant and largely untapped potential for renewable energy sources. Solar energy is abundant, with excellent potential for utility-scale photovoltaic power stations, particularly in rural areas. Vietnam has one of South-East Asia's largest offshore wind potentials, with average wind speeds of up to 11 m/s, leading to capacity factors of more than 4500 h per year.

Huge public investments are needed in grid infrastructure and transmission lines for solar and wind power, as well as in generation. The emphasis must be on ensuring long-term energy security based on sustainable renewables and storage, as well as grid flexibility and upgrades.

Further, the World Bank should support the call for the release of Nguyễn Thị Khanh and other climate and environmental leaders and assure civic space for non-profit organizations to engage safely and effectively in the energy transition.



STOP FUNDING GAS

Kraijenhoffstraat 137A
1018 RG Amsterdam
The Netherlands
www.re-course.org

