



Viet Nam Power Sector Finance Flows Dashboard

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Related CPI works

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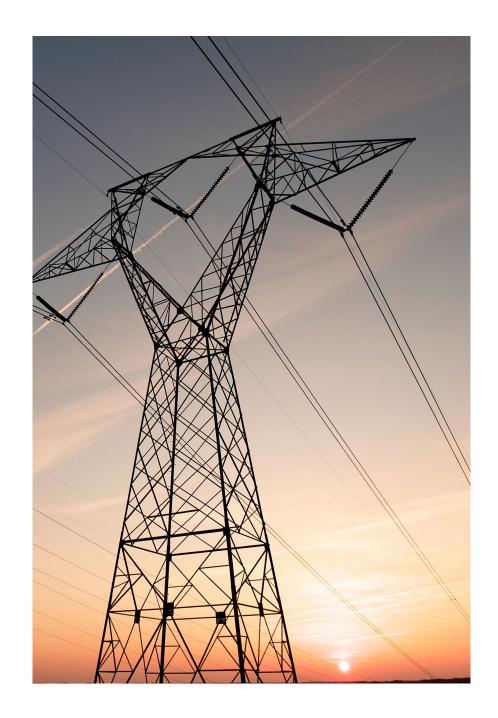


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Introduction



Introduction

- Viet Nam and its power sector are crucial to supporting global emissions reduction. Globally, Vietnam CO2 emissions per capita ranked 79th in 2022, while its CO2 emission from fuel combustion ranked 17th in 2023 (IEA 2023).
- This report, along with its accompanying Dashboard, provide a landscape and trend analysis of investments in Viet Nam's renewable energy (RE) vs fossil fuel (FF) from 2017-2022, the most recent period with reliable data available.
- The Dashboard provides consolidated data to inform policymakers and investors in monitoring, evaluating, and designing their energy transition policies and investment decisions more effectively, while the report provides a more detailed and analytical overview.
- This builds on CPI's Asia Pacific energy sector tracking work, following the release of the <u>Indonesia Power Sector Finance Dashboard</u>.
- Understanding how prior policies helped to unlock RE financing in Viet Nam can provide lessons on mobilizing RE investment for other developing economies, particularly in Southeast Asia.



Executive summary

- Viet Nam succeeded in attracting far higher investment in RE (64.54%) than FF (35.13%) power projects from 2017 to 2022. Domestic private investors contributed around 80% of the RE finance over the period.
- CPI's findings align with the earlier findings, which indicated that Viet Nam's RE progress can be attributed to national policies designed to incentivize more investments (<u>Do et al. 2021</u>), including:
 - Generous Feed-in Tariffs (FiTs) for solar PV from 2017 to 2020 and wind power projects from 2018 to 2021.
 - **Tariff and tax exemptions**, including corporate income tax for certain years, import tariffs for related equipment, and land leases for some utility-scale projects.
 - **Improved investment environment** that attracts various sources of funding, including foreign investment.
- A recent major change not reflected in the period of analysis is the policy update to Viet Nam's FiT, announced in April 2025. While it is too early to ascertain its full impact, this update, attempting to address limitations of the previous FiT scheme, has sparked concern over potential revenue and investment reductions in the RE market.



Viet Nam's ambitious climate and energy targets

- The Viet Nam government announced net-zero emission goals by 2050 during COP26.
- In 2022, the country submitted an updated Nationally Determined Contribution (<u>NDC</u>), stating that an additional USD 21.7 billion in total is needed to implement its target of reducing greenhouse gas (GHG) emissions by 15.8% by 2030.
- Viet Nam's Just Energy Transition Partnership (<u>JETP</u>), launched in 2022, aims to mobilize nearly USD 16 billion in public and private financing over the first 3–5 years to support the country's NDC targets, with a particular focus on decarbonizing the power sector.
- The Power Development Plan 8 (PDP8), officially approved in 2023 and revised in 2025, outlines Viet Nam's energy roadmap to 2030. With the primary goal of increasing the share of RE (excluding hydropower) to 28-36% of the energy mix by 2030, 13 GW of coal-fired power projects initially planned under PDP7 have been cancelled.
- The government is placing greater emphasis on <u>expanding domestic RE sources</u> to help meet energy demand, which is projected to grow by <u>10-12% annually through 2030</u>.

Data Sources



Data sources

Data sources used in this study:

For Renewable Energy Power Sector Finance Mapping:

- CPI's Global Landscape of Climate Finance dataset (2017-2022).
- Other relevant sources, such as articles from trusted media outlets and publicly available data listed in References.

For Fossil Fuel Power Sector Finance Mapping:

- IJGlobal transaction data
- Global Energy Monitor (GEM)
- Other relevant sources, such as articles from trusted media outlets and publicly available data.



Data gaps

While our findings are based on an analysis of data from reliable sources covering 2017 to 2022, considerable gaps persist for the following items:

- Finance for captive power plants (unreported).
- Direct government budgetary spending for the energy sector.
- Detailed information on gas power plants (e.g., unspecified sources of funding).
- Finance flow status for "shelved" projects (i.e., not labelled as cancelled).
- Detailed information on financial instruments used for FF projects (unclear whether using marketrate vs concessional loans).
- Differences in reporting practices across data sources and reporting entities.
- Reported status of finance flows (disbursements vs. commitments).
- For fossil fuel sector, our approach and data sources track data from a project level standpoint

Findings presented in the report and Dashboard should be interpreted with these data constraints in mind.

Methodological Approach



POWER SECTOR INVESTMENT FOSSIL FUELS RENEWABLES (RE) (FF) Variable RE Coal fired **Power Plant** (CFPP) T&D Non-Variable RE Multiple Technologies Gas fired Power Plant Unspecified

Power sector investment categories

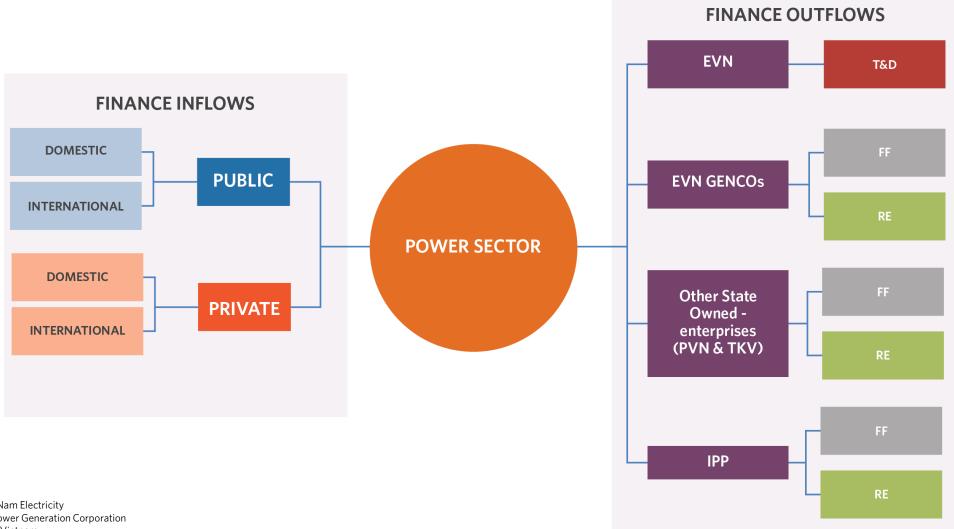
The destinations of Viet Nam's power sector investment are as follows:

- Fossil Fuel (FF)
 - Coal-fired power plants
 - Gas-fired power plants
- Renewable Energy (RE)
 - Variable RE (e.g., solar PV, wind)
 - Non-variable (e.g., geothermal, hydro, biomass/biofuel, waste-to-energy)
 - Multiple Technologies (for investments in more than one renewable energy sources)
 - Unspecified RE technology
- Transmission and Distribution (T&D)



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Viet Nam's finance flows to the power sector



EVN: Viet Nam Electricity

GENCO: Power Generation Corporation

PVN: PetroVietnam

TKV: Tập đoàn công nghiệp Than và Khoáng sản Việt Nam / Vinacomin (Viet Nam National Coal and Mineral Industries Group)

IPP: Independent Power Producer

Source: EVN, PVN, TKV



Financial data categorization

Figure 3. Categories and definition of financial terms

Types of actor	Public Finance	Finance commitments from MDBs, bilateral finance, state-owned institutions, export credit agencies, and multilateral climate funds. Government direct budgetary spending is not covered by this study due to data limitations.
	Private Finance	Finance commitments from corporations, commercial financial institutions, institutional investors, private equity, venture capital, and family offices.
Types of source	Domestic Finance	Public and private finance from local institutions.
	International Finance	Public and private finance from international institutions.
	Grants	Transfers made in the form of cash, goods, or services for which no repayment is required.
	Concessional Loans	Loans extended with terms/rates preferable to those prevailing on the market.
Types of Instrument	Market-rate Loans	Loans extended in line with regular market conditions. Examples include term loans, credit facilities, bridge loans, mezzanine debt, etc.
	Equity	Capital investment through the sale of shares in return for ownership interest. No repayment is required, but comes with a share of future profits or ownership control.

Viet Nam's Power Sector Finance Landscape 2017-2022



A substantial financing gap remains to meet Viet Nam's 2030 climate targets

A total of USD 214.8 billion, or around USD 30.7 billion annually, is required to achieve Viet Nam's net-zero emission (NZE) scenario¹ by 2030, as defined by BloombergNEF.**

With only USD 6 billion invested in 2023, there is an annual financing gap of more than 80% to meet the NZE 2030 scenario.

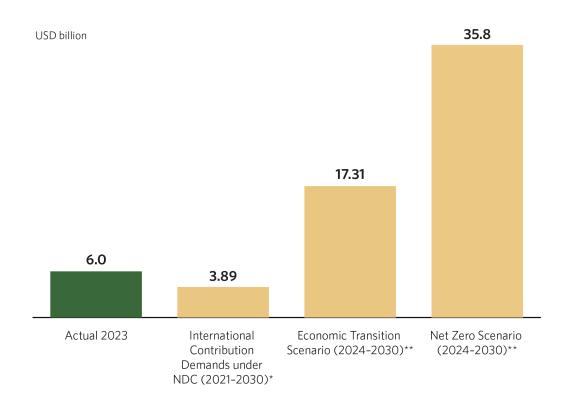
Current investment also falls far short of BloombergNEF's less ambitious Economic Transition Scenario ² (requiring USD 103.9 billion by 2030 or USD 17.3 billion annually) and Viet Nam's Updated NDC (requiring international contribution of USD 35 billion by 2030 or USD 6 billion annually).

These gaps highlight the need to mobilize both domestic and international finance.

Notes:

Two decarbonization scenarios as observed and defined by BloombergNEF:

Figure 4. Annual investment needed in low-carbon energy supply by 2030 under different scenarios



Source: *Viet Nam BUR (2020), **BloombergNEF (2024)

¹ NZE Scenario: A pathway to achieve net-zero emissions by 2050, constrained by carbon budgets for sectors and aiming for 1.5°C.

² Economic Transition Scenario: A base-case, economics-led projection of energy transition driven by commercial technology and market trends.



Renewable energy dominated power sector finance

Figure 5. Power sector investment, 2017-2022 (%, by technology)



Of the USD 64 billion of reported investment in Viet Nam's power sector from 2017 to 2022, USD 41.3 billion (64.54%) was invested in RE.

This was almost twice the amount invested in FF energy, at USD 22.5 billion (35.13%).

Transmission and distribution (T&D) received USD 209 million (0.33%).



Private domestic FIs contributed more than half of power sector finance

Private domestic financial institutions (Fls) were the largest source of Viet Nam's power sector finance overall, contributing USD 37 billion, or around 58%.

Private domestic investment also dominated RE finance, providing USD 33
billion, or around 80% of investments.

Meanwhile, FF finance mainly came from international FIs, both public and private.

Note: Public domestic providers are mainly SOEs or state-run Fls. This category does not include government budgetary spending on the power sector due to data gaps

Figure 6a. Power investment by FI type, 2017-2022

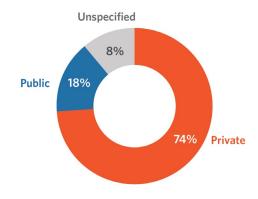
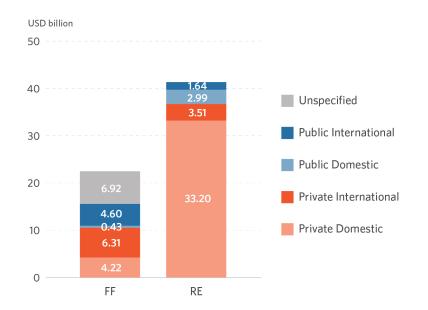


Figure 6b. FF and RE power investment by FI type, 2017-2022



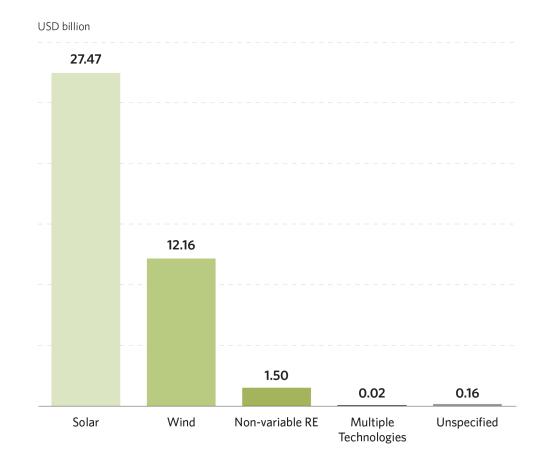
Renewable Energy Power Sector Finance



Solar and wind received most finance for renewable energy

- Reported investment in RE power from 2017 to 2022 was around USD 41.31 billion.
- Of that amount, solar PV received the 66.5%, or USD 27.47 billion, followed by wind at 29.4%, or USD 12.16 billion.
- The dominance of solar and wind can be attributed to generous feed-in tariffs (FiTs) during the period, on top of an accommodating broader policy environment.

Figure 7. Viet Nam RE power sector finance, 2017-2022, by technology



Note: Non-variable RE includes: hydropower, geothermal, waste to energy, biofuels.



Policy drivers of wind and solar PV expansion in Viet Nam from 2017 to 2022

KEY DRIVERS

1 Government's focus on increasing energy availability

Solar and wind have emerged as increasingly viable means of improving electricity availability due to rapid cost reductions in related technologies and relatively short construction times for new power plants.

Q Government's commitment to climate treaties

Under its 2020 NDC, Viet Nam committed to reducing GHG emissions by 9% in 2030, with reduction targets of 5.5% (unconditional) and 11.2% (conditional) below business-as-usual for the energy sector.

9 Growing demand for clean Air

Advancements in monitoring technology have increased awareness and action over worsening air pollution.

Solar and wind industry lobby

The solar and wind industries have demonstrated emerging lobbying power, although this has decreased in recent years.

Source: Do et al. (2021)



Policy drivers of wind and solar PV expansion in Viet Nam from 2017 to 2022

Immediate Driver

Generous Feed-in Tariffs (FiTs)

- Under the previous mechanism, solar and wind power plants in Viet Nam received higher FiT rates than in other ASEAN countries.
- Through the Prime Minister's Decision No. 11/2017/QD-TTg, Viet Nam offered FiT rate of USD 0.0935/kWh to incentivize investment in solar power projects.
- In 2018, **FiT rates for wind power were set at USD 0.085/kWh for onshore projects and at USD 0.098/kWh for offshore projects**, a considerable increase from the previous rate of USD 0.078/kWh.
- These generous FiT rates apply for 20 years, commencing from each project's
 commencement of commercial operations. This initiative was designed to support the
 continued growth of solar power, with targets of reaching 14,450 MW installed solar capacity
 in Viet Nam by 2025 and 20,050 MW by 2030.
- The generous FiT rates do not apply to new solar and wind projects that have been licensed after 2022.

Source: <u>Do et al. (2021)</u>



Policy drivers of wind and solar PV expansion in Viet Nam from 2017 to 2022

Supporting Drivers

- **Corporate income tax exemption** for solar and wind developers for the first four years of operation, reduction by 50% for the following nine years, and by 10% until the 15th year of operation.
- **Import tariff exemption** for related equipment.
- Land lease payment exemptions (to date, the first ASEAN country to implement this) ranging from 14 years to the entire project lifespan for some utility-scale solar and wind projects, depending on location.
- No local content requirement, to level the playing field among investors and reduce technology costs.
- **Improved investment environment** that attracts various sources of funding, including foreign investment.

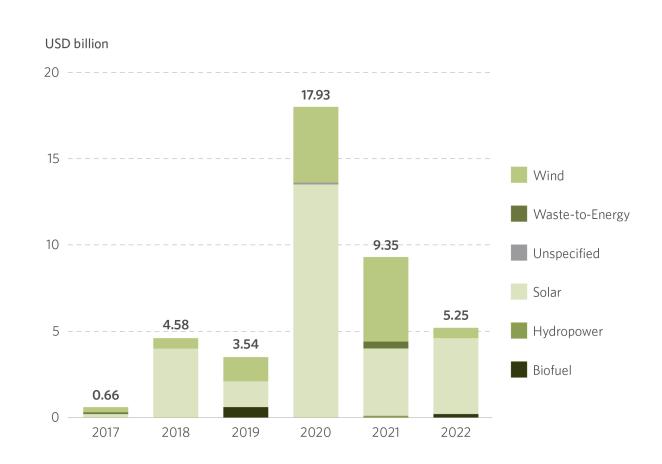
Source: Do et al. (2021)



Policy impact: Solar and wind investments peaked during FiT expiration

- Viet Nam's generous FiT significantly boosted investments in solar and wind power projects by providing guaranteed prices for generated electricity.
- This is evident from investments in solar and wind peaking as their FiT incentives expired in December 2020 and October 2021, respectively.
- Total investment in wind was lower than in solar, given that:
 - Solar PV, especially rooftop panels, are quicker to install(within weeks) than wind power projects (could take years).
 - When compared to the levelized cost of electricity (LCOE), the FiT for wind was not as attractive as for solar PV.
 - The three-year eligibility window was too short for wind power projects, especially offshore.

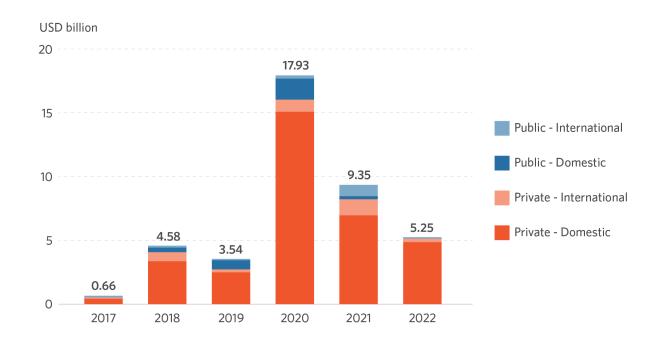
Figure 9. Viet Nam RE power sector finance by technology





Policy impact: Dominance of private domestic finance, peaking just ahead of FiT expiration

Figure 10. Viet Nam RE power sector finance by source

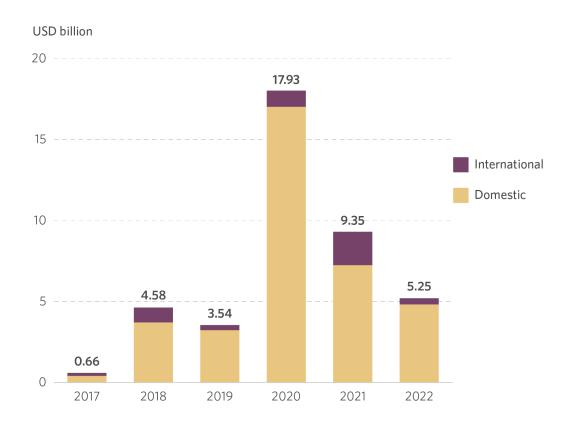


- **Private domestic finance dominated** from 2017 to 2022 and peaked at over USD 16 billion in 2020, with a more than 400% increase from 2019.
- The major decline from 2021 to 2022 can be attributed to the generous FiT ending in 2021, as well as the solar grid congestion issue.
- Combination of generous FiT, 20-year assurance, and decreasing LCOE for solar and wind spurred private domestic investment in RE.



Policy impact: Dominance of domestic investors

Figure 11. Viet Nam RE power finance by type of source (domestic/international)

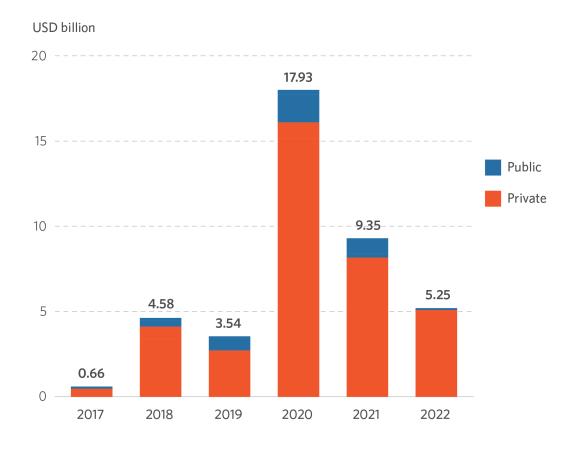


- RE projects to date have been mainly developed by domestic investors and large conglomerates. They obtained debt finance mostly from domestic commercial banks on a corporate loan basis (World Bank 2018).
- In addition to FiTs guaranteeing above-market prices for RE-generated electricity, domestic investors were also better positioned to act quicker than foreign investors, who faced longer due diligence, regulatory risk assessments, and often required higher risk guarantees or PPAs, which were not always available.



Policy impact: Dominance of private investors

Figure 12. Viet Nam RE power finance by type of source (public/private)



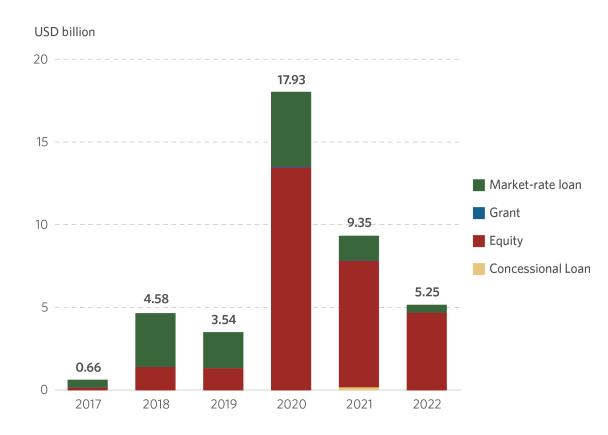
- Initiated in 2008, Viet Nam's power sector unbundling system broke up the vertically integrated state-owned utility EVN and removed barriers for private investors to enter the power sector.
- As a result, independent power producers (IPPs)
 compete with EVN-affiliated generation
 companies in a power pool selling to a single
 buyer (EVN).
- This power sector reform, along with generous FiTs, incentivized the private sector to jump into the RE market.



Policy impact: Dominance of equity in RE finance following FiT

- From 2017 to 2019, market-rate loans
 dominated RE financing. With uncertainties
 surrounding FiT in the earlier period, banks and
 investors priced in risks more conservatively,
 resulting in a reliance on debt and a weak
 appetite for equity.
- **Equity began to dominate in 2020**, indicating growing confidence in FiTs and a reliance on own capital to quickly tap into RE projects, given the imminent expiration of the generous FiT (in 2020 for solar and 2021 for wind).
- Following the FiT expiration, equity still dominated in 2022, but on a smaller scale, indicating a continued commitment from domestic investors and large conglomerates.

Figure 13. Viet Nam RE power finance, 2017-2022, USD billions, by Type of Instrument





International investment in Viet Nam's RE power sector

- International investment only constituted 12% of Viet Nam's total RE power investment from 2017 to 2022.
- In total, **Thailand was the largest single country international investor** in Viet Nam's RE power sector (around **USD 1.1 billion**).
- Investment from China increased significantly to USD 615 million in 2021, surpassing Thailand.

Figure 14a. RE power investment by source (international/domestic)

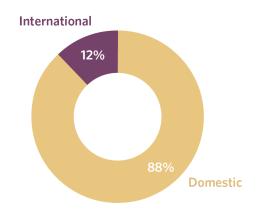
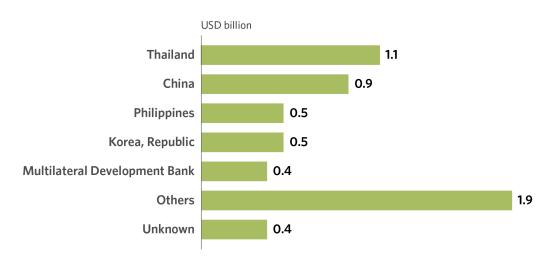


Figure 14b. International RE investment by international financier nations (2017-2022)



Note: "Others" is comprised of small investments from various countries



Breakdown of international investment by RE technology

- Viet Nam received **higher international investment in wind power** (54.4%, USD 3.08 billion) compared to Solar power (30.9%, USD 1.75 billion)
- International **investment in wind power is led by China** (USD 0.59 billion), followed by Thailand (USD 0.54 billion) and South Korea (USD 0.44 billion)
- International **investment in solar power is led by Thailand** (USD 0.55 billion), followed by China (USD 0.29 billion) and the Philippines (USD 0.27 billion)

Figure 15a. International RE power investment to Viet Nam by technology, 2017-2022

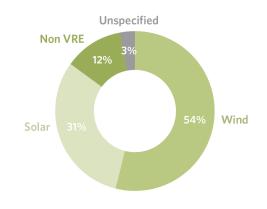
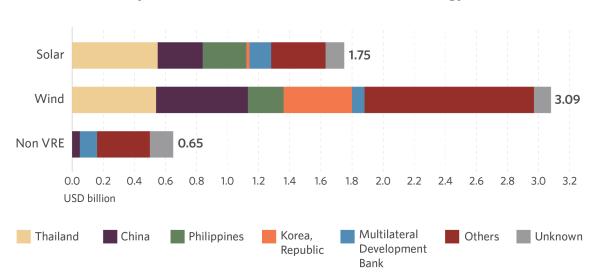


Figure 15b. RE investment by international financier nations and technology



Fossil Fuel Power Sector Finance



Sharp increase in gas investment in 2021

Coal and gas received almost the same amount of investment over 2017 to 2022, though gas investment is concentrated in 2021 and 2022.

The sharp increase in gas investments in 2021, followed by zero new coal investments in 2022, is likely driven by a convergence of strategic policy shifts and international climate commitments, including:

- The COP26 (2021) pledge to achieve net-zero emissions by 2050, signaling a decisive move away from coal.
- Viet Nam's updated NDC, submitted in 2020, identified the energy sector as a key area for emissions reductions
- While the Power Development Plan 8 (PDP8) was officially approved in 2023, its early drafts have guided energy planning since 2021, positioning gas, as a transitional fuel in the shift toward a low-carbon power sector.
- Anticipation of international financial support through the Just Energy Transition Partnership (JETP) that was signed in 2022.

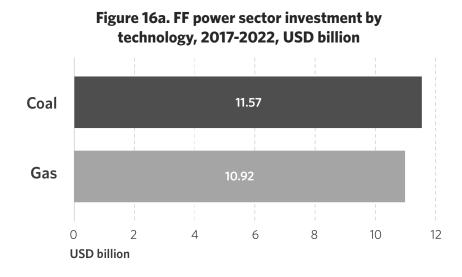
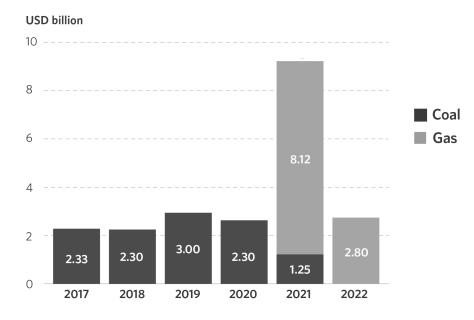


Figure 16b. Yealy breakdown of FF investment by technology, 2017-2022, USD billion





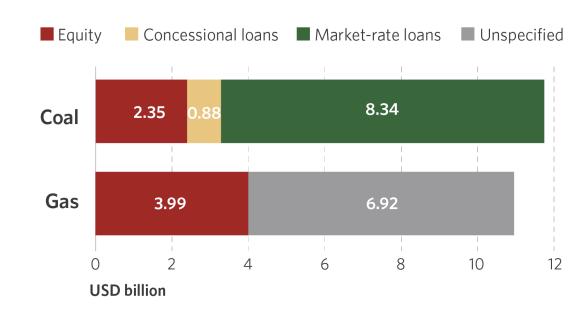
Loans dominated FF power finance

Over the 2017 to 2022 period, loans dominated, totaling USD 9.22 billion (41%), while equity reached USD 6.34 billion (28%).

Coal projects were predominantly financed through market-rate loans, which made up 72% of coal-related investments. Smaller portions came from equity (20%) and concessional loans (8%).

In contrast, gas power investments showed a less diverse mix. Equity made up 37% of total gas financing, while a significant portion is unspecified in reported data.

Figure 17. FF power investment by financing instrument, 2017-2022, (in USD Billion)





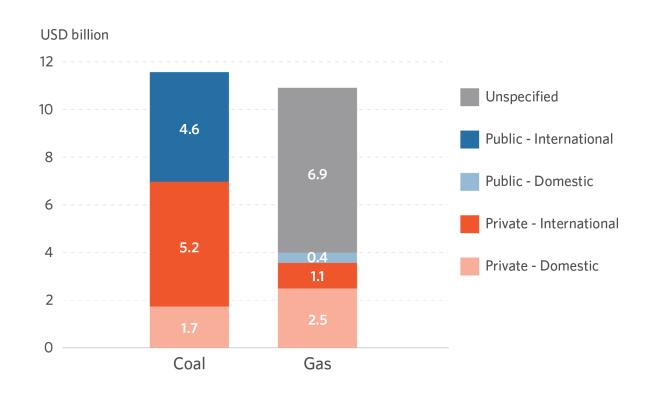
Private international investors dominated FF power finance

International funders accounted for 48% of FF investment over the period, with **private investors contributing 47% of this amount**.

For coal, 85% of financing—USD 9.8 billion—came from international sources, led by international private finance (45%) and international public institutions (39%).

For **gas power**, a significant portion of the financing sources remains undisclosed. This may suggest that investors are reluctant to disclose their involvement due to **negative perceptions of FF investment**.

Figure 18. FF power investment by type of FI source, 2017-2022, USD billion





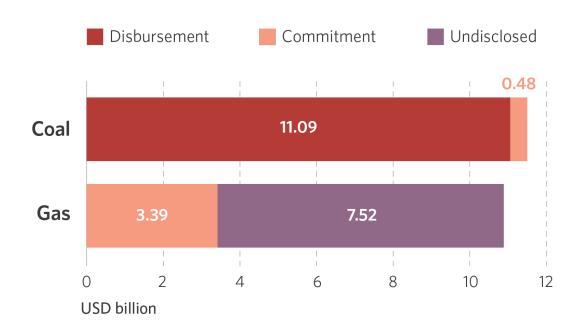
Disbursement vs Commitment

Coal power investments were predominantly tracked in the disbursement stage (96%), totaling nearly all the USD 11.6 billion invested. This may indicate that most of the reported financial flows to coal during the period were part of past commitments.

Gas investment tracking was less clear, with the status of the largest share of flows (USD 7.5 billion) undisclosed. Hence, it cannot be concluded whether the amount recorded had been largely disbursed or was still at the commitment stage.

Based on PDP8, officially approved in May 2023, Viet Nam cancelled approximately 13 GW of coal-fired power projects that were initially planned in the PDP7. This marks a pivotal policy shift towards cleaner energy sources.

Figure 19. FF power investment by commitment or disbursement, 2017-2022, USD billion





Foreign investor domination in FF finance

Overall International sources constituted **48% of FF investments** (USD 10.9 billion).

Japan contributed the largest amount, at USD 6 billion (54% of total foreign FF investment), mostly to coal power plants.

For gas power plants, undisclosed sources covering both equity and loan accounted for the largest share at USD 6.92 billion (63% of overall gas investments). Considering the investment surge in gas only began in 2021, the undisclosed information might be to avoid public criticism as there has been increasing global commitment to move away from FFs.

Figure 20a. FF power investment by source (international/domestic), 2017-2022, USD billion

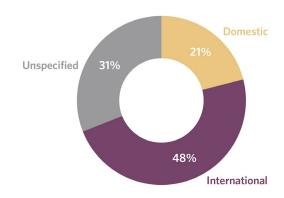
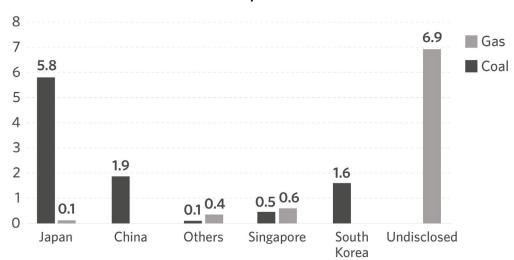


Figure 20b. International FF power investment by source country, 2017-2022, USD billion



Conclusion and Recommendations



Conclusion

By adopting policies that drummed up interest in solar and wind power investment—generous FiT rates, as well as exemptions for tax, import tariffs and land leases—**Viet Nam succeeded in attracting far higher investment in RE** (64.54%) than FF (35.13%) over the 2017 - 2022 period. Below are the main highlights:

- Private-domestic FIs were the largest contributor to Viet Nam's power sector investments, with solar PV and wind receiving the largest shares of RE finance.
- Foreign RE investments were dominated by investors from Thailand, China, the Philippines, and South Korea, especially for solar and wind power.
- Following investors' confidence in the generous FiT rates, the dominant financial instrument for RE investment shifted from market-rate loans (up to 69%) in 2017 to 2019 to equity (up to 90%) in 2020 to 2022.
- **FF power finance flow increased significantly in 2021, driven by a surge in gas investments**. However, it decreased significantly in 2022 with no finance flows to coal that year. This is aligned with the adoption of NZE commitment in 2021 and PDP8, which positioned gas as a transitional fuel.
- Foreign investors, mainly from Japan, dominated coal investment (54%). For gas power investments, undisclosed sources accounted for the largest share (63%), underlining a significant lack of available data and disclosure.
- Market loans dominated coal investments (72%), whereas equity was the main instrument (37%) in gas investments. However, a significant portion of instruments used in gas investments was unspecified.



Policy takeaways

Viet Nam's journey in unlocking RE financing can provide **important lessons** for other developing economies, particularly in Southeast Asia, on how to **leverage policy tools to mobilize more RE investments**:

- **Financial incentives**, such as favorable FiTs and exemptions of corporate tax, import tariffs, and land leases, can **spur RE investments**.
- In the case of the FiTs, which generally have a short eligibility window, domestic FIs have the
 advantage in quickly tapping into RE projects, considering there are fewer
 barriers/requirements to enter the market. Equity is the common financial instrument for this
 purpose.
- Aligning climate targets, financial capacity, and investment policies is critical in creating and sustaining an attractive market for investors. Generous FiT rates require higher government budget allocations. It is therefore important to comprehensively analyze the impact of FiTs to avoid the need for corrections during implementation, such as the recently issued update to Viet Nam's FiT (<u>Decision 988/QD-BCT</u>).



Recommendation for further analysis

- More updated datasets can be useful for further analysis on Viet Nam's energy trend and policy, including the impact of FIT regulation update issued in 2025.
- Similarly, as Viet Nam's JETP was announced in December 2022, more recent data is needed to evaluate the impact.



References

BloombergNEF. 2024. Net-Zero Transition: Opportunities for Vietnam. p. 34. https://assets.bbhub.io/professional/sites/24/BNEF_VietnamNZS_EN.pdf

BloombergNEF. 2025. Presentation at CPI Workshop in Viet Nam "Investing in a Sustainable Future: Energy Transition Opportunities".

Climate Insider. 2025. Vietnam Looks to More Wind, Solar Power in Revised Energy Plan. https://climateinsider.com/2025/04/17/vietnam-looks-to-more-wind-solar-power-in-revised-energy-plan/#:~:text=Insider%20Brief,1%2C375.1%20billion%20kWh%20by%202050.

Do TN, Burke PJ, Nguyen HN, Overland I, Suryadi B, Swandaru A, Yurnaidi Z. 2021. Vietnam's solar and wind power success: Policy implications for the other ASEAN countries. Energy for Sustainable Development. 65: 1-11. https://doi.org/10.1016/j.esd.2021.09.002

European Commission. 2023. Joint Statement on the Launch of the Resource Mobilisation Plan for the Just Energy Transition Partnership with Viet Nam. https://ec.europa.eu/commission/presscorner/detail/en/statement_23_6243

EVN. 2015. Overview of Viet Nam Wholesale Energy Market. https://vepg.vn/wp-content/uploads/2022/12/4.-EN_NLDC_-wholesale-electricity-market.pdf

Green Finance & Development Center. 2023. Vietnam's Eight National Power Development Plan (PDP8). https://greenfdc.org/vietnams-eight-national-power-development-plan-pdp8/#:~:text=The%20future%20of%20coal%20in%20Vietnam%20%E2%80%93,of%20new%20coal%20projects%20to%20around%2013GW.

International Energy Agency [Internet]. 2023. Viet Nam: Emissions. [Accessed 2025 October]. https://www.iea.org/countries/viet-nam/emissions

KPMG. 2025. Revised Power Development Plan VIII of Viet Nam under Decision 768/QD-TTg. https://kpmg.com/vn/en/home/insights/2025/07/revised-pdp-8.html

PVN. Power Industry and Renewable Energy. https://pvn.vn/sites/en/Pages/detailv4.aspx?NewsID=2d02afe3-af8c-4566-ba06-4a01d0056539

UNFCCC. 2022. Viet Nam Nationally Determined Contribution (Updated 2022). https://unfccc.int/sites/default/files/NDC/2022-11/Viet%20Nam_NDC_2022_Eng.pdf

U.S. International Trade Administration (U.S. Department of Commerce). 2024. Vietnam - Power Generation, Transmission, and Distribution. https://www.trade.gov/country-commercial-guides/vietnam-power-generation-transmission-and-distribution

Viet Nam Ministry of Natural Resources and Environment. 2020. Third Biennial Updated Report to the United Nations Framework Convention on Climate Change. United Nations Framework Convention on Climate Change. p. 65. https://unfccc.int/sites/default/files/resource/Viet%20Nam_BUR3.pdf

World Bank. 2018. Vietnam: Maximizing Finance for Development in The Energy Sector. https://documents1.worldbank.org/curated/en/290361547820276005/pdf/133788-WP-OUO-9-Vietnam-Energy-MFD-Report-ENG-for-printing.pdf