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Issue brief Vietnam: Turning clean energy commitment into investment

By Amin Mohseni-Cheraghlou, Muhammad Rafdi Fayyadh, and Frank Willey

Transforming energy systems in emerging markets and developing economies (EMDEs) to address climate change requires a significant increase in investment. However, existing initiatives to fund this transformation are wholly insufficient for these economies to generate clean energy at the scale required to meet rising demand while minimizing emissions. Several institutions have proposed a variety of investment structures to bridge this financing gap. This case study of Vietnam's energy sector—and others complementing a primary report—illustrates the potential for a guarantee-based mechanism to leverage private investment in EMDEs at a far greater multiple than other approaches currently being proposed.[1]

Overview: Vietnam's energy targets

Over the past two decades, Vietnam has maintained steady economic growth, averaging 6.2-percent annual grown from 2002 to 2022. During this period, gross domestic product (GDP) per capita increased by 3.6 times, reaching approximately $3,700, accompanied by a rising demand for energy consumption.[2] Energy demand has grown at an average rate of 9.5 percent per year.[3] Earlier projections have suggested that demand in 2025 would be approximately 400 billion kilowatt hours (kWh) and will surpass 570 billion kWh by 2030.[4]

Coal and oil accounted for nearly three-quarters of all energy supply in Vietnam in 2023 (Figure 1). Coal's share in Vietnam's total energy supply has surged from 15 percent in 2000 to 50 percent in 2023

1. Amin Mohseni-Cheraghlou and Frank Willey, "Scaling Up Private Capital for Climate Investment in Emerging Markets," Atlantic Council, June 16, 2025, https://www.atlanticcouncil.org/wp-content/uploads/2025/06/Scaling-up-private-capital-for-climate-investment-in-emerging-markets.pdf; Ian Callaghan, et al., "Guarantees 2.0: Meeting Climate Finance Needs in the Global South," Atlantic Council, September 18, 2023, https://www.atlanticcouncil.org/wp-content/uploads/2023/07/Guarantees-2.0_Meeting-Climate-Finance-Needs-in-the-Global-South_pdf.pdf.
2. "Viet Nam," World Bank Group, last visited March 27, 2026, https://www.worldbank.org/ext/en/country/vietnam; "Viet Nam Energy Outlook Report: Pathways to Net-Zero," Electricity and Renewable Energy Authority of Viet Nam and Danish Energy Agency, June 2024, https://ens.dk/sites/ens.dk/files/Globalcooperation/1._eor-nz_english_june2024_0.pdf.
3. Phung Thanh Binh, "Energy Consumption and Economic Growth in Vietnam: Threshold Cointegration and Causality Analysis," *International Journal of Energy Economics and Policy*, May 28, 2011, https://www.econjournals.com/index.php/ijeep/article/view/7.
4. "Viet Nam: Decision of the Prime Minister No. 428/QD-TTg of 2016 on the Approval of the Revised National Power Development Master Plan for the 2011–2020 Period with the Vision to 2030," Prime Minister of the Socialist Republic of Vietnam, last visited March 27, 2026, https://policy.asiapacificenergy.org/node/2760.

Figure 1: Total energy supply, 2022

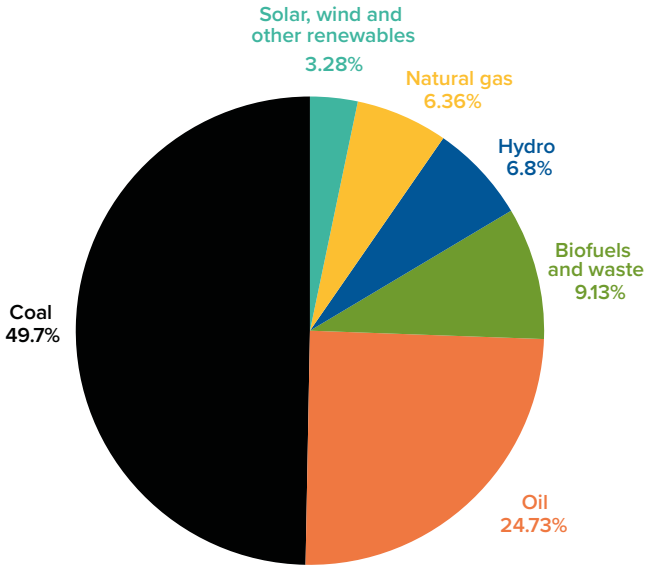


Figure 2: Evolution of total energy supply, 2000–2022

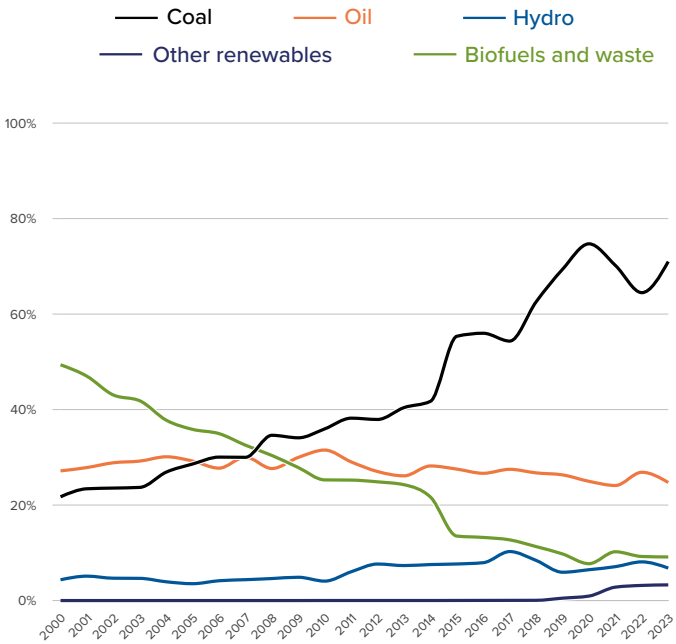


Figure 3: Electricity generation sources, 2022

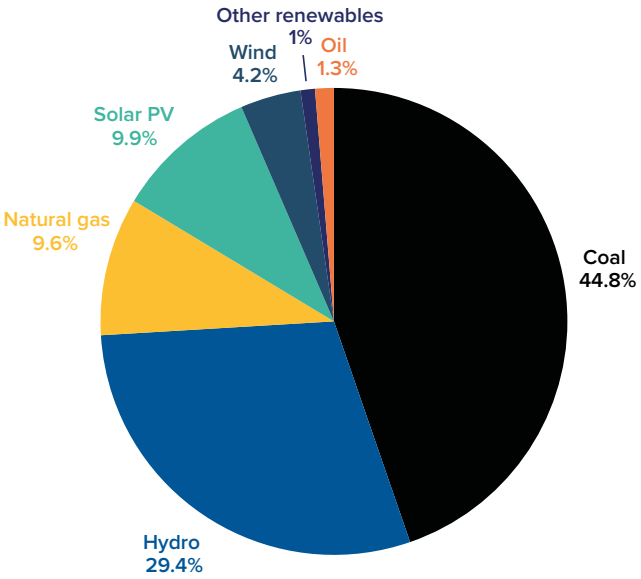


Figure 4: Evolution of CO_2 emissions by fuel, 2000–2022

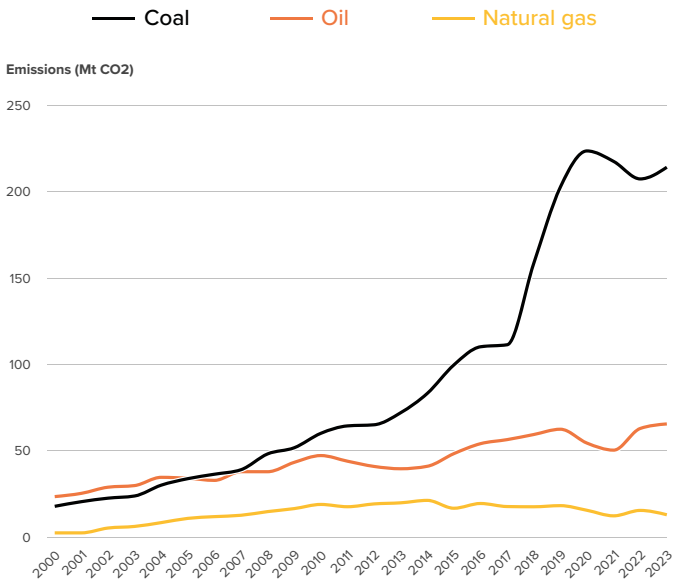


Figure 5: Share of modern renewables in final energy consumption (percentage), 2000–2021 (ranked forty-second in the world in 2022)

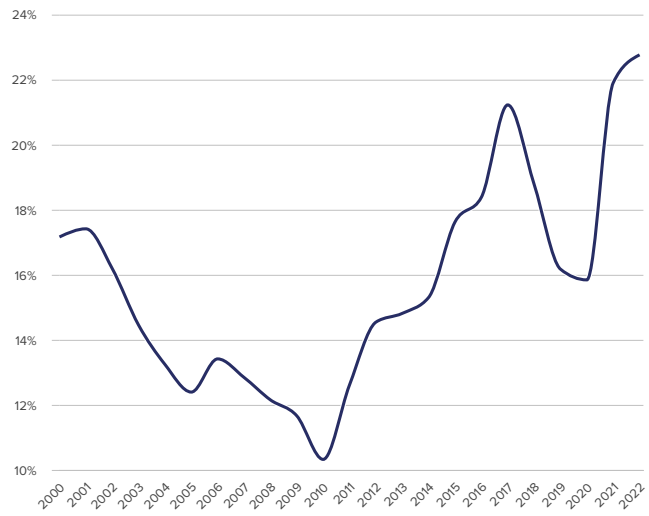
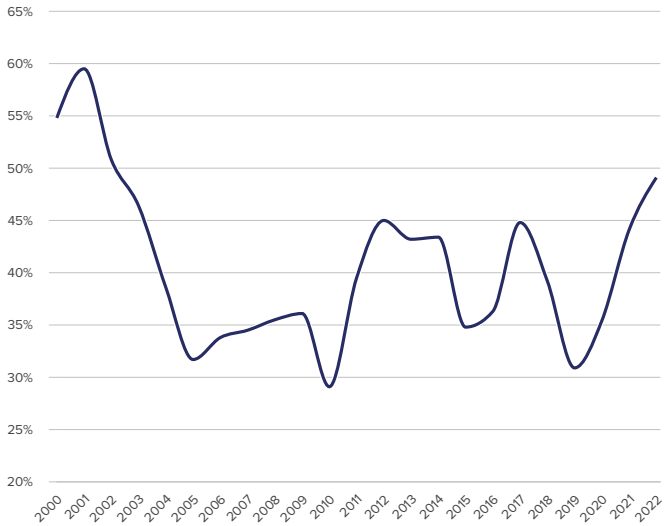


Figure 6: Renewables share of electricity generation (percentage), 2000–2022 (ranked fifty-first in the world in 2022)



Source: "Viet Nam—Countries & Regions," International Energy Agency, last visited September 17, 2025, https://www.iea.org/countries/viet-nam/.

(Figure 2). Coal has been the fuel of choice to feed Vietnam's burgeoning energy appetite because of institutional inertia, its familiarity as a proven technology, and reliable access to cheap supply. Coal-fired power plants generated around 45 percent of the country's electricity in 2023 (Figure 3), while coal's share of carbon dioxide (CO_2) emissions increased from 41 percent in 2000 to 73 percent in 2023 (Figure 4).

Climate change poses significant economic risks to Vietnam, with studies indicating that a 1.5-degree Celsius (°C) increase in global temperature could result in the loss of 4.5 percent of GDP.[5] Acknowledging the risks, Vietnam has set ambitious goals and taken important steps toward its clean energy transition.

Vietnam has announced a net-zero deadline of 2050. In its 2022 Nationally Determined Contribution (NDC) under the Paris Agreement, it amended its previous commitments to increase its carbon emissions reduction targets, from 27 percent to 43.5 percent compared to business-as-usual by 2030, conditional on international support.[6]

Vietnam has adopted the National Climate Change Strategy to 2050 and the National Green Growth Strategy for 2021–2030 as foundations for its low-carbon transition, while documents like the Master Plan on National Energy (2021–2030) and the country's eighth national power development plan (PDP VIII) focus on the energy sector.[7] The government is amending its national power development plan to incorporate nuclear

5. "Nationally Determined Contribution (NDC)," Socialist Republic of Vietnam, last updated October 2022, 17, https://unfccc.int/sites/default/files/NDC/2022-11/Viet%20Nam_NDC_2022_Eng.pdf.
6. Ibid.
7. "Decision No. 896/QD-TTg on Approving the National Strategy for Climate Change until 2050," Climate Change Laws of the World, last visited September 17, 2025, https://climate-laws.org/documents/decision-no-896qd-ttg-on-approving-the-national-strategy-for-climate-change-until-2050-5d61?id=decision-no-896-qd-ttg-on-approving-the-national-strategy-for-climate-change-until-2050_3848; "National Green Growth Strategy for 2021–2030, Vision Towards 2050," Socialist Republic of Viet Nam, October 19, 2021, https://en.baochinhphu.vn/national-green-growth-strategy-for-2021-2030-vision-towards-2050-11142515; "Gov't Approves Plan to Realize National Energy Master Plan for 2021–2030," Socialist Republic of Viet Nam, April 26, 2024, https://en.baochinhphu.vn/govt-approves-plan-to-realize-national-energy-master-plan-for-2021-2030-111240426113129831.htm;, "Vietnam National Power Development Plan: What Is Key for Energy Developers and Investors," VDB Loi, May 2023, https://vdb-loi.com/wp-content/uploads/2023/05/Vietnam-National-Power-Development-Plan-What-is-Key-for-Energy-Developers-And-Investors.pdf.

energy and hydrogen alongside renewable sources such as solar and wind.

The nation has revised its non-hydro renewable energy target from 13 percent in 2022 to 21 percent of total installed capacity by 2030. Specifically, Vietnam aims to boost solar energy's contribution from 10 percent in 2022 to 16 percent by 2030.[8] Vietnam is also revisiting nuclear energy plans previously shelved in 2016.[9] Discussions with international partners to explore the deployment of small, modern nuclear reactors are under way.

Vietnam's transition efforts have started to show some results: the share of renewables in total energy consumption increased from around 10 percent in 2010 to 22 percent in 2022 (Figure 5).

However, Vietnam's rapid expansion in renewables has created grid management challenges, with transmission infrastructure struggling to keep pace.[10] Power grid congestion has led authorities to reduce renewable energy output, especially when supply exceeds demand, leaving many solar and wind projects underutilized.

Given the rapid rise of demand for electricity, challenges with inadequate infrastructure, and Vietnam's turn to coal as a fuel of choice, the share of renewables in electricity generation actually declined from 55 percent in 2000 to 49 percent in 2022 (Figure 6).

Vietnam's reliance on coal is expected to persist in the next few decades due to massive investments in coal power plants in the past twenty years; these plants tend to have a lifespan of about fifty years.

However, more than half of the conditional carbon emissions cuts that Vietnam has promised under its 2022 Nationally Determined Contributions (NDC) are expected to come from the energy sector, making it a key focus in the country's efforts to cut emissions. This should be an achievable goal because Vietnam has massive potential for renewable energy.

McKinsey estimates Vietnam has the technical potential of 1,000 gigawatts of (GW) renewable energy.[11] Moreover, Ernst & Young's Renewable Energy Country Attractive Index (RECAI) ranked Vietnam as the thirty-ninth most attractive country for renewable energy investments in the world in 2024.[12] However, reaching its renewable potential and net zero targets by 2050 will require significant funding to shift to cleaner energy and improve efficiency across industries. With public funding becoming more scarce, the private sector has a pivotal role to play here.

Financing requirements and recent trends

Vietnam is projected to require $400 billion in financing by 2040 to effectively address climate change, according to the Ministry of Natural Resources and Environment.[13] However, the state budget is expected to cover only $130 billion, leaving a substantial shortfall that must be filled through external funding sources. The World Bank Group estimates a similar funding need of $368 billion through 2040, equivalent to nearly 7 percent of Vietnam's GDP, with half of this amount expected to come from the private sector.[14] BloombergNEF estimates a more ambitious financing need of $2.4 trillion from 2024 to 2050, driven largely by $1 trillion in demand-side investments, including electric vehicles and energy efficiency improvements, and $1.4 trillion in supply-side investments focused on renewable energy expansion, power grid upgrades, and carbon capture and storage.[15]

Between 2016 and 2020, Vietnam mobilized significant funds. According to the Climate Public Expenditure and Investment Review document, Vietnam's climate investment budget across

8. Aniruddha Ghosal, "Vietnam Plans Energy Shift Toward Building More Solar, Less Reliance on Gas and Coal," Associated Press, February 27, 2025, https://apnews.com/article/vietnam-energy-solar-gas-coal-832e7b8bb7c103fb17e1f86121f735cf.
9. Khanh Vu, "Vietnam to Amend National Power Plan to Include Nuclear Energy," Reuters, October 21, 2024, https://www.reuters.com/business/energy/vietnam-amend-national-power-plan-include-nuclear-energy-2024-10-21/.
10. Lam Le, "After Renewables Frenzy, Vietnam's Solar Energy Goes to Waste," Al Jazeera, May 18, 2022, https://www.aljazeera.com/economy/2022/5/18/after-renewables-push-vietnam-has-too-much-energy-to-handle.
11. Jonathan Deffarges, et al., "Putting Renewable Energy Within Reach: Vietnam's High-Stakes Pivot," McKinsey, October 2, 2023, https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/putting-renewable-energy-within-reach-vietnams-high-stakes-pivot.
12. "Renewable Energy Country Attractiveness Index (RECAI) 63: Top 40 Ranking," Ernst & Young, June 2024, https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/energy-resources/documents/ey-gl-recai-63-top-40-ranking-06-2024.pdf.
13. "Vietnam Needs around 400 Billion USD for Climate Change Response," Vietnam News Agency, August 7, 2023, https://netzero.vn/en/vietnam-needs-around-400-billion-usd-for-climate-change-response/.
14. "Vietnam Country Climate and Development Report," World Bank Group, July 2022, https://openknowledge.worldbank.org/server/api/core/bitstreams/a27f1b05-910d-59ab-ba2c-84206bf107c2/content.
15. "Vietnam's 2050 Net-Zero Target Represents a $2.4 Trillion Opportunity," BloombergNEF, January 8, 2025, https://about.bnef.com/insights/clean-energy/vietnams-2050-net-zero-target-represents-a-2-4-trillion-opportunity-bloombergnef/.

twenty-nine provinces (out of sixty-three provinces and cities) steadily increased from VND 15,000 billion ($615 million) to nearly VND 24,000 billion ($984 million). Official development assistance (ODA) funding drove most of this growth, rising from 24 percent in 2016 to 46 percent in 2020 while domestic investment remained stable.[16] The climate budget consistently accounted for 16–21 percent of the total provincial investment budget throughout this period. More than 90 percent of funds were allocated to adaptation projects, with only 6–10 percent supporting mixed adaptation and mitigation initiatives and less than 1.2 percent directed to pure mitigation efforts. The four sectors that dominated climate investment were transport (14.5 percent), residential and city resilience (14.1 percent), irrigation (12.9 percent), and river dykes and embankments (11.7 percent), which collectively made up more than half of the total climate budget.

While the budget remained relatively stable, 2018 marked a turning point when domestic sources became more dominant than ODA, with more than 75 percent of the climate change budget coming from domestic sources in 2019 and 2020.

Vietnam is establishing a green taxonomy to strengthen sustainable finance and attract more climate-related investment.[17] Between 2017 and 2022, green credit in Vietnam grew at an average annual rate of more than 23 percent. As of 2023, total green loans amounted to VND 528.3 trillion ($21.67 billion), representing 4.2 percent of the country's total outstanding loans.[18] Among the twelve green sectors eligible for financing under the State Bank of Vietnam guidelines, renewable and clean energy accounted for the largest share at 45 percent, followed by green agriculture at 31 percent.

In 2022, Vietnam signed the Just Energy Transition Partnership (JETP) to reduce emissions from coal-fired power plants and to accelerate the renewable energy mix to 47 percent by 2030, emphasizing power transmission, energy storage, and offshore wind technology.[19] The deal provides $7.5 billion in public funds led by the International Partner Group (IPG) and is expected to attract another $7.5 billion from private investments with a market loan rate. Most public money comes from development finance institutions (DFIs) and their commercial instruments, mostly loans with some equity and a guarantee (62 percent). These are followed by concessional loans (34 percent)—of which sovereign loans make up 8 percent and non-sovereign loans fill the rest.

Grants and technical assistance combined make up a small portion (4 percent). Vietnam's Resource Mobilization Plan (RMP) serves as the blueprint to integrate JETP funding into its energy transition strategy and drive public- and private-sector engagement.[20]

During its energy transition scheme, Vietnam has implemented key policies to draw private investment and manage financial risks. The PDP VIII document, approved in 2023, aims to mobilize $134.7 billion in foreign investment to expand the country's power sector.[21] To encourage long-term commitments, the government offers tax incentives, including a 10-percent corporate income tax (CIT) rate for the entire project lifespan, a full CIT exemption for the first four years of profitability, and a 50-percent CIT reduction for an additional five years for projects deemed to have social importance, including those in the environmental sector.[22] Additionally, feed-in tariffs (FiTs) have been implemented to support solar and wind energy, providing fixed, long-term pricing to ensure stable revenue streams for developers.[23] This has significantly boosted Vietnam's renewables capacity, making the country the leader in the Association of Southeast Asian Nations

16. "Climate Public Expenditure and Investment Review of Viet Nam," United Nations Development Programme, March 2022, https://files.acquia.undp.org/public/migration/vn/CPEIR-Main-Report-all-final-EN-Final.pdf.
17. Nguyen Thoan and Hai Yen, "Finalization of Green Taxonomy 'a Matter of Urgency,'" *Investor*, April 3, 2024, https://theinvestor.vn/finalization-of-green-taxonomy-a-matter-of-urgency-d9262.html.
18. Lê Hằng, "Banking Sector Putting Active and Enormous Efforts into Green Growth Targets," State Bank of Vietnam, September 12, 2023, https://sbv.gov.vn/vi/w/sbv575213.
19. Luthfyana Kartika Larasati and Sandy Fajrian, "JETP Resource Mobilization Plan: How Viet Nam Can Turn Ambition into Action," Climate Policy Initiative, April 4, 2024, https://www.climatepolicyinitiative.org/jetp-resource-mobilization-plan-how-viet-nam-can-turn-ambition-into-action/.
20. "Resource Mobilisation Plan: Implementing Viet Nam's Just Energy Transition Partnership (JETP)," European Commission Directorate-General for Climate Action, December 2023, https://climate.ec.europa.eu/system/files/2023-12/RMP_Viet%20Nam_Eng_%28Final%20to%20publication%29.pdf.
21. Khanh Vu and Francesco Guarascio, "Vietnam's $135 billion power plan for 2030," World Economic Forum, May 23, 2023, https://www.weforum.org/stories/2023/05/vietnam-pdp8-power-plan-for-2030/.
22. "Tax Incentives for Foreign Enterprises in Vietnam," Vietnam Briefing, last visited September 17, 2025, https://www.vietnam-briefing.com/doing-business-guide/vietnam/taxation-and-accounting/tax-incentives-for-businesses.
23. "Beyond Tripling: Keeping ASEAN's Solar & Wind Momentum," Ember, November 16, 2023, https://ember-energy.org/latest-insights/beyond-tripling-asean/.

(ASEAN), with 13 percent of its electricity generation coming from solar and wind, the region's highest share (70 percent of ASEAN's total electricity generation by renewable sources). Direct power purchase agreements (DPPAs) further enhance investment security by allowing large energy consumers to purchase electricity directly from renewable energy producers, reducing reliance on state-owned utilities and increasing market flexibility.[24]

Vietnam Development Bank (VDB)—a state-owned financial institution responsible for mobilizing capital, providing credit, and managing entrusted funds for national development—can be key in mobilizing capital for climate projects through concessional loans, guarantees, and risk mitigation mechanisms.

Unlocking capital: A guarantee facility to scale up private investment

However, Vietnam still confronts a sizable funding gap. To attract further private investment, guarantee mechanisms like the Emerging Market Climate Investment Compact (EMCIC) can help de-risk investments and encourage foreign and domestic private capital. EMCIC is designed to unlock $100–500 billion in private capital over the next decade to accelerate green energy and nature-based investments in EMDEs.

Structured as a large-scale loan guarantee facility, EMCIC would offer institutional investors credit guarantees that cover up to 80 percent of non-currency risks across portfolios of climate-related projects. These risks, which are common to all energy projects to varying degrees, include regulatory and revenue risks, transmission bottlenecks and curtailment, price volatility, and permitting and environmental challenges. The lender will need to evaluate each project's specific risks to its portfolio and seek guarantees only for those projects for which the risks fit within parameters established by EMCIC.

The compact's primary goal is to elevate these investments to "investment grade" status in the eyes of internal credit committees, significantly reducing perceived risks and facilitating greater private capital flows into promising renewable energy markets such as Vietnam. EMCIC would be funded by a coalition of sovereign governments from high-income economies with strong economic ties to emerging markets, alongside support from major foundations and sovereign wealth funds.

In Vietnam, the EMCIC guarantee could vastly increase private capital flows into power transmission, battery energy storage systems, and clean energy technologies by expanding the availability of concessional capital beyond Vietnam's current public lending capacity. For example, the power grid, particularly transmission infrastructure, is ripe for investment with EMCIC guarantee coverage as clean energy curtailment is growing. Vietnam's JETP has not attracted anywhere near the amount of investment required to meet its NDCs. Guarantees provide a higher leverage rate and can thus bring in more capital to power grid projects in comparison to conventional grants and loans, enabling wealthy countries to make more efficient use of public funds to meet JETP obligations.

EMCIC has several distinguishing features in comparison to other guarantee mechanisms and facilities. First, it would not require sovereign guarantees from the countries where investments are made, which is a common barrier to project bankability in emerging market countries that often have existing indebtedness and cannot further strain their sovereign balance sheet with guarantees.[25] Instead, it would shift due diligence responsibilities onto prequalified investors, who would be required to manage diverse, standards-compliant investment portfolios across multiple markets. Second, EMCIC would provide comprehensive coverage of all risks except for currency risks, for which it will rely on market-based currency hedging operations. Many existing facilities only cover certain risks on projects (see table 1). Third, EMCIC presents a user-friendly, scalable model that reduces barriers for private investors who are unfamiliar or inexperienced with blended finance transactions, while upholding robust environmental and social safeguards. EMCIC would pre-qualify private investors to use the guarantees based on a set of standards, which are similar to existing standards governing climate investment-driven facilities. However, after pre-qualifying investors, the EMCIC facility would not perform due diligence itself. Instead, private investors would carry out their own due diligence, while the facility would perform spot checks on projects within each investor's portfolio to verify compliance with established standards and key performance indicators.

By leveraging VDB's financial tools and the EMCIC's risk-sharing solutions, Vietnam can bridge its financing gap and accelerate its low-carbon transition. Given their lower risk structure, private financing of carbon-capture, wind, and solar photovoltaic (PV), as well as retiring coal power plants and replacing them with natural gas, should be prioritized in EMCIC-guaranteed projects in Vietnam.

24. Thu Nguyen and Marlon Joseph Apanada, "Vietnam's Renewable Energy Policy Is Spurring Decarbonization of Global Brands," World Resources Institute, November 1, 2024, https://www.wri.org/insights/vietnam-direct-power-purchase-agreement.
25. Mohseni-Cheraghlou and Willey, "Scaling Up Private Capital for Climate Investment in Emerging Markets."

Table 1: A comparison of proposed and active guarantee facilities

Guarantee provider	Eligible projects			Risks covered						Leverage	Funding	Target capitalization
	Clean energy	Nature-based / adaptation	SDG-aligned / other development goals	Project execution / construction	Political	Credit / default	Commercial / performance	First-loss / equity	Currency			
Proposed/In-Progress												
EMCIC	✓	✓	✗	✓	✓	✓	✓	✓ (anticipated)	✗	~1:10	5–10 developed countries	~$10B (proposed facility)
BRICS Guarantee Platform	✓	✗	✓	✗	✓	✓	✗	✓ (possible)	✗	~1:10	Existing NDB balance sheet	NDB capital: $100B authorized
The Green Guarantee Company	✓	✗	✗	✗	✗	✓	✓	✗	✗	~1:10	FCDO, GCF, NSIA, USAID / Prosper Africa, Norfund	$100M+ initial target
Active												
MIGA Guarantees	✓	✗	✗	✓	✓	✓	✓	✗	✗	~1:5–10	World Bank Group resources	$2.8B subscribed capital; targeting $20B annual issuance by 2030
IFC Guarantees	✓	✗	✗	✓	✓	✓	✓	✗	✗	~1:4–8	IFC balance sheet / blended finance	$40.9B total capital (June 2025)
iTrust Guarantee (RELP)	✓	✗	✗	✓	✗	✓	✓	✗	✗	TBF	Private investors	TBF
EFSD+	✓	✗	✓	✗	✓	✓	✓	✗	✗	~1:10	EU budget / EIB / DFIs	€60B target by 2027
African Development Bank Guarantees	✓	✗	✗	✓	✓	✓	✓	✗	✗	~1:6–8	AfDB capital base / donor trust funds	$318B authorized capital (2024)
DOE Loan Guarantee Program	✓	✗	✓	✓	✗	✓	✓	✗	✗	~1:10–15	US Federal appropriations	$290B loan authority through 2026
PIDG (GuarantCo)	✓	✓	✓	✓	✓	✓	✓	✗	✓	~1:3–10	UK, Netherlands, Switzerland, Australia, Sweden, Germany, Canada, IFC	~$1.5B in guarantees issued to date
Africa GreenCo	✓	✗	✗	✓	✗	✓	✓	✗	✓	~1:10	InfraCo Africa, IFU, GuarantCo backing	$27M GuarantCo guarantee facility
Infracredit (Nigeria)	✓	✗	✓	✓	✗	✓	✓	✗	✗ (local currency only)	~1:5–8	NSIA, GuarantCo, KfW, AFC, AfDB, InfraCo Africa	~~₦~~15B ($35M) initial capital
Asian Development Bank (ADB)	✓	✓	✓	✓	✓	✓	✓	✗	✓	~1:5–10	ADB capital / donor funds	$165B authorized capital (2024)
Asian Infrastructure Investment Bank (AIIB)	✓	✓	✓	✓	✓	✓	✓	✗	✗	~1:5–8	AIIB capital base	$100B authorized capital
IDA (World Bank)	✓	✓	✓	✓	✓	✓	✓	✗	✗	~1:5–10	IDA donor contributions	$93B IDA20 (2022-2025)
IBRD (World Bank)	✓	✓	✓	✓	✓	✓	✓	✗	✗	~1:5–10	IBRD capital / borrowings	$283B subscribed capital
European Investment Bank (EIB)	✓	✓	✓	✓	✓	✓	✓	✗	✗	~1:8–12	EIB capital / EU budget backing	€248.8B subscribed capital (2023)
Export-Import Bank of the United States	✓	✗	✗	✓	✓	✓	✓	✗	✗	Varies	US Government backing	$135B statutory exposure cap

Legend: ✓ = Covered/Eligible; ✗ = Not covered/Not eligible; **TBF** = To be finalized; **—** = Information not available; **Active** = Currently operational; **Proposed** = Under development; Leverage ratios indicate typical mobilization of private capital per dollar of guarantee/funding.

About the authors

Amin Mohseni-Cheraghlou is a senior lecturer of economics at the American University in Washington, DC, and was a macroeconomist with the Atlantic Council GeoEconomics Center (2021-2024). During his three-year tenure at the Atlantic Council, he developed and led GeoEconomics Center's flagship Bretton Woods 2.0 Project and frequently contributed to the center's analytical outputs on various issues related to the global economy and international finance.

Previously, he served as a senior advisor at the International Monetary Fund's Office of Executive Directors and was a research economist and consultant in different departments of the World Bank between 2007 and 2020. Most notably, he was part of the core team at the World Bank working on several rounds and updates of Bank Regulation and Supervision Survey, Global Financial Development Report, and leading the development of Global Financial Development Database.

Mohseni-Cheraghlou's areas of expertise are development macroeconomics, geoeconomics, energy economics, and international financial and trade relations with a focus on emerging markets, the United States, China, and the Middle East North Africa region.

He holds a PhD in economics, an MA in international development, and a BS in electrical engineering.

Muhammad Rafdi Fayyadh is a sustainable finance practitioner with experience at the intersection of climate policy, infrastructure, and investment. His work focuses on developing and structuring green finance instruments, conducting due diligence and risk assessments for blended finance initiatives, and advancing sustainable development initiatives across sectors.

Fayyadh holds a BS in civil engineering from Bandung Institute of Technology in Indonesia and an MS in sustainability management from Columbia University.

Frank Willey is an assistant director at the Atlantic Council Global Energy Center, where he focuses primarily on climate finance, clean-energy competitiveness, industrial decarbonization, transmission infrastructure, and regulatory policy.

Prior to joining the Atlantic Council, Willey served as a research associate for Stanford University's Center for International Security and Cooperation under Siegfried S. Hecker, preparing materials for the book *Hinge Points: An Inside Look at North Korea's Nuclear Program*. Willey has worked at several energy companies including a natural gas and power merchant, midstream project developer, and solar investment startup. He was also an intern for the Global Energy Center in the fall of 2020.

Willey holds a bachelor's degree from Stanford University in international relations, specializing in international security and environment, energy, and natural resources. He speaks French and Spanish.

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