Junior Consulting Research Report · February 2026

The Vietnamese Energy Sector in 2026 Plans and Pathways for Improved Sustainability

EVALUATING VIETNAM'S POLICY FRAMEWORK, MARKET REFORMS, GREEN FINANCE INCENTIVES, AND EMISSIONS-REDUCTION MECHANISMS SHAPING THE COUNTRY'S 2026 ENERGY TRANSITION.

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Introduction

Vietnam's commitment to achieving net-zero emissions by 2050 marked a significant shift in national energy policy. Since then, the government has introduced a series of strategic frameworks aimed at modernising the power sector, most notably the Power Development Plan VIII (PDP8). By 2026, many of these policies will move from planning to implementation, making it a decisive year for assessing progress toward sustainability.

The World Bank predicts that Vietnam will continue in the trend of growth, with lower estimates setting a GDP growth of 6.3% this year, though this could be as high as 9 percent too. With this comes the inherent need for more energy to sustain the growth and added pressure on the nation to support itself. This is why developing sustainable alternatives to coal, the main energy source in Vietnam, is essential to ensure a long term and stable growth without any limitations due to resources.

This report will explore the different options Vietnam has to improve sustainability in the energy sector whilst still producing as much, if not more, and outline what policies are already in place to ensure this. We will also evaluate these policies and give our conclusion as to what we believe is needed to ensure a smooth growth transition into 2026.

I. INATIONAL PLANNING AND FRAMEWORK

The main framework in-use in Vietnam for national planning is the PDP8[1].Vietnam's Power Development Plan 8 (PDP8) was officially approved via Decision 500/QD-TTg on May 15th 2023 and sets the national energy goals for 2030 with a vision towards 2050. Its main target is the reduction in the use of coal as an energy source, and targets a full net zero by 2050. It also recognises the fact that in order to have energy sustainability, you must have energy security, affordability and emission control: not just renewables. This plan signals a turning point in energy policy, as it replaced PDP7[2], a less concrete plan to shift onto renewable energy. It was also updated on the 15th of April 2025 by Prime Minister Bui Thanh Son[3] with the aim of increasing power output in the country, with the hope of this leading to a GDP growth of 10% annually until 2030, and 7.5% until 2050. The way Vietnam plans on doing this is by increasing the transmission grids to a voltage level of 220 volts or higher if possible – this should also make the grids run more efficiently and facilitate energy trade with neighbouring nations. As of now, GDP growth is on the up, with it reaching 8.02% at the end of 2025, signaling an improvement on 2024 (only 7.09%)[4]. There is still room for improvement, but with more investment and time it is looking very good for the future of Vietnam's energy sector.

Resolution 70[5] is a fairly new resolution aimed at supporting development, as it acts as a bridge between long-term planning (PDP8) and concrete regulatory measures, ensuring all changes go smoothly[6]. Crucially, it established a legal and political legitimacy for the reforms taking place to move closer towards sustainability, as without this, it would be far easier for corporations to challenge change on a legal basis. The main objectives are to ensure a reliable and affordable energy supply for continued economic growth, an increase in the share of renewable energy in the national mix, as well as generally support Vietnam’s net-zero 2050 commitment and emissions reductions. Similarly to PDP8, Resolution 70 encourages more private and foreign investment in order to finance the sustainable energies which are being developed such as offshore wind, solar and biomass[7]. We must note however some issues and complications regarding Resolution 70.

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[1] Planning and Development Programme 8

[2] 2011

[3] Vietnam Briefing (2025) Vietnam revises PDP8: key targets of the National Power Development Plan.

[4] National Statistics Office of Vietnam (2025) Socio-economic situation in the fourth quarter and 2024.

[5] August 20, 2025

[6] Vietnam.vn (2026) Realizing the goals set out in Resolution 70 of the Politburo

[7] LuatVietnam

There are gaps in its implementation at a provincial and national scale which complicate its financing, especially if it is foreign. It also has some very ambitious targets such as Net Zero 2050 which could be a hurdle to its success along with PDP8 if there were ever to be funding or commitment issues.

As mentioned in the above, the PDP8 and Resolution 70 have a common goal of increasing renewable energy output, and therefore are advantageous to the expansion of this sector. Firstly, let's take a look at solar energy and how this has been developed in Vietnam. The country is targeting a dramatic solar capacity growth by 2030, with solar expected to reach 46,459 to 73,416 MegaWatts, making it a top source in the renewables power mix[8]. Solar panels are now being installed in 'empty space' such as rooftops, which offer the ideal positioning for them, and are also a good way of attracting more private financing by having international companies install them on their buildings in Vietnam. Wind power is the second main renewable being explored, both onshore and offshore. Onshore wind capacity is projected to reach around 26,000 to 38,000 MW by 2030 under the revised PDP8[9] and offshore wind targets projections of 6,000 to 17,032 MW by 2030 and further growth by the mid-2030s[10]. Then there are biomass and waste-to-energy sources which are included in PDP8, with capacity expected to be around 1,523 to 2,699 MW by 2030[10] .The advantage of biomass for example is that it helps manage agricultural and urban waste streams whilst providing clean energy, a win-win situation[11]. Finally, there's the option of geothermal energy, however even though it is recognised in the PDP8 as a possible renewable energy source, currently it is being developed on a very small scale due to its heightened complexity and requirement for more funding. As such, our conclusion on these points is that Vietnam definitely is set for large-scale expansion of solar and wind capacity as core pillars of its clean energy transition, and these will be supplemented by biomass and other emerging technologies.

[8] SETP (2025) Vietnam approves Revised Power Development Plan 8, signaling massive renewable energy expansion. SETP News, 17 April.

[9] Norton Rose Fulbright (2025) Vietnam: Power Sector Snapshot, Global publication, November.

[10] SETP (2025) Vietnam approves Revised Power Development Plan 8, signaling massive renewable energy expansion. SETP News, 17 April.

[11] Nguyễn Quốc Việt (2025) Chuyển dịch năng lượng tái tạo và tăng trưởng kinh tế hiện nay, Lao Động, 29 May.

II. SHIFTS IN MARKETS AND INVESTMENT - INCENTIVES FOR GREEN FINANCE

The coming of age of green energies, notably against the backdrop of industrial developments opening the gates for an increasingly favorable productional means for the solar, hydraulic and wind energy sector has not been foreign for the Vietnamese energy sector. Boasting a respectable 44% of its energy being produced on a renewable and clean basis in 2024[12], numbers are set to rise in view of technological innovation providing the necessary impetus to induce such an advancement.

Further successful progress in the fields of DPPAs (Direct Purchase Power Agreements) allowed for Vietnamese super-consumers (notably the industrial sector) to allow for energy acquisition without the intermediary of third-parties or utilities, thus fostering not only innovation but decreasing costs for the productional sector. As such, legislative action in view of reaching productional objectives are tabled such as Decree 57; a regulatory tool introducing capped tariffs, rooftop solar limits on energy production of this variety, and increasing market integration for the prospering Vietnamese energy sector[13]. The introduction of government induced legislative actions in view of fostering relations between the industrial sector and the energy production actors favors the development of a climate of prosperity not only for further innovation, but also for a healthy economy. The need to consult all stakeholders and consequently integrate their needs into government policy remains a point of importance for the Vietnamese government, an exemplary attitude in view of upholding stable growth in the impacted sectors.

Advancements in the field of Green Finance, materialized notably by the use of a hybrid public/private capital to finance efforts towards environmental sustainability (investment in renewable energy, acute pollution control, and biodiversity conservation)[14] has further been a point of foundation for the Vietnamese economy to manifest progress. Vietnam has thus introduced measures of investment regulation which allow not only for industrial sectors to benefit from reduced energy costs, but further develop the expanded energy grid across the country[15]. Already highly electrified, the country prides itself in using 30% hydropower, followed by more traditional means to produce its electricity. Not only does this represent opportunities for mainly tech companies to invest in this country (as Vietnam seeks foreign investment to achieve its

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[12] Low Carbon Power (n.d.) Vietnam: Electricity generation and low-carbon energy, Low Carbon Power.

[13] Singh, S. (2025) 'Investing in renewable energy: How Decree 57 reshapes Vietnam's regulatory framework', Vietnam Briefing, 1 October.

[14] United Nations Environment Programme (UNEP) (2018) Green Financing, UNEP, 23 January.

[15] Nguyen, T.C., Chuc, A.T. and Dang, L.N. (2021) Green Finance in Viet Nam: Barriers and Solutions, ADBI Working Paper No. 886. Tokyo: Asian Development Bank Institute

PDP8 goals)[16], but further an opportunity to bring around global sustainability goals to flourishing.

Indeed, Vietnam's commitment to the PDP8 plan (Vietnam (8th Power Development Plan) boasts not only consideration for a sustainable development in the long run -notably in the fields of renewable energies-, but acts as an inspiration for neighbouring states aspiring to reach levels of achievements comparable to Vietnam in this field. With relation to the field of energy production, Vietnam thus surpasses in planning effectiveness its concurrents, setting the pace in regional energy production dynamics.

Drawing plans for both up to 30 and 50 years, the recently amended PDP8 plan provides not only for a multiplication of solar production capacity (of a multiplying factor of up to 3.5), but further provides increased ambitious objectives in all fields. Indeed, phasing out coal remains a priority alongside the parallel development of greener alternative energies such as offshore windfarming, a more efficient way of producing energy from wind than traditional land-based windfarms. With relation to the energy sector, development of LNG compatible import hubs (infrastructural investment in maritime LNG terminals) and a consideration for nuclear energy are tabled for this renewed PDP8 plan. As such, a triple goal of development, energy security and sustainability are combined in Vietnam's revised PDP8 plan, in view of securing the country's future as a regional competitor and emerging international trade power. Adherence to global sustainability objectives thus not only demonstrates Vietnam's acute role in globalisation and involvement on major trade axes, but further shows the extent to which the willingness of a State to engage in transnational trade leads to commercial prosperity.

As such, we may draw the following conclusive points in relation to Vietnamese policy on market shifts and incentivisation for green energies; dynamic trends of investment related to a change towards sustainability led Vietnam to engage with the international framework of combatting climate change, and that in view of conforming not only to international expectations, but further domestic objectives. Externalities include thus the cementation of Vietnam as a regionally viable partner for the global trade community (alignment on development values) and a relatively sustainable model of development for the domestic industrial sector- notably in view of the novel means of producing energy. Expansion of the energy grid and deepening of ties with the private sector leads the State to create an environment prone to sustained growth based on solid foundations.

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[16] Government of Canada (2023) Energy market in Vietnam, Tradecommissioner.gc.ca.

[17] ASEAN Centre for Energy (2025) Policy Insight – Vietnam's Revised PDP8 and Indonesia's RUPTL 2025-2034, 29 August.

[18] Tran, D., Lovell, S. and Chau, P. (2025) 'Vietnam's PDP8 gets a makeover', A&O Shearman Insights, 25 June.

[19] Vietnam Briefing (2025) 'Vietnam revises PDP8: Key targets of the National Power Development Plan', Vietnam Briefing, 18 July.

III. REDUCTION OF EMISSIONS ACROSS THE ECONOMY

The recently launched Emissions Trading Scheme (ETS) aims at creating a framework prone to induce collaboration on the topic of emission related pollutants, notably as a negative externality of industrial activity. Far from being excluded from the impact of the latter, Vietnam engaged in the process starting 2025 with the instigational pilot phase of the project.

Indeed, these target three major energy intensive sectors, notably those of coal-generated electricity, steel and cement production[20]. Launching a pilot phase will lead to the realistic evaluation of how such a model could lead Vietnam into an era of sustainability, in addition to massively contributing to decreasing global emissions levels. Accounting for a total of 7 to 9% of global anthropogenic CO2 emissions, steel production remains one of the most polluting heavy industrial activities[21], in addition to coal-based energy production- accounting itself for up to 40%[22]. Cement production amounts to a total of 8% of total Co2 emissions globally[23]. As such, these sectors being targeted remain a rational choice for the Vietnamese State. In addition to incentivising (through negative incentives) the transition to either greener ways of producing these goods (cement and steel) or producing electricity from renewable sources (by putting a hurdle of quotas on coal). Though international ETS systems only truly exist only within the EU, it is not inconceivable that the instigation of such a pilot project will expand the model to a pan-ASEAN level, especially against the backdrop of growing concern relating to climate change within the organisation.

The Vietnamese model of ETS (Decree No. 06/2022/ND-CP) contains precise guidelines so as to frame the different phases of this pilot project in order to evaluate the needs of the State. Indeed, these include the possibility for industries covered to offset 30% of their obligations related to compliance, the ability to borrow up to 15% of allowances from allocation periods set in the future in order to meet current compliance obligations. Were an organisation not to use up its quotas, it may be banked up until 2030[24]. Use of such frameworks demonstrates a will of compliance on behalf of

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[20] The ESG Institute (2025) 'Vietnam's carbon market takes shape: What businesses need to know', The ESG Institute (online), 2 December.

[21] SteelWatch (2025) SteelWatch Explainer: Why steelmaking drives climate change – and why it doesn't have to be this way, 22 January.

[22] World Nuclear Association (2024) Carbon Dioxide Emissions From Electricity, updated 3 September 2024.

[23] Macaranga (2024) Cement matters in the climate crisis, 10 April.

[24] International Carbon Action Partnership (ICAP) (2025) 'Vietnam issues rules for pilot ETS, launching August 2025', ICAP Carbon Action, 2 July.

Vietnam in order to reach global objectives of sustainability, as well as adhere to the international treaties on climate change. Fostering cooperation, yet also stimulating competition, this healthy incentive will most probably prove its worth, with results being released at the end of the pilot phase of 2026.

Vietnam announces its ambitious adherence to achieve a net-zero target by 2050. Chronologically setting its objectives in order to peak its greenhouse emissions by 2035 while reducing its emissions by 43.5% by 2030, Vietnam aims at ultimately reaching net zero by 2050. Critics of the PDP8 plan thus put forward the increased reliance of Vietnam on Liquified Natural Gas, despite the State defending its actions by presenting LNG as a “transitional fuel”. Many analysts present decarbonisation of the energy sector as the only viable way to reach such objectives (as seen previously Vietnam relies heavily on fossil fuels in the present state of matters which heavily impedes climate efforts). As such, the transition will represent a yet unseen occasion for investors, with Bloomberg presenting the occasion as a “$2.4 trillion opportunity” in order to contribute to Vietnam conforming to the conditions set out in the Paris Agreement of 2015 and fuel change.

Being a legally binding international multilateral treaty, the Paris Agreement (focusing on limiting climate change to 2 degrees Celsius, preferably 1,5)[28] represents an opportunity for Vietnam to gain the favors of the international community and to join the world stage of climate change acting countries. Summatively, not only does this transitive opportunity represent an occasion to shine for the private sector, the involvement of the latter also contributes to the double objectives of growth and sustainability, shaping the future of Vietnam and global environment alike. As seen in Part II of this report, the joint action of the private and public sectors on climate efforts is far from being a zero-sum collaboration, rather reflecting the ideas contained within the framework of green finance. The applicability of this model to Vietnamese economy is even more suiting, as efforts already put in place due to heavy state involvement already gave rise to multiple projects- be it

[25] Pham Van Tan (2023) Vietnam’s Major Commitments at COP26, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Hanoi, December.

[26] Climate Action Tracker (n.d.) Vietnam – Net-Zero Targets, Climate Action Tracker.

[27] BloombergNEF (2025) Vietnam’s 2050 Net-Zero Target Represents a $2.4 Trillion Opportunity, 8 January.

[28] UNFCCC (n.d.) The Paris Agreement, United Nations Framework Convention on Climate Change.

within the energy sector[29] or productional industries[30]. As such, rather than a burden, the net-zero objectives of Vietnam do come-around as an opportunity for growth and development, all in line with an agenda focused on green-development and combatting climate change at a domestic, regional and international level.

CONCLUSION:

To conclude, Vietnam is taking a defining path towards net zero by 2050, reflecting a strong environmental and economic commitment for the future. The instruments and frameworks which we analysed in this report, notably the PDP8, Resolution 70, green-finance mechanisms, and the pilot Emissions Trading Scheme, show that the nation is taking necessary steps in order to allow for a smooth and efficient transition. With 2026 being a key year for transition from planning to execution, current progress in renewable expansion, grid upgrades, and regulatory reform all suggest that there is indeed a credible trajectory toward a more balanced and resilient energy supply.

The focus will mostly be on solar and wind energies which are emerging as the core drivers of this transition, followed by biomass and hydropower. The aim will be to reduce the use of coal as much as possible whilst still preserving energy security and affordability. However, it is also crucial for this transition that funding remains steady in order to make this transition economically viable.

Challenges will still persist: financing, governance issues, implementation and the need to slowly fade out fossil fuels without causing power shortages are all real threats to this transition. Whilst these are all valid points that must be considered, we believe that with the continued commitments made by Vietnam, that this transition should be possible and achievable, as long as funding and governance stay on track. This would further reinforce its status as a competitive and forward-looking regional power.

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[29] Hauber, G. (2024) 'Vietnam's direct power purchase agreement (DPPA) decree could catalyze a new era for renewable energy', Institute for Energy Economics and Financial Analysis (IEEFA), 29 July.

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