



**COUNTRY
COMPARATIVE
GUIDES 2023**

The Legal 500 Country Comparative Guides

Vietnam

RENEWABLE ENERGY

Contributor

LNT & Partners



Bui Ngoc Hong

Partner | hong.bui@lntpartners.com

Nguyen Quoc Bao

Senior Associate | quocbao.nguyen@lntpartners.com

This country-specific Q&A provides an overview of renewable energy laws and regulations applicable in Vietnam.

For a full list of jurisdictional Q&As visit legal500.com/guides

VIETNAM

RENEWABLE ENERGY



1. Does your jurisdiction have an established renewable energy industry? What are the main types and sizes of current and planned renewable energy projects? What are the current production levels?

Yes, Vietnam possesses one of the fastest growing renewable energy industry in ASEAN. Discussions on renewable energy began in the early 2000s when energy shortages posed a greater threat to Vietnam's development. However, it was not until 2011 that specific renewable energy targets were set out in the national power development plan (**PDP**) 7. Following the PDP7, Vietnam introduced feed-in tariff (**FIT**) schemes for certain renewable energy sources. Notably, with Vietnam's commitment to achieving net-zero emissions at COP26, there is an even greater emphasis on renewable energy.

Currently, hydropower is the primary source, followed by solar power, wind power, and other renewable energy types. In the first 10 months of 2023, hydropower accounted for 28.5% of total energy generation, generating 66.74 billion kWh. Solar power projects generated 22.35 billion kWh accounting for 9.5%, and wind power projects generated 8.52 billion kWh accounting for 3.64%. Other renewable energy sources, such as biomass, remain comparatively modest. In 2020, biomass contributed a mere 0.14% of the total electricity output sold to the grid.

Looking to the future, the PDP8 sets out ambitious goals towards renewable energy development:

- Onshore/Nearshore wind power:
- 2030: 21,880 MW (14.5% of power plants' total capacity);
- 2050: 60,050 – 77,050 MW (12.2 – 13.4%)
- Offshore wind power:
- 2030: around 6,000 MW (4%), or other higher capacity in case advanced technology, plausible energy price and transmission fee are met;

- 2050: Promotion of this sector with a target range of 70,000 – 91,500 MW (14.3 – 16%).
- Solar power:
- 2030: 12,836 MW (8.5%, excluding the existing solar rooftop power). The capacity for central solar power is capped at 10,236 MW due to significant growth from 2020-2022, and the remaining capacity is allocated for self-generation and self-consumption, and may be allowed for development without capacity limit in certain cases.
- 2050: 168,594 – 189,294 MW (33.0 – 34.4%).
- Biomass energy and energy produced from waste:
- 2030: 2,270 MW (1.5%), potentially higher under specific conditions;
- 2050: 6,015 MW (1.0 – 1.2%).
- Hydropower
- 2030: 29,346 MW (19.5%), potentially higher under specific conditions;
- 2050: 36,016 MW (6.3 – 7.3%).

2. What are your country's net zero/carbon reduction targets? Are they law or an aspiration?

During COP26, Vietnam committed to achieving net zero by 2050. The carbon reduction targets must follow Nationally Determined Contributions (NDC), and are codified in laws from time to time.

3. Is there a legal definition of 'renewable energy' in your jurisdiction?

Yes. Under Article 3.3 of the Law on Economical and Efficient Use of Energy 2010, "renewable energy resource" means "including water power, wind power, solar radiation, geothermal resources, biofuels and other renewable energy resources".

Under the PDP8, Vietnam has the plan to formulate new, separate law on renewable energy. Therefore, we may expect another definition for renewable energy to be

introduced in such law.

4. Who are the key political and regulatory influencers for renewables industry in your jurisdiction and who are the key private sector players that are driving the green renewable energy transition in your jurisdiction?

Here are the key regulators in the renewable energy sector:

- **The Prime Minister (PM)** holds the authority to approve pivotal matters such as national power development plan.
- **The Ministry of Industry and Trade (MOIT)** serves as the central authority overseeing the renewable energy industry. The MOIT is tasked with, among others, formulating and proposing PDP for PM's approval, acting as approving authority for certain licensing procedures during renewable energy development, signing public-private partnership (PPP) documents, and promoting a competitive power market.
- **Other ministerial authorities involving in specific issues**, such as Ministry of Natural Resources and Environment (MONRE) for environment, land and sea issues; Ministry of Defense (MOD), Ministry of Public Security (MPS) and Ministry of Foreign Affairs (MOFA) for areas sensitive to national security, etc.
- **Provincial People's Committee (PPC)** acts as highest local administrative authority. PPC is generally responsible for approving projects, allocating land or sea area, and approving some licensing procedures.
- **Other local authorities** such as some departments of the PPC (e.g., DPI, DOIT, DONRE, DOC) or lower-level People's Committee.

In quasi-public sector, the Electricity of Vietnam (**EVN**), a State-owned enterprise (**SOE**), takes a significant role in the renewable energy sector. EVN is engaged in power generation, transmission, retail, and wholesale. As an SOE, EVN used to have the exclusive authority to manage and operate the transmission grid. Although the sector has now been opened to other stakeholders, the EVN remains vastly dominant due to its existing control over Vietnam's grid.

In the private sector, private stakeholders have become more and more prominent. Local investors previously took the lead in the early stages of industry

development. However, foreign investors have recently become more active, supporting the increasing influence of private investors in renewable energy. So far, many large corporations have been involved in the energy segment such as Trung Nam Group, Xuan Thien Group, Shire Oak International, Mainstream Renewable Power, etc.

5. What are the approaches businesses are taking to access renewable energy? Are some solutions easier to implement than others?

For energy developers, entry into the renewable energy industry is possible through initiating either greenfield projects or acquiring existing ones. The latter option is currently more common. Please refer to our detailed analysis in Question 6.

For business consumers, there are various approaches to accessing renewable energy sources, with some already implemented and others anticipated. These approaches include:

- **Self-consumption:** Businesses can create their own renewable energy projects, often using rooftop solar panels to generate electricity for their own use. This approach is currently encouraged under the PDP8, particularly for rooftop solar power installations on office buildings and residential houses.
- **On-site generated power:** Businesses can allow a renewable energy project to be set up on their premises. They can then use the electricity generated by this project. For example: a warehouse occupant might let a solar project developer install panels on its roof, and then buy the electricity produced.
- **Direct Power Purchase Agreements (DPPAs)**, including:
 - *Model 1 (Physical DPPA):* Customers sign DPPA to directly purchase renewable energy from generators with their own power grids.
 - *Model 2 (Synthetic DPPA):* The customers sign DPPA with the renewable energy generator under Contract for Difference (**CfD**). The renewable energy generator will use the national power system to supply power, and sell all of their produced renewable energy to EVN as the wholesaler. EVN will sell renewable energy to the power retailers who then sell it to customers. Differences in spot prices and contract price will be adjusted between the generator and customer.

Currently, the MOIT is formulating the DPPA pilot mechanism, aiming for approval and implementation as soon as possible. Among the three approaches mentioned above, it is generally easier to access renewable energy through self-consumption and on-site generated power without requiring grid connection. Regarding the DPPA scheme, further guidelines and/or a formal legal mechanism remain to be seen for effective implementation in practice.

6. Has the business approach noticeably changed in the last year in its engagement with renewable energy? If it has why is this (e.g. because of ESG, Paris Agreement, price spikes, political or regulatory change)?

Yes, for energy developers. Compared to the previous period of from 2018 to 2021, there has been a noticeable change in the business approach regarding renewable energy in 2022, particularly in the wind sector.

Rather than aggressively pursuing new developments or acquisitions, investors have taken a more cautious “wait-and-see” approach due to some uncertainties in the policies.

For wind energy projects, the FIT was no longer applied for projects unable to achieve COD by 1 November 2021. After FIT expiration, pricing mechanism became increasingly uncertain until the MOIT’s introduction of transitional pricing mechanism in late 2022 and early 2023. That said, the transitional pricing does not create a necessary boost to wind energy. This is because the favourable FIT mechanism has been replaced by a negotiation-based pricing system, where the electricity sale price will not exceed the pre-determined maximum price. Under the transitional pricing regime, the maximum price for onshore and offshore wind is reduced by approximately 21.2% and 21.8%, respectively, compared to the applicable FIT in the preceding period (reference rate USD1 = VND23,700).

Moreover, due to the long-pending formulation of PDP8 and its guidelines, investors in greenfield energy projects have struggled to include their projects in the master plan or obtain key investment licenses. Consequently, new developments are not as appealing as in the preceding period. Meanwhile, the acquisition of existing projects, especially those that already achieved COD within the FIT period or obtained investment licenses, remains quite active in the market. Now, although PDP8 has been issued, its detailed implementation plan is pending finalization. It is expected that a well-defined

implementation plan for PDP8 should help clarify the alignment between PDP8 and the specific local power development plans, thus unleashing the new greenfield developments.

Another significant policy change involves the amendment to the Electricity Law, effective as of March 2023, permitting the private sector to invest in and operate the transmission grid – a domain that was formerly under the exclusive authority of the State. This opening aims to leverage resources from the private sector to upgrade and enhance the capacity of the grid transmission, addressing the supply problem that has hindered many renewable energy projects from achieving full operation. However, businesses still await more detailed elaboration of this new policy to possibly implement a new business approach.

7. How visible and mature are discussions in business around reducing carbon emissions; and how much support is being given from a political and regulatory perspective to this area (including energy efficiency)?

Vietnam’s dedication to carbon emission reduction is evident through its efforts in:

- **Attracting green financing/investment:** Vietnamese businesses, especially in manufacturing, are adopting green practices to attract foreign investments, meeting global decarbonization requirements.
- **Facilitating carbon credit market:** Vietnam is currently perfecting its legal framework to support the domestic carbon credit market, with an aim of launching carbon credit trading platform in 2028.
- **International commitments and domestic regulations:** In 2021, Vietnam committed to achieving net-zero carbon emissions by 2050. New laws, including PDP8 and Decree 06/2022/ND-CP, outlining ambitious goals for renewable energy development, greenhouse gas emission reduction, and the carbon credit market, have been issued. These steps are vital for Vietnam’s decarbonization goals.

8. How are rights to explore/set up or transfer renewable energy projects, such as solar or wind farms, granted? How do these differ based on the source of energy,

i.e. solar, wind (on and offshore), nuclear, carbon capture, hydrogen, CHP, hydropower, geothermal and biomass?

Generally, a renewable energy project is considered established when its investor acquires both the in-principle investment approval (**IPIA**) and the investment registration certificate (**IRC**). One prerequisite for obtaining these approvals is the project's inclusion in both national and local master development plans. Subsequent to the IPIA and IRC being secured, the investor must proceed to fulfil various additional requirements. These encompass tasks related to investment, the environment, fire prevention, site clearance, construction, installation and operation. Additionally, the investor is obliged to execute main project agreements with other relevant stakeholders, as mentioned in Question 15 below.

As of now, the biomass and solid waste energy projects are the types of renewable energy that can still benefit from FIT. For solar and wind energy, FIT is no longer applied for those achieving the COD after 31 December 2020 or from 1 November 2021 onwards, respectively. The current pricing approach for solar and wind energy mirrors that of hydropower projects, involving negotiations within pre-determined electricity price framework. Additionally, the proposed approaches of DPPA and a bidding mechanism for determining electricity rates are currently in draft form, awaiting further development.

Establishing an offshore wind project is currently challenging due to the lack of a relevant legal framework.

9. Is the government directly involved with the renewables industry? Is there a government-owned renewables company or are there plans for one?

Yes. Besides its regulatory role, the government, through SOEs, actively participates in the development and operation of renewable energy projects. One notable SOE in this sector is EVN, which not only serves as a major electricity wholesaler and national power grid operator, but is also involved as a developer in some notable renewable energy projects across Vietnam. Examples include the Da Mi solar farm, Phuoc Thai 1 solar farm, and Phu Lac wind farm. Other SOEs, such as LICOI 13 and LICOI 16 (under the Ministry of Construction), also participate as investors/project owners.

10. What are the government's plans and strategies in terms of the renewables industry? Please also provide a brief overview of key legislation and regulation in the renewable energy sector, including any anticipated legislative proposals?

The Government is actively promoting an increase in renewable energy capacity as part of the PDP8 to facilitate a complete energy transition. By 2030, wind, solar, biomass, and waste energy are expected to contribute around 28.5% of the total national capacity. Notably, targets for offshore wind and onshore wind power capacities are set at 6,000 MW and 21,880 MW, respectively. This marks substantial growth compared to the previous target set in PDP7, which was only 6,000 MW.

Regarding pricing, the FIT has expired for wind and solar energy, currently only applying to biomass and solid waste energy. The pricing mechanism for wind and solar energy is not entirely clear at the moment; more details can be found in the response to Question 8.

Key legislation for renewable energy projects in Vietnam includes various laws:

- Investment Law and Enterprise Law cover conditions for investment, registration of renewable energy projects and incorporation of project company.
- Construction Law regulate pre-construction procedures, construction permit and construction acceptance.
- Environmental Protection Law governs environmental protection permits and approvals, such as environment impact assessment and environment permit.
- The Land Law governs land use rights concerning renewable energy projects.
- The Electricity Law covers requirements for organizing power plant operations, electricity production and sale.
- Decisions of PM and/or MOIT on pricing mechanism applicable to each source of renewable energy.

Looking forward, the DPPA pilot mechanism (see our answer in Question 5) and ceiling tariffs for the sale of electricity from wind/solar power plants to EVN are anticipated to be released soon. This development is expected to provide clarity on the pricing mechanism. Additionally, under the PDP8, one of the policy solutions involves the introduction of a bidding process for the selection of project developers and determining electricity prices, as part of the amendment to the

Electricity Law.

As to offshore wind energy, there have been deliberations on the development approach for such projects, although the specific details remain somewhat unclear.

11. Are there any government incentive schemes promoting renewable energy (direct or indirect)? For example, are there any special tax deductions or subsidies offered? Equally, are there any disincentives?

Yes, there are both incentives and disincentives.

As to incentives, they come in the form of tax incentive, land rent exemption or reduction, and subsidies. Subject to each particular case, the tax incentive could include a 15-year period with reduced CIT and specific exemptions on the import tax for particular items. The extent of land rent reduction or exemptions is subject to the project location. Subsidies commonly take the form as FIT, but currently, FIT is applicable only to biomass and solid waste energy, as mentioned in Question 8 above.

There are also disincentives. Under Vietnamese laws, if an investor opts to benefit from the land rent reduction or exemption, their rights over the land use right will be significantly more restricted. For instance, investors may not be permitted to mortgage the land use right to a financier. Additionally, financing a renewable energy project in Vietnam presents challenges, including limited options for mortgaging the land use right, the absence of government guarantees, the lack of legal opinions from the Ministry of Justice (MOJ) for renewable energy projects (except for those invested under PPP), and the non-bankable standard PPAs.

12. Has your Government had to help with the basic cost of energy over the last year and has that led to any discussion about de-linking the gas price and renewables prices?

The Government previously supported the basic costs of renewable energy through the FIT scheme. However, as discussed in Question 8, FIT is no longer applicable to wind and solar energy. Pricing for wind and solar energy is now transitioning to a negotiation-based process, which might be affected by the gas prices compared to the period when FIT was in effect.

To help reduce the energy costs by way of financing,

Vietnam has joined the Just Energy Transition Partnership (**JETP**). Of course it remains subject to Vietnam meeting the relevant conditions for entitlement to the JETP financing, Vietnam is hopeful to obtain a substantial \$15.5 billion in funding from the JETP, for both the public and private sectors, to facilitate green transitions, including renewable energy projects.

13. If there was one emerging example of how businesses are engaging in renewable energy, what would that be? For example, purchasing green power from a supplier, direct corporate PPAs or use of assets like roofs to generate solar or wind?

As the DPPA pilot mechanism remains in the drafting phase, the common approach for businesses to engage renewable energy are through self-consumption or on-site generated power, as analyzed in detail in Question 5 above.

Other than the above approaches, businesses can procure power from EVN. However, at present, due to the lack of distinct lines for renewable energy, those purchasing electricity from EVN cannot be guaranteed that the energy comes exclusively from renewable sources.

14. What are the significant barriers that impede both the renewables industry and businesses' access to renewable energy? For example, permitting, grid delays, credit worthiness of counterparties, restrictions on foreign investment.

The significant barriers include:

- **Pending detailed power development plan** – As discussed in Question 6, although PDP8 has been adopted, the detailed plan for implementation is still awaiting finalization. Consequently, obtaining approval for new greenfield renewable energy projects may prove challenging.
- **Permitting delay** – Delay in obtaining necessary permits for a renewable energy is not uncommon, especially during inclusion of project into the power development plan, site clearance and achieving COD.
- **Unmatched grid infrastructure** – Numerous renewable energy projects have been unable to operate at their full capacity due to the potential overload of the national

grid. Although the State's exclusivity in the development and operation of grid transmission has been lifted to attract the private sector, much work still needs to be done to implement this.

- **Non-bankability PPA** – PPAs are usually required to be in a statutory standard form, which lacks sufficient standard protective clauses for the project developer. The project developer has very limited room for negotiation.
- **EVN's creditworthiness** – As the main off-taker, EVN's creditworthiness is an important factor for lender to assess the bankability of a project. Despite being a SOE, EVN's off-taking obligations are not guaranteed by the State. Moreover, EVN is making considerable loss in 2022.

As to restriction on foreign investment, generally, except for offshore wind and hydropower sector, Vietnam opens the renewable energy market for foreign investor without restriction.

15. What are the key contracts you typically expect to see in a new-build renewable energy project?

Here are the key contracts that are typically relevant to a new-build renewable energy project:

- **Electricity Contracts:** These include the grid-connection agreement, power purchase agreement (PPA), and other technical contracts (e.g., SCADA/EMS agreement, protective relay agreement).
- **Land Contracts:** These include agreements like land compensation agreements, land acquisition agreements, and/or land lease contracts.
- **Construction & Installation Contracts:** These involve the EPC contract and equipment supply contract.
- **Financing Contracts:** These consist of the facility agreement and guarantee agreement.
- **Operation & Management (O&M) Agreement.**

Please note that the list above is not exhaustive. Depending on the energy source, there may be fewer or additional contracts that will be relevant.

16. Are there any restrictions on the export

of renewable energy, local content obligations or domestic supply obligations?

Generally, the export of electricity requires PM's approval if the transmission is through the national grid with a voltage level of 220kV or above, or from the MOIT if the transmission is through the national grid with a voltage level below 220kV.

Currently, as we are aware, there is no local content requirement for the main equipment used in a renewable energy project, such as wind turbines or solar panels. As to employment, the laws stipulate that foreign employee can be recruited only if a qualified local candidate cannot be found for the position.

17. Has deployment of renewables been impacted in the last year by any non-country specific factors: For example, financing costs, supply chain or Covid 19?

Yes, the disruption of the supply chain and other adverse effects of Covid-19 have led to many renewable energy projects failing to achieve the COD by the FIT expiration date, especially wind project at the end of 2021.

18. Could you provide a brief overview of the major projects that are currently happening in your jurisdiction?

Some notable projects worth mentioning include:

- **Trungnam Solar Farm:** Developed by Trung Nam Group in 2020, with a total capacity of 450 MW. Remarkably, Trung Nam Group also developed a 500kV transformer station and 17km transmission line for the project, marking the first and only private sector involvement of this kind.
- **Ea Nam Dak Lak Wind Power Plant:** This onshore wind power project, also developed by Trung Nam Group, holds a total capacity of 400 MW and achieved COD in 2021. It remains the largest wind power project in Vietnam.

19. How confident are you that your jurisdiction can become a leader in newer areas like offshore wind or hydrogen?

Vietnam can establish itself as a leader in offshore wind, hydrogen, or other innovative renewable energy sectors if Vietnam can effectively deploy its rich resources.

Take offshore wind, for example: with a coastline extending over 3,400 kilometers, numerous islands and islets within its Exclusive Economic Zone, and exposure to the strong winds of the northeast monsoon, Vietnam possesses significant potential for generating offshore wind energy in Southeast Asia. According to the World Bank, Vietnam's capacity in this regard could exceed 500 GW. Apart from its natural advantages, Vietnam has actively promoted the development of offshore wind energy projects. This commitment is underscored not only in the directives of the Communist Party of Vietnam, but also in the government's master policy. Furthermore, in terms of financial support, Vietnam has designated offshore wind projects as eligible for funding under initiatives like the JETP.

Still, as mentioned above, there is much work to be done to translate this encouraging policy into practical implementation. This includes clearing the sea use master plan, addressing national security concerns, and setting out specific development requirements.

20. How are renewables projects commonly financed in your jurisdiction?

The predominant financing method for renewable projects in Vietnam is project financing. Practically, offshore lenders generally offer greater credit capacity. Of note, under Vietnamese laws, their ability to secure land use rights and assets attached to land, which are key assets in a renewable energy project, is restricted, as only banks licensed and operating in Vietnam are permitted to mortgage these rights and assets.

There are special structures that can help balance, to some extents, the benefits and risks mentioned above. One possible option is financing through a syndicated loan between a local bank and a foreign lender. By virtue of syndication, the local bank may be permitted to act as a security agent or trustee for the foreign lender, minimizing risks related to the enforcement and perfection of mortgages over land use rights and assets attached to land.

Contributors

Bui Ngoc Hong
Partner

hong.bui@Intpartners.com



Nguyen Quoc Bao
Senior Associate

quocbao.nguyen@Intpartners.com

