



Wind Energy in Vietnam

Vietnam is a country with a rapidly growing economy together with an increasing energy and electricity demand. Due to both rapid industrialization and remarkable economic growth, domestic energy consumption levels increased by approximately 12% per year between 2006 and 2016. Vietnam is considered to have the best wind resources in Southeast Asia, especially in the nearshore/offshore and onshore coastal regions in the south of Vietnam. Several wind measurement studies that have been conducted in these areas measured yearly average wind speeds of 6.5 up to more than 9 meters per second at 80 to 100 meters height. State-owned enterprise EVN is the single buyer in the electricity generation market and holds a monopoly on transmission and distribution.

Windfarm development offshore

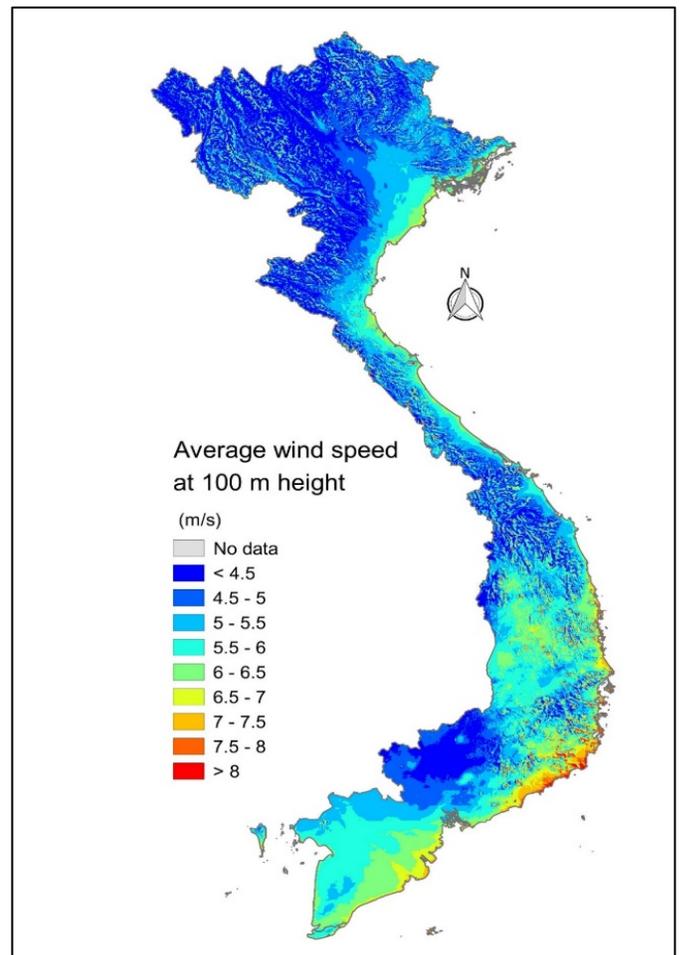
Offshore wind energy development - further off-coast than nearshore wind energy - is still in the development phase in Vietnam. At this moment, investments are being made in on-shore and near-shore wind energy projects, because of their easier feasibility.. The offshore wind energy sector is, especially along the coastline to the northeast of Ho Chi Minh City, very promising, due to the shallow water (ranging between 1 and 25 meters) within 50 kilometres from the shore and the highest offshore wind speeds of Vietnam.

Generally, wind speeds are declining further inland. Noteworthy is that Vietnam is vulnerable to extreme weather events like storms and typhoons, especially in July, August, September and October.

Development energy policy

The Vietnamese government is committed to the promotion of renewable energy and energy efficiency and has taken several measures (including mechanisms, policies, incentives and supporting schemes) to improve the environment for expansion over the last few years. Although this is a positive development, there are still a number of impediments – such as energy pricing and feed-in tariffs – that prevent the renewable energy sector of taking full advantage of the current business potential.

Energy security and savings, cleaner production, emission reductions and sector reform will remain priority issues on the Vietnamese political agenda for years to come, and this is set to create significant market opportunities for trade and investment.





In 2017, the government revised its “7th Power Development Plan for 2011 to 2030” and placed a stronger emphasis on renewable energy. Fossil fuels, hydro and coal still remain the main supply of Vietnam’s energy consumption, but in the revised version coal production has been cut by approximately 30% from 76 GW to 55 GW. Instead, renewable energy will play a much larger role in 2030 compared to previous goals.

Financial resources and windfarm financing

Local Vietnamese banks appear to lack the financial capital, knowledge and trust to finance large scale wind energy and other renewable energy projects. That means that foreign investors and banks must account for a large part of the required capital investments of wind energy projects to support the desired wind energy development in Vietnam.

Uncertainties concerning the power purchasing agreements (PPA) exist as they might be under risk of potential curtailment by the EVN. Also, the lack of a wind energy supply chain in Vietnam is worrisome for companies that are dependent on the existence of it. However, at the same time, this is also an opportunities for those that have expertise in setting-up a reliable supply chain.

Currently, there is no established supply chain for wind energy development in Vietnam. That means that all specialized material, knowledge and experience must come from foreign countries. This situation will change over time and it is expected that the Vietnamese government will support project developers with wind energy development. It appears that the government follows the ‘first-come, first-served’ principle.

Wind energy Feed-in Tariff (FIT)

In order to stimulate renewable energy production, a Feed-in Tariff (FIT) was introduced in Vietnam in 2011. The current FIT for wind energy in Vietnam amounts 8.5 US\$cent/kWh for onshore and 9.8 US\$cent/kWh for offshore wind projects with a Power Purchase Agreement (PPA) duration of 20 years.

The final regulation on PPAs, Circular 02, which goes into effect on the 28th of February 2019, does not include any indexation of the FIT to the Consumer Price Index. This means that the current PPA’s do not take inflation risks into account. Fluctuations of the exchange rate, however, are secured by the new circular, as the official exchange rate of the Vietnamese Dong against the USD dollar serves as the foreign exchange rate.

Why Dutch wind energy businesses should act now

Offshore wind energy is still in an early phase of development. The ambitions of the Vietnamese government and the potential for wind energy in Vietnam are huge. At the moment, there has just been a few wind energy projects developed.

However, many international parties are interested in participating in the offshore wind energy sector of Vietnam. Currently, countries like Denmark, Germany, USA, and UK, are already active in Vietnam. Therefore, wind energy developers should start making first steps by connecting with Vietnamese governmental and private stakeholders.



Business opportunities for Dutch wind sector

Due to the development of wind farms and the growing market, opportunities for Dutch companies in the wind sector are abundant. These opportunities appear for all actors in the project chain:

- **Developers:** many wind farms have to be developed and project developers have the possibility to obtain the right to develop wind energy locations registered in the Provincial Wind Power Development Planning (PWPDP).
- **Financial specialists and investors:** expertise of financial advisors and banks is highly required. Especially in the implementation of smarter ways of financing that mitigate the specific uncertainties of Vietnam and related risks.
- **Technical consultants and knowledge institutes:** Vietnam lacks knowledge on the development of wind energy projects in many fields and phases of the development process, and therefore foreign technical support and knowledge is necessary.
- **Constructors:** Nearshore and especially offshore windfarms require specialized knowledge, expertise and materials. Dutch companies have a renowned reputation and a well-established international position because of their international involvement in offshore wind energy projects.
- **Suppliers:** Vietnamese wind energy sector lacks a well-established supply chain. This is a business opportunity for Dutch suppliers. At the moment there are only a few windfarms under construction, but this is expected to increase rapidly in Vietnam.



In order to seize the business opportunities for Dutch companies in the Vietnamese wind energy sector described above, the following actions are key, although not realised overnight:

- Acquire familiarity and reputation as a relevant and interesting party in windfarm development in Vietnam, with private parties and national and local governments;
- Acquire knowledge on the current status of windfarm developments in Vietnam;
- Align with existing windfarm developments by getting involved in different phases in different roles.

Business support

The Embassy in Hanoi and the Consulate General in HCMC can provide information about the wind energy sector in Vietnam, applicable rules and regulations, potential business partners and relevant government authorities.

In addition, the Government of the Netherlands has developed several instruments to support Dutch companies in doing business in Vietnam. The information can be found on www.rvo.nl.

Further information

This factsheet is based on the baseline study conducted by Eric Arends as commissioned by RVO upon request of the Dutch Embassy in Hanoi. A link to the original document can be found here:

<https://www.rvo.nl/onderwerpen/internationaal-ondernemen/landenoverzicht/vietnam>.

For general information on doing business in Vietnam please refer to the [Factsheet Doing Business in Vietnam](#). More information on the opportunities and challenges of other renewable energy sectors can be found in the factsheet [Renewable Energy](#) via the Embassy's website.

To remain updated on general events and business opportunities in Vietnam:

- Dutch Embassy & CG in Vietnam (NL) (<https://www.nederlandwereldwijd.nl/landen/vietnam>)
- Dutch Embassy & CG in Vietnam (ENG) (<https://www.netherlandsworldwide.nl/countries/vietnam>)
- Dutch Business Association Vietnam (DBAV) (<https://dbav.org.vn/>)
- Holland Home of Wind Energy (HHWE). (<https://www.hhwe.eu/>)
- Vietnam Chamber of Commerce (VCCI) (<https://e.vcci.com.vn/>)
- European Chamber of Commerce Vietnam (<https://www.eurochamvn.org/>)



Trade Missions & Wind Energy events

- Vietnam Wind Energy Summit 2019 Hanoi, 13-14 March
- Trade mission with Prime-Minister Rutte, Minister van Nieuwenhuizen, and Vice-Minister Sonnema to Vietnam with sector focus on i.e. offshore wind energy, 8-12 April 2019.
- Vietnam Offshore Wind Roundtable Ho Chi Minh City, 20 November 2019.

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