

Industry statement

Supporting Vietnam's wind sector 7 June 2018

Wind power is one of the most competitive energy sources globally and one of the fastest growing industries in the world, with double-digit growth for the past 15 years. This is thanks to stable long term regulatory frameworks, which has fostered and increased investment in R&D, economies of scale and wind sector investment appetite overall. The industry had a good year in 2017, installing 52.5 gigawatts (GW) to reach a total installed capacity of 539 GW. The industry also has become much more geographically diverse, spreading beyond the 'traditional' markets in Europe and North America; with China leading global markets, new markets in Latin America, Asia and Africa; and since 2010, the majority of installations have been outside the OECD, and wind power has taken a leading role in new power generation capacity installations worldwide.

Vietnam's rapidly growing economy is in an acute need of new, affordable clean energy sources, and wind energy could play a significant role here. In line with its current Power Development Plan, Vietnam aims to nearly double its installed power generation capacity from the current level of 42 GW to 80 GW by 2020.

Vietnam has huge potential for wind development. According to a recent World Bank study, there is a potential of 27GW of exploitable wind resources, and other estimates put the number much higher. Utilizing Vietnam's abundant wind resources is one of the strategic choices for meeting Vietnam's soaring electricity demand, expected to be around 10% out to 2025. The National Power Development Plan issued in 2011 and updated in 2016 contains a target of 6.5% of renewable energy electricity production by 2020 and 6.9% by 2030, which translates into a wind target of 800 MW by 2020 and 6000 MW by 2030. The current wind installation of merely 197 MW is far from meeting the target by 2020.

A number of countries in South East Asia have already seized the opportunity to develop their wind and RE industries. Vietnam's neighbour Thailand is likely to cross the 1000MW mark in wind installations by end of 2018; and a similar story is developing in the Philippines. These countries' decision to utilise wind power is not only because it offers affordable power, but also because it has many other benefits:

- Wind energy is in many markets the most competitive electricity generation technology. Sound R&D investments, technology developments and economies of scale have made wind energy one of the most preferred technology of choice for new power generation capacity around the world.
- Enhanced energy security: wind and other renewable technologies are by definition indigenous, and therefore reinforce local economies from volatility in imported fuel prices.

- Wind energy creates local industrial development: wind energy is driven by innovation. It has proved to be a successful industry in most of the European countries, in East Asia and in North and South America.
- Wind power creates jobs. The wind industry has a long supply chain, from
 components to turbine manufacturing, from wind resource assessment to project
 development, from construction to operation and maintenance of a wind farm. Every
 section of the industry generates genuine local jobs. The global wind industry
 currently employs about 1.15 million¹ people around the world.
- Wind power attracts international investment. Globally, wind power attracted investment of US \$107 billion in 2017 and the number is likely to continue to grow.
 Vietnam is viewed as a very attractive destination for wind power investment under a stable long term regulatory framework.
- Apart from the direct economic benefits, jobs and industrial development, wind energy has an important role to play in cutting air pollution and reducing greenhouse gas emissions.

In support of the take-off of Vietnam's wind sector we have the following recommendations:

1. Standardized commercial PPA

The nature of wind power is that project costs are largely up front, with zero fuel costs and relatively small operation and maintenance costs throughout the life of the project. Financing, and the cost of financing is therefore a key component in making wind power economically attractive.

The power purchase agreement (PPA) is the most important element in determining the cost of finance. A standardized, transparent and bankable PPA is essential for reducing risk and lowering the cost of capital. We are pleased to see that PPAs have been signed for recent wind projects, but further refinement would be needed to be 'bankable' for international investors and to match wind generation capacity in Vietnam with the increase in electricity demand.

2. Simplified and clear project approval process

A clear, transparent and timebound project approval process is critical to reduce uncertainty, foster market and investor confidence and maximise sector growth.

3. Grid infrastructure forward planning

¹IRENA: Renewable Energy and Jobs - Annual Review 2018

Vietnam is blessed with abundant hydro resources, which is an important advantage in establishing a modern, flexible grid. However, with the foreseen spectacular growth in the power sector, planning and investment will be needed to ensure the successful integration of variable renewable energy such as wind and solar.

4. Establishment of National Wind Energy Association

Vietnam's wind industry is ready to take off. A strong national industry needs a strong industry association to support its development. An industry association is indispensable for the healthy development of their wind industry has been seen in leading wind power countries like China, US, Germany, Denmark, India, Spain, Brazil, UK, France and Mexico for instance.

A national wind energy association can be the key driver for legislative initiatives and can help the government to support the industry, while fostering a direct dialogue for Public Private Partnerships which may lay the basis to align capabilities from each side. It can help the government in communicating with the industry efficiently and effectively and act as a focal point for the industry to interact with the government. It can also help to build the industry through creating industry conferences, workshops and other training and educational programs.

The Global Wind Energy Council is ready to help facilitate the take-off of the wind industry in Vietnam. For doing so, it would need a robust national wind association and a strong local industry to ensure that Vietnam receives maximum benefit from its excellent wind resources. We believe the wind sector in Vietnam has a bright future, and are happy to provide any assistance and support required.

Signatories:









