Good morning, everyone. I’m Tu Rui from Southeast University. It’s my honor to give you a report on wind energy on the 4th international conference on new energy.

Compared with solar energy, nuclear energy and other energy sources, wind energy is able to meet the demand of resource development due to its advantages such as continuous expansion of production scale, obvious advantages in conversion efficiency and rapid technological development.

The first utilization of wind energy dates back to thousands of years ago when people use wind to drive ships. In the 1880s, the first wind turbine was invented, bringing a beginning to the development of modern wind energy technology. The global wind power generation industry has been a sunrise industry and developing rapidly with increasing production capacity.

Wind energy is characterized by the following features:

1. Abundant in resources and widely distributed
2. Cost-saving and easy to manufacture
3. Renewable and environment friendly

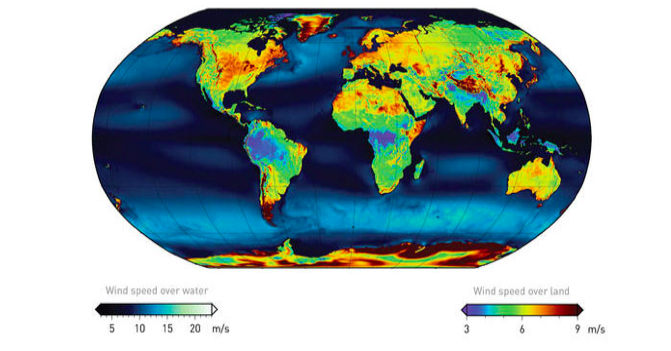


Figure. 1

Developing trends for wind energy include:

1. Improve utilization rate and reduce generation cost

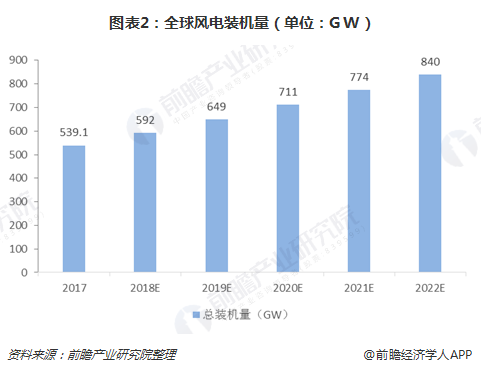


Figure. 2

Fig .2 illustrates the development trend of global wind power capacity from 2017 in which the capacity has been rising at a high speed. In addition to the available low-altitude wind resources mainly utilized nowadays, there are also high-altitude wind resources to be developed and used. In addition to natural wind energy, industrial wind energy wasted in industrial development should be fully utilized.

1. Increase the development of offshore wind power generation

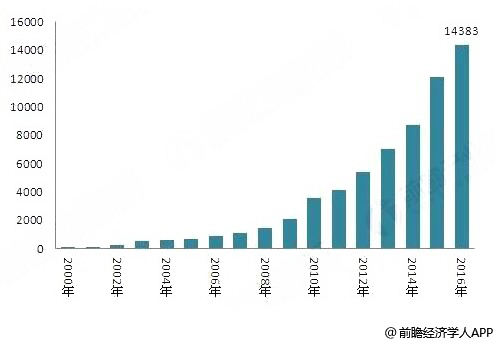


Figure. 3

From Fig .3 we can see that the offshore wind power is a new industry developing rapidly. Nowadays, the offshore wind power facilities are mostly built near the coast. In the future, wind power is bound to develop in the deep sea, which is more extensive, more abundant in wind energy and the wind speed is more stable for utilization.

1. Build more transmission lines

Wind energy still compete with conventional generation source on a cost basis. Building a few already-proposed transmission lines could significantly reduce the costs of expanding wind energy.

Overall, the wind energy industry is a promising industry and is believed to bring a revolution on the world’s energy structure.