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WIND POWER POTENTIAL OF UKRAINE

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Abstract

The suggestions for improving Ukrainian energy resources usage, based on the renewable sources of energy, that is wind stations, were represented in this article.

Keywords: wind, energy, renewable sources of energy.

Introduction

Ukraine's renewable energy market becomes more and more important now. But wind energy is still a wonder in Ukraine. Ukrainians are beginning to use the energy of the wind.

Purpose of this work is to analyze the prospects of renewable electricity, from the side of wind power stations, in Ukraine.

Research results

Thus, the energy production grows faster than the population. Modern power engineering faces a lot of problems, and the most urgent problem is the new energy sources. At present, 6 billion people on the Earth consume more than 12 billion kWh of energy per year, i.e., an average of 2 kWh per person. That is, about 90% of the energy we get by fossil fuels - oil, coal and gas, their rate of accumulation in the bowels of the Earth is much smaller than the speed of their consumption (approximately 106 times), that's why we look aside of renewable sources of energy, especially wind energy.

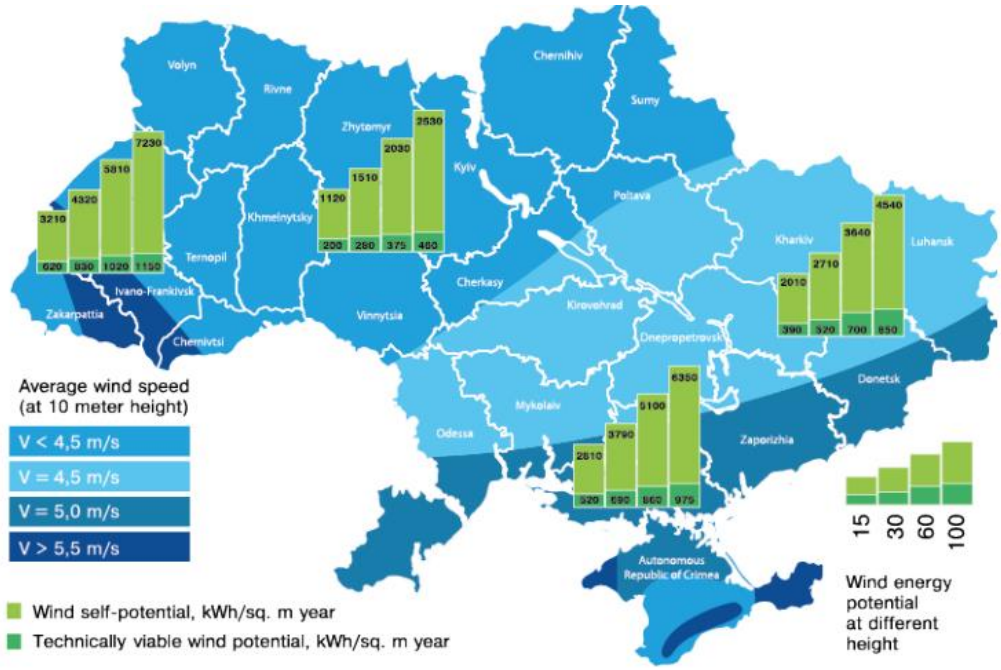

Illustration 1. Wind power potential of Ukraine

According to the Wind Energy Association, wind energy potential in Ukraine is estimated at 30,000 GWh. Some researchers believe, Ukraine is among the top-four European countries, most suitable for generating electricity from wind.

The installed capacities at the end of 2015 totalled 89 MW and the amount of electricity generated from wind was 151 MW.

In January 2012, 37.5 MW of modern wind power plant Novoazovsk were put into operation, out of 107.5 MW planned. Also, in 2011 wind power plant Wind Park Ochakiv with capacity of 25 MW and 3 MW wind power plant in the Kherson region (Vindkraft Ukraine) were put into opertation. Thus, in 2011, about 65.5 MW of modern wind power plants were constructed in Ukraine, and the total capacity of all Ukrainian wind power plants increased to 150 MW. About 50% of Ukraine's territory is suitable for installation of wind power plants and commercial generation of electricity from wind. In particular, the prospective regions are the Black Sea coast, the southern steppe regions, and the Carpathian Mountains.

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Conclusions

Understanding of the need for state support for wind energy will gradually dawn at the authorities. Otherwise, in the near future, along with foreign cars, appliances and junk consumer goods, Ukraine will be flooded with wind stations from overseas.

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