



# Wind as an energy source

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# Wind as an energy source.

Wind is an old, proven and reliable source of renewable energy. People used it long before the introduction of the term in sailing ships and windmills.



Now, due to the development of technology, wind turbines have become quite a strong figure in the market and occupy a strong position in its niche. The competition between manufacturers made them invest well in the research of the most optimal wind generator.





For optimal operation of the windmill, the following factors are taken into account:

- ▶ height above sea or land level.
- ▶ Location. The best option is the coast or the sea.
- ▶ Wind speed. The optimum speed of 15 m/s.
- ▶ Number of blades. Three blades is the most effective option.
- ▶ Axis of rotation.

Wind energy reserves are more than a hundred times greater than the hydropower reserves of all the rivers of the planet



# Pluses:

- ▶ No pollution - the production of energy from wind does not lead to emissions of harmful substances into the atmosphere or the formation of waste.
- ▶ The use of renewable, inexhaustible energy source, saving on fuel, in the process of its production and transportation.
- ▶ Minimum transmission energy loss
- ▶ The service life of such a power plant is on average 20-30 years, and after its dismantling there are no traces-neither in the landscape nor in the atmosphere.



# Minuses:

- ▶ Variability of power over time-electricity production depends, unfortunately, on the strength of the wind, which man can not affect.
- ▶ Noise.
- ▶ Threat to birds
- ▶ Wind farms entail large investment costs.



Thank you for attention.