

# Windmills and windturbines



WINDMILLS AND WINDTURBINES The main topic of what I want to tell is, in fact, the renewable energy. Renewable energy is the energy which are produced from natural sources like sunlight, wind, rain and geothermal heat. Wind turbines are used to extract energy from the wind or windpower. We use windmills to use directly mechanic energy by machinery, besides wind turbines which are the topic of my article are used to convert mechanical energy to electric energy. Lets take a look at the history of wind power, windmill and the wind turbine. Wind power has been used since the human put their sails into the wind. Also, architects have been using natural ventilation in buildings since the old ancient times. According to the sources, the Babylonian emperor Hammurabi planned to use wind power for his irrigation project in the 17th century. Wind-driven wheel, type of a wind powered machine was also used in ancient Tibet and China since 4th century. The first practical windmills were built in Sistan, a region between Iran and Afghanistan, since the 9th century. Windmills in a large measure have many advantages. They dont cause any pollution, noise pollution and they dont need fuel. Thats why US and Holland still use large windmills. Wind turbines were used in Persia the earlier 200 B. C. The windwheel of Heron of Alexandria marks one of the first known instances of wind powering a machine in history. However, the first practical windmills were built in Sistan, as I mentioned above. The first known electricity producing windmill operated, was a battery charging machine installed in 1887 by James Blyth in Scotland. The first windmill for electricity production in the United States was built in Cleveland, Ohio by Charles F Brush in 1888. These are the areas in which windturbines are used. Now, I am going to tell about the advantages of wind energy and <https://assignbuster.com/windmills-and-windturbines/>

the wind turbines. Wind energy is a clean and environmental friendly energy source. There is not too much cost of transportation for wind energy. Natural wind can be directly used. Wind turbines are not complicated machines. They can simply be set without any help of an operator. They are designed to work automatically. They can set up to 20-30 years with only periodic maintenance . They reduce the air pollution. According to a research in US, just the wind potential of California reduces the CO2 in 1. 2 million tones. To supply the same air quality, we need a forest which has 90 million trees. We can supply % 21 percent of electricity demand of whole world by wind power. Also, 22 million tones of CO2 can be reduced from the world until the year 2020. Wind turbines dont emit radiation. They dont need fuel, they are safe and easy to install. They expand the electricity usage in rural areas. As a national advantage, I can say that wind turbines are the sources that abates the dependence of your country to another nations. Consequently, the wind energy supports today's energy production resources and make our world a better place to live. YUSUFCAN OZDOGAN <http://www.ruzgarturbiniturk.com/> <http://www.soyutwind.com/ruzgarturbini/ruzgarturbini.html> [http://en.wikipedia.org/wiki/Wind\\_turbine](http://en.wikipedia.org/wiki/Wind_turbine) <http://en.wikipedia.org/wiki/Windmill> and my previous researches about renewable sources last year.