WORLD DEVELOPMENT OF WIND POWER PLANTS AS AN EXAMPLE OF COSMOPOLITAN PATRIOTISM

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It is known that the education of patriotism begins with understanding the values of the fatherland. Love and devotion to the Motherland formed with appreciation of beauty their homes, with a love of trees, flowers and peace of father's house.

Kant in his essay "Metaphysics of Morals" (1797) writes that the man patriot is a man cosmopolitan. Kant's logic is following. Patriotism - the consciousness of patriotic duty. This consciousness is ancestral to humans [1]. The very definition of patriotism through the duty requires a person to be able to rise above the natural tendency to identify themselves only with "their" community (ethnic group, culture, and nation). And pour him into a very wide scope of patriotism as identification with humanity. Only such a person is able to perform a patriotic duty to their ethnicity, their culture, their nation [2].

In 1966, Kenneth Boulding in a classic essay, "The Economics of the Coming Spaceship Earth"[3], suggested that the human race behaves like cowboys on spaces with an open boundary, whereas in fact we live on a living spaceship with a finely balanced life-support system. Therefore, it is necessary to safe our spaceship in proper conditions it is necessary to be a patriotic to the whole planet. One of the ways of protecting our future is using of the alternative sources of energy.

About 1% of the solar energy received by Earth drives the atmospheric air masses. This happens when the air begins to move because of the difference in temperature in different parts of the planet. In general, this energy is 100 times greater than all world energy consumption. But only a small portion of this energy is used in practice. Mankind learned to use wind energy long time ago. Already 3000 years ago, a man travelled by sea for long distances, using wind energy. Today wind energy is experiencing a renaissance, and is used more and more.

In Russia, for the last 5 years number of new wind turbine units were built and put into operation. 4 units are In Bashkiria. Each has power 550 kW. in the Kaliningrad region, there are r 20 units on the sea shore, and the capacity of wind power is 4.5 MW. There were erected two wind turbines of 250 kW each on The Commander Islands, one 200 kW wind turbine was put into operation in Murmansk. The total capacity of wind turbines in Russia exceeded 10 MW.

Former Federal Republics of the USSR, now - the independent states, also started development of their wind energy potential. Ukraine has even passed a law to simplify the creation and operation of wind power plants. According to international statistics, the capacity of wind turbines in Ukraine is more than 5

MW. In Estonia and other Baltic countries, wind turbines are common on farms in the Baltic islands and in coastal areas. Belarus has built several wind turbines with total capacity of about 1 MW. Republic of Kazakhstan is actively involved in wind power energy. And there is even investment project of wind power station Dzungarian Gates, power of which will be 5 MW.

Other republics, located in Central Asia can also use the presence on their territories deserts, hills and sea coasts, in order to build wind turbine, however, some of them have considerable resources of carbon fossil fuels that can compete with wind energy, for example in Turkmenistan.

Azerbaijan also has rich deposits of oil and gas. At the same time, far-sighted policy is the preservation of non-renewable fuel resources and development of renewable. The most difficult situation is in Armenia and Georgia. In the mountains, the wind certainly blows, but it is difficult to determine exactly perspective sites for wind turbines. Construction in the mountains also is much more complicated than in the plains. In addition, Armenia has again launched nuclear power plant [4].

The advantages of wind power are:

- Wind power does not pollute the environment.
- Wind power, as well as bioenergy, under certain conditions (high wind speed, expensive fuel for conventional power plants) can successfully compete with non-renewable energy sources.

Disadvantages of wind power plants

- The wind is very unstable, with sudden strong gusts and lulls. This complicates the use of wind energy. This is probably the only and indisputable lack of wind. Technical solutions that would compensate for this the number one wind power.
- Wind farms create a lot of noise. This thesis is very controversial European rules wind turbines are placed at a distance from residential buildings that the noise from the blades did not exceed 35-40 decibels

Being a patriotic to our planet and using the alternative sources of energy will lead to maintaining good conditions for saving the Earth for the future generations.

References:

- 1. Kant. Metaphysics of Morals // Works. : In 6 vol., St. Petersburg, 1995. Vol. 4.
- 2. O.R. Signaevskaya. Philosophy of education in Modern Russia: search of solidarity or phenomenon of patriotic sense. Pedagogical education in Russia. 2011. Vol 3. Pp. 7-16.
- 3. K. Boulding. The Economics of the Coming Spaceship Earth. 1966
- 4. Energy and the environment. Textbook. SPB. 2008. 88 pages, illustrated.

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