## WIND POWER AS A DIRECTION OF ENERGY IN AGRICULTURE: THE LEGAL REGULATION

## Yu.M. Rud, applicant, National University of Life and Environmental Sciences of Ukraine

The article examines the use of wind energy as a source of alternative energy in agriculture. The state of legal regulation of relations in this area, and defines the main disadvantages.

## Agriculture, energy, wind energy, wind power, legal regulation.

Among the most promising ways of saving in agriculture can be attributed to use instead of traditional energy sources such reducing its sources as wind power.

It is worth mentioning that this wind is traditionally long using in agriculture, particularly in the mills in the mechanisms by rising water and so on. Contributing to this day and contribute to natural climatic and geographical conditions Ukraine. Researches conducted towards determining the prospects of wind power in Ukraine, clearly show its high wind potential power. So researches of the current state of legal maintenance of wind direction as energy saving in agriculture and reach the goal of this article.

By studying the possibility of using wind energy in agriculture, we must consider the traditional division of wind energy on "big" and "small" criterion for power wind turbines. The first group includes wind power capacities of hundreds of thousands of kilowatts, the second - Wind installation of low power (30 kW) that can work both independently and combined wind-diesel, wind, hydro or wind-solar installations using accumulators (storage) energy.

In the literature repeatedly pointed the need of the development of "small", "non-profit" wind, calling it as "rural", "farmer", "for court". Summarizing the arguments invoked in support of this position, you can bring them to the next. Firstly, the specificity of agricultural activities linked to the large spatial dispersal of production facilities and low power consumption at them. This makes possible to satisfy the demand for electricity by using wind autonomous electrical installations, due to the unreasonableness of such consumer power lines. Second, agricultural activities characterized by seasonality and some electricity infrastructure need only a few months a year. For example, electric fence pasture in pasture-grazing of cattle in the summer. Again, it is low-power wind turbines are able to provide electricity to these objects. Thirdly, the present energy supply in remote rural areas is poor, and solve the problem again possible by installing low-power wind turbines. This wind turbines up to 20 kW do not require any permits to use, easy to install, with low cost and fast payback.

In addition to these, the use of wind energy in agriculture is appropriate because of its environmental friendliness. This allows you to place wind turbines directly on farmland and around (unlike nuclear or thermal power). I would like to mention about the shortcomings, which include: acoustic (noise of wind turbines), vibration hazard to birds, bats and more. However, the technologies and designs wind turbines, as well as the requirement to their location all these negative factors can be eliminated or minimized and benefits of wind energy, including "small" far outweigh its disadvantages.

In considering the application of wind energy instead of traditional energy sources in agriculture, analyze that same energy can be obtained to determine the prospects for its use. Basic Law of Ukraine "On Alternative Energy Sources" definition of wind power does not, but only refers to wind power renewable energy sources (Art. 1) as one of the types of alternative energy sources. Does not define the term and the Law of Ukraine "On energy saving", but also calls among alternative and renewable energy sources, ie sources that are continuously or periodically appear in the environment, wind (Art. 1). Identification of this type of energy contained in GOST 2275-93 "Energy. Alternative and renewable energy. Terms and definitions ", according to which wind power - a" natural energy of motion of air relative to the surface of the Earth. " However, as we see the last document specifies no form of energy, but rather its source.

Currently, the main potential customer "small" wind energy - rural population actually has no basic knowledge of the principles of wind energy and wind turbines on opportunities. Combined with low technical level and low purchasing power of farmers can state unequivocally a very slow rate of development of an autonomous wind power in Ukraine and the impossibility of their acceleration without active government intervention through measures both direct and indirect support to the specific agricultural activities. It should be the task of further investigations both theoretical and applied.