

$$\zeta = \left[\frac{\frac{R_0}{R_{II}}}{\varphi_0 \frac{R_{II}}{R_{II}} \left(1 - \frac{\Sigma f}{\pi R_0 R_{II}} \cdot \frac{1}{4 \operatorname{tg} \alpha_1} \cdot \frac{1}{\varepsilon} \right) \cos \alpha_1} \right]^2,$$

where φ_0 - coefficient of speed loss in inlet pipes; ε - coefficient of reduction of the initial moment of the amount of motion.

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FEATURES OF THE USE OF ALTERNATIVE ENERGY SOURCES IN UKRAINE

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This topic is extremely relevant. Thanks to alternative energy sources, businesses are becoming more competitive. This is due to reduced emissions and using of traditional fuels and rejection of toxic materials.

Alternative energy, enlarge on the use of unbounded energy sources, can go a 'key', which will discover the door to freedom in two sectors: fuel and gas. The Law of Ukraine "On Alternative Energy Sources" sets out the basic principles of state policy in the field of alternative energy sources, public administration in this area, stimulating the production and consumption of energy produced from alternative sources, sets "green" tariffs for all types of energy and state guarantees for entities that use alternative sources for production [1].

It should keep in mind that circumstances the use of revolving energy sources is one of the most hopeful decisions to the growing questions of durable development of the state altogether, its regions separately and energy supply.

Alternative energy sources which are used at Ukrainian enterprises: solar energy, wind energy and biomass energy.

About 90% of solar energy market is stand on silicon processing nowadays. The yearly technically attainable energy potential of solar energy in Ukraine is tantamount to 6 million tons of standard fuel. Its application would permit replacing about 5 billion m³ of natural gas. In Ukraine designated its own production of highly efficient silicon solar elements with efficiency up to 20%. In this country, five solar power plants are put into operation.

Our country has regions with regular powerful winds. Making wind energy growth has own rationale. In spite of the upper cost of wind energy, collated to classical, the usage of wind energy is economically appropriate in the steppe, especially mountain and coastal areas, for instance, Donetsk, Luhansk, Mykolaiv, Odesa and Kharkiv region. As well as the mountainous areas of the annexed Crimea and of the Carpathians [2].

Bioenergy is a branch of electricity generation using biofuels, which is created on the basis of biomass. Biomass includes biodegradable substances of organic origin that undergo biodegradation. Currently, the usage of biomass as a fuel in Ukraine is about 1 million tons of conventional fuel / year.

In this country, there are an adequate number of technological, social and economic needs in the use of alternative energy sources [3]. Alternative energy is designed to help solve, foremost, two important problems: energy efficiency and environmental safety. However, there are problems that hinder the improvement of resource efficiency in Ukraine.

Regardless the barriers, the climatic conditions of Ukraine and the specifics of management in general redound to the development of alternative energy.

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