

УДК 620.92

## **THE PROBLEMS OF ALTERNATIVE ENERGY SOURCES IN BELARUS**

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In the modern world the relevance of the issue of development of alternative energy sources is becoming more and more obvious. The desire to reduce dependence on fossil fuels, reduce greenhouse gas emissions and ensure energy security leads to the search for new, sustainable energy sources. However, countries where industry is not developing as rapidly as in developed Western countries, such as Belarus, face a number of specific problems that make the transition to alternative energy sources difficult. In this essay, we will discuss the problems of alternative energy sources in Belarus.

One of the key factors hindering the development of alternative energy sources in Belarus is the problem of limited resources. For example, in Belarus the amount of sunlight during the year is limited due to the climatic peculiarities of the region, and this makes solar panels less efficient compared to other regions where solar activity is higher. The need for certain climatic and geographical conditions for efficient utilization of wind energy makes the implementation of this type of energy challenging. In order to increase the efficiency and competitiveness of alternative energy sources in a resource-constrained environment, targeted investments in research and development and infrastructure projects are needed. Insufficiently high level of infrastructure development, the lack of specialized production facilities and qualified specialists also makes it difficult to implement alternative energy on a large scale. Moreover, the high technological requirements for alternative energy sources can increase production costs and make them less competitive in the market. To overcome these limitations, increased investment in technology development, training and specialized infrastructure are needed.

The next serious obstacle is economic inefficiency. The high investments required to build and maintain alternative energy infrastructure

may not be economically viable in a context of limited resources and economic instability.

Moreover, the low efficiency of energy production from alternative energy sources, especially when conventional energy sources are available at lower prices, makes them less attractive for investors and consumers. The solution to this problem requires the search for new business models capable of ensuring the economic sustainability and competitiveness of alternative energy sources.

The lack of a transparent and stable government policy on alternative energy, as well as insufficient funding for programs and projects in this area also limit investment opportunities and slow down the pace of development of alternative energy sources.

To overcome this problem, the government should strengthen efforts to create incentives for investment in alternative energy sources, including through the development of special programs and support measures.

Finally, lack of public awareness, misconceptions about the advantages and possibilities of energy from alternative energy sources, mistrust and uncertainty about their efficiency and economic feasibility also hinder the successful development of alternative energy in Belarus. To address this problem, it is necessary to conduct information campaigns, educational activities and disseminate information about the benefits and opportunities of alternative energy sources.

Overall, the development of alternative energy sources in Belarus faces a number of serious challenges, including limited resources, technological constraints, economic inefficiency, lack of government support and lack of public awareness. However, with appropriate measures and investments in the development of this industry, it is possible to overcome these challenges and ensure a sustainable and clean energy future for the country.

## References

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