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ASPECTS OF ALTERNATIVE ENERGY DEVELOPMENT IN THE CONTEXT OF THE ENERGY SAVINGS OF THE COUNTRY

Keywords: energy efficiency, energy security, energy resources, renewable energy, alternative energy sources.

At the end of the second millennium, the world has become a global economic system which is a determining factor of the effective implementation of scientific and technical research. One of the main factors, economic and energy security is influenced by the high competitive status of the countries. Today, developing countries and the efficiency of production processes do not depend on the available natural resources. And one of the important indicators of high economic growth is to ensure the development according to sustainability paradigm by introducing alternative sources of energy. It is the economic power of business entities on the basis of intensive development and innovation, energy efficiency provides production traditionally raise the economy to a high level of development.

That is why, for stabilization of economic processes, due attention should be paid to the study, research and implementation of alternative types of energy and, accordingly, various methods of energy saving at the enterprise.

Analysis of this problem is highlighted in the works of many scholars, such as: V. Galvani, A. B. Lovins, E.F. Schumacher, J. Cornilli B. Oikonomo, B. Laponche, V. Heyets, O. Tsapko-Poddubna, G. Gelotukha, G. Kaletnik, M. Kovalko, S. Denisyuk, V. Zhovtyansky and others. The general problems of energy supply and the individual issues affecting them are under the constant attention of world and regional international organizations, and in the first place - energy: the International Energy Agency (IEA), the World Energy Council (WEC), the International Atomic Energy Agency (IAEA)), The Center for Energy Policy and Economic Science (Switzerland), the World Bank (WB), the European Bank for Reconstruction and Development (EBRD), the Ukrainian Association for Renewable Energy [1].

The indicator of GDP energy intensity in Ukraine is quite high. Therefore, this should motivate the country and Ukrainian enterprises to upgrade their equipment and production mechanisms, search for sources of financing for innovation, and introduce energy saving technologies that will save on the purchase of imported energy resources such as oil and gas. One of the methods of raising the level of energy security of an enterprise is to encourage enterprises to rationally use available energy resources, to implement measures to avoid their losses, as well as to recycle them on the basis of non-waste production. This state support will contribute not only to improving the energy security of the entire country but also of each enterprise, will help stabilize the state of its own energy independence, reduce the threats of the energy threat of all forms at all levels (internal and external) and ensure sustainable development of the economy.

These external threats to the energy security of the enterprise include the lack of funds in the form of external and internal investments for updating the technological base, the rapid increase in prices for energy resources, the fluctuation of the national currency, short-term contracts for the supply of raw materials, low solvency, the emergence of problems in obtaining loans for long-term periods that cause the use of exhaust equipment, energy-intensive technologies that lead to the emergence of threats to a stable state economic security of the enterprise.

In contrast to external threats to the economic security of enterprises, there are also internal ones that are not related to general economic changes in the country, but directly with internal processes at the enterprise. One of the internal threats to the company's economic security is the ineffective planning of production activities, lack of awareness of employees in ecological issues, and the extremely high level of outdated means of production, which sometimes operate at 80% in Ukrainian enterprises.

It is worth highlighting the key features that contribute to increasing and maintaining the energy security of the enterprise: signing contracts with suppliers of long-term supply of energy resources (such energy sources include gas, water in various aggregates, compressed air, traditional and alternative fuels); construction and connection of a new installation as a backup power supply; periodic updating of the technological base; control of the state of the means of production on a permanent basis; support of a constant index of load on equipment; search, development and introduction of new alternative energy sources.

For a qualitative analysis of the state of the enterprise's energy security, identify a number of indicators, which are given in Table 1.

Table 1

Indicators for assessing the efficiency of energy resources management at an enterprise [2. p.70]

Indicators	Calculation procedure	Indicators	Calculation procedure
Useful electricity supply to consumers	The ratio of the indicator in the current month of the current year to the same last year	Enterprise profit	The rate of profit growth
Technological component of electric power losses	The share of electricity received by the network	The level of actual power losses in networks	The share of electricity received by the network
Installed voltage deviation	The average monthly value for all consumers	The level of automation of organization management	Number of units of electronic computers per head
The share of large industrial consumers	The share of consumption by large industrial enterprises in the general useful leave	Volume of investments on new equipment	The share of cash on new equipment from the total cost of fixed assets
Commercial component of electricity losses	The share of electricity received by the network	The effectiveness of the existing system of personnel motivation	The share of workers who are satisfied with the remuneration system
Gathering funds for supplied electricity	The share of the amount invoiced to consumers	Level of provision of social guarantees to employees	The share of social benefits in accordance with the annual wage bill
The level of safety at the enterprise	Number of accidents and injuries per month	The share of workers who increase their qualifications	Specific weight in the total number of employees who increase their qualifications
Condition of settlements with the personnel of the company	Number of salary days for staff	Degree of wear of the equipment	Usability coefficient
The number of claims made by other companies	The number of emails received from other networks and companies with claims per month	Cost-effectiveness of the enterprise	The ratio of profit from electricity transmission to transmission costs

Energy efficiency and energy conservation are extremely important factors for the development of enterprises and their maintenance of energy security. That is why it is necessary to deviate from traditional energy resources and accumulate funds for the search and introduction of new energy sources -

biofuels, wind energy, geothermal energy, solar energy, tidal energy, which will be lower than the cost, but will have the same heat output. The question of finding alternative energy sources is important not only in terms of energy security but also in order to reduce the negative impact of the fuel and energy complex enterprises on the country's ecology, which is mostly manifested in connection with the fact that industrial production has an imperfect structure of construction of the production cycle, obsolete equipment and equipment, as well as the lack of a generally accepted environmental improvement in the enterprise.

It is the active policy on the part of enterprises and the state as a whole that will help to increase the level of energy security in Ukraine.

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COMPETITIVENESS AS A BASIS OF THE ECONOMIC SECURITY OF THE STATE

Keywords: competitiveness, global competition, national economy, economic security, national security.