



THE MAIN DIRECTS OF ENERGY SAVING IN UKRAINE AND POLAND

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In modern conditions, the country is not enough secured proper-governmental primary fuel and energy resources, while searching for affordable and quality of external energy sources are actively introducing energy-saving technologies and develop a system for the use of alternative and renewable energy sources.

Primary energy resources in Ukraine and Poland are: coal, lignite, crude oil, natural gas, hydropower. Nuclear energetics plays an important role in energy production in Ukraine. The construction of nuclear power stations in Poland has only just begun. Electrical energy is a secondary form of energy that may produced from almost any other kind of energy, and most simply delivered to the desired site of use in the country. Another kind of secondary energy - the heat - produced near the place of its consumption. The state of economy, energy and the environment in both countries leads to increased use of biomass, solar and wind energy.

Differences in the cost of production (purchase) of primary and secondary energy resources, the structure of their consumption by economic sectors (industry, utilities and the public sector, population, transport, agriculture) determine the levels of their importance in terms of percentage in each of the two countries in specific segments time. Modern mathematical techniques allow us to construct and analyze energy consumption patterns of the two countries and its change in time.

Using statistics provided information and measurement, analytical and control systems in the energy sector in Ukraine and Poland, it enables to identify the main areas of energy saving with the differences in the levels of their priorities: implementation of economically feasible energy-saving technologies, replacement of energy-consuming equipment more cost-effective; restructuring of the industrial and municipal sectors to reduce their energy consumption; restructuring of power generating facilities to make them more maneuverability and reduce the consumption of primary energy sources; energy loss reduction in magisterial and utility networks; creation of complex automated systems of accounting and control of energy consumption at the sites of various economics sectors; actively informed about the progress of implementation of energy saving measures.

In order to implement each direction it is necessary to create specialized information systems for them support as part of an overall control system by energy supplies and energy consumption in each country, taking into account the processes of developing mutual supplies of energy resources.

The effectiveness of each from these directions will be different one from other in each of the two countries and these differences may be variates in time. Furthermore, the results of any from these directions may differ in some areas of the one same country. The greatest effect can be expected from their simultaneous and continuous development in international cooperation conditions.