

## ABOUT THE PERSPECTIVES OF THE DEVELOPMENT OF THE HEAT SECTOR ENERGY IN THE CONTEXT OF ENVIRONMENTAL POLICY

**Serdiuk O.S.**

Ph. D.,

Senior Scientist of the Department Issues of Perspective Development of Fuel-energy Complex,  
Institute of Industrial Economics NAS of Ukraine (Kyiv)

**Trushkina N.V.**

Master of Economics,

Researcher of the Department Issues of Perspective Development of Fuel-energy Complex,  
Institute of Industrial Economics NAS of Ukraine (Kyiv)

The purpose of this study is to determine the existing problems and perspectives of the development of the heat energy sector in the context of national environmental policy.

The article examines the impact of environmental policy on the economic efficiency of the operation of Ukrainian thermal power stations in the framework of the Kyoto Protocol, the Paris Treaty and the Energy Community Directive.

In order to establish the economic feasibility of implementing measures for the reconstruction of Ukrainian TPPs this article has been completed calculation of the payback period of the investment project and annuity of the annual cash flow of break-even.

At the expense of the elimination of the power units of the TPP, the national level of emissions of pollutants will be reduced, which will increase the share of unused quotas. However, this will raise the problem of replacing the power plants that have been decommissioned. The high

cost of building new energy objects (which complicates the mechanisms of raising funds) makes this option little, at least in the short term.

Thus, based on the results of calculating the cost-effectiveness of the capital reconstruction projects of Ukrainian TPPs, it can be concluded that the implementation of these projects is inappropriate in view of the non-complexity (or long payback period) of such projects. Under these conditions, there are two options for solving the energy problem: the first is the liquidation of TPPs that do not comply with the requirements of Directive 2001/80/EC; the second is the provision of economic conditions (fuel price regulation, electricity tariff adjustments, etc.), in which the projects will have an acceptable payback period.

Recommendations for the replacement of part of the thermal power generation capacity with renewable sources have been developed.