The article deals with the investigation of ecological and economic efficiency of domestic instrumental regulation and use of alternative energy sources in the structure of the fuel and energy complex of the country.

As the experience of many countries shows – the effective functioning of ecological and economic mechanisms of alternative energy sources, attracting investments in renewable energy branch, not only contributes to solving global challenges of climate change and the national energy security, but also leads to significant environmental and economic results: creation of new jobs, stimulating economic growth, scientific research and engineering developments, reducing greenhouse gas emission, reducing the cost of measures to protect the environment and, ultimately, positive environmental and economic impact on a specific time interval.

Ukraine, seeking to Europe, should take into account the experience of developed countries, which redirect its energy to alternative energy sources, following two aspects: economic (wind energy, solar, water energy, biomass energy is inexhaustible, unlike gas, coal and nuclear fuel, reserves of which are being reduced and the price thus is increasing) and environmental (alternative energy sources are ecologically pure that becomes the main value in the face of deteriorating climate).

At the same time, the deepening of Ukraine’s integration into the global economy will increase the impact of global trends. Therefore, when forming a long-term strategy it is important to more fully and comprehensively address these trends and focus on possible global challenges. In this context it is necessary to strive for the most efficient and effective instrumental regulation of development and use of alternative energy sources in the structure of the domestic energy sector.

In our opinion, the efficiency of instrumental regulation of renewable energy development in the structure of the domestic energy sector is significantly influenced by: state support; pricing policy; researches and analysis of the global and domestic market of renewable energy, etc. At the same time, given the domestic realities, we note that all studied instruments on regulation of development and use of renewable energy are effective and efficient, but their simultaneous implementation is objectively impossible today. Therefore, we have identified in our proceedings a number of instruments of state influence, requiring implementation to local realities, which facilitate effective functioning of ecological and economic mechanism of alternative energy sources, increase the investment attractiveness of renewable energy. Based on the above, we have formed a scheme of stages to achieve environmental and economic efficiency of instrumental regulation of alternative energy development.

In summary, we note that now the government needs to introduce new instruments for regulating development and use of alternative energy sources, which should be based not on social co-payments, but on redistribution of available at disposal resources to support effective technologies of electricity production in order to achieve environmental and economic benefits.