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POWER INDUSTRY OF UKRAINE AND REALITIES OF THE GLOBAL WARMING

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Abstract

The results of studies of the evolution of global energy consumption are highlighted, anthropogenic and solar-terrestrial factors of influence on global warming are reviewed. Since the mid-twentieth century, the trend of increasing global surface temperature, one of the indicators of the climate system of our planet, has been investigated. An explanation of the greenhouse effect enhancement is given, as a result of an increase in the concentration of greenhouse gases in the Earth's atmosphere. Along with the anthropogenic concept of global warming, a natural concept is also considered, in which it is believed that the determining factors of increasing surface temperature are natural, associated with cosmogenic cyclical processes, with solar-terrestrial interaction (Earth's rotation around the Sun, precession of the Earth's rotation axis, solar activity cycles and etc.). It is shown that there are approaches that interchange the causes and effects of warming, namely: changes in the atmospheric concentration of carbon dioxide - this is a consequence of global temperature changes on the

planet, and not their cause. The warming of the oceans leads to a decrease in the solubility of CO₂ in water and the release of its excess into the atmosphere. The author's vision of trends forecasts the development of the electric power industry and renewable energy sources in Ukraine in the coming decades are given. In particular, a list of organizational, technological, and scientific-innovative problems associated with the unregulated use of renewable energy sources have been proposed. References 39, figures 3.

Key words: global warming, climate change, greenhouse gas, energy efficiency, global energy balance, renewable energy.

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