Traditional Energy Sources and Green Power Sources: problems and development prospects in the context of global decarbonization

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Abstract
Subject/Topic. The article deals with the problems of developing traditional energy sources and green power sources in the context of a global transition based on reducing greenhouse gas emissions that negatively affect the planet's climate. ***Goals/Objectives***. The purpose of the study is to identify factors that determine trends in greenhouse gas emissions, identify directions for adapting both traditional and environmentally friendly energy sources to climate change. ***Methodology.*** The study of the problem posed was carried out on the basis of using such methods as comparative and statistical analysis, synthesis, economic analysis, including ecological and economic, comparison and grouping method, as well as information modeling. ***Results.*** The use of traditional energy sources increases the local and global environmental problems of modern society, while green energy allows you to mitigate or neutralize the negative impact on the environment. A number of developed countries, and primarily European ones, will receive significant benefits by reducing hydrocarbon imports and shifting their economies to a low-carbon path, as well as increasing their energy security. At the same time, for countries that have enough fossil fuels, a radical transition from traditional to renewable and other green energy sources is possible only with the use of significant administrative and financial resources, and creates serious risks for sustainable long-term socio-economic development. ***Conclusions/Significance.*** Moving towards global carbon neutrality will be an integral solution to the climate crisis and could bring significant benefits to both developed and developing countries. However, immediate and large-scale action is needed to reduce greenhouse gas emissions in all sectors of the economy, using initiatives and tools, both at the international and national levels.

Keywords: *climate change, greenhouse gases, emission reduction, traditional energy sources, green power sources, renewable energy sources.*

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