
ISSUES OF ACHIEVING ECONOMIC STABILITY THROUGH GREEN ENERGY RESOURCES

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Abstract

This research discusses the necessity of using green energy sources. The stable development of the economy, the expansion of its sectors and industries, and the increase in the standard of living of the population require a more rational use of economic resources. The increase in the volume of production, the emergence of new production enterprises causes a large consumption of energy and energy resources. According to experts and scientists, the existing natural fuel and energy resources (natural gas, oil) found in the world are sufficient for 60-150 years. The article also examines the issues of using renewable energy sources to develop the green economy. The article examines some forecasts of renewable energy sources presented in the report of the International Energy Agency - IEA. At the end of the article, there are conclusions and suggestions on the methodology of using "green" energy in the development of the economy of Uzbekistan.

Keywords: economic stability, green growth, hydronetics, renewable energy, energy resources.

INTRODUCTION

The development of the green economy is associated with important deadlines aimed at the sustainability of ecological, social and economic markets, the protection of natural resources, financial stability and the protection of mutual relations. During this development, important decisions must be made and implemented. These decisions take the following forms:

Elimination of environmental problems: Green economy is aimed at elimination of problems related to natural resources, energy consumption and environmental protection. In this way, economic activities support new technologies and methods to reduce energy investment, use high technologies and preserve the environment.

Exchange and social goods: Eliminating problems related to quality social spheres, household factors and social discipline will help its development.

Cleanliness and financial dispersion: A green economy seeks to avoid financial dispersion and increase environmental cleanliness. This is done through fiscal policies, investments and clean energy practices for consumers.

MATERIALS AND METHODS

In his research, Y. Shadimetov studied foreign experience, problems and prospects of "green" energy. In particular, he gave examples of the importance of the formation and popularization of green energy, the development of renewable energy sources, and the transition to a "green" economy in Uzbekistan. Over the past years, great attention has been paid to the development of alternative energy sources in Uzbekistan, because today the whole world community is focused on finding a solution to the problem of rational use of natural resources [4]. The issues of modeling the influence of important factors on the adoption of "green" energy technologies are reflected in the research

conducted by Zeng S. et al. Such issues were studied. Green energy technologies (GETs) are environmentally safe and convenient, making a promising contribution to achieving carbon reduction goals. Many countries are currently adopting many programs to transition to green energy [5].

The sustainability of natural resources has become a global issue that demands the attention of recent literature and politicians. In their study, K. Y. Chau et al. influence of the search and consumption of green energy (renewable energy production, renewable energy consumption and combustible renewable waste) on the sustainability of natural resources (natural resource rent) in G7 countries conducted empirical research on secondary data from the World Bank Indicators (WDI) between 2001 and 2023 and applied moment quantile regression (MMQR) to test the relationships between the constructs. The results showed that the search for and consumption of "green" energy is positively related to the sustainability of natural resources in the G7 countries. This study has both theoretical and practical significance, especially for the formulation and implementation of natural resource sustainability policies for relevant authorities.

RESULTS AND DISCUSSION

At the current stage of digitization of the economy in Uzbekistan, improving sustainable development is becoming one of the main factors in increasing the competitiveness of the energy industry. "Continuous supply of electricity to the economy and active introduction of "green" technologies in all sectors, increasing the energy efficiency of the economy by 20% are among the main issues. By 2026, to increase the electricity production by an additional 30 billion kWh to a total of 100 billion kWh, to increase the share of renewable energy sources to 25% by 2026, and to supply nearly 3 billion cubic meters of natural gas per year saving" tasks are defined. Development of proposals and recommendations based on increasing their efficiency in the sustainable development of the activity of energy enterprises, in which, in accordance with the concept of the development of the energy industry, it is of urgent importance to theoretically justify methodological approaches and develop practical mechanisms for increasing the competitiveness of enterprises and the efficiency of production capacities.

A long-term strategy for the development of the oil and gas, electric power, coal, chemical, and construction industries aimed at ensuring stable economic growth in the republic and increasing the level of well-being of the population, continuously satisfying the demand for fuel and energy resources has been implemented. In the Resolution of the President of the Republic of Uzbekistan dated 22.08.2019 No. PQ-4422 "On increasing the energy efficiency of economic sectors and the social sphere, implementing energy-saving technologies and developing renewable energy sources", the above issue - a roadmap for "Further improvement of energy efficiency of economic sectors and social sphere and development of renewable energy sources" has been defined [1].

In the process of implementation of the "Concept of supplying the Republic of Uzbekistan with electricity in 2020–2030", expansion will be ensured in accordance with the new tasks and priorities of Uzbekistan for the period up to 2030. The concept notes several indicators to be achieved by 2030, including [2]:

- power increase from 12.9 GW to 29.3 GW;
- production of electricity 63.6 bln. ● 120.8 billion from kW/h. increase to kW/h;
- reducing natural gas consumption from 16.5 billion cubic meters to 12.1 billion cubic meters;

- reduce losses in electricity transmission by 2.35% and losses in distribution by 6.5% (1.85 times less than in 2019).

The implementation of these plans will ensure the country's energy security, taking into account the forecasts that energy consumption will almost double in the next 10 years.

At the same time, today the main part of production capacity (about 85 percent) is made up of electric power plants, therefore, by 2030, it is planned to launch 15.6 GW of new and modernized production capacity of IES.

According to the above information, energy production capacity in Uzbekistan is increasing year by year. In 2016, the energy production capacity was 59.0 billion kWh, and by 2025, we can see that this figure will reach 74.3 billion kWh.

There are many ways to generate electricity, and these methods use the main technologies used in electricity generation. By choosing these energy production methods, it is possible to efficiently produce the properties and output of the energy being produced.

In the diagram below, you can see the analysis of the indicator of the supply of electricity to consumers in Uzbekistan.

In our country, the use of green energy sources in all sectors of the economy is an important factor in increasing the competitiveness of the sectors. The widespread introduction of "green" energy sources has a positive impact on the reduction of costs for the provision of energy resources services in the networks, the increase of production efficiency, as well as the availability of stable energy, the saving of financial resources and the mitigation of the complications of climate change. Also, as it allows to solve a number of issues such as fully satisfying the general demand for energy, the implementation of uninterrupted energy supply in remote and remote areas, and to achieve the goals of sustainable development, in recent years, renewable energy has become a major part of the overall energy balance in our country.

Today, the share of renewable energy sources in the total volume of electricity production in our country is about 10 percent.

Table 1: QTEM potential of Uzbekistan (Million tons of oil equivalent = Mtoe)

Renewable energy source	Gross potential	Technical potential
Hydropower	9.2 Mtoe	2 Mtoe
Wind energy	2.2 Mtoe	0,4 Mtoe
Solar photoelectron	50973 Mtoe	177 Mtoe
Geothermal energy	67000 Mtoe	0,3 Mtoe
Total alternative energy sources	117984 Mtoe	179,3 Mtoe

According to the report of the International Energy Agency (IEA)⁵, in 2023 the global capacity of renewable energy will reach 510 gigawatts (GW). We can see that this indicator is almost 50% more than in 2022.

CONCLUSION

At a time when the demand for energy resources is increasing, effective use of energy resources, the extraction of green energy sources and their introduction into sectors and sectors of the economy serve as a basis for ensuring the stability of the energy system. Renewable energy sources are important because they are environmentally friendly green energy sources. In order to ensure a "green" economy, renewable energy sources play an important role in reducing the use of fossil fuels (CO₂), saving energy resources, and properly organizing their consumption. QTEMs, firstly, provide energy services without polluting the air, and secondly, serve the sustainable development of the energy sector in mountainous and remote areas.

- Construction of "green" energy capacities and their effective use serve as the basis for sustainable development of the country's economy. Including:
- Health resources are used in the construction of "green" energy facilities. They are solar, wind, water and other resources.

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