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WAYS TO DEVELOP A GREEN ECONOMY IN A **DIGITAL ECONOMY**

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Abstract

Article on the importance of the development of a green economy in the digital economy, digital technologies and opportunities for their use, the broad opportunities created by the government for the development of a green economy in Uzbekistan, research theories of scientists and economists supported by their scientific and theoretical foundations for the development of a green economy and increasing employment in the digital economy. "

Keywords: Green economy, digital economy, green energy, energy analysis, environmental crisis, environment.

Introduction

Today, humanity is faced with new threats, a reduction in natural resources, an increase in the population, and the emergence of environmental problems. In this regard, it became necessary to introduce the principles of "green development" into the world economy. Also, in accordance with the decree of the President of the Republic of Uzbekistan dated October 4, 2019, the "Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for the Period 2019-2030" PQ-4477-son adopted. In this regard, it is important to study the foreign experience of the "green economy."

A green economy is an economic model based on the protection of ecology and the rational use of natural resources, as well as their processing¹. This model combines environmental conservation, energy efficiency, social justice, and economic reform. Increases the rational use of financial and environmental resources in relation to other economic models. One of the features of a green economy is the prevention of environmental disasters and the conservation of natural resources. At the same time, one of the main goals is a green economy, environmental safety and rational use of natural resources to ensure high economic activity. It is necessary to preserve the environment, manage water and air quality, and the well-being of society.

Another feature of the green economy is the use of green energy and technology. In the green economy, the transition to green energy sources will be expanded. Using solar, wind, water

¹ Khashimova S.N. Green economy. Textbook. - T: "Marifat," 2024. p. 224. 44



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and other energy sources improves energy efficiency. At the same time, the green economy strengthens social and environmental responsibility. Financial organizations, enterprises and people, without violating legal and social standards, strive to preserve the natural environment, minimize the negative impact, and social support. The green economy will be developed and recycled on the principles of two-way efficient use of human and the environment.

Over the years, digital technology has dramatically changed our lives and spheres, improving our productivity, economy and social well-being². The big role of digital technologies in promoting a green economy contributes to improving the efficiency and development of agriculture, water management, electricity, heat and other areas.

Research Methodology

Studying green economics as a new discipline, scientifically based methods of systems analysis, statistical evaluation, comparative comparison, energy analysis, and an interdisciplinary approach were widely used. In particular, the comparative analysis showed how foreign countries use the method of system analysis in the analysis of thematic literature and sources, as well as the "green" economy in its sustainable development.

Literature analysis

The term "green economy" was first introduced in the UK in 1989 by a group of leading environmental economists as the basis for the "Project for a Green Economy" report (Pearce, Markandya and Barbier, 1989)³. This source, consistently presented to the UK Government in the Environment Report, has been shared to conceptually define the term "sustainable development" and forecast economic development, evaluate projects and advise on the implications of sustainable development.

Uzbek scientists A.A. Isadzhanov in their studies argue that the "green" economy is the economy of future, and it is she who is the driving force of the economic development of the XXI century, and the theory of the "green" economy is based on the following three axioms. In particular, in a limited space, it is impossible to continuously expand the sphere of influence, it is impossible to demand satisfaction of the ever-growing need for limited resources and are trying to scientifically substantiate the statements that "everything on Earth is interconnected." Along with this, the studies of T.K. Iminov, A.V. Vakhobov, T.Z. Teshabaev, N.Kh. Hakimov consistently study local opportunities for the transition to a "green" economy, foreign experience, economic environmental problems in the development of industry. In particular, the well-known scientist N. Khakimov should conduct a comparative analysis of human ecology and the "green" economy as an integrated process, and approach this issue in a new way.

When conducting these studies, methods widely used in the methodology of scientific research were used. In the process of scientific analysis, these methods of scientific research were

³ The need for a conceptual, scientific, innovative approach to the transition to a green economy February 2024. GREEN ECONOMY AND DEVELOPMENT p. 16-21



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 $^{^2}$ SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH. International scientific online conference 23-30 .

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widely used, in particular, observation, generalization, grouping, comparison, analysis and synthesis.

Analysis and Results

The relationship between the green economy and information technology plays an important role in ensuring environmental financial development. Information technologies are one of the main elements of enhancing the practical application of the green economy, preserving the environmental environment and the effective use of financial resources. In a green economy, information technology plays an important role in preserving the environment and linking financial development. This serves to ensure the transition to a green economy by automating financial transactions, collecting information, and effectively managing time and resources in a digital environment. Information technology plays an important role in creating new changes in the green economy. Combining them with the principles of a green economy can increase the ability to support financial development and environmental protection.

The accelerating industrialization and population growth in the country significantly increase the economic demand for resources, as well as increase the negative anthropogenic impact on the environment and lead to an increase in greenhouse gas emissions⁴. Low energy efficiency of the economy, irrational use of natural resources, poor technology renewal, insufficient participation of small businesses in the implementation of innovative solutions for the development of the "green economy" impede the achievement of priority national goals and objectives in the field of sustainable development of the country.

It should be noted that in recent years, in order to reduce dependence on fossil fuels in the republic in the development of renewable energy sources, special attention has been paid to the issue of increasing the share of the use of renewable energy sources, such as solar and wind energy.

In recent years, the use of solar and wind energy in the republic has increased significantly (Table 1)⁵.

Years 2015 2016 2017 2018 2019 2020 2021 2022 2023 0,003 Solar power plants 0.3 0.7 0.2 0.1 0.03 49 435.8 1237.3 electricity generated (million kWh) 15.5 0 Wind 0 0 0 0 0 1.2 0 farms volume of generated electric energy (million kWh)

Table 1: Solar and wind energy use

⁵ Yuldashev I.A., Tursunov M.N., Choko Chkarov S.K., Zhamolov T.R. "Solar energy." Textbook - Tashkent 2019. p.183.



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⁴ International Scientific and Practical Conference "IMPROVING THE MECHANISM FOR ATTRACTING FOREIGN DIRECT INVESTMENT IN THE CONTEXT OF THE TRANSITION TO A GREEN ECONOMY" on the topic "Green economy: analysis of theoretical and practical approaches" p. 5-8.

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The government pays attention to projects to diversify energy sources.

However, there are certain problems that require industry modernization. By 2030, it is planned to increase the share of renewable energy sources produced in the republic by 25 percent. Currently, a number of projects are underway to introduce technologies related to the use of solar energy.

According to the data, in 2023, 3,855,225 solar panels worth 427.1 million US dollars were imported to the Republic of Uzbekistan from more than twenty countries. Countries such as the People's Republic of China, the United Arab Emirates, Hong Kong, the Republic of Turkey and the Republic of South Korea are leading in this direction. In the economic literature, the following areas of development of the "green" economy are distinguished: the development of renewable energy sources⁶. The energy sector accounts for about 60% of greenhouse gas emissions into the atmosphere. The analysis shows that every fifth inhabitant of the world, or 1.2 billion people, is deprived of access to electricity. 2.8 billion Trees, coal and animals are used to cook and heat the habitat. This is a violation of home air.

Currently, developed countries produce 1 to 3 kg of municipal solid waste per capita daily. In the United States, this figure is growing by 10% every 10 years. In Russia, the area of waste collection is more than 2 thousand square meters. km At the same time, creating a system of rational waste management can bring serious economic dividends. In particular, in the UK in 2005-2010, within the framework of special programs, 7 million tons of waste were recycled and used for the second time. This allowed to emit 6 million tons of greenhouse gases into the atmosphere, save 10 million tons of primary materials and 10 million liters of water. 8,700 jobs have been created in this area.

One in six people suffer from a lack of drinking water. Due to climate change and the intensification of global natural water circulation in areas with a humid climate, humidity increases, and droughts increase in areas with an arid climate. Currently, 3.6 billion people (almost half of the world's population) live in areas with a lack of water for at least a month a year, and by 2050 this figure will amount to 4.8 billion 5.7 billion may increase to.

UNEP conducts research to reduce demand for transport, primarily private vehicles, without compromising overall population movement. "Green transport" means any method or organizational form of movement that reduces the negative impact on the environment. Green transport includes pedestrian and bicycle paths, green cars, urban transport systems that contribute to the design of convenient transition zones for public transport, as well as contribute to the preservation of an economical, healthy lifestyle and living space.

Transport systems have a serious negative impact on the environment, 20-25% of global energy consumption and greenhouse gases are directly attributable to transport contribution. The number of fleets in the world is expected to triple by 2050^7 . In this regard, UNEP, together with the International Automobile Federation and the ICHT International Transport Forum, has launched the initiative "50 percent to 50 years." The goal of this initiative is to increase the

⁷ The national report on the state of the environment was published by the Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan © 2023 International Institute for Sustainable Development International Institute for Sustainable Development. Tashkent 2023. p.154.



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⁶ MODULAR FOLDER "DEVELOPMENT STRATEGY FOR NEW UZBEKISTAN" Namangan – 2023. p.254.

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efficiency of the global fleet by 50% by 2050. In Tashkent, 90% of greenhouse gas emissions come from vehicles. The amount of toxic substances emitted by motor vehicles in Tashkent is 395 thousand tons per year. If in 2018 in Uzbekistan the amount of these toxic substances amounted to 2 million 449 thousand tons, then the share of vehicles amounted to 60% million tons. This figure is 3 times higher than world standards.

All human activities lead to a change in biochemistry. The direction and scale of these changes can be called an "environmental crisis."

According to the United Nations, 30.7% of the land area is forested. Along with ensuring food security, forests play an important role in preventing climate change. Every year, humanity loses 13 million hectares of forest plantations, and regular land degradation has led to desertification of 3.6 million hectares of land.

If 8.0% of the known 8300 species of animals have disappeared in the world, then 22.0% are on the verge of extinction, then only about 1.0% of 80,000 tree species have been studied in terms of potential use⁸. Development of markets for the creation and implementation of "green technologies." According to some estimates, by 2025 the global market for environmentally friendly equipment will reach 4.4 trillion euros (about 6 trillion dollars). There is an annual increase in this market by an average of 30% and an increase in its contribution to world GDP to 6-7%.

Based on the above, it is advisable to solve the following problems in the development of the "green" economy: the main problem in the successful implementation of the concept of the "green" economy is the direction of the concept of the "green" economy as effective energy and resource-saving technologies, additional investments in the development of alternative energy or "green growth" is a simplification;

- The complexity of the scientific rationale for the need to transition to a green economy, the high uncertainty in predicting environmental problems make it difficult to explain this concept clearly and simply. In particular, there is no single agreement on reducing the timing and level of greenhouse gas emissions into the atmosphere. And greenhouse gas emissions are increasing;
- A green economy cannot replace sustainable development, a green economy is a criterion for achieving sustainable development;
- sustainable development requires holistic, interconnected development of economic, social and environmental components;

Conclusion

In conclusion, in our country, the role of the state is being successfully implemented to create the necessary conditions for the development of the digital economy, which indicates the results achieved and ambitious goals for the near future.

For a speedy transition to a "green" economy and the elimination of environmental problems in our country, the most urgent tasks are energy resources, the economical use of water and land, investing in the production of environmentally friendly alternative electricity and waste processing, strengthening the principle of public-private partnership. In order to create

⁸ Muftaydinov K.Kh., Kadyrov K.M., Yulchiev E.Yu. Ecology. Tashkent 2020.p 417.



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sustainable jobs in the long term, it is necessary to improve the skills and retraining of workers during the transition to a green economy, as well as increase their potential for green growth and human capital development. In general, the transition to a green economy is a complex, multifaceted and multifaceted process.

The complexity of the scientific justification of the need for a transition to a "green" economy, the high uncertainty of forecasting environmental problems make it difficult to explain this concept in an understandable and simple way. In particular, there is no single agreement on reducing the timing and level of greenhouse gas emissions into the atmosphere. And greenhouse gas emissions are increasing;

It is necessary that financial, banking and insurance investments become the main source of private investment in the green economy.

The transition to a green economy must be organized in harmony between nature and human economic activity in order to ensure the sustainable development of society.

Bringing to the general public the essence and significance of the green economy should become one of the most important tasks of the education system of our country.

The process of transition to a green economy is of particular importance for each country and directly depends on such features as natural capital, human capital and the level of economic development of the country.

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