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UZBEKISTAN'S STRATEGY FOR TRANSITION TO GREEN ECONOMY AND ITS FORMATION

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Annotation
In the article, the development of "green economy" takes a leading place in ensuring sustainable economic development in our country, rational use of limited, non-renewable economic resources, and increasing energy efficiency. In 2019-2030, the strategy of the transition to the "green economy" of the Republic of Uzbekistan envisages solving the tasks of increasing the energy efficiency of the economy and rational use of natural resources in the conditions of limited, non-renewable economic resources.

Keywords: green economy, economic well-being, energy efficiency, long-term economic growth, environmental problems, strategy of transition to green economy, human capital, national strategy of economic growth.

Introduction

In today's reality, economic well-being is increasingly dependent on the introduction of environmentally friendly, resource-saving technologies and approaches. After all, the world's population is growing, and natural resources are constantly shrinking. From this point of view, the transition to a "green" economy has several advantages. Because it not only improves human well-being and ensures social justice, but also significantly reduces environmental risk reduction. According to the UN Environment Program, investing 2% of the world's GDP in greening the economy during the period 2011-2050 will ensure current and future long-term economic growth, avoid serious risks related to climate change, increased water scarcity and loss of ecosystem services. . In Uzbekistan, fundamental changes continue in all aspects of state and social life. At the same time, the person, his rights and legal interests are at the center of changes. Investments in human capital, knowledge and innovation, transition to a "green" economy are considered as one of the priority areas of economic development, as a condition for increasing its competitiveness and sustainable development of the

country. Taking into account the territorial location of the economy, limited resources, especially water resources, the transition to "green rails" is of decisive importance for Uzbekistan. According to the World Resources Institute, our republic is among the 25 countries most affected by water, and water scarcity will worsen with climate change. At the same time, Uzbekistan has the highest indicators of fresh water intake and the lowest indicators of water use efficiency in the world. Despite the fact that the agriculture of Uzbekistan accounts for 90% of the total water consumption of the republic, due to the inefficiency of the irrigation networks, a third of the water in agriculture is simply disappearing. Due to outdated infrastructure and inefficient agricultural practices, water is used inefficiently in the fields.

In October 2019, in order to mitigate the consequences of environmental problems and improve management in the field of increasing the energy efficiency of the economy, the Action Strategy of the Republic of Uzbekistan for the transition to a "green" economy in 2019-2030 was approved. In its framework, the direction "green energy" was chosen. It is planned to produce 25% of the country's electricity from renewable sources in the next 8 years. Almost 10 GW of new renewable energy facilities are planned, including 5 GW of solar, 3 GW of wind and 1.9 GW of hydro. It produces 260 million kWh of electricity and supplies more than 80,000 households with electricity. In addition, the commissioning of the station has the opportunity to save 78 million cubic meters of natural gas per year and prevent the release of 100,000 tons of harmful waste into the atmosphere. This amount of saved gas can supply all households in our country with natural gas for 10 days. The development strategy of New Uzbekistan for 2022-2026 also focuses on further development of "green" energy in our country. In particular, in 2022, 7 projects with a total capacity of 173 MW will be launched in the field of hydropower. Among them: 3 new HPPs will be built in Samarkand region; 4 existing HPPs in Surkhandarya, Samarkand and Tashkent regions will be modernized. As a result, 173 MW of new capacity will be created, which will increase the total capacity of our country's hydroelectric power stations to 2225 MW. This is three times more than the actual need of the country. In addition, according to the Paris Agreement, Uzbekistan made an additional commitment to reduce greenhouse gas emissions per unit of GDP by 35 percent by 2030 (10 percent in 2010). Such a number of cases show that the implementation of large-scale scientific research on the "greening" of the economy in our country, the introduction of renewable energy sources and the protection of rural settlements from the negative effects of climate change is of urgent importance.

RELATED WORK

The theoretical and practical aspects of ensuring sustainable development based on the development of the "green economy" were deeply studied in the scientific researches of foreign economists A. Atkinson, A. Steiner, R. Ayris, S.Bessa, K. Burkart,

Z. Kiis, R. Fuchs [1 ,2,3,4]. The principles of the transition from the "brown economy" to the "green economy" and the mechanism and levers of financing national programs are closely related foreign scientists S.N. Bobylev, V.D. Kalner, V.A. Polozov, S.A. Lipina, E.V. Agapova. It was analyzed in the works of A.V. Lipina, V. Sidorovich [5,6,7,8]. The necessity, status, composition and current problems of developing "green energy" in our country were discussed by the economists and researched in the works of H. Khajibakiev, A.V. Vakhabov, Sh.A. Toshmatov, T.K. Iminov, T.Z. Teshaboev, M.T. Butaboev. [9,10].

RESEARCH METHODOLOGY

In the research process, the methods of induction and deduction, systematic analysis, comparative analysis of the methodology of various international and non-governmental organizations, tables and graphs were used in the analysis of renewable energy consumption.

ANALYSIS AND RESULTS

The concept of "Green economy" was first used in scientific research in 1989.

In some sources, "Green economy" is the nature of the country research as new sectors of the economy that help to improve. If done, in some studies, "Green economy" helps nature and profitable new technologies are studied as ecosystems, third and in group studies, "Green economy" is environmentally friendly products transition to a new stage of development aimed at creation, its basis is said to constitute clean or "Green" technologies. It is an economy that leads to "improvement of people's well-being and social equality, significant reduction of environmental risks and environmental deficits". The absence of a universally accepted approach to clarifying the essence of this concept indicates that the concept of "Green economy" is still in the formative stage. This concept can also be applied to economic sectors, Green Economy theory, principles, or Green Economy policy. The main goal of the "green economy" concept is to ensure sustainable economic growth and increase investments, while simultaneously improving the quality of environmental protection and social integration. From this point of view, in order to achieve this goal, it will be necessary to direct public and private investments to environmental and social factors of sustainable development on a large scale. The goal of the "green economy" is to achieve sustainable economic growth with the rational use of natural resources and the relative reduction of negative environmental impacts.

When talking about the "green economy", connect it with the environment we must not forget that it depends, namely, the growth of ecology. The solution to this global problem is the worsening of all mankind prompts to find. First of all, we need to have a complete understanding of ecology, because environmental problems are represented by this concept. In 1866, the German biologist Ernst Haeckel made the

first appearance. The word ecology comes from the Greek words oikos (home) and -logos (learning) created Ecology is between living organisms and their environment said that he will study their mutual relations. Historically this direction studied biology. When the concept of ecology appears, it is its main objects of study were divided into:

• Population - a group of organisms located in a certain area, considered one or similar species;
• A system that includes an ecosystem and its habitat;
• Biosphere - the part where life is spread on earth.

Today, ecology has moved beyond biology to other sciences integrated, interdisciplinary, human-environment interactions became a learning science. Understanding the ecology "man-nature" problem he traveled a long and complicated path on his way. Global environmental problems until it appears, man looks at nature as a master and subjugates it. He spared no effort on his way. After all, today is the future of humanity that he is in danger, his place in nature and the meaning of his life directly realizes that it is related to nature conservation. This problem relevance, global environmental problems, every country on the planet, every the legal framework in this direction that it belongs to the household and every person formed the basis for the adoption of relevant laws.

Contributions supporters of the "green economy" concept believe that the current economic system has certain positive results in improving the standard of living of the population. Ecology disturbance (climate change, desertification, loss of biodiversity), natural depletion of capital, increasing poverty, lack of fresh water, food, energy, people and countries problems such as inequality between the current economic system is perfect are the reasons why it is not. Therefore, the current economic model is "brown".

A number of dangerous consequences of environmental degradation and climate change Today, it poses a great threat to humanity. Today concentration of carbon dioxide gas (CO_2) in the atmosphere to the ecological limit is approaching, and if the necessary measures are not taken, it will be in the near future the indicator may worsen. Climate change is plentiful it leads to the rise of the sea level in the countries. A dangerous aspect that is, 14 percent of the population and 21 percent of the urban population in developing countries lives in coastal regions where there is a risk of flooding.

All global crises are job losses, social such as insecurity and poverty, both developed and developing current socio-economic issues that seek stability in countries deepens the problems. One of the main goals of protecting modern ecology is the wide use of biogas obtained by rational use of renewable resources and environmentally harmful waste in the economic and social development of the country. Renewable energy is a source of energy obtained from the energy flow of the environment. These include

solar, wind, water resources, geothermal resources, biogas obtained from industrial and municipal, agricultural waste. Alternative energy sources play a major role in saving primary hydrocarbon resources in cities and ensuring energy security of the country.

Information on renewable energy in reports prepared by different international and non-governmental organizations may differ from each other. This situation can be explained by the differences related to the different calculation methodologies used in the preparation of current reports. In particular, BP (British Petroleum) reports only provide information on the consumption of renewable energy used in the production of electricity. In the REN21 reports, the composition of final energy consumption is divided into fossil fuels, nuclear energy, traditional biomass and modern renewable energy. In 2020, due to the introduction of restrictions related to the COVID-19 pandemic, the economy's demand for energy decreased sharply. In particular, in the first quarter of 2020, the world's demand for electricity decreased by 2.5%, and the demand for coal and oil decreased by 8 and 5%, respectively. It can be observed that the demand for renewable energy, which is the only source of electricity production, has increased. For example, from March 10 to April 10, 2020 in the European Union (EU) and the United Kingdom, coal-fired electricity production fell by 29%, while alternative energy sources provided 46% of total electricity production, an increase of 8% compared to 2019 [11].

Table -2 Prospects for the development of "green energy" [11].

	Current situation		Moderate scenario		An intense scenario	
	2015 y.	2018 y.	2030 y.	2050 y.	2030 y.	2050 y.
Share of alternative energy in final energy consumption, %	9,5	10,5	17,0	25,0	28,0	66,0
Energy capacity, %	1,8	1,8	2,4	2,6	3,6	3,2
Share of alternative energy in electricity production, %	23,0	26,0	38,0	55,0	57,0	86,0
Number of electric cars, mln. piece	1,2	7,9	269	627	379	1109
Heating devices, mln. piece	20	38	63	119	155	334

Sustainable development trends in the field of "green energy" may create an opportunity to transition to a new socio-economic development model for the countries of the world in the future. Investments in the field will allow creating more than 42 million jobs in alternative energy sectors by 2050. By this time, the number of people employed in the energy sector is 100 million. per person, the acceleration of transition processes to "green energy" is predicted to lead to a 13.5% improvement in

the well-being of the world's population. Most of the electricity consumed in Uzbekistan (88.7%) is produced in thermal power stations. In this case, the core of the energy consumption structure is oil and gas resources, and their reserves can satisfy the need for natural gas and oil for 20-30 years. If the annual need for electricity in the national economy is 59-60 bln. 107 billion per kWh by 2030. If we take into account the increase to kWh, the expiration date of natural oil and gas reserves can be shortened even more. As a result of the development of economic sectors and the growth of the population's needs in our country, the need for electricity is increasing. Analysis shows that in 2000, one user used 114 kWh of electricity per month.

The strategy of the transition to a "green" economy of the Republic of Uzbekistan for the years 2019-2030 also includes an effective system of waste processing, rational consumption and storage of natural resources, creation of "green" jobs, climate resilience, introduction of drip irrigation technology on an area of up to 1 million hectares, and it means increasing the productivity of the crops grown in them by 20-40 percent. In the process of growing the economy, the country's leadership remains committed to combating climate change and protecting the environment. This is confirmed by the establishment of 16 national goals and 127 related tasks in the field of sustainable development until 2030. At the same time, commitments were made to comply with the basic requirements of "green" development. The recent report of the World Bank confirms the urgency of creating a future with high stability, more careful attitude to the environment and inclusiveness in Uzbekistan. It recommends strengthening human capital through investing in people, "greening" the economy and decarbonizing. According to experts, the National strategy of "Green" economic growth, based on sustainable and efficient use of natural and energy resources, aims to increase resistance to natural disasters and climate change by reducing environmental pollution to a minimum level. World experience shows that the introduction of "green" technologies into various sectors of the economy has a positive effect on the quality of life of the population. As a result, living in cities becomes more pleasant and comfortable, the quality of life increases, its duration increases, infant mortality decreases, etc. In addition, countries that have chosen the path of "green growth" are attracting the attention of international organizations and business circles. Foreign investors and creditors show great interest in them. Uzbekistan's transition to a "green" economy will be an important signal to the world community for the financing of large investment projects aimed at achieving the national goals of "green development".

CONCLUSIONS AND SUGGESTIONS

Over the next decade, "green growth" will change the way people live and work. Digitization and decarbonization as key drivers of this transformation will facilitate the transition to a sustainable world where our planet, its rich biodiversity and

humanity can flourish. Today, the biosphere is under threat due to increased carbon emissions, and human-caused climate change is threatening ecosystems around the world. The report "Green Growth 2030" published by Huawei in April 2022 serves as a "Road Map" for the trends and technologies of the industries that will ensure a "green future". In terms of sectors, the changes we will see will undoubtedly be seen in sectors such as energy, manufacturing, transport, construction and digital infrastructure. Key perspectives, drivers and innovation pathways to help build a "green future". Renewable energy sources become mainstream: more than 50 percent of electricity is generated from renewable energy sources. Floating photovoltaic installations, offshore wind turbines, and superpower grids that can transport energy intercontinentally represent a radical change in how energy is produced and consumed. The industrial sector will be "green": we will see 390 robots for every 10,000 workers, who will be able to work independently in factories on a large scale. Based on visual and transparent supply chains, virtual factories bring together engineers, designers and experts to plan and implement E2E products. Three-dimensional (3D) printing enables mass customization, i.e. product customization, where consumers can design and create their own products.

Electrification dominates the automotive industry: 145 million new energy vehicles will be on the road worldwide, and there will be 100 million private charging stations. New energy hybrid (mixed) wing aircraft, cargo ships, public bicycles and the Internet of Transport will revolutionize air, sea and public transport by reducing congestion and emissions.

Carbon-free buildings of the future: By 2030, all new construction and by 2050, all buildings will be carbon-neutral. New building projects and environmentally friendly materials, natural energy resources and biomass from organic waste are all zero carbon innovations.

Digital infrastructure will go green: by 2030, the world will have 200 billion communications connections, a 10-fold increase in total computing and a 500-fold increase in the computing power of artificial intelligence. Renewable energy, data-driven services, fully automated operation and maintenance, neural networks and knowledge graphs will help develop an intelligent, ecological infrastructure.

Low-carbon lifestyles are on the rise: e-health, online education and digital tourism are just some of the lifestyle changes that are helping to reduce humanity's carbon footprint.

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