



Journal of Academic Research and Trends in Educational Sciences

Journal home page:
<http://ijournal.uz/index.php/jartes>



DIRECTIONS FOR DEVELOPMENT OF GREEN ECONOMY IN UZBEKISTAN

Karimova Aziza Sayibnazarovna¹

National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers"

KEYWORDS

green factor, green economy,
industry, green investments,
green technologies

ABSTRACT

This article discusses the features, problems and prospects of the green factor of economic growth in Uzbekistan, and also describes the main directions of development of the green economy in the Republic of Uzbekistan.

2181-2675/© 2023 in XALQARO TADQIQOT LLC.

DOI: 10.5281/zenodo.8371796

This is an open access article under the Attribution 4.0 International(CC BY 4.0) license (<https://creativecommons.org/licenses/by/4.0/deed.ru>)

¹ National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers", Tashkent, Uzbekistan (azizasay@umail.uz)

Introduction. Humanity is on the verge of new threats. The world's population continues to increase, and natural resources are constantly decreasing. This imbalance puts states in a difficult position. First of all, there is an aggravation of global environmental problems. In Central Asia, the average annual temperature has increased by about one degree over the past 30 years. The decline of our region's major river basins and biodiversity is a matter of grave concern. Gases that increase evaporation levels, as well as widespread air pollution, further exacerbate the problems. No one doubts that states' efforts to achieve green development goals must be even more active and effective. To improve the situation, experts emphasize the need to introduce the principles of "green" development.²

Climate change and its consequences are priority challenges and threats to the global sustainable development of the world economy and the well-being of the world's population. This problem affects important sectors of the economy, such as agriculture, energy, infrastructure and healthcare, which in turn negatively affects the growth rate of GDP, economic modernization and, ultimately, the environmental and national security of the country. According to the³Swiss report Re Institute, the global economy could shrink by 18% in the next 30 years. In particular, under a worst-case scenario of a 3.2°C temperature increase, China could lose almost a quarter of its GDP (24%) by mid-century. In the US, Canada and the UK, losses will be about 10%. Europe will be slightly more affected (11%), while countries such as Finland or Switzerland are less at risk (6%) than, for example, France or Greece (13%)⁴.

Methodology. In the study of this topic, the authors used methods such as analysis, observation, statistics, comparison, and economic review.

Discussion. The "green" economy is a big topic; a presentation of all aspects would require a rather lengthy monograph, so let's look at it using the example of the electric power industry.

First, about the very concept of "green" economy. The main postulate of this theory is that the economy is part of the natural environment. It transforms various resources taken from it into products and goods needed by people, and sends back the generated waste. At the same time, people themselves are also part of the natural environment, which depends very much on it.⁵

To achieve green and sustainable economic growth, the world community is actively implementing strategies and measures to combat climate change and its negative consequences. 1. Paris Agreement. At the 21st session of the Conference of the Parties to the

² : <https://xs.uz/ru/post/zelenaya-ekonomika-perekhod-ot-traditsionnoj-k-peredovoj>

³Porfiryev Boris Nikolaevich "green" factor of economic growth in the world and in Russia // Problems of forecasting. 2018. No. 5 (170). URL: <https://cyberleninka.ru/article/n/zelenyy-faktor-ekonomicheskogo-rosta-v-mire-iv-rossii> (access date: 12/30/2021).

⁴The Swiss Re Institute (2021). World economy set to lose up to 18% GDP from climate change if no action taken, reveals Swiss Re Institute's stress-test analysis.

⁵<https://uz.sputniknews.ru/20191010/Uzbekistan-nuzhdaetsya-v-zelenoy-ekonomike-silnee-chem-kto-by-to-ni-bylo-12590781.html>

UN Framework Convention on Climate Change on December 12, 2015 in Paris, 196 countries adopted an agreement on climate change, the goal of which is to keep the increase in global average temperature to 1.5 degrees Celsius. The Agreement entered into force on November 4, 2016. The 2030 Agenda for Sustainable Development. In 2015, world leaders from all countries adopted the 17 Sustainable Development Goals for 2030 proposed by the United Nations. The program includes: 17 goals, 169 targets and 230 indicators aimed at ending poverty, reducing inequality and protecting the planet ⁶. The program is viewed through the lens of three pillars: social inclusion, economic growth and environmental protection; and is based on five critical dimensions: people, prosperity, planet, partnership and peace, also known as the 5Ps. Most countries in the world are gradually making the transition to a green economy, where ecology is the engine of progress. The concept of green economy has emerged in the last two decades and is closely related to the concept of sustainable development. Practice proves that sustainable economic growth is the only source of increasing income and, accordingly, investment to eliminate accumulated environmental damage, "green" modernization of production, which helps to increase the productivity of primary resources and, consequently, reduce the resource intensity of the economy and the load on life-supporting environmental ecosystems ⁷.

Analysis. According to research results, Uzbekistan annually loses almost 4.5 percent of its gross domestic product through the use of hydrocarbon energy - oil, gas and coal. This is despite the fact that half of the energy generation capacity is outdated. Their restoration or modernization requires enormous funds. The transition to "green" energy is effective and economical from an environmental point of view. The whole world is choosing an alternative path. In fact, the Strategy for the transition to a "green" economy, adopted three years ago, means that our country is moving towards the right goal.

As part of the Paris Agreement, Uzbekistan reaffirms its commitment to reduce greenhouse gas emissions per unit of GDP by 35% by 2030. To achieve these goals, Uzbekistan has adopted a Strategy for the transition to a green economy for 2019-2030.

PP-436 dated December 2, 2022 "On measures to increase the effectiveness of reforms aimed at transitioning the Republic of Uzbekistan to a green economy until 2030" was adopted. Approved by the document Program for the transition to a "green" economy and ensuring "green" growth in the Republic of Uzbekistan until 2030. It provides for the achievement of the following strategic goals:

- increasing the production capacity of renewable energy sources to 15 GW and bringing their share in the total volume of electrical energy production to 30% or more;
- increasing energy efficiency in industry by at least 20%;
- reducing energy intensity per unit of gross domestic product by 30%, including through increased use of renewable energy sources;

⁶Transforming our World: The 2030 Agenda for Sustainable Development. United Nations, 2015.

⁷Porfiryev Boris Nikolaevich "green" factor of economic growth in the world and in Russia // Problems of forecasting. 2018. No. 5 (170). URL: <https://cyberleninka.ru/article/n/zelenyy-faktor-ekonomicheskogo-rosta-v-mire-iv-rossii> (date of access: 01/10/2022).

increasing the efficiency of water use in all sectors of the economy, introducing water-saving irrigation technologies over an area of up to 1 million hectares;

expansion of green areas in cities to 30% or more by planting 200 million seedlings per year and bringing their total number to 1 billion;

increasing the recycling of household waste to 65% , etc.⁸

Problematic issues related to climate change negatively affect the effectiveness of reforms carried out in the country, in particular on economic growth and poverty reduction, ensuring environmental and food security. Based on this, the country in this direction pays great attention to reducing the impact of climate change and adapting to it, accelerating measures to transition to a “green” economy, and promoting a “green” and inclusive model of economic growth.

In this regard, in order to stimulate “green” economic growth in the country, rational use of natural resources, attract “green” investments, mitigate the negative impact of the environmental crisis, the Decree of the President of the Republic of Uzbekistan dated October 5, 2019 No. PP-4477 approved the Strategy for the transition of the Republic of Uzbekistan to "green" economy in the period 2019 - 2030.

Also in May of this year, the Republic of Uzbekistan joined the global initiative (Global Methane Pledge) for countries to reach a collective goal of reducing methane emissions by at least 30 percent by 2030 compared to 2020 levels.

Lessons learned from the negative situations caused by the coronavirus pandemic and climate change show the need to reconsider more sustainable resources and approaches to ensuring economic growth, in particular, the effective organization of the implementation of strategic goals and activities for the “green” economy and “green” economic growth in the country.

The need to increase the effectiveness of measures taken to develop a “green” economy based on the Strategy for the transition of the Republic of Uzbekistan to a “green” economy in the period 2019 - 2030, as well as ensuring coordinated efforts of government authorities and management with international organizations for mutual cooperation in this direction led to the need to develop the Program .⁹

The need for a transition to a “green economy” in Uzbekistan is explained by the fact that most of the energy consumed in the national economy is generated using non-renewable organic natural resources, the depletion of limited reserves of resources, the exacerbation of environmental problems associated with environmental pollution, water shortages, and the drying up of the Aral Sea due to accelerated industrial development. Sustainable development of the economy of Uzbekistan, development of a long-term strategy for structural transformations requires taking into account internal and global processes and problems. According to the UN World Meteorological Organization, to date

⁸https://www.norma.uz/novoe_v_zakonodatelstve/kak_uzbekistan_pereydet_na_zelenuyu_ekonomiku

⁹Resolution of the President of the Republic of Uzbekistan on measures to increase the effectiveness of reforms aimed at transitioning the Republic of Uzbekistan to a “green” economy until 2030.

the average annual air temperature in the world has exceeded the level of 1880 by 1 degree Celsius. In Uzbekistan, over the same period, the average annual air temperature increased by 1.6 degrees Celsius (from 13.2 to 14.8 degrees). The rate of warming of average air temperatures in our country exceeds the average rate observed on a global scale. Climate warming has a negative impact on the state of ecosystems, which leads to an aggravation of the environmental situation in the Republic of Karakalpakstan, Khorezm, Bukhara, Navoi, Kashkadarya, Samarkand and Surkhandarya regions. As a result of global warming in Central Asia over the past 50-60 years, the area of glaciers has decreased by about 30%. The analysis showed that with a temperature increase of 2 °C, the volume of glaciers will decrease by 50%, and with a warming of 4 °C - by 78%. According to scientists' calculations, by 2050, water resources in the Syrdarya basin are expected to decrease by 5%, in the Amu Darya basin - by 15%. As calculations by experts show, the total water deficit in Uzbekistan for the period until 2015 amounted to more than 3 billion m³, by 2030 it could reach 7 billion m³ and by 2050 - 15 billion m³.¹⁰

Conclusions. The “green” economy includes not only reform of the energy sector. This concept includes multifaceted and large-scale measures such as solving the problem of drinking water, food security, innovation in agriculture, sustainable urban development, rational waste management, expansion of forest areas, and reduction of desertification. The benefits of the green economy will be seen not only by the state or business, but first of all by ordinary people. This is its meaning.

As can be seen from world experience, the introduction of “green” technologies in various sectors of the economy will have a positive impact on the quality of life of the population. As a result, life in cities will become healthier, which means child mortality will decrease and average life expectancy will increase.

Perhaps it would be worth paying closer attention to wind power plants in various kinds of deserts and steppes, which are abundant in Uzbekistan. The wind potential is very large, according to some estimates, up to 520 GW of power and more than a trillion kWh of electricity. About 10% of this potential would be enough for Uzbekistan to solve acute energy problems.

In rural areas, traditionally suffering from shortages of electricity and fuel, solar panels, heaters, collectors, and wind turbines are also being gradually introduced. Such facilities compensate for power shortages in certain areas and make it possible to eliminate unnecessary transmissions with inevitable losses in networks, thereby improving the energy systems of individual areas.

When renewable energy covers the uninhabited outskirts of Uzbekistan and rural areas, in combination with large thermal stations (the creation of “smart” transmission networks is also part of the “green” economy methods), it will create a new electric power industry for the republic that is much more efficient than it is now.

¹⁰ A.Vakhabov, Sh.Khazhibakiev. The need and priority directions for the transition to a “green economy” in Uzbekistan. “NEW ARCHITECTURE FOR BUILDING AN ECONOMY IN A POST-PANDEMIC WORLD” Abstracts of the international conference in Tashkent, April 20, 2021.

Bibliography:

1. Resolution of the President of the Republic of Uzbekistan "On approval of the strategy for the transition of the Republic of Uzbekistan to a green economy for the period 2019 - 2030" dated October 4, 2019, No. PP-4477.
3. Porfiryev Boris Nikolaevich "green" factor of economic growth in the world and in Russia // Problems of forecasting. 2018. No. 5 (170). URL: <https://cyberleninka.ru/article/n/zelenyy-faktor-ekonomicheskogo-rosta-v-mire-iv-rossii> (access date: 12/30/2021).
4. The Swiss Re Institute (2021). World economy set to lose up to 18% GDP from climate change if no action taken, reveals Swiss Re Institute's stress-test analysis 5. Transforming our World: The 2030 Agenda for Sustainable Development. United Nations, 2015.
5. Shermukhamedov, A. T. Development of a green economy in Uzbekistan / A. T. Shermukhamedov, B. M. Kholboev // Progressive technologies and processes: collection of scientific articles of the 7th All-Russian Scientific and Technical Conference with international participation, Kursk, 24–25 September 2020. – Kursk: Southwestern State University, 2020. – P. 177.
6. Communication from the Commission. Action Plan: Financing Sustainable Growth. <https://eurlex.europa.eu/legalcontent/EN/TXT/?uri=CELEX:52018DC0097>.
7. Porfiryev Boris Nikolaevich "green" factor of economic growth in the world and in Russia // Problems of forecasting. 2018. No. 5 (170). URL: <https://cyberleninka.ru/article/n/zelenyy-faktor-ekonomicheskogo-rosta-v-mire-iv-rossii> (date of access: 01/10/2022).