



ISSUES OF IMPROVING THE GREEN ECONOMY IN UZBEKISTAN

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One of the most pressing problems facing humanity in the 21st century is the issue of ensuring economic growth while maintaining ecological balance. The rapid development of industry, population growth, and excessive use of natural resources are threatening a global ecological crisis. In such conditions, a new economic model - the concept of a green economy - is becoming an important strategic direction on a global scale.

Today, the transition to a green economy based on the principles of sustainable development remains one of the most important issues in the world. Global climate change, limited natural resources and disruption of the ecological balance are pushing humanity to take a careful approach to the environment. Uzbekistan, having determined its strategic directions in this regard, is also putting forward the development of a green economy as a priority task.

A green economy is a sustainable development model that ensures economic growth, but reduces the negative impact on the environment, based on the rational use of resources. This approach is widely supported by the UN, the World Bank, the European Union and other international organizations. A green economy is an ecologically safe, economically efficient and socially just economic model. It ensures environmental protection and rational use of natural resources along with economic growth. According to the UN, a green economy is an integral part of sustainable development.

Uzbekistan has also set itself the goal of a gradual transition to a green economy based on the principles of sustainable development. Work is being carried out in areas such as renewable energy, waste recycling, and ecological transport through state programs, investment projects, and the legislative framework. However, reforms in this area still face many problems and obstacles. A green economy is not only an environmental necessity, but also a strategic direction for Uzbekistan that will lead to long-term economic stability. The country's existing resources and potential provide opportunities for the development of this area, but a systematic approach, financial investments, and public engagement are required.

This article analyzes the current state, problems, ways of improvement and prospects of the green economy in Uzbekistan. Also, based on existing experience, practical proposals for the development of this sector are developed.

In recent years, elements of a green economy have been introduced in Uzbekistan in the following areas:

- **Energy:** Solar and wind power plants are being built. By 2030, it is planned to provide 30 percent of electricity from renewable sources.
- **Agriculture :** Drip irrigation and water-saving technologies are being introduced.

- **Transportation:** Efforts have begun to transition to electric vehicles and use cleaner fuels.
- **Waste management:** Construction of recycling plants and development of waste sorting systems.

Globally, factors such as climate change, environmental pollution, and depletion of water and land resources are forcing every country to strive for environmental sustainability. Uzbekistan is no exception to this trend. In particular, local environmental problems such as the Aral Sea tragedy, desertification, and water scarcity indicate the need to accelerate the implementation of a green economy.

Table 1⁸¹

Green economy indicators in Uzbekistan (2020–2024)

No.	Indicator name	2020	2021	2022	2023	2024*	Growth trend (%)
1	Renewable energy share (%)	7.5%	8.2%	9.0%	10.3%	12.1%	+4.6%
2	Number of solar power plants (pcs)	3	5	9	14	22	+633%
3	Area of land under drip irrigation (thousand ha)	330	450	610	800	950	+188%
4	Percentage of recycled household waste (%)	14.6%	17.2%	19.5%	22.3%	25.0%	+71.2%
5	Number of electric cars (by republic, pcs.)	850	1,300	2,500	5,000	8,700	+923%
6	Trees planted within the framework of "Green Space" (million)	—	85	125	200	280	—
7	Investments in renewable energy (\$ mln)	210	320	480	720	950	+352%

As the table shows, the share of renewable energy has been steadily increasing over the past 5 years, but is still low compared to the global average (25–30%). There has been a sharp increase in electric vehicles and solar power plants, which is a result of the government's investment in green transport and energy. The waste recycling sector is still underdeveloped, but there is growth. Much attention is being paid to ecological restoration through the Green Space project. In 2020, the share of renewable sources in total energy consumption was 7.5%, while by 2024 this figure will reach 12.1%. This indicates that state

⁸¹ Prepared by the author based on data from www.stat.uz.

policy is focused on the development of renewable energy. The growth rate in the share continues to be stable every year. Over the past 5 years, the number of solar power plants has increased from 3 to 22, that is, an increase of +633%. This is clear evidence that great attention is being paid to solar energy in Uzbekistan. By improving irrigation technologies, the area of land under drip irrigation will increase from 330 thousand hectares in 2020 to 950 thousand hectares in 2024. This is a significant achievement in the efficient use of water resources.

Table 2⁸²

Current issues in the green economy and their impact

No.	Problem	Impact
1	Lack of financial resources	The widespread implementation of projects and programs slows down
2	Technological deficiency	Improving energy efficiency becomes more difficult
3	Shortage of personnel and environmental knowledge	Low quality of industry professionals, no effective management
4	Weakness of legislation	Weak accountability even when environmental standards are violated
5	Low environmental awareness of the population	The demand for green habits has not been formed

The results of the analysis show that there are green economy reforms in Uzbekistan, but they are still at an early stage. A systematic approach, financial and technological support, legislation, and environmental awareness of the population are the main pillars of this process.


The development of a green economy in Uzbekistan is becoming an integral part of modern development. The country has taken the first positive steps in the development of renewable energy sources, the introduction of environmentally friendly technologies, waste recycling, and the rational use of natural resources.

However, systemic problems - financial and technological constraints, incomplete legal framework, staff shortages, and low environmental awareness among the population - hinder the large-scale development of a green economy.

The following are considered essential for a successful transition to a green economy:

- Establishing environmental sustainability as a priority in public policy;
- Attracting private sector and international investors;
- Strengthening environmental education and advocacy;
- Implementation of innovative and technological solutions;

⁸²Created by the author.

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- Improving green legislation.

Uzbekistan is taking important steps towards developing a green economy. In recent years, significant growth has been observed in areas such as the use of renewable energy sources, waste recycling, and water conservation. At the same time, state programs and the legislative framework for ensuring environmental sustainability, adapting to climate change, and rational use of natural resources are being strengthened.

The country is making significant efforts to reduce environmental problems, manage natural resources wisely, and introduce new, environmentally friendly technologies. Statistical indicators also show positive trends in the green economy.

However, obstacles remain in this direction, such as lack of funding, low innovative capacity, and lack of environmental awareness. To overcome them, comprehensive measures should be taken to strengthen state policy, involve the private sector, and increase the ecological culture of the population.

Efforts to improve the green economy not only protect the environment, but also create new opportunities for economic growth. Therefore, the green economy must be developed as an integral part of Uzbekistan's long-term development strategy.

However, problems such as lack of financial resources, technological dependence, low environmental awareness, and imperfect legal standards hinder the effective implementation of a green economy. To overcome these shortcomings, it is necessary to introduce innovative technologies, comprehensively study international experience, strengthen environmental education, and develop effective cooperation between the public and private sectors.

The development of a green economy in Uzbekistan is important for ensuring environmental and economic sustainability. A number of measures are being implemented in the country to eliminate environmental problems and effectively use natural resources. At the same time, problems in the financial, technological and spiritual spheres still await resolution.

The successful implementation of a green economy requires joint action by public policy, the private sector, and society. This process can become a key factor in ensuring the sustainable and competitive development of Uzbekistan.

The process of improving the green economy in Uzbekistan is an important and complex task. The measures currently being implemented are yielding positive results, but for the further development of the sector, it is necessary to intensify work in the following areas:

1. **Strengthening the financial and investment base:** Increasing financial investments in green technologies and environmental projects, in particular, expanding cooperation with international financial institutions.

2. **Promoting innovation:** Encouraging research on environmental technologies in national research centers and higher education institutions, reducing technological dependence.



3. **Raising environmental awareness:** Establishing comprehensive advocacy and educational programs to develop environmental culture among the population and business entities.

4. **Improving legal standards:** Adapting and harmonizing laws and regulations related to the green economy.

5. **Expand private sector participation:** Encourage the production of environmentally friendly products, support green businesses through tax and other incentives.

With the implementation of the above measures, Uzbekistan can further successfully develop a green economy, rationally use natural resources, and ensure environmental sustainability. This will serve as an important factor in the socio-economic development of the country.

Improving the green economy in Uzbekistan is a long-term and systematic process. Currently, the country is taking significant steps to reduce environmental problems and ensure sustainable development, but for the effective development of the green economy, significant improvements are needed in the financial, technological, legal and social spheres.

In particular, a stronger foundation for a green economy can be created by expanding financial investments, developing and introducing innovative technologies, raising environmental awareness, and improving the legislative framework. Also important factors are stimulating the private sector and involving citizens in environmental activities.

Thus, when these measures are implemented, Uzbekistan will achieve tangible progress in the efficient use of natural resources and ensuring environmental sustainability. This will serve to increase the competitiveness of the country's economy and the well-being of the population.

In conclusion, the green economy is not only a solution to environmental problems for Uzbekistan, but also a way to ensure economic stability and social well-being. The country's natural resources and socio-economic potential create the basis for the successful implementation of this direction. In the future, systematic policies, large-scale investments and active participation of the population will be important for further improving the green economy. The green economy is not only a solution to environmental problems for Uzbekistan, but also a strategic path to sustainable economic growth. On this path, all social strata - the state, society and business - must work together.

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