

# GREEN ECONOMY AS A DRIVER OF SUSTAINABLE ECONOMIC GROWTH IN UZBEKISTAN

sustainable development in Uzbekistan.

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ARTICLE INFORMATION

Volume: 1 Issue: 8

DOI:https://doi.org/10.55439/INSURE/vol1\_iss8/a17

Uzbekistan finds itself at a crucial crossroads wherein the imperative lies in striking a harmonious equilibrium between advancing its economy while upholding environmental sustainability. This manuscript delves into the potential of implementing a green economy as a catalyst for fostering sustainable economic progress within Uzbekistan. The author delves into how the shift towards utilizing renewable energy, enhancing resource efficiency, and adopting eco-friendly practices can engender novel economic prospects, enhance public well-being, and mitigate environmental challenges. The manuscript scrutinizes the current green ventures in Uzbekistan, encompassing investments in renewable energy outlets and regulations aimed at safeguarding the environment. The significance of education, fostering innovation, and embracing inclusive growth strategies in bolstering a successful transition towards a green economy is deliberated upon. Through a comprehensive examination of both the environmental and economic merits, this research endeavor aspires to enrich the discourse surrounding

ABSTRACT

KEYWORDS

green economy, sustainable development, renewable energy, economic growth

# Kirish (Введение/Introduction)

Uzbekistan and the Pursuit of Sustainable Development Uzbekistan, a country with a rich historical background and abundant natural resources. Its conventional economic framework, heavily dependent on the extraction of resources and agricultural practices, is confronted with sustainability issues. Concerns regarding the environment, such as water scarcity and air pollution, pose challenges to the country's long-term economic prospects. Nevertheless, a novel perspective is taking shape: the concept of a 'green economy'. This strategy emphasizes the importance of environmental welfare in conjunction with economic progress. Through the adoption of cutting-edge technologies, promotion of resource efficiency, and safeguarding of natural assets, Uzbekistan has the potential to unlock a path towards sustainable economic advancement. This article delves into the promising prospects of the green economy for Uzbekistan, exploring how environmentally-friendly initiatives can effectively tackle critical environmental challenges, generate fresh economic prospects, and position Uzbekistan as a frontrunner in sustainable development within the region. It scrutinizes specific domains where an eco-friendly approach can propel advancement, such as the development of renewable energy sources, sustainable agricultural practices, and the promotion of ecotourism. Although obstacles lie ahead, by embracing a green-oriented future, Uzbekistan can pave the way for a flourishing economy for future generations.

Ensuring macroeconomic stability and the realization of national sustainable development objectives, addressing the socio-economic impacts of the COVID-19 pandemic, and effectively meeting the benchmarks outlined in the national sustainable development goals,

alongside attaining domestic objectives and priorities in sustainable development up to the year 2030, are resolutions put forth by the Cabinet of Ministers [6].

Per the resolution made by the Cabinet of Ministers of the Republic of Uzbekistan under No. 83 on the 21st of February, 2022, projections for the years 2022-2026 and 2030 have been formulated for individual metrics and forwarded to the Ministry of Economic Development and Poverty Reduction, as well as to the State Statistics Committee [6].

In recent times, the necessity of sustainable development has gained more attention on the international stage, as countries around the world acknowledge the importance of harmonizing economic advancement and environmental protection [1].

The Coordinating Council acts as the Coordinating Council of the Government of the Republic of Uzbekistan regarding the implementation of the UN Framework Program on Cooperation in the Field of Sustainable Development Goals for Uzbekistan in 2021-2025 [2].

## Adabiyotlar tahlili (Обзор литературы / Literature review)

Economists such as A.V. Vahabov from Uzbekistan advocate for the "Transition to the Green Economy." They highlight the importance of achieving energy efficiency in Uzbekistan and the need to transition towards "green" energy consumption. Furthermore, they emphasize the significance of electrifying transport, effectively managing waste, improving drinking water supply, and mitigating emissions of CO2 and carbon gas. Additionally, they stress the importance of addressing climate change adaptation and biodiversity preservation issues [3].

It was found that A.SH. Bekmurodov and U.V. According to Gafurov, the phenomenon of economic growth is manifested through a direct Maxsus son 2024

relationship with the growth of the gross domestic product, both in absolute values and per person, achieved through the use of economic resources and improvement of its overall quality and structure [4].

"Green" technologies are increasingly the focal point of expanding discourse; the concept of the "green dimension" is evolving into a distinct institutional framework that sharing platforms can leverage to appeal to eco-conscious consumers and establish credibility with environmentally mindful local governments and investors [5].

## Tadqiqot usullar ( Методология/Methodology)

This research will employ a mixed-methods approach to comprehensively analyze the potential of the green economy as a driver of sustainable economic growth in Uzbekistan. A comprehensive scrutiny will be carried out on existing scholarly literature, governmental publications, and policy papers concerning: The concept of green economy and its implementation in developing nations. Strategies for sustainable development in Uzbekistan. The environmental obstacles and economic prospects in Uzbekistan. This scrutiny will establish a robust groundwork for grasping the current knowledge base and pinpointing potential gaps in research. Relevant quantitative data, such as, statistics on economic growth, figures on renewable energy generation, environmental metrics like water consumption and levels of pollution. This data will be assessed utilizing suitable statistical techniques to gauge the potential economic and environmental advantages of green policies in Uzbekistan.

#### Tahlil (Анализ / Analysis)

An analysis of forestry data from 2000 to 2021 reveals a positive trend in Uzbekistan's forest cover relative to its total land area. In 2000, forest area constituted approximately 6% of the landmass. This percentage exhibited a gradual rise, reaching 7% by 2005 and surpassing 8% by 2015(See fig.1).

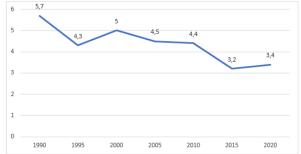


Figure 1. CO2 emissions (metric tons per capita) -Uzbekistan Source: https://www.worldbank.org/en/country/uzbekistan

By 2021, the data indicates a further increase to 8.4% forest cover. The data linked to the implementation of national reforestation programs or policies promoting tree planting [7].



Figure 2: Access to electricity (% of population) - Uzbekistan Source: <a href="https://www.worldbank.org/en/country/uzbekistan">https://www.worldbank.org/en/country/uzbekistan</a>

In the Figure 2, data retrieved from the World Bank's collection of development indicators reveals a high electrification rate in Uzbekistan. As of 2021, 99.9% of the population has access to electricity. This high electrification rate provides a strong foundation for the development of a green economy in Uzbekistan. Reliable access to electricity is crucial for the adoption of clean energy technologies in households and businesses, promoting a shift away from fossil fuels.

Further analysis could explore the contribution of different economic sectors (e.g., agriculture, industry, renewable energy) to the overall GDP. This can be used to discuss how the green economy might be influencing the structure of Uzbekistan's economy. Real GDP provides a more

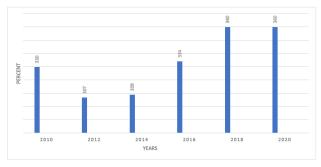


Figure 3: Annual freshwater withdrawals, total (% of internal resources) -Uzbekistan

Source: https://www.worldbank.org/en/country/uzbekistan

accurate picture of economic growth by eliminating the distorting effect of price changes. Sources like the World Bank report that Uzbekistan's real GDP in 2022 amounted to \$95.3 billion USD [8].

# Natijalar muhokamasi (Результаты и обсуждения / Results & Discussion)

In the Figure 1, the line graph illustrates the fluctuations in CO2 emissions within a 30-year period. Starting in 1990, emissions were at their peak, with approximately 5.3 metric tons per capita. This was followed by a decrease to around 4.3 metric tons by 1995. The next decade saw a rise in emissions, peaking again at about 4.8 metric tons in 2005. However, from 2005 onwards, there was a significant downward trend, culminating in a substantial reduction to roughly 1.8 metric tons per capita by 2020. The y-axis of the graph is marked from 0 to 6 metric tons, and the x-axis is labeled in five-year intervals, providing a clear view of the emissions trajectory. The blue line representing the data shows a general decline in emissions, especially notable in the last 15 years of the period. This decline in CO2 emissions could be attributed to various factors such as advancements in energy efficiency, shifts in energy sources, or economic transformations. The data suggests a positive environmental development in Uzbekistan, aligning with global efforts to reduce carbon footprints and mitigate climate change impacts[9,10,11]. Transitioning towards solar power, wind power, and other forms of renewable energy has the potential to diminish carbon emissions and environmental pollution[12]. By encouraging energy-efficient practices in homes, businesses, and transportation can lead to significant reductions in energy consumption.

Uzbekistan faces significant challenges regarding water usage. Implementing irrigation technologies that minimize water waste, such as drip irrigation, can significantly reduce overall freshwater withdrawals[13]. Modernizing water infrastructure to reduce leakage and improve distribution systems can ensure efficient water delivery and prevent unnecessary withdrawals. Public awareness campaigns and educational initiatives can encourage water-saving practices in households and businesses. As the Figure 3 shows, the data points indicate an increase in Uzbekistan's freshwater withdrawals from 334% in 2016 to a stable level of 360% since 2018. Uzbekistan's population has been steadily increasing. This could lead to a rise in water demand for residential use. An expansion of agricultural activities, particularly water-intensive crops, could explain the rise in water withdrawals.

## Xulosa (Заключение/ Conclusion)

The concept of the green economy offers Uzbekistan an enticing opportunity to attain sustainable development. Through the strategic emphasis on environmental sustainability in conjunction with economic advancement, Uzbekistan stands to gain significant advantages. Firstly, engagement in green practices has the potential to generate financial savings and enhance the efficiency of resource utilization within businesses, thereby fostering an increase in overall productivity. Secondly, a decrease in the dependence on fossil fuels and the implementation of sustainable land management techniques have the capacity to contribute to the promotion of cleaner air, enhancement of water quality, and preservation of biodiversity. By raising public awareness about the benefits of the green economy and promote citizen engagement in sustainable practices. Moreover, developing infrastructure with sustainability in mind, such as green buildings and eco-friendly transportation systems, can contribute to a green economy. Creating employment opportunities in environmental sectors, such as conservation, renewable energy, and waste management, can boost the economy while preserving the environment.

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