World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

THE "GREEN" ECONOMY OF NEW UZBEKISTAN: KEY TRENDS FOR COMPARATIVE ANALYSIS

Muitov Davron Sobirovich Candidate of Political Sciences, Associate Professor at the Uzbek State University of World Languages
Akhmedova Shakhrizoda Anvarovna Teacher at the Uzbek State University of World Languages
E-mail: shaxrizodaa@inbox.ru

Article history:

Received: 10th October 2024
Accepted: 6th November 2024

Abstract:

This article explores Uzbekistan's transition to a green economy, emphasizing the country's commitment to sustainable development through a range of environmental reforms and initiatives. The discussion highlights key strategies, including the development of renewable energy sources, such as solar and wind power, the modernization of transportation systems through the introduction of electric buses and railway electrification, and the implementation of water-saving technologies in agriculture. The adoption of the National Strategy for Transition to a Green Economy until 2030 and active participation in international agreements, such as the Paris Agreement, underscore Uzbekistan's alignment with global sustainability standards.

The article also examines the challenges posed by climate change, including reduced water resources and agricultural productivity, and emphasizes the need for international cooperation and investment. Key measures discussed include the redistribution of financial resources toward eco-friendly sectors, institutional support for environmental reforms, and the integration of UNEP recommendations.

By analyzing national and international practices, the article underscores Uzbekistan's significant progress in harmonizing economic growth with environmental protection, positioning the country as a regional leader in sustainable development.

Keywords: Green economy, Uzbekistan, sustainable development, renewable energy, solar energy, wind power, water-saving technologies, railway electrification, electric buses, Paris Agreement, UNEP recommendations, climate change adaptation, international cooperation, environmental reforms.

Over the past decade, the impacts of climate change have become increasingly tangible on a global scale, with Uzbekistan, as part of Central Asia, being particularly vulnerable to disruptions in environmental balance. International projections suggest a potential reduction in the flow of the Amu Darya and Syr Darya rivers by up to 15%, a 25% decrease in per capita water availability, and a 40% decline in agricultural crop yields by the mid-21st century. These factors pose significant risks to the economy, infrastructure, and public health[1].

In response to these challenges, climate action has been designated as a priority in Uzbekistan's state policy. In 2017, the country signed the Paris Agreement, committing to limit the rise in global temperatures to below 2°C. At the COP26 conference in Glasgow, Uzbekistan presented its updated Nationally Determined Contribution (NDC, 2021), increasing its target for reducing specific greenhouse gas emissions to 35% by 2030 compared to 2010 levels[2].

To fulfill these commitments, Uzbekistan has strengthened its regulatory and institutional framework. A significant milestone was the adoption of the National Strategy for Transition to a Green Economy for 2019–2030[3] (Presidential Decree No. 4477 of 2019) and the establishment of the Interdepartmental Council on the Green Economy. Notably, 2025 has been declared the Year of Sustainable Climate in Uzbekistan, with a focus on actively addressing the consequences of climate change and environmental challenges. As part of this initiative, projects are planned to promote green energy development, conserve water resources, and implement large-scale urban and regional greening programs.

Historically, the theory of the free market, based on the principle of minimal state intervention, has been a

[1] Ministry of Ecology, Environmental Protection, and Climate Change of the Republic of Uzbekistan, National Report on the State of the Environment: Uzbekistan, International Institute for Sustainable Development, 2023.

[2] National Database of Legislation, 03 August 2024, No. 06/24/106/0571; 04 October 2024, No. 06/24/149/0772

[3] National Database of Legislation, 05 October 2019, No. 07/19/4477/3867; 03 December 2022, No. 07/22/436/1061; 04 October 2024, No. 06/24/149/0772.

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

cornerstone of economic thought. According to this concept, market mechanisms driven by the "invisible hand" of competition ensured economic growth, technological progress, and societal welfare. However, despite significant achievements, this approach overlooked a critical dimension—the interplay between the economy and natural ecosystems. This oversight highlights why ensuring sustainable development has become a strategic priority for countries like Uzbekistan, which is taking steps to harmonize economic growth with environmental protection.

Since the 1970s, environmental protection has taken a central place on the international agenda. A pivotal moment was the United Nations Conference on the Human Environment in 1972, which marked the starting point for the development of environmental policies in leading countries. This period saw the establishment of specialized government institutions and the introduction of regulations and standards for environmental protection. That same year, the Club of Rome's report, "The Limits to Growth" [4] was published, warning of potential resource depletion and its consequences for the global economy. The model presented in the report emphasized five key parameters: population growth, industrial production, food supply, resource depletion, and environmental pollution. Over the subsequent decades, this model was repeatedly updated with current data, including considerations of global climate change.

Today, the concept of sustainable development has transcended the domain of environmental protection, becoming the foundation of international strategies and economic initiatives. A significant role in shaping the modern environmental agenda is played by the concept of the green economy. This approach has unified the efforts of political leaders, international organizations, businesses, and the scientific community. The central goal of the green economy is to ensure sustainable development through the responsible use of natural resources, minimizing environmental risks, and adopting innovative approaches. This new direction in economic policy aims not only to mitigate existing environmental challenges but also to foster a global culture of ecological responsibility.

Modern challenges, including climate change, resource depletion, and threats to biodiversity, demand coordinated action from the international community. Responsible environmental policies, the transformation of production processes, and the adoption of sustainable development principles are not merely strategic choices—they are obligations to future generations.

To begin, it is essential to define the term green economy. The green economy is a contemporary concept that has emerged over the past two decades. Closely tied to the idea of sustainable development, it seeks to achieve social, economic, and environmental goals simultaneously across countries and regions.

There are numerous interpretations of the concept of the "green economy." In the United Nations Environment Programme (UNEP) synthesis report for policymakers, "Towards a Green Economy," it is defined as an economic system that enhances human well-being, ensures social equity, and significantly reduces environmental risks and resource depletion. This is an economy characterized by low carbon emissions, efficient resource use, and social inclusion[5].This definition is widely cited in recent UN conference reports, as well as in the materials of the United Nations Environment Management Group (UNEMG) and the Organisation for Economic Co-operation and Development (OECD) [6].

The UNEP report emphasizes the economic dimension of the sustainable development concept, highlighting the growing recognition that economic growth and environmental protection can serve as complementary strategies. This assertion challenges the common perception of an inevitable conflict between economic and environmental objectives, demonstrating the potential for their harmonious integration into policymaking and governance.

In the collection of articles from the UN Conference on Trade and Development (UNCTAD), "The Road to Rio+20," the green economy is presented as a model in which economic growth and environmental responsibility not only coexist but also reinforce each other, simultaneously promoting social progress. This definition underscores a comprehensive approach to

[4] Meadows, D. H., Meadows, D. L., Randers, J., et al., Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind. 2nd edn. Moscow, 1991.

[5] UNEP, Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication – A Synthesis for Policy Makers. [online]. Available at: http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER_synthesis_ru.pdf

[6] UNEP, Green Economy after Rio+20 – Progress and Prospects: Program 1st Global Conference of PAGE (Dubai, 4–5 March 2014). [online]. Available at: http://www.unep.org/greeneconomy/Portals/88/documents/PAGE/PAGEUAEProgramme.pdf .

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

sustainable development that integrates economic, environmental, and social dimensions[7].

Studies by the Danish 92 Group, a non-governmental organization, further elaborate that the green economy is not a fixed state but a process of transformation and ongoing progress. They define it as a fair economic model aimed at addressing systemic imbalances in the modern economy, improving human well-being, and ensuring equal opportunities for all. At its core, the green economy prioritizes maintaining ecological and economic integrity within the planet's sustainable ecological limits[8].

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) defines the green economy as a strategic priority for the region, aimed at environmentally sustainable economic development with low carbon emissions and a strong emphasis on social progress[9]. Green growth policies in the Asia-Pacific region encompass comprehensive measures designed to achieve economic growth and improved well-being while reducing resource use and emissions in key sectors such as construction, energy, food production, and transportation.

The concept of the green economy, which has taken shape over the past two decades, represents an effort to balance economic growth, social equity, and environmental sustainability. It is designed to provide viable solutions for all groups of countries—developed, developing, and economies in transition.

Recently, the concept has garnered increasing attention and is actively discussed among experts, policymakers, and non-governmental organizations. The transition from the traditional model of economic growth to a green economy has become a global trend, shaping not only the sustainable development of national economies but also the future of the planet as a whole. Advancing the principles of the green economy is viewed as a critical and the only viable path to achieving global sustainable development.

In practice, the implementation of the green economy concept relies on a variety of tools adapted to national conditions. Approaches to natural resource management and environmental security vary depending on the political, economic, and social characteristics of each country. According to M. Kenneth[10], the green economy is uniquely positioned to stabilize economic systems by harmonizing the interests of humanity, nature, and the rational use of resources.

From a practical perspective, the transition to a green economy[11] offers both economic and social benefits. The adoption of low-carbon and resource-efficient technologies enhances resource efficiency, creates new markets, and promotes the development of renewable energy sources. This not only reduces production costs but also generates employment in green sectors, thereby strengthening economic stability. Socially, the green economy improves quality of life by reducing pollution and fostering a safer environment—outcomes particularly critical for developing nations.

The economic benefits of adopting green economy principles include increased resource efficiency, the implementation of innovative technologies, and the creation of new markets. Low-carbon and resource-efficient technologies significantly cut production costs and stimulate the growth of renewable energy. In turn, this creates new jobs in green industries, bolsters economic stability, and contributes to social well-being. Ecological innovations and the transition to a green economy present unique opportunities for stable development, particularly in the face of growing imbalances in the global financial and economic system. Today, clean technologies address the root causes of environmental problems through innovative approaches that transform products, technologies, and consumption patterns. These market-driven technologies demonstrate high competitiveness and financial efficiency. The clean technology market encompasses a wide range of goods, services, and processes that not only reduce costs and improve productivity but also minimize environmental impacts, ensuring the responsible use of resources.

Today, green technologies encompass five main categories: energy-efficient and alternative energy solutions, energy consumption management systems,

[7] The Road to Rio+20: For a Developmentled Green Economy. Second issue / ed. C. M. Simpson. – New York, Geneva: United Nation, 2011. – 98 p.

[8] Green Economy Accord. Accord 4. Green Economy Accord: / Ecconomic Development Department Republic of South Africa. – URL: http://www.economic.gov.za/ communications/publications/green-economy-accord

[9] Green Growth, Resources and Resilience: Environmental Sustainability in Asia and the Pacific // ESCAP. – 2012. – URL: http://www.unescap.org/resources/green-growth-resources-and-resilience-environmental-sustainability-asia-and-pacific

[10] Kennet M. What Green Economics? An age of global transformation – An Age of Green Economics [Электронный ресурс]: 2010. 12 с. URL: http.// www.greeneconomics. org.uk

[11] Egorova, M. S., 'Ecological Investments as a Path to Economic Recovery', Siberian Science Bulletin, 2011, 1(1), p. 474. [online]. Available at: http://sjs.tpu.ru/journal/article/view/97

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

environmentally friendly transportation, waste and emissions management technologies, and solutions for reducing air and water pollution. These technologies contribute to achieving several key objectives, including reducing environmental pollution and enhancing resource efficiency in industries such as manufacturing, construction, agriculture, and urban design. They also mitigate the effects of climate change by transitioning to clean energy sources such as solar, wind, and hydropower and adopting low-carbon technologies.

A critical goal of the green economy is climate change adaptation. This is achieved through the implementation of technologies resilient to extreme weather conditions, early warning systems, and improved management of biodiversity and forest resources. More efficient use of natural resources, including the development of environmentally friendly products such as natural cosmetics and pharmaceuticals, contributes to improved well-being

In the energy sector, a key focus is the development of alternative energy sources, transitioning from hydrocarbon fuels to environmentally clean solutions. In the consumption structure of hydrocarbons, there is a shift from oil and coal toward natural gas, which is a more environmentally friendly fuel. Clean technologies, such as coal combustion in an oxygen-rich environment with carbon capture and storage (CCUS), help minimize emissions and reduce the burden on ecosystems.

Uzbekistan is actively working on diversifying its energy sector by combining the development of renewable energy sources with the modernization of traditional energy systems. The country places particular emphasis on utilizing its abundant natural resources, including 300 sunny days per year and extensive wind zones. This initiative aims to harness Uzbekistan's vast solar potential and implement an ambitious strategy to triple the share of renewable energy by 2030[12].The plan includes achieving a total solar power capacity of 5 GW and wind power capacity of 3 GW, reducing dependence on hydrocarbon fuels and supporting the transition to environmentally sustainable solutions. These efforts underline Uzbekistan's commitment to addressing climate challenges and advancing green energy development.

Significant projects in the field of renewable energy are already being implemented in Uzbekistan. For example, a 100 MW solar power plant was built in the Navoi region, becoming the first of its kind in Central Asia[13]. This facility leverages the region's high solar potential and significantly reduces the carbon footprint. Additionally, a 500 MW wind power plant is under construction in Karakalpakstan, strengthening Uzbekistan's position in wind energy development[14].

Furthermore, projects involving carbon capture, utilization, and storage (CCUS) [15] technologies are in the planning stage. These initiatives aim to mitigate the environmental impact of coal-fired power plants. By adopting such technologies, Uzbekistan seeks to enhance energy efficiency and demonstrates its commitment to meeting global sustainable development standards.

One of the key aspects of Uzbekistan's transition to a green economy is the modernization of the transport sector. The country is actively developing environmentally friendly transportation, with electric buses being introduced in Tashkent and other cities. These initiatives reduce CO_2 emissions and improve air quality. Urban planning efforts that aim to minimize long-distance commuting and enhance public transport infrastructure also play a significant role in reducing the carbon footprint and easing pressure on urban systems[16].

The UNEP "50 by 50" campaign—which seeks to improve the fuel efficiency of the global vehicle fleet by 50% by 2050—aligns with Uzbekistan's goals to reduce carbon emissions in transportation. In line with this, Tashkent's adoption of electric buses[17] is set to expand to other major cities, further contributing to cleaner urban environments and promoting sustainable mobility solutions.

Uzbekistan is also prioritizing the modernization of its railway infrastructure. The electrification of railway lines, particularly the Tashkent–Urgench route, reduces dependence on diesel fuel and significantly lowers the

[12] President of the Republic of Uzbekistan, Decree on Measures to Enhance the Effectiveness of Reforms Aimed at Transitioning Uzbekistan to a Green Economy by 2030.

[13] Gazeta.uz, 'Energy Transition in Navoi Region', [online]. Available at: https://www.gazeta.uz/ru/2021/08/27/energy-navoi/

[14] Daryo.uz, 'Wind Farm Construction in Karakalpakstan', [online]. Available at: https://daryo.uz/ru/2024/05/04/v-karakalpakstane-postroat-vetroelektrostancii-na-73-mlrd

[15] IEA, Energy System: Carbon Capture, Utilisation and Storage. [online]. Available at: https://www.iea.org/energy-system/carbon-capture-utilisation-and-storage

[16] UNEP National Committee of Russia, 'NPO UNEPCom'. [online]. Available at: http://www.unepcom.ru

[17] Gazeta.uz, 'Electric Buses in Uzbekistan', [online]. Available at: https://www.gazeta.uz/ru/2022/02/03/e-bus/

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

carbon footprint. Additionally, substantial attention is being given to the development of high-speed rail lines, which provide both environmental and economic benefits.

Furthermore, Uzbekistan is advancing initiatives to promote the use of hybrid and electric vehicles. Customs duties on electric vehicles have been reduced, making them more affordable for the population and encouraging a shift away from internal combustion engine vehicles. Charging stations for electric vehicles have already been established in Tashkent and other major cities, creating the necessary infrastructure for widespread adoption.

These efforts underscore Uzbekistan's commitment to integrating green technologies, aligning with global trends and best practices in sustainable development. By fostering the adoption of renewable energy and eco-friendly transport solutions, the country strengthens its position as a leader in the transition to a green economy.

Во многих государствах национальные инициативы служат катализатором перехода к устойчивому развитию. Например, в России был принят закон об отказе от ламп накаливания в пользу энергосберегающих технологий, а Швеция нацелилась на полный отказ от нефти, угля и газа, с переходом к возобновляемым источникам энергии. В Бразилии акцент сделан на развитии биотоплива, Тайвань активно внедряет солнечные батареи, а Южная Корея интегрировала «зеленые» технологии в свою национальную стратегию, охватывая транспорт, переработку отходов и альтернативные источники воды.

Uzbekistan, alongside other nations, is making significant strides in both the transportation sector and infrastructure development, facilitating its transition to a green economy.

The green economy is becoming a cornerstone of the new global development model, necessitating widespread adoption and implementation at all levels[18]. However, transitioning to this model requires the creation of effective mechanisms for execution. While developed countries have achieved considerable success in reducing environmental impact, many developing nations continue to face growing ecological pressures. For instance, a substantial portion of the environmental damage from industrial production is concentrated in BRICS countries, which function as the world's "workshop." Similarly, the European Union has reduced the use of its own forests, offsetting this reduction by importing timber from tropical regions.

These examples highlight the critical importance of international cooperation and the harmonization of approaches to natural resource management within the global economy. Addressing these challenges collectively is essential to ensuring sustainable development that benefits both developed and developing nations.

The use of land and water resources within the framework of a green economy is also affected by the phenomenon of "shifting environmental burdens." Private, state-owned, and mixed enterprises from capital-rich countries increasingly acquire long-term rights to use or own significant tracts of land in developing nations. This trend highlights the necessity of analyzing not only local consumption and production patterns but also the broader impact of international trade and investments on the global distribution of resources.

For a successful transition to a green economy, new approaches and methods are required. UNEP offers a range of recommendations, including: establishing an effective regulatory framework, prioritizing funding for environmentally significant projects, reducing investments in sectors that deplete natural resources, applying tax and market mechanisms to stimulate environmentally friendly technologies, improving education and competencies in this field, and strengthening international cooperation.

State policy plays a crucial role in the transition to sustainable development. This requires a radical restructuring of investments, shifting the focus from fossil fuels and unsustainable assets to energy efficiency, renewable energy, sustainable agriculture, and ecosystem conservation. For instance, insufficient investments in public transportation and energy conservation negatively impact ecological balance, whereas reallocating capital toward these areas could become a decisive factor in stabilizing the economy.

Environmentally oriented economic reforms include the introduction of environmental taxes, standards, and regulations, the development of environmental management systems, and the implementation of comprehensive programs at federal, regional, and sectoral levels. The most promising measures involve tax reforms, such as redistributing the tax burden toward resource consumption and pollution, as well as reducing subsidies that contribute to environmental degradation.

[18] Problems of Modern Economy. [online]. Available at: http://www.m-economy.ru

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

International cooperation also plays a critical role in the transition to a green economy. Intergovernmental organizations, international financial institutions, and the private sector are key actors in providing technical and financial support to developing countries, particularly for the adoption of new technologies. Multilateral environmental agreements, such as the Montreal Protocol, illustrate how effective legal and institutional mechanisms can facilitate the resolution of global environmental challenges. The UN Framework Convention on Climate Change (UNFCCC) holds the greatest potential for fostering the green economy, as it provides the foundation for international actions to combat climate change and promote environmental sustainability in economic systems.

CONCLUSIONS

Uzbekistan, as part of the global community, is actively taking steps to implement the principles of a green economy. The main directions include the development of renewable energy sources, environmentally friendly transportation, the adoption of water-saving technologies in agriculture, and the electrification of infrastructure. The adoption of the National Strategy for Transition to a Green Economy until 2030 underscores the country's long-term commitment to sustainable development. However, as a Central Asian nation, Uzbekistan faces significant climate change challenges, including reduced water resources and declining agricultural productivity. The country's signing of the Paris Agreement and the update of its Nationally Determined Contribution (NDC) to reduce greenhouse gas emissions highlight its efforts to meet international standards and address these challenges on a global scale.

A notable achievement has been the establishment of the Interdepartmental Council on the Green Economy and the adoption of several presidential decrees, providing institutional support for ecological reforms. This has enabled Uzbekistan to attract international attention and investments for implementing environmentally significant projects.

In the energy sector, the country focuses on solar and wind energy, implementing projects such as the solar power plant in the Navoi region and the wind farm in Karakalpakstan. In the transportation sector, the introduction of electric buses and the electrification of railways signal a gradual reduction in the carbon footprint, aligning with global sustainable development trends.

For a successful transition to a green economy, collaboration with international organizations and partners is of critical importance. Uzbekistan actively leverages the experience and support of other countries and institutions by participating in international initiatives such as COP26 and implementing UNEP recommendations. A global shift to a green economy is impossible without redistributing investments toward environmentally significant areas, such as renewable energy, energy efficiency, and ecosystem protection. Uzbekistan aims to adapt this model by harmonizing economic growth with the preservation of natural resources.

Thus, Uzbekistan demonstrates its readiness to align with global sustainable development standards, combining national initiatives with international best practices. Continuing the implementation of environmental reforms and attracting international investments will enable the country to make a significant contribution to the global transition to a green economy.

REFERENCES.

1. Egorova, M. S., 'Ecological Investments as a Path to Economic Recovery', Siberian Science Bulletin, 2011, 1(1), p. 474. [online]. Available at: http://sjs.tpu.ru/journal/article/view/97
2. Ministry of Ecology, Environmental Protection, and Climate Change of the Republic of Uzbekistan, National Report on the State of the Environment: Uzbekistan, International Institute for Sustainable Development, 2023.
3. UNEP, Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication – A Synthesis for Policy Makers. [online]. Available at: http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER_synthesis_ru.pdf
4. National Database of Legislation, 03 August 2024, No. 06/24/106/0571; 04 October 2024, No. 06/24/149/0772.
5. National Database of Legislation, 05 October 2019, No. 07/19/4477/3867; 03 December 2022, No. 07/22/436/1061; 04 October 2024, No. 06/24/149/0772.
6. UNEP National Committee of Russia, 'NPO UNEPCom'. [online]. Available at: http://www.unepcom.ru
7. President of the Republic of Uzbekistan, Decree on Measures to Enhance the Effectiveness of Reforms Aimed at Transitioning Uzbekistan to a Green Economy by 2030.
8. Meadows, D. H., Meadows, D. L., Randers, J., et al., Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind. 2nd edn. Moscow, 1991.

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-41, December 2024
ISSN: 2749-3601

9. Problems of Modern Economy. [online]. Available at: http://www.m-economy.ru
10. Economic Development Department Republic of South Africa, Green Economy Accord. [online]. Available at: http://www.economic.gov.za/communications/publications/green-economy-accord
11. UNEP, Green Economy after Rio+20 – Progress and Prospects: Program 1st Global Conference of PAGE (Dubai, 4–5 March 2014). [online]. Available at: http://www.unep.org/greeneconomy/Portals/88/documents/PAGE/PAGEUAEProgramme.pdf
12. ESCAP, Green Growth, Resources and Resilience: Environmental Sustainability in Asia and the Pacific, 2012. [online]. Available at: http://www.unescap.org/resources/green-growth-resources-and-resilience-environmental-sustainability-asia-and-pacific
13. Kennet, M., 'What Green Economics? An Age of Global Transformation – An Age of Green Economics', 2010, p. 12. [online]. Available at: http://www.greeneconomics.org.uk
14. Simpson, C. M. (ed.), The Road to Rio+20: For a Development-led Green Economy. 2nd issue. New York, Geneva: United Nations, 2011, 98 p.
15. Gazeta.uz, 'Energy Transition in Navoi Region', [online]. Available at: https://www.gazeta.uz/ru/2021/08/27/energy-navoi/
16. Daryo.uz, 'Wind Farm Construction in Karakalpakstan', [online]. Available at: https://daryo.uz/ru/2024/05/04/v-karakalpakstane-postroat-vetroelektrostancii-na-73-mlrd
17. https://daryo.uz/ru/2024/05/04/v-karakalpakstane-postroat-vetroelektrostancii-na-73-mlrd
18. https://www.iea.org/energy-system/carbon-capture-utilisation-and-storage