

Дылдаев М.М., Есеналиева Б.Б., Дылдаева М.М.

**КЫРГЫЗ РЕСПУБЛИКАСЫНДА ЖАШЫЛ ЭКОНОМИКАНЫ ӨНҮКТҮРҮҮ:
ИНСТИТУЦИОНАЛДЫК ТЕНДЕНЦИЯЛАР**

Дылдаев М.М., Есеналиева Б.Б., Дылдаева М.М.

**РАЗВИТИЕ ЗЕЛЕННОЙ ЭКОНОМИКИ В КЫРГЫЗСКОЙ РЕСПУБЛИКЕ:
ИНСТИТУЦИОНАЛЬНЫЕ ТЕНДЕНЦИИ**

M. Dylдаev, B. Esenalieva, M. Dylдаeva

**GREEN ECONOMY DEVELOPMENT THE KYRGYZ REPUBLIC:
INSTITUTIONAL TRENDS**

УДК: 338.22/332.142

Алгачкы этапта жашыл өсүштүн шарттарынын бири экологиялык факторду баалоо системасын экономикалык өнүгүүнүн негизги индикаторлорунун системасына өнүктүрүү катары туруктуу өнүгүүгө өтүү болду. Бул жагдайда экологиялык шарттарды эске алуу менен жана ошондой эле ар кандай тармактарында чечимдерди кабыл алууда экологиялык көрсөткүчтөрдү туура эмес баалоо озунун залакасын экономикага тийгизерин мааниге ээ. Макалада белгиленгендей, Кыргыз Республикасынын «жашыл» экономикасын илгерилетүү модели жаратылыш компоненттерин жөнгө салуунун жана пайдалануунун жалпы системасын аныктоочу төрт негизги артыкчылыкты камтыйт: экосистеманын деңгээли, суу ресурстары жана сууну пайдалануу маселелери, гидроэнергетика, органикалык айыл чарба. Мындан тышкары, республикада туруктуу каржылоо жаатында бир нече демилгелер алга жылдууда: КР банктар бирлиги республиканын банк секторунда жашыл экономика жаатындагы ишти туруктуу каржылоо принциптерин киргизүү процессин баштады.

Негизги сөздөр: жашыл экономика, айланма экономика, экологиялык коопсуздук, жашыл технологиялар, туруктуу өнүгүү, калдыксыз өндүрүш, аз көмүртектүү өнүктүрүү, гидроэнергетикалык потенциал.

Одним из условий зелёного роста на начальном этапе является переход к устойчивому развитию, а именно внедрение системы оценки экологических факторов в ядро основных экономических показателей развития. Ключевое значение в работоспособности данных факторов отводится анализу и оценке различных экологических индикаторов, выступающих основным стимулом в принятии решений в секторах экономики, подразумевая, что институциональному регулированию необходимо учесть условий окружающей среды. В статье отмечается, что в основу модели продвижения «зелёной» экономики Кыргызской Республики включены четыре основных приоритета которые определяют совокупную систему регулирования и использования компонентов природы: экосистемный уровень, водные ресурсы и вопросы водопользования, гидроэнергетика, органическое сельское хозяйство. Кроме того, в республике продвигается несколько инициатив в области устойчивого финансирования: Союз банков Кыргызской Республики начал процесс внедрения принципов устойчивого финансирования деятельности в области зелёной экономики в банковском секторе республики.

Ключевые слова: зелёная экономика, циркулярная экономика, экологическая безопасность, зелёные технологии, устойчивое развитие, безотходное производство, низкоуглеродное развитие, гидроэнергетический потенциал.

Transitioning towards sustainable development is a prerequisite for achieving "green" growth at the initial stage. This includes

incorporating an environmental assessment system into the key economic indicators of development. The assessment and analysis of environmental indicators assume a pivotal role in informing and guiding decision-making processes within economic sectors. Therefore, institutional policies and regulations must consider the prevailing environmental conditions to ensure sustainable development and long-term viability. The paper highlights that the model for promoting the "green" economy in the Kyrgyz Republic has four main priorities that determine the overall system of regulating and utilizing natural resources, namely ecosystem management, water resource management, hydropower, and organic agriculture. Moreover, several sustainable finance initiatives are being promoted in the Republic: the Union of Banks of the Kyrgyz Republic has begun the process of introducing the principles of sustainable financing of green economy activities in the banking sector of the republic.

Key words: green economy, circular economy, environmental safety, green technologies, sustainable development, waste-free production, low-carbon development, hydropower potential.

The Kyrgyz Republic, as a member of the world community, has signed dozens of international environmental treaties and conventions in the field of sustainable development, moreover at the UN Conference on Sustainable Development "RIO+20" in 2012, the country outlined for itself a priority in the development of the concept and promotion of "green" economy, in such areas as resource conservation, resource efficiency measures, green financing, etc. [1].

The concept of a green economy, according to the United Nations, is aimed at sustainable development by integrating economic growth, social inclusiveness, and environmental sustainability while significantly reducing environmental risks and ecological scarcities. The United Nations Environment Programme (UNEP) has played an important role in promoting this idea, which ultimately seeks to improve human well-being and social equity.

The UN has outlined key characteristics and principles associated with a green economy that include the following:

1. Low Carbon

This entails reducing carbon emissions and transitioning to low-carbon technologies and energy sources.

2. Resource-Efficient:

It involves maximizing the efficient use of resources, minimizing waste, and promoting the use of renewable resources.

3. Social Inclusion:

The aim is to ensure that the benefits of a green economy are distributed equitably, with a focus on poverty reduction and social inclusiveness.

4. Biodiversity Conservation:

It promotes the conservation and sustainable use of biodiversity, recognizing the importance of ecosystems for human well-being.

5. Sustainable Agriculture:

This encourages agricultural practices that are environmentally sustainable, socially inclusive, and economically viable in the long term.

6. Renewable Energy:

This entails increasing the share of renewable energy sources in the overall energy mix, reducing reliance on fossil fuels.

7. Circular Economy:

It embraces a circular economy model that minimizes waste, encourages recycling, and promotes the sustainable use of resources.

8. Green Jobs:

It creates employment opportunities in sectors that contribute to environmental sustainability, such as renewable energy, energy efficiency, and conservation.

9. Resilience to Climate Change:

It involves building resilience to the impacts of climate change through adaptive strategies and infrastructure development.

10. Sustainable Consumption and Production:

This encourages responsible consumption patterns and sustainable production processes to reduce environmental impact [2].

The concept of a green economy aligns with the broader goals of sustainable development, seeking to balance economic growth with social development and environmental protection. It recognizes the interconnectedness of economic, social, and environmental systems and aims to transform traditional economic models toward a more sustainable and resilient future.

Accordingly, a transition to a green economy is an urgent need for Kyrgyzstan, as the socioeconomic development of the country is largely based on the consumption of natural resources [2]. The researchers of the International Renewable Energy Agency have also shown that implementation of green economy measures stimulates economic growth, provides new job opportunities, increases human well-being, and contributes to achieving a climate-smart future [3].

The term “green economy”, as defined by Kyrgyz experts, is an economy that leads to increased well-being of people and strengthening social justice while significantly reducing risks to the environment, preserving and efficiently using resources, and stimulating the conservation of the country’s natural ecosystems [4].

Reducing the carbon footprint in the production

process is a crucial aspect of the development of a green economy. The term refers to all emissions and greenhouse gases produced by human economic activities, organizations, events, or waste disposal. Greenhouse gases, including carbon dioxide (CO₂) and methane (CH₄), can be emitted from various sources such as agriculture, food production and consumption, industrial goods manufacturing, transportation, and services. In 2023, the UN Secretary-General, Antonio Guterres, highlighted in his speech that while many countries have committed to net-zero emissions by the middle of the century, there is still a lot to do. The current carbon dioxide levels are at record highs, and the global temperature has increased, making the last decade the warmest in human history. The melting of Arctic ice, catastrophic fires, floods, droughts, and hurricanes are becoming more common, causing significant damage. Biodiversity is declining, deserts are expanding, oceans are warming, and plastic waste is choking them. Unless the production of fossil fuels is reduced by 6% annually by 2030, the situation will worsen. However, forecasts indicate that the annual growth in fossil fuel production will be 2% [2].

The development of green economy principles is to be an objective of institutional strategic actions, and according to the factors that determine the vector of development. The country has a huge potential of natural resources for low-carbon development, mainly due to hydropower potential; economic priorities of the green economy (energy and agriculture), together with water resources, are the main driving factors of the country’s economic growth [3].

It should be noted that the start of an institutional development in the mentioned area in the period of 2010-2020, was decisive for the promotion of the main green economy initiatives for the sustainable development of the Kyrgyz Republic in the long term. On its basis, a sustainable development strategy was adopted in 2012, with improved management institutions, effective legislation, developed environmental and economic thinking, and improved social and economic rankings in global development, including through the ideas of sustainable development.

The above measures led to the creation of the National Council for Sustainable Development under the President of the Kyrgyz Republic on November 24, 2012, which outlined the general action framework by combining the efforts of government and civil society on the development of approaches and principles of green development, resulting in the approval of the National Strategy for Sustainable Development of the Kyrgyz Republic for the period 2013-2017 in 2013 [5].

The sustainable development strategy emphasizes the importance of considering environmental threats and risks, particularly in the context of the climate change adaptation agenda. Climate change has a significant

impact on food and energy security, leading to a decrease in water supply, which in turn affects the health of the population and results in a decline in the standard of living due to land resource degradation and the lack of irrigation water in some rural areas.

The strategy outlines economic measures that can reduce poverty and improve the standards of living while ensuring a balanced environmentally sustainable policy. This requires effective planning and management of natural resources to transition towards sustainable development as part of the green economy.

To achieve this, the country needs a well-developed strategy that considers all the factors that determine the structure of the green economy and implements a unified state policy in the field of environmental safety and protection. The strategy highlights the importance of focusing economic policies on the rational use of natural resources to ensure sustainable economic growth and increase competitiveness, development, and labor productivity.

The sustainable development strategy also highlights the importance of increasing economic potential without disrupting natural ecosystems and increasing labor productivity. This can be achieved by diversifying the economy, increasing export potential, and prioritizing green technologies and organic agriculture. It encourages businesses to develop green ideas and work towards regulating the business environment and developing industries that produce environmentally friendly products. Kyrgyzstan has potential opportunities in the international arena, particularly in agriculture and green energy, which are key priorities of green sustainable development, along with resource-efficient technologies and eco-tourism [5].

The President of the Kyrgyz Republic outlined strategic guidelines for the new model of sustainable development and took the initiative to launch 78 large investment projects for this period [6]. The strategy became a blueprint for a number of important documents, namely: the National Development Strategy of the Kyrgyz Republic until 2040, the Green Economy Concept in the Kyrgyz Republic, the Green Economy Development Program for 2019-2023 [7], the National Development Program of the Kyrgyz Republic until 2026, Decree of the President of the Kyrgyz Republic “On National Cleanliness Day and an action plan to create an effective infrastructure for the management of household waste for the period 2023-2025” and etc. [6].

One of the key takeaways from the meeting is that the President of the Kyrgyz Republic, S. Zhaparov, places great importance on environmental issues and the development of a green economy. He highlighted that the UN has designated 2022 as the International Year of Sustainable Mountain Development, which was initiated by Kyrgyzstan.

Additionally, he reiterated his commitment to reducing greenhouse gas emissions by 44% by 2030 and achieving carbon neutrality by 2050 using renewable

energy sources. As a country that is a major source of water and energy resources in Central Asia, Kyrgyzstan has significant potential for development.

However, currently, only 13% of this potential has been realized. In line with the new EU Global Gateway strategy, Kyrgyzstan is eager to collaborate and present investment projects for consideration, including large hydroelectric power plants that utilize renewable energy sources [8].

In 2018, the concept “Kyrgyzstan is a country of the green economy” and the National Development Strategy until 2040 was adopted, providing for the development of a competitive economy with a focus on the use of innovative green technologies [1]. The 7 priority sectors have been identified, through which it is expected to ensure a progressive transition to green development, particularly: green energy, green agriculture, green industry, sustainable tourism, low-emission transport, waste management, and green cities.

Accordingly, 4 cross-sectoral areas are to be supported, particularly: sustainable financing, fiscal incentives, sustainable public procurement, and capacity building. The implementation of incentives for the promotion and use of environmental technologies, equipment, and products, and an interdepartmental working group has been created to develop tools and mechanisms to stimulate the development of a green economy within the framework of “The Concept of Fiscal Policy of the Kyrgyz Republic for 2015-2020 and the Action Plan” [6, 9].

In May 2016, Kyrgyzstan joined the PAGE initiative and became a partner in promoting the principles of a green economy; to measure progress in achieving the goals and objectives identified in the NSSD, the Matrix of Monitoring Indicators was approved by order of the Government of the Kyrgyz Republic dated February 19, 2015. With recommendations of the Organization for Economic Cooperation and Development, the assessment of the progress of the republic's transition to sustainable development consists of five key blocks: carbon and energy productivity, natural assets, environmental quality of life, economic opportunities and response policies, socio-economic context, and growth characteristics [6].

Currently, the main operating action document is “The Green Economy Development Program in the Kyrgyz Republic for 2019-2023”, which focuses on the implementation of the following measures [7]:

1. In the field of “green” energy: reducing the energy intensity of GDP while simultaneously increasing access for citizens and economic entities to reliable and modern energy supplies.

2. In the field of “green” agriculture: increasing the population's supply of environmentally friendly food through sustainable resource management and the development of resource-saving, organic, and climate-resistant agriculture.

3. In the field of green industry: promoting resource efficiency and cleaner production processes in industrial production in the Kyrgyz Republic.

4. Low-carbon and environmentally friendly transport: reduce CO₂ emissions and the concentration of pollutants in the atmospheric air of the cities of Bishkek and Osh by switching the transport sector to low-carbon (bio) fuel and electricity.

5. In the field of “sustainable tourism”: create basic tools to stimulate the transition to sustainable tourism to improve the standard of living of the local population; and preserve ecological systems for future generations.

6. Municipal waste management: the creation of organizational and legal mechanisms that contribute to minimizing the volume of municipal waste by involving secondary material resources in the production and forming an official sector for processing, disposal, and disposal of waste

7. “Green” cities: create a basis for the sustainable development of “green” cities in the urban planning of the Kyrgyz Republic.

The program also provides measures for increasing the level of knowledge and capacity of government officials to introduce the principles of green economy and sustainable development into development programs, with high awareness of the population and business community [7].

Moreover, several sustainable finance initiatives are being promoted in the Republic: the Union of Banks of the Kyrgyz Republic has begun the process of introducing the principles of sustainable financing of green economy activities in the banking sector of the republic. 14 commercial banks and 1 microfinance company signed the Declaration on the Creation of a Green Economy Charter to unite common banking efforts towards the formation of sustainable finance. Road maps have been developed for the introduction of sustainable financing in the banking system and the sector of microfinance organizations according to the principles of “green” economies [9].

To date, as noted by the Ministry of Economy and Commerce of the Kyrgyz Republic, a memorandum of understanding within the framework “C5+1” has been signed between the Central Asian countries and the United States regarding cooperation on decarbonization in Central Asia, including points to increase the capacity of

the Trans-Caspian trade route, as well as improve energy integration in the region to increase supplies electricity [6].

Lastly, active work is currently underway to create a national mechanism for financing green projects in the form of a “Green Finance Corporation”. It is expected that the creation of the Green Finance Corporation will attract climate finance to the country's banking sector to support lending to green technologies, such as environmental transport, solar panels, and energy-efficient and resource-saving technologies. To develop sustainable financing in the banking sector, as well as attract green and climate finance, banks plan to implement ESG standards (Environmental, Social, and Corporate Governance), which are a set of management characteristics that achieve involvement in solving environmental, social and governance problems [6].

In conclusion, the Kyrgyz Republic still is a “new” player in the field of green economy, but the institutional work that is being built at the moment, considering the recent ecological and economic trends and developed countries’ advances, could potentially be a strong solid base at the further stages in sustainable development and rational resource management of Kyrgyz Republic.

References:

1. The concept of the Green Economy in the Kyrgyz Republic "Kyrgyzstan is a country of green economy." Approved by the Jogorku Kenesh of the Kyrgyz Republic dated June 28, 2018 No. 2532-VI.
2. United Nations (UN). – Режим дост.: <https://www.un.org/en/>
3. Dylbaev M.M. The Role of Public Administration in Environmental Protection and Environmental Safety in the Kyrgyz Republic / M. M. Dylbaev, G. Zh. Asanbaeva // Актуальные вопросы современной экономики. – 2023. – № 2. – С. 26-33.
4. UNDP official website. – Режим доступа: <https://www.undp.org/ru/kyrgyzstan/news>
5. National Strategy for Sustainable Development of the Kyrgyz Republic for the period 2013-2017 (Approved by Decree of the President of the Kyrgyz Republic dated January 21, 2013 No. 11). Bishkek, 2013-48 p.
6. Ministry of economics and commerce of Kyrgyz Republic. - Режим доступа: <https://mineconom.gov.kg/ru>
7. Green Economy Development Program in the Kyrgyz Republic for 2019-2023 // Bishkek, 82 pp
8. “24.kg” News Agency. – Режим доступа: <https://24.kg/>
9. Ministry of Justice of the Kyrgyz Republic. – Режим доступа: <http://cbd.minjust.gov.kg/>