

GREEN INSURANCE" IN UZBEKISTAN:STATUS AND WAYS OF DEVELOPMENT***Khasanov Farrukh Ravshanovich****Senior lecturer at Tashkent State University of Economics, (PhD)**Email: f.khasanov@bk.ru*

Abstract: The article examines the importance and relevance of green insurance. The problems of implementing a green insurance system in Uzbekistan are studied, and proposals and recommendations for developing a green insurance system based on modern international criteria are formulated.

Keywords: ecology, environmental risks, environmental audit, green insurance, insurance organizations.

Introduction. Today, global climate change, ecological imbalances, and the increase in natural disasters pose urgent and urgent issues for humanity. At the same time, there is an increasing need to implement the principles of sustainable development in all sectors of the economy. In particular, in the field of financial services, environmental risk management, their minimization, and the creation of compensation mechanisms are taking an important place among modern approaches.

From this perspective, the concept of “green insurance” is emerging in the global insurance market as a means of insuring environmental risks, taking economic protection measures against climate risks, and raising the environmental awareness of the population. This type of insurance serves not only to compensate for environmental damage, but also to encourage businesses operating in accordance with environmental standards, reduce their carbon footprint, and support the introduction of green technologies.

The growing environmental challenges in the socio-economic development of the Republic of Uzbekistan, in particular, risks associated with climate change, water scarcity, land degradation and atmospheric pollution, are putting the need for a transition to a green economy on the agenda. The introduction of green insurance in the process of reforming and diversifying the insurance market in the country can not only ensure environmental sustainability, but also increase the climate resilience of the financial system.

This article analyzes the need to form and develop a green insurance system in Uzbekistan, its institutional, economic and legal foundations, international experience and possibilities for application in national conditions. It also identifies existing problems and obstacles and develops scientifically based proposals and recommendations to overcome them.

Literature review. The scientific literature on green insurance has expanded significantly in recent years due to the increasing relevance of sustainable development, environmental risks, and financial adaptation to climate change. Research in this area has focused mainly on environmental risk assessment, integration of green finance with the insurance sector, parametric insurance, and the formulation of insurance products based on ESG (Environmental Social Governance) criteria.

Clements J. & Kreft S. “Climate Risk Insurance: Closing the Protection Gap” study demonstrates the relevance of green insurance as a mechanism for managing climate change risks through insurance and filling protection gaps [6].

Swiss Re Institute 's report " The economics of climate change: no action not an option" analyzes the vulnerability of the insurance market to climate risks, the creation of new financial products, and the relationship between green investments and the insurance sector [7].

Sobol O.S. The article "Green Insurance: Taking into account environmental factors in the activities of Russian insurers" examines the status and prospects of green insurance in the Russian Federation [4].

Rustam Azimov and Mirodil Mirsadikov's article "Green Insurance in Uzbekistan – Current State, Challenges, and Development Prospects: A Theoretical Analysis" outlines the need for the development of green insurance in Uzbekistan, the main obstacles, and solutions [3].

Methods. In carrying out this research expert assessment, generalization , **Comparison and analysis methods were used.**

Analysis. Climate change is having a negative impact on the global economy. Issues of environmental protection and ecological sustainability are currently relevant on a global scale, and the introduction of effective economic instruments in this direction is of great importance. One of such instruments is green insurance . Through the green insurance system, financial management of environmental risks arising in various sectors of the economy, stimulation of economic activity combined with nature conservation, and ensuring environmental security are achieved. Such insurance products help solve social and economic problems arising from climate change.

Green insurance is an insurance mechanism aimed at financially mitigating economic losses resulting from environmental risks, climate change, natural disasters, pollution, carbon emissions, and other similar situations caused by natural and anthropogenic factors. Its main task is to redistribute environmental risks, protect society and business entities from natural hazards, and financially ensure sustainable economic development.

The theoretical foundations of green insurance are primarily based on **ecological economics** and **risk management theories**. **According to ecological economics**, climate change and the limited availability of natural resources caused by human activities have made their protection a strategic task. In this regard, green insurance appears as a financial instrument that enhances environmental responsibility and privatizes risk.

Risk management theory, green insurance serves not only to accept risks, but also to redistribute them through market mechanisms. That is, risks are centralized through insurance companies and, in the event of a loss, economic stability is ensured through insurance payments. Today, green insurance is being developed in international financial markets in accordance with **ESG (Environmental, Social, Governance)** standards. This means that insurance activities should be conducted not only on the basis of financial interests, but also on the basis of environmental protection, social protection of the population and good governance principles.

The scientific essence of green insurance is reflected in the following basic principles:

1. Environmental risk management - preliminary assessment of financial losses associated with processes such as environmental disasters, environmental pollution, and depletion of natural resources, and the formation of a system for their compensation through insurance mechanisms.
2. Improving the environmental and investment climate - making projects related to the introduction of green technologies more attractive by ensuring their financial security.
3. Support for environmental protection policies - encouraging entities operating in accordance with environmental norms and standards developed by the state.
4. Promoting sustainable economic development - using it as a financial instrument to promote an environmentally safe and sustainable economy.

Today, the following main types of green insurance are used in international practice:

- **Environmental Liability Insurance.** A type of insurance that covers liability to third parties for environmental damage caused by a company's activities. It is particularly widely used in the industrial and energy sectors.
- **Climate Risk Insurance.** It serves to financially cover losses caused by natural disasters caused by climate change - droughts, floods, hurricanes, forest fires, etc. This type of insurance is important for the agricultural and infrastructure sectors.
- **Renewable energy insurance.** A form of insurance designed to cover risks arising during the construction, operation, and maintenance of projects based on renewable energy sources such as solar, wind, and bioenergy.
- **Environmental insurance in agriculture.** It covers the risks associated with organic farming, agrobiodiversity, and environmentally friendly production. It is used to financially manage risks associated with soil, water, and air pollution.
- **Transport environmental risk insurance.** Provides insurance protection against environmental damage caused by vehicles' negative impact on the environment, in particular, emissions of harmful gases, fuel spills, and accidents.
- **Resilience insurance.** Aimed at increasing the resilience of communities and infrastructure to risks associated with climate change and environmental disasters, this type of insurance system covers projects such as water resource management and infrastructure strengthening.

"Green insurance" is one of the mechanisms that ensures environmental sustainability, on the one hand, encouraging producers to act responsibly, and on the other hand, mitigating the consequences of environmental damage through the financial system. World experience shows that such types of insurance are widely used in developed countries not only to manage climate risks, but also to finance green projects.

The development of the green insurance market in the European Union and the United States has reached a high level. European countries are implementing innovative approaches to introduce insurance systems against environmental risks. For example, countries such as Germany, France and the Netherlands have made great progress in combating climate change through green insurance systems. In the United States, effective ways have been developed to counter environmental risks through green insurance products.

China and India are recognized as countries that have successfully implemented environmental insurance systems in their economies. In China, there is a high level of political support, especially in the field of environmental risk insurance. India, on the other hand, aims to prevent natural disasters and maintain economic stability through green insurance products.

Like all countries, the introduction of a green insurance system is an urgent issue in Uzbekistan. In the context of increasing environmental problems, Uzbekistan is also paying great attention to the implementation of the concepts of sustainable development and green economy. Also, the introduction of green financial instruments, in particular, green insurance mechanisms, into economic processes has become one of the important tasks.

In accordance with the Decree of the President of the Republic of Uzbekistan No. PF-16 dated January 30, 2025 "On the State Program for the Implementation of the "Uzbekistan-2030" Strategy in the Year of Environmental Protection and "Green Economy", the Ministry of Ecology, Environmental Protection and Climate Change is tasked with developing a draft law

on the gradual introduction of a system of mandatory insurance of environmental damage caused by enterprises and organizations conducting economic activities by November 1, 2025.

In addition, in accordance with the Resolution of the President of the Republic of Uzbekistan No. PQ-108 dated March 1, 2024 "On Comprehensive Measures for the Further Development of the Insurance Services Market", the National Agency for Promising Projects is tasked with developing a proposal for the introduction of "Green Insurance" products.

Currently, the market for green insurance products is still in the process of formation in Uzbekistan. The government of the republic is implementing various projects aimed at protecting the environment. State programs aimed at combating environmental risks and developing a green economy can give impetus to the development of green insurance in Uzbekistan.

There are several challenges in developing a green insurance system in Uzbekistan, including:

1. Low demand for green insurance products and low level of awareness of the population on environmental issues.
2. Legal and financial mechanisms are not yet fully formed.
3. There are no special financial mechanisms for green insurance products.
4. The country's insurance organizations are not ready for a green insurance system.

In Uzbekistan, it is important to implement reforms in the following areas to form a green insurance system based on modern international criteria, increase resilience to environmental risks, strengthen the population's environmental awareness, and ensure economic stability:

1. Improving the legal and regulatory framework. The following regulatory and legal measures are necessary to develop the green insurance system on an institutional basis:

- on environmental risk insurance A separate law should be developed. This law will clarify the concept of green insurance, types of environmental risks, insurance entities, monitoring and audit mechanisms;
- amendments to the Law of the Republic of Uzbekistan "On Insurance Activities" on climate risk insurance have been introduced, strengthening the regulatory framework for the creation of green insurance products;
- introduced for insurance organizations operating in accordance with ESG (Environmental, Social, Governance) criteria.

2. Expand product range and diversification. Green insurance should not only insure environmental risks, but also serve as a tool for managing climate-related economic risks. In this regard:

- parametric (index) insurance products: creating a fast and transparent payment system through insurance products based on weather indicators (e.g., precipitation amount, temperature, wind speed);
- introduction of types of environmental insurance across sectors, including:
 - in agriculture – drought, hail, dew, biological pests;
 - construction – damage caused by actions that violate environmental requirements;
 - energy and industry – excessive carbon emissions, errors in waste management;
 - the transport sector – introducing special tariffs for electric cars, bicycles, and vehicles that consume ecological fuel.
- green insurance packages for the population: it is necessary to develop insurance products that support an environmentally active lifestyle, encourage energy conservation, waste recycling, or reduced water consumption.

3. Strengthening financial and institutional mechanisms. In forming a sustainable green insurance system, it is important to introduce the following financial stability and institutional factors:

- introduction of a state subsidy system: state reimbursement of part of insurance premiums in order to increase interest in green insurance for farms, startups, and innovative companies;
- providing insurance protection to residents living in hazardous areas and projects aimed at sustainable development through the establishment of a green insurance fund;
- financially support the environmental activities of insurance companies through Green Bonds.

4. Digitalization and introduction of innovative technologies. Effective use of technological innovations in the green insurance market is a work to modernize the system, for this:

- creating the possibility of remote detection, assessment and real-time monitoring of climate risks using satellite and drone technologies;
- automatic management of contracts, payments and insurance events based on blockchain technology, increasing transparency and reducing the risk of corruption;
- enabling customers to conclude and renew insurance contracts, monitor payment status, and use the environmental bonus system using mobile applications.

5. Introduction of human resources and scientific and analytical base. In order to train highly qualified specialists for the sustainable development of the green insurance market:

- establish specialized courses and master's programs in "Green Insurance and Environmental Risks" at higher educational institutions;
- establishment of scientific centers for the analysis and forecasting of environmental risks in cooperation between insurance organizations and scientific research institutions;
- stimulating the development of insurance products based on innovative models and algorithms by strengthening scientific and analytical activities.

6. To establish extensive international cooperation and exchange of experience. This in the direction of:

- implementation of pilot projects , attracting technical assistance and grants with international financial institutions such as UNDP, IFC, GCF;
- internationalization of the activities of insurance organizations certification according to standards.

The proposals presented will serve to form the green insurance system of Uzbekistan based on modern international criteria. They will serve as an important factor in increasing the resilience of the insurance market to environmental risks, strengthening the environmental awareness of the population and ensuring economic stability. These approaches will also increase investment attractiveness, attract foreign capital and accelerate the transition to a green economy based on ESG principles.

Conclusion. The formation and development of a green insurance system in Uzbekistan is emerging as a pressing issue in today's climate problems, a sharp increase in environmental risks, as well as the strengthening of the principles of sustainable economic development. The study scientifically proved the importance of green insurance as one of the main financial instruments in ensuring not only economic, but also social and environmental stability.

The main obstacles to the introduction of green insurance are the weak regulatory framework, the lack of skills and technologies of insurance companies to assess and manage environmental risks, the low level of awareness among the population and entrepreneurs, as well as the lack of financial incentive mechanisms from the state. These problems are slowing down the green transformation of the insurance market.

In conclusion, the following factors are important for the effective formation of a green insurance system in Uzbekistan:

- creating a sound legislative framework in the field;
- increase the capacity of insurers and introduce technologies for modeling environmental risks;
- improving information systems (GIS, meteorological data);
- expanding subsidies and financial incentives based on public-private partnerships;
- to create a deep understanding of the benefits of green insurance among citizens and businesses.

Based on the above, it can be recognized that green insurance is a strategic direction for Uzbekistan that not only strengthens environmental security, but also opens up new economic opportunities and investment directions.

References:

1. Decree of the President of the Republic of Uzbekistan No. PF-16 dated January 30, 2025 "On the State Program for the Implementation of the "Uzbekistan-2030" Strategy "In the Year of Environmental Protection and "Green Economy"". <https://www.lex.uz/docs/7369703>
2. Resolution of the President of the Republic of Uzbekistan No. PQ-108 "On comprehensive measures for the further development of the insurance services market" dated March 1, 2024. <https://www.lex.uz/docs/6824178>
3. Rustam Azimov & Mirodil Mirsadikov. "Green Insurance in Uzbekistan - Current State, Challenges, and Development Prospects: A Theoretical Analysis". 8th International Conference on Research in Business, Management and Finance. May 16-18, 2025. Rome, Italy.
4. Sobol O.S. "Zelennoe" straxovanie: uchet ekologicheskikh faktorov v deyatelnosti rossiyskikh straxovshchikov. Vector legal science 8 /2022.
5. Ermolaeva A.S., Kulumbegova A.V. "Strakhovanie ekologicheskikh riskov TEK: opyt, problemy i perspektivy razvitiya". Magazine "Strakhovoe delo". 2021. No. 1(334). S. 38-44.
6. Clements J., & Kreft S. Climate Risk Insurance: Closing the Protection Gap. Munich Climate Insurance Initiative, 2018.
7. Swiss Re Institute. The economics of climate change: no action not an option. Zurich: Swiss Re, 2021. <https://www.swissre.com/institute>.
8. Corfee-Morlot J., et al. Towards a green investment policy framework: The case of low-carbon, climate-resilient infrastructure, OECD Environment Working Papers, 2012, no. 48. Available at: <https://clck.ru/YPwn>.
9. The Global Risks Report 2020 // World Economic Forum. <https://www.weforum.org/reports/the-global-risks-report-2020>
10. <https://napp.uz>