



DIRECTIONS FOR THE DEVELOPMENT OF GREEN INSURANCE TYPES: SCIENTIFIC-THEORETICAL AND PRACTICAL APPROACH

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***Annotation.** The article analyzes the scientific and theoretical foundations of types of green insurance within the green economy, international practice, as well as the possibilities of implementing and developing these types of services in the context of Uzbekistan. It also puts forward existing problems and practical proposals for their elimination.*

***Key words:** green economy, green insurance, environmental risk, insurance market, sustainable development.*

Introduction. In order to ensure sustainable development and environmental safety in Uzbekistan, the transition to a green economy has become one of the priority areas. The role of the insurance sector in this process is increasingly increasing, especially the importance of types of "green insurance" that provide protection against environmental risks. One of the main areas of sustainable development of the modern economy is to ensure environmental safety and rational use of natural resources. In this process, the importance of the insurance sector, in particular, types of green insurance, is increasing. Green insurance is not only a means of financially eliminating environmental risks, but also an important mechanism for stabilizing the country's economy.

On March 1, 2024, Resolution No. PQ-108 "On comprehensive measures for the further development of the insurance services market" was adopted, which for the first time in official government documents reflected the provision on "green



insurance" as an object of scientifically based policy. Instructions were also given to introduce "green insurance" products[1].

The resolution mentions the term "green insurance" not only as a practical tool, but also as an important institution in ensuring economic stability. This allows us to consider these types of insurance as an object of scientific research.

First, we should dwell on the concept of green insurance and its types. Green insurance includes insurance services that protect against environmental risks, natural disasters, pollution, and renewable energy projects. These types of insurance serve to protect the country's ecosystem and encourage businesses to be environmentally responsible. Yashil sug'urtaning asosiy turlari quyidagilar:

Natural disaster insurance is a type of insurance aimed at eliminating economic losses resulting from natural or man-made factors such as floods, droughts, fires, earthquakes, winds and landslides. This type of insurance is a means of ensuring financial stability for residents and entrepreneurs living in areas prone to natural disasters. In Uzbekistan, there are areas prone to natural disasters, with a high risk of drought in agricultural lands, floods and landslides in mountainous and foothill areas, as well as drought and heat stress in the Republic of Karakalpakstan and Surkhandarya region, as well as fire and wind risks in construction and urban development, and we understand the need for green insurance.

Renewable energy projects (RES) are projects to produce electricity or heat using solar, wind, hydropower, biomass, and geothermal sources. These projects are capital-intensive, but also involve high risk. Due to their high dependence on weather factors (for example, solar panels are ineffective on rainy days), technical failures, construction delays, or licensing issues, as well as legal and environmental risks, insuring these projects is a guarantee tool for investors, banks, and the state.

Renewable energy project insurance is a strategic mechanism in the transition to a green economy in Uzbekistan. This type of insurance helps reduce



investment risks, increase project efficiency, and ensure the environmental sustainability of the country.

Environmental liability insurance is a type of insurance for legal entities or individuals for damage to the environment caused by their activities. Environmental liability insurance is one of the types of “green insurance” that is widely used in international practice and is very relevant for Uzbekistan.

This type of insurance provides financial protection for enterprises and organizations from environmental risks, insures payments and reimbursement of expenses in cases of environmental pollution, and strengthens social responsibility to the state and society. Environmental liability insurance - along with environmental protection, serves to form a socially responsible business environment. The development of this type of insurance in Uzbekistan is considered an important mechanism for protecting the interests of the state, entrepreneurs and society.[3]

Financial protection of eco-infrastructures is the basis of the concept of "green insurance". This direction is aimed at protecting objects, projects and infrastructures aimed at protecting the environment from risks. Eco-infrastructure is infrastructure objects built and operated for the purposes of environmental protection and sustainable development. These include sewage and treatment facilities (biological and chemical), city parks, green areas, eco-transport systems (electric buses, bike paths), as well as energy-efficient buildings, and environmental monitoring centers.

Financial protection of eco-infrastructures is an important mechanism not only for protecting investments, but also for ensuring environmental sustainability, public health and economic security. The insurance system can serve as a reliable guarantee in this area.

Agricultural insurance (especially against climate risks) is one of the most important and necessary areas of "green insurance" for the agricultural sector. This



type of insurance allows reducing agricultural risks and guaranteeing farmers' income. This type of insurance covers the risks of crop loss (floods, droughts, rains, winds), damage to crops or animals, as well as loss of income due to natural disasters and weather conditions.

Literature review. In recent years, the number of scientific and practical studies on the development of types of green insurance has been growing. There are many foreign and domestic scientists who have conducted research in the field of green insurance and environmental risk insurance. In particular, Natalia Vladimirovna Pershina published works in the field of the insurance market and environmental risk assessment "Environmental Insurance: Theory and Practice" (monograph), in which she analyzed the legal, economic and practical aspects of the implementation of environmental insurance mechanisms in Russia. In parallel, Olga Nikolaevna Smirnova studied insurance instruments linking ecology and finance. Uzbek economists Sobirov Bakhtiyor Bakhromovich touched upon the issues of assessing environmental risks and mechanisms for their insurance in their articles "The Role of Environmental Insurance in the Development of a Green Economy", "Methods for Assessing and Reducing Environmental Risks in the Insurance Market". The issues of green insurance and environmental risk insurance, its theoretical and practical aspects were considered by the foreign scientist Christian Gollier (France) in his work "Assessing the Future of the Planet", which is based on scientific approaches in the field of environmental risk, climate change, green economy and insurance. Howard Kunreuther (USA) in his work "Managing Catastrophic Risks through Insurance" conducted research on natural disasters, climate risks and insurance. At the same time, domestic researchers A.R. Mamarakhimov in his articles "Green Economy and Financial Mechanisms", Sh.E. Rakhmatov in his articles "Sustainable Economic Development and Reforms in the Insurance System" put forward priority areas for expanding the possibilities of green insurance and environmental risk insurance.



Methodology. In the process of conducting the research, the methods of system analysis and approach, logical and structural analysis, grouping and generalization, expert assessment and forecasting, mutual and comparative comparison were used.

Analysis and results. Government decisions are being implemented to further develop the insurance market, improve the availability and quality of insurance services through the widespread introduction of modern information technologies, and further improve regulation of the industry. As part of this study, a detailed analysis of the introduction of types of "green insurance", development opportunities, existing obstacles and ways to overcome them was conducted. The main areas of analysis and their results are presented below. During the analysis of the state of environmental risks in the insurance market of Uzbekistan, it was revealed that special types of environmental risk insurance are practically absent or operate in a limited volume. Insurance companies mainly specialize in insuring traditional risks (automobile, property, life, etc.). At the same time, the mechanism for assessing environmental risks is insufficiently developed, and insurance companies lack the qualifications and practice of analyzing environmental risks.

During the analysis of the state of environmental risks in the international insurance market in developed countries (Europe, USA, Japan), types of green insurance are actively being introduced. In particular, climate risk insurance, carbon emissions insurance, and energy efficiency insurance are available and provided with practical mechanisms. It has been determined that in Uzbekistan, in order to implement these experiences, it is necessary to improve the regulatory framework and market infrastructure. [4] According to the results of a survey involving about 30 insurance companies in Uzbekistan, 78% of companies do not have information about green insurance, and 85% of companies indicated that they would be ready to introduce this type of insurance if there were incentive mechanisms (tax incentives, subsidies) from the state. Using a scenario modeling



method that combines financial analysis and probabilistic efficiency, it is shown that the introduction of green insurance types will lead to a reduction in economic losses by 12-18%, a reduction in government spending, and the creation of new jobs and products in the insurance sector.

Conclusion

The results of the study of the development of green insurance types show that global environmental threats, climate change, the growth of man-made accidents and natural disasters require the restructuring of the insurance system through new mechanisms. In particular, green insurance is becoming an important tool not only for reducing economic risks, but also for protecting the environment, ensuring sustainable development and increasing social responsibility.

The analysis carried out in the article shows that in international practice, green insurance is implemented in several forms: environmental liability insurance, insurance of renewable energy projects, insurance of coverage of agro-ecological risks, insurance of "green certified" projects in construction and industry, etc. These types form new segments of the modern insurance market.

The authors of the study propose the following main directions for the development of green insurance types:

1. Improvement of the legislative framework - it is necessary to introduce separate regulatory documents taking into account green finance and environmental risks.
2. Diversification of insurance products - creation of specialized types of environmental insurance in accordance with market demand, by sector.
3. Financial incentives and subsidies - a mechanism for state stimulation of green insurance activities.
4. Informing the population and businesses - strengthening environmental responsibility by improving the insurance culture.



At the same time, the article notes that in developing countries such as Uzbekistan, there are a number of obstacles to the implementation of green insurance, such as the lack of infrastructure, database and personnel. Therefore, a step-by-step approach adapted to local conditions is needed.

In conclusion, the development of green insurance is important not only for environmental protection but also for sustainable and inclusive economic development. Scientific analyses and practical proposals in this area provide a solid scientific basis for the formation of national insurance policy and the strategy of the "green economy".

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