



## REGULATION OF ENVIRONMENTAL SAFETY IN THE CONTEXT OF GEOPOLITICAL CHANGES

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### ABSTRACT

**Background:** The present paper examines the need to make changes to the organizational and legal provision of environmental safety in the Russian Federation in the context of the introduction of large-scale economic sanctions. Today, the regulation of environmental safety, which is an integral part of national security, and the introduction of a sharp change in the geopolitical situation and economic conditions for the Russian Federation, needs a significant rethink. **Objective:** The purpose of the presented work is to find ways to improve the legislation regulating environmental safety in the current conditions of large-scale sanctions and geopolitical changes. The paper describes the legal concept of environmental safety, its content, and its structure. The authors characterize the current state of the legislative framework in the field under consideration, noting the presence of theoretical, technical, and legal problems. **Methods:** A comparative analysis of environmental concepts from different countries with examples of regulation of environmental safety in world practice has been carried out, and a conclusion has been made about the need to make greater use of economic incentives for environmentally friendly enterprises in Russia. **Results:** It has been noted that the onset of new conditions caused by the introduction of economic sanctions and geopolitical tensions creates significant risks for the environmental security of the country and will require new organizational and legal solutions. **Conclusion:** The authors believe that even in the conditions of economic sanctions, the priority of environmental safety for the country's leadership should be maintained.

**Keywords:** Environmental safety. State regulation. Theoretical and legal justification. Economic incentives. Correlation of concepts.



## REGULAÇÃO DE SEGURANÇA AMBIENTAL NO CONTEXTO DAS MUDANÇAS GEOPOLÍTICAS

### RESUMO

**Antecedentes:** O presente artigo examina a necessidade de fazer mudanças na disposição organizacional e legal de segurança ambiental na Federação Russa no contexto da introdução de sanções econômicas em larga escala. Hoje, a regulamentação da segurança ambiental, que é parte integrante da segurança nacional, e a introdução de uma mudança acentuada na situação geopolítica e nas condições econômicas da Federação Russa, precisam ser repensadas significativamente. **Objetivo:** O objetivo do trabalho apresentado é encontrar formas de melhorar a legislação que regulamenta a segurança ambiental nas atuais condições de sanções em larga escala e mudanças geopolíticas. O artigo descreve o conceito legal de segurança ambiental, seu conteúdo e sua estrutura. Os autores caracterizam o estado atual do arcabouço legislativo na área em análise, observando a presença de problemas teóricos, técnicos e jurídicos. **Métodos:** Foi realizada uma análise comparativa de conceitos ambientais de diferentes países com exemplos de regulamentação de segurança ambiental na prática mundial, e chegou-se à conclusão sobre a necessidade de maior utilização de incentivos econômicos para empresas ecologicamente corretas na Rússia. **Resultados:** Observou-se que o surgimento de novas condições causadas pela introdução de sanções econômicas e tensões geopolíticas cria riscos significativos para a segurança ambiental do país e exigirá novas soluções organizacionais e legais. **Conclusão:** Os autores acreditam que mesmo nas condições de sanções econômicas, a prioridade da segurança ambiental para a liderança do país deve ser mantida.

**Palavras-chave:** Segurança Ambiental. Regulação estatal. Fundamentação teórica e legal. Incentivos econômicos, correlação de conceitos.

### 1. INTRODUCTION

Over the past few decades, environmental issues have been on the agenda around the world, although humanity, in its desire to increase consumption, had considered them secondary issues for a long time (Tsenina et al., 2022). In Russia, according to opinion polls, at least half of the respondents support the need to implement large-scale state measures aimed at improving the state of the environment (Mukhametshina, 2020). Currently, negative environmental changes, as the results of the study show, are caused, first of all, by industrial impact, urbanization, military conflicts, and nature (Tikhomirov, 2022; United Nations, 2021).

The scientific community has long paid attention to the degradation processes occurring in the natural environment (Suleimenova et al., 2021; Zhura et al., 2022). The realization of the impending ecological disaster has led to a change in the conceptual



apparatus of modern science. In particular, the concept of environmental security has become widespread (Græger, 1996), moving from the scientific environment to the legal field and establishing itself in legal practice at the international and national levels.

Nevertheless, this concept is very complex, controversial, and dynamically developing, considering the rapid changes in the environment and the recent problems caused by the sanitary and epidemic state of the entire human civilization (COVID-19), as well as the geopolitical situation and the impact of large-scale economic sanctions on the economy of many countries.

These circumstances cause a constant interest in the study of environmental safety problems and the search for factors influencing these processes (Fedulin et al., 2020; Yerkinbayeva et al., 2021). In many freely available research papers, environmental safety is considered from various angles and associated with various categories. Thus, in the work of the team under the leadership of N.G. Gadzhiev (2021) ecological safety correlates with economic security as its component element, while E.V. Vorontsova and A.L. Vorontsov (2017a, 2017b) consider the problems of environmental safety regulation as systemic ones, consisting in the legal duplication of the same areas of regulation. The conceptual apparatus and the shortcomings of legal technique in the formulation of legal norms cause fair criticism from some researchers (Sukhova, 2019). The topic seems to be far from fully investigated; thus, the presence of the problems outlined above makes new studies in this field more relevant. The purpose of the presented work is to find a legal solution to the current problems of ensuring environmental safety.

## 2. THE HYPOTHESIS OF THE STUDY

A change in the geopolitical situation causes a decrease in the level of environmental norms and standards and the cancellation of environmental programs, which may lead to a decrease in the level of environmental safety.

## 3. METHODS

The study was conducted based on systematic and integrated approaches, combined with a set of general and particular scientific methods. Analysis, synthesis, and generalization were used to study literary sources related to the problem of the study. The comparative method made it possible to consider and summarize the international practice



of ensuring environmental safety and to correlate the Russian experience with it. The normative basis of the study was the current regulatory legal acts used in the regulation of environmental safety. The theoretical and methodological basis of the study was the fundamental and applied works of Russian and foreign researchers in the field of nature protection, as well as ensuring national security in the fields of ecology and economics. To prove the hypothesis of the study, such information materials as official statistics and other information on the topic available on the Internet were used. Based on the proposed hypothesis, special methods of the study were identified, namely, a questionnaire and an expert survey on the most important current threats to Russia's environmental security.

Thirty-three employees of the environmental prosecutor's offices of three regions in the Center of Russia (Prioksky Interregional Department of the Federal Service for Supervision of Natural Resource Usage (Rosprirodnadzor)) were involved as experts. The experts were selected considering their positions (department head, analyst) and participation in research activities. The indicators of their publication activity in journals included in the Scopus or Web of Science citation databases were also taken into account if there were at least three articles on a similar topic. The respondents were notified that their answers to the questions in the survey would be used in this study in a general way.

#### 4. RESULTS

The level of ensuring environmental safety within Russia is characterized by the fact that the concept of environmental safety is perceived as a component of national security. The basic strategic planning document that defines the national interests and strategic national priorities of the Russian Federation, the goals and objectives of state policy in the field of national security and the sustainable development of the Russian Federation for the long term, i. e. the National Security Strategy of the Russian Federation (President of the Russian Federation, 2021) indicates environmental safety and rational use of natural resources as one of the strategic national priorities, the implementation of which makes it possible to ensure and protect the national interests of the Russian Federation. Paragraph 82 of the National Security Strategy describes specific goals for ensuring environmental safety and rational use of natural resources. They include ensuring the quality of the favorable environment for human life, preservation and restoration of the natural environment, balanced nature management, and mitigation of the negative effects of climate change. Paragraph 83 of this Strategy states that the achievement of the goals of ensuring



environmental safety and rational use of natural resources shall be carried out through the implementation of state policy aimed at ensuring environmentally-oriented economic growth, stimulating the introduction of innovative technologies, the developing of environmentally friendly industries; ensuring the rational and efficient use of natural resources, the development of mineral resources; conservation of biological diversity of natural ecosystems and the development of systems of specially protected natural territories; improving the efficiency of state environmental supervision, industrial and public control in the field of environmental protection; development of the system of state environmental monitoring; improving the level of environmental education and environmental culture of citizens; development of international cooperation in the field of environmental protection, etc. Such a detailed presentation of the objectives in the field of environmental safety testifies to the conceptual formation of a long-term state policy in this area tied to the needs of the socio-economic development of Russia and the prospects for the development of Russian society.

It must be said that this concept has been developed in dozens, if not hundreds of regulatory legal acts of various levels, among which there are those in which environmental safety is directly indicated as an object of regulation. As an example, one can cite Law of the Kursk region No. 16-ZKO dated 05.07.1997 "On environmental safety" (Kursk Regional Duma, 1997), etc. At the same time, it has been noted that Russian regulation in the field of environmental protection is mainly focused on measures of repressive influence on non-ecological production, etc. (Medvedeva & Borovkova, 2021). However, this is not always effective, since it encourages attempts by those responsible for environmental violations to evade punishment, somehow hiding the true scale of pollution and provoking the creation of corruption schemes to get away with possible violations (Medvedeva & Borovkova, 2021).

It should be noted that Russia's policy regarding environmental safety has changed dramatically in 2022. The authorities are discussing easing environmental requirements for Russian enterprises to support business under the influence of geopolitical changes. This follows from the minutes of the Commission of the State Council of the Russian Federation on Ecology meeting dated March 29 (Official Internet Resources of the President of Russia, 2022). The document proposes to significantly reduce the coefficients of payment for negative environmental impact (NEI). Today, two coefficients to the charged rate are mainly applied for manufacturing enterprises, namely, 100 and 25. The first one is used if the plant has a significant negative impact on the environment, for example, for companies in the fields of metallurgy, chemical industry, or waste disposal. The second one is for companies



whose emissions impact is negligible. According to the protocol, it is proposed to reduce the coefficient from 100 to 25, and 25 to five (Zakondyrin, 2022).

In today's difficult conditions, the Russian leadership considers it most important to establish the sustainable operation of enterprises and fulfill obligations under investment programs, social obligations, and planned environmental measures. The recently adopted Federal Law No. 71-FZ dated 26.03.2022 "On amendments to certain legislative acts of the Russian Federation" (State Duma of the Federal Assembly of the Russian Federation, 2022) contains substantial measures to support industrial enterprises.

The Law provides for the postponement of the entry into force of regulatory legal acts containing mandatory requirements that cannot be met due to technological and other restrictions, including the postponement of emission quotas and the timing of the introduction of automatic emission control systems.

The deadline for completing the experiment on emission quotas in cities on the priority list of the national project "Ecology" has also been postponed. Such measures as amendments to legislation aimed at changing regulatory mechanisms in terms of integrated environmental permits, the creation of preferential taxation regimes for manufacturers of environmental equipment, and the introduction of preferences for investment projects aimed at environmental modernization and other possible measures are still under discussion (Voronov, 2022).

During the survey, experts were asked to answer an open question: "What threats to environmental safety do you consider the most relevant ones in the current situation?" The answers proposed by the respondents have been listed by us in Table 1, which represents the distribution of expert opinions on the issue under consideration in percent.

**Table 1.** Current threats to the state of environmental safety

N	Factors threatening the state of environmental safety	The relevance of the threat in the responses of the survey participants, %
1	Reducing the requirements of environmental regulations and environmental standards for production facilities opened for import substitution and their products	44
2	Reducing the costs of environmental protection measures, monitoring its condition	34
3	Reducing the number of inspections of enterprises conducted by nature protection authorities	15
4	Other reasons	7

It seems that the cancellation of requirements, the postponement of quotas, and the execution of environmental programs can lead to a significant deterioration in the state of

environmental safety. Reducing the coefficients of payment for environmental damage at times will lead to the fact that companies simply will not be interested in introducing environmentally friendly technologies. Postponing the timing of emission quotas and the introduction of automatic emission control systems will also entail a violation of the basic principles of environmental protection established by law and may harm the state of environmental safety

In the legislation of most developed countries, there are no clearly formulated concepts for ensuring environmental safety, but this does not mean that regulation of this area of public relations is not given due attention there. Regulation of environmental safety in this group of countries is formed under the Green Concept (Kahle & Gurel-Atay, 2014), where much attention is paid to economic mechanisms.

Thus, among the state instruments in the field of environmental policy in Germany, environmental charges and licenses for interaction with the environment dominate. The state sets the price for the use of the environment, the volume of use is determined by demand, that is, by the functions of marginal environmental protection costs for individual manufacturers. In a broad sense, it includes environmental taxes, environmental contributions, and various environmental duties. On the one hand, their goal is to form a revenue base for the implementation of measures to protect and improve the quality of the environment. On the other hand, such environmental charges may encourage the transformation of the technological process of production at a separate enterprise, while reducing the burden on the environment. With the help of pollution charges in the form of environmental charges for certain emissions, an economic incentive is created to reduce the size of normal and over-limit emissions by avoiding them (Enderle et al., 2021).

Since the 1980s, the US environmental strategy has been combining public environmental management with market mechanisms for its regulation. The concept of environmental risk has become the theoretical basis of state environmental policy. The instrument of the market mechanism, which is actively functioning in the USA, is the sale of pollution rights. One of the most important principles of such a market is the right to sell various kinds of emissions and discharges. The simplified scheme of such trade is as follows: within a limited territory, a limit is imposed on a certain amount of emissions (discharges) of pollutants. This amount of pollution cannot be exceeded during new construction. Otherwise, this system is called the bubble principle (Pisarev, 1997). Under these conditions, a newly built or reconstructed enterprise wishing to expand its production falls within the framework of strict environmental restrictions on the possibility of an increase



in environmental pollution in the region. In this case, the company should choose one of two options: creating a reliable cleaning system or buying the right to additional pollution from another company (Vishnyakov & Ilyushnikova, 2001).

In Japan, an insurance model is used. Entrepreneurs pay insurance corresponding to the potential damage they can cause to the environment. The desire to reduce contributions to the insurance fund becomes an incentive for eco-friendly production. Management is carried out through a special insurance fund, which determines the source and amount of pollution costs and assigns a special compensation payment from it. This payment is withdrawn from the amount of the deposit, which each enterprise associated with nature management initially transfers to the insurance fund. If the inspection does not reveal a violation of environmental quality standards by the enterprise, the deposit is returned to the enterprise with interest. The amount of the advance deposit is equal to the potential damage that may occur with a similar production technology (Abdurasulova & Dobaeva, 2014).

The reviewed international experience allowed comparing different approaches to environmental safety regulation. The results are presented in the form of Table 2.

**Table 2.** Features of environmental safety regulation in different countries

Country	Features of regulation
Russia	Predominance of administrative mechanisms (fines and prohibitions)
Germany	Impact on the environmental friendliness of production through the application of the mechanism of taxes and fees or licensing.
USA	Market mechanisms: purchase of pollution rights
Japan	Risk insurance and collateral mechanism for collecting environmental damage

## 5. DISCUSSION

The mechanism of regulation of environmental safety described in several studies (Vorontsova & Vorontsov, 2017a) is not completely perfect, because it is not devoid of some problems of a theoretical, technical, and legal nature.

In the study (Sukhova, 2019), it is proposed that this concept should have become a legal criterion for a generalized assessment of certain real situations related to the natural environment or its elements. However, in practice, due to the vague wording, it has caused different interpretations, and therefore it is constantly subjected to reasonable criticism (Vorontsova & Vorontsov, 2017c) and does not contribute to the development of legal support for this area.





According to researchers (Vorontsova & Vorontsov, 2017b), another matter of great importance for the regulation of environmental safety is systemic problems consisting of the legal duplication of the same areas of regulation. While the industry codified acts have essentially different relations as the object of their legal regulation, many program documents of the Russian state in the field of environmental safety and environmental protection reproduce virtually similar objectives. At the theoretical level, it is not clear how the concepts of environmental protection and ensuring environmental safety are correlated (Sukhova, 2016, 2019). The interpretation of many other fundamental concepts of environmental law also remains unclear, which is the subject of lively discussions in the scientific community.

It seems to us that to form the future regulation of environmental safety, we should proceed from the understanding that environmental safety is part of the economic security of the state (Gadzhev et al., 2021). This conclusion is based on the fact that damage in the environmental sphere is a deterrent to the sustainable socio-economic development of humanity as a whole and individual states. At the same time, the main activities in environmental protection in the world practice, as we pointed out in this paper earlier, are directly linked to economic methods and regulatory instruments characteristic of ensuring economic security.

Some researchers also express the idea that deserves support that in global practice the effectiveness of environmental policy is ensured by the greening of the economy, which is based on the use of a self-financing mechanism through the active involvement of private capital (Balova et al., 2021; Bezdudnaya et al., 2021). Here, the task of the government is to create the necessary legislative and economic conditions, as well as means of control. All other issues are solved by enterprises directly related to environmental management (Vishnyakov & Ilyushnikova, 2001).

Thus, it is important for the state authorities in the Russian Federation responsible for the formation and implementation of an environmental safety strategy and the implementation of environmental protection programs to prevent negative trends in the environmental sphere under the conditions of the imposition of foreign economic sanctions and the possible continuation of the COVID-19 pandemic. We believe that the reduction of environmental requirements and the curtailment of environmental programs concerning production facilities and their products, including import substitution, should not be allowed. At the same time, it is necessary to move away from the policy of further tightening liability measures against companies that violate the environment, introducing economic incentives



into the mechanism of environmental safety regulation, and following accepted international practice.

## 6. CONCLUSION

The regulation of environmental safety in the current conditions should be aimed at neutralizing negative trends that manifest themselves in excessive protection of the interests of entrepreneurs leading to the detriment of the environment, including in the field of import substitution, and refusal to continue environmental programs due to lack of funding. Environmental safety under any conditions should remain the main priority of state policy, therefore, in this area, the country's leadership should show firmness and integrity and try to find a balance between environmental requirements and business interests.

In this regard, it seems to us that it is preferable to use more mechanisms of economic stimulation of environmental measures that are widely used in international practice. Thus, the hypothesis of the study has been proved. We see a possible continuation of the topic started in this study in the search for conflicts that the regulation of environmental safety enters into with other areas of legal regulation and the possibilities of their resolution.

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