TAXES AS A TOOL TO ENSURE ENVIRONMENTAL SAFETY

Larisa Aguzarova, Fatima Aguzarova, Kamilla Tsallaeva

•

North-Ossetian State University named after K.L.Khetagurov, RUSSIA

<u>aguzarova.larisa@yandex.ru</u>

<u>aguzarus@yandex.ru</u>

<u>kamilla.tsallaeva@yandex.ru</u>

Abstract

In this paper, taxes and fees are considered as a means of regulating the environment, ecological state. The experience of ensuring environmental safety through taxation is described. The authors consider the shortcomings and disadvantages existing in the Russian tax system and environmental problems within the country. The results of taxation system analyses are given and systemized. In the paper the authors outline proposals and ideas for environmental protection using tax instruments.

Keywords: taxes, environmental safety, tax regulation, environmental protection

I. Introduction

At the present stage of development of all human activity spheres, inexorable processes are taking place to change the environment. The human impact on the environment condition is getting more intense every day. As a result of human activity, environmental pollution occurs, the depletion of natural resources and the gradual destruction of flora and fauna (for example, transport greatly pollutes the environment with exhaust gases when moving). That is why the state policy in the field of economic development and the ecological state of the environment should be interconnected.

Within the implementation of measures for the economic regulation of the environment, taxes act as a key tool to minimize the damage that is caused to the environment in the course of economic activity.

The use of exhaustible natural resources is conditioned by the need of mankind to be provided comfortable living. Today, the desire for high standards of living is associated with the depletion of natural resources, environmental pollution (for example, during the extraction of depleted hydrocarbon raw materials).

Industrial and entrepreneurship development, carried out without taking into account the impact on nature, can lead to serious problems both in the environmental condition, and, in the long term, on the economic development of society.

Not only individual citizens are responsible for making decisions to prevent environmental disasters and problems, but also the State. Public authorities need to develop and implement effective environmental management tools for economic purposes. Taxes occupy a special place here as a special form of control and regulation of the activities of business entities.

II. Methods

The main methods we used by throughout this work are

methods of analysis and synthesis;

- a statistical method that made it possible to identify certain trends in the tax policy of the Russian state (based on the analysis of tax revenues and benefits);
- a comparative law method through which the main global trends in the development of taxes as an instrument for ensuring environmental safety were determined.

To conduct the study, we analyzed the data from the Federal Tax Service on the application of preferential taxation coefficients in connection with the use of highly effective environmental technologies.

As well regulatory documents of the Russian Federation and other countries aimed at regulating the environment through tax instruments were analyzed. Moreover, the research of theoretical economists and actual statistical data on environmental taxation in selected countries of Europe, Asia and America are considered.

III. Results

Today, environmental well-being is one of the main questions affecting the development of society in general and individual economies in particular. Special attention is paid to the issues of greening the use of natural resources in the process of their exploration for the development of industry and entrepreneurship.

The existing legal system of the Russian Federation, which provides for economic mechanisms to stimulate environmental protection activity through the introduction of tax and other liabilities for the use of natural resources, does not have the necessary tools for effective regulation and control over the implementation of environmental safety standards. This circumstance leads to a decrease in the level of pollution of the natural environment.

The experience of European countries in the field of the economy ecologization demonstrates the successful application of market instruments aimed at improving the state of the environment. There are environmental taxes and payments among them. Such financial responsibility is aimed at correcting the economic behavioral model of both producers and consumers, in the direction of reducing the negative impact on nature.

In addition, subsidies, tax incentives and preferences play an important role (for example, tax holidays for enterprises engaged in the protection and protection of fixed territories). Incentive measures are of great importance to stimulate innovative technologies and the introduction of new environmentally friendly technologies. Moreover, liability and compensation mechanisms occupy an important place in the environmental management system, providing compensation for environmental violations.

The existing in Russia payment system for negative environmental impacts does not fully contribute to solving the tasks of improving the environmental situation and preserving natural resources. This is related to the fact that the targeted use of funds for environmental needs is not guaranteed by either the tax administration or other government agencies. The problem of creating an effective system for monitoring compliance with environmental standards and norms remains relevant for many countries applying the environmental payment system. The reason for this is technical limitations in the sphere of monitoring and measuring the actual quantity of harmful emissions and discharges [3, pp. 453-457].

Unfortunately, Russian environmental taxation practice remains underdeveloped compared to foreign countries, where this system has become widespread and is actively used as a tool to encourage enterprises to choose environmentally friendly production technologies [7]. (Environmental taxation in this article refers to taxes in the field of environmental management).

The absence in Russia of a clearly defined legislative concept of "environmental tax" and an appropriate regulatory framework highlights gaps in the theory of taxation and limits opportunities for the formation of an effective environmental policy of the state.

The experience of the European Union countries since the 1970s has demonstrated significant achievements in the field of greening taxation. A centralized approach to the adoption of regulatory acts at the EU level, combined with the adaptation of the tax systems of individual

states, contributed to the formation of an effective environmental taxation scheme.

The example of the United Kingdom is one of the most significant in terms of encouraging enterprises to carry out environmentally responsible production. In the UK, a tax on landfill with differentiated rates has been successfully operating since 1999. These rates depend on the type of waste. Moreover, in the UK there is a system of benefits for organizations investing in environmental projects.

Table 1: Approaches to environmental taxation in different countries.

Country	Types of environmental taxes and payments	Features	Application examples
In general	Electricity, coal, hydrocarbon derivatives, natural gas and gas condensate	Taxes do not promote emission reduction	
United Kingdom	Targeted environmental taxes	Tax revenues are used for environmental protection	
Germany	Noise tax, emissions taxes, waste and pollution payments, energy and transport taxes	Strict environmental policy policy; taxes based on environmental indicators of vehicles	Transport tax is calculated based on environmental indicators
Russia	Tax on engine power, fees for the use of natural resources	Non-ecological approach to transport tax; does not encourage emission reduction	Proposal to use the experience of Germany to encourage the transition to environmentally friendly cars
Finland	Carbon tax	Encourages the introduction of energy-saving technologies	Introduction of a carbon tax in 1990
China	Environmental Tax, solid waste	tax Tax benefits for companies that reduce emissions	Replacement of the pollution fee with an environmental tax in 2018
Brazil, India, South Africa	(There is no clear concept of "environmental taxes")	Start of development of environmental tax reform in Brazil	

[5, p. 304], [8], [9], [10], [11], [12].

This table provides examples of key aspects of environmental taxation of global economies, collected on the web pages of the legislative bases of various states. The purpose of the imposed taxes, their impact on the environmental safety of the country and the world are examined here, as well the preservation of the environment [5, pp. 302-306].

Special importance is attached to the development and implementation of a set of economic and market instruments aimed at minimizing the negative environmental consequences of economic activity.

The main directions in this area are:

- formation of a system of compulsory payments for the use of natural resources and emissions of pollutants, the amount of which should correspond to the costs of implementing environmental measures;
- transformation of approaches to the regulation of excess impacts on ecosystems through mechanisms of compensation for damage caused to the environment;

• introduction of tax benefits and preferences for "green" enterprises and organizations that carry out their activities without harm to the environment (for example, tax holidays or a reduced tax rate).

It should be emphasized that the subject of tax incentives are to be:

- technologies, including artificial intelligence, which more accurately determines the consequences of a decision related to the introduction of a particular tax; [2, p. 325]
- processes that meet the criteria of minimum waste, resource conservation and environmental cleanliness, which includes the use of the best available technologies approved at the legislative level;
 - green energy and its use in production processes;
- human resources that develop non-toxic ways and methods of work (in production, logistics, sales of goods and services), etc.

It is important to support investments in the development of production facilities for the prevention, reduction and disposal of waste through recycling, along with the production of environmentally-friendly goods. Accordingly, the main recipients of tax benefits should be entities initiating scientific research and development in the field of ecology, as well as investing in the modernization and creation of new environmentally friendly manufactures [4, pp. 82-84].

The principles of resource recycling and waste-free production act as a fundamental base for the neo-industrial development of a modern economy. The implementation of an effective utilization and recycling system, in particular of motor vehicle waste, stimulates the intensification of research and innovation activity by both manufacturers and recyclers.

It is important to point out that the income from recycling fees should be used to finance infrastructure and environmental projects, including subsidizing the costs of enterprises for the implementation of waste management measures [5, pp. 302-306].

IV. Discussion

Effective ecological adaptation of business structures contributes to improving the quality of society life and stimulates economic progress. Therefore, improving the system of monitoring compliance with environmental laws is one of the most important aspects of public policy. Considering the tools of tax impact, it is important to mention that it enables indirect regulation of the multivariable activities of economic agents. That is why this study is aimed at analyzing and developing tax incentive mechanisms for enterprises to minimize their negative impact on the environment.

Research in the field of tax regulation of environmental policy reflects the relevance of the issues of development and implementation of tax instruments aimed at environmental optimization of economic activity. Many authors emphasize the advantages of environmental taxation in light of its ability to provide economic entities with flexibility in choosing strategies to reduce harmful effects on the environment [5, pp. 302-306].

The issues of tax support for technologies that are simultaneously characterized by a high degree of environmental friendliness, innovation and energy efficiency, as well as the problems of tax regulation in the context of waste management and decarbonization of the economy become the subject of detailed analysis in the works of many modern authors.

Since the current environmental situation has an increasing impact on human activities and, in particular, on economic activities, including production, logistics, and the sale of goods. It is important, in the context of the trend towards economic globalization (which has been shaken recently), to analyze world experience and bring effective tools to the international level. This means the introduction of mandatory environmental taxes and payments for all countries of the world, or at least for such communities as the CIS.

Focusing on the need to adapt the tax system to the current challenges of socio-economic transformations, it is important to consider various approaches to tax incentives for environmentally oriented changes in business practices and public relations, offering specific

mechanisms for improving this system [6, pp. 59-61].

Initiatives aimed at introducing and developing the best available technologies, obtaining and using equipment capable of significantly reducing pollution levels. In addition, investments in the creation and modernization of facilities to reduce the volume and danger of waste should become the basis for tax incentives. These measures provide not only for improving the environmental situation, but also for stimulating research activities and the development of innovative technologies in the field of waste disposal and recycling.

The problem of the disbalance between income from environmentally oriented fees and environmental protection expenses requires comprehensive consideration and adjustment. At the moment, the established amounts of payments for pollution do not perform their main function - effective compensation the costs associated with eliminating environmental damage.

This highlights the imperfection of both environmental law and its administration system. In this regard, the need for a radical revision of approaches to tax incentives for environmentally responsible business behavior becomes obvious. This implies not only a reassessment of pollution payment standards, but also the introduction of measures aimed at strengthening responsibility for non-compliance with environmental standards, including a system of fines.

The existing payment system in the Russian Federation for negative environmental impacts shows clear signs of inefficiency and incomplete compliance with modern environmental and economic requirements. The immutability of the current strategy in the foreseeable future will inevitably lead to further degradation of the environmental situation.

And this, in turn, will provoke serious socio-economic consequences, including a decrease in production capacity and crisis in the economy. It is obvious that in order to prevent such negative scenarios, a comprehensive rethinking and qualitative updating of the environmental taxation system is required. It is also necessary to identify new areas for tax benefits and preferences that will facilitate the transition to more environmentally friendly and resource-saving production processes.

It seems advisable to introduce a set of tax exemptions for bonds belonging to the "green" categories and bonds focused on "national and adaptation projects" in the field of ecology. The key measures that can increase the attractiveness of such instruments for investors and at the same time help attract additional funds for environmental initiatives are:

- reduction of the corporate income tax rate to 10% in respect of income received in the form of interest on these bonds;
- reset the corporate income tax rate based on financial results arising from the sale or other disposal of these bonds, provided that the taxpayer has owned them for at least one year.

Such tax incentives not only contribute to expanding financial opportunities for the implementation of environmentally significant projects, but also activate the development of sustainable financing instruments. That fully corresponds to the strategic guidelines for the development of the financial market of the Russian Federation, outlined in the document "Main directions of budget, tax and customs tariff policy for 2024 and for the planning period 2025 and 2026 years" [13].

During the assessment of the fiscal consequences of the implementation of these measures, carried out on the basis of an analysis of data provided by the Moscow Exchange, it was revealed that potential shortfalls in the federal budget as a result of reducing the tax rate to 10% on interest income from "green" and "adaptation" bonds may amount to an insignificant percentage of the total tax income received from corporate income tax.

This highlights that the introduction of the proposed benefits will have a limited impact on the fiscal indicators of the budget, while the expected positive effect on the environmental sector of the economy and the promotion of sustainable investment may be significant.

The current law gives taxpayers the right to accelerate depreciation of the main technological equipment operated in the case of the use of the best available technologies with high energy efficiency or a high energy efficiency class (with a coefficient not higher than 2). Statistical data on the application of these benefits by taxpayers in 2020-2022 are presented in the Figure 1.

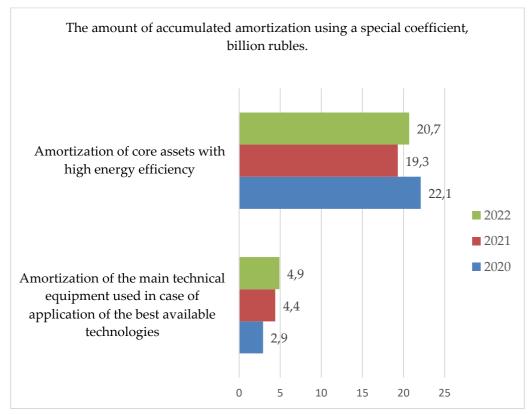


Figure 1: *The amount of accumulated amortization using a special coefficient, billion rubles.*

According to the presented data, it can be seen that the amortization of the main technical equipment used in the application of the best available technologies increased from 2.9 billion rubles in 2020 to 4.9 billion rubles in 2022. On the other hand, the amortization of core assets with high energy efficiency decreased from 22.1 billion rubles in 2020 to 20.7 billion rubles in 2022.

IV. Conclusion

Thus, analyzing the existing environmental situation and the tax system, it can be concluded that there is an imbalance between the amount of income from environmental taxes and the costs of protecting and restoring the natural environment. The established amounts of payments for environmental impact do not meet their original purpose — to compensate for the costs of eliminating negative consequences for the environment.

In this regard, it is necessary to realize that not all economic entities fully fulfill their obligations to pay environmental fees, which indicates shortcomings both in environmental legislation and in the system of its administration. The lack of targeted payments for environmental damage and the inadequate link between revenues and government expenditures on environmental protection measures indicate the inefficiency of the environmental payment system in force in the Russian Federation.

In order to overcome the revealed problems and to improve the efficiency of the existing tax system, it is necessary to carry out a comprehensive revamp:

- standards of tax payment for environmental impact on the environment;
- mechanisms for regulating and controlling taxation, including stricter responsibility (including criminal responsibility) for misdemeanors of environmental law.

Also, in our opinion, there is an inadequate tax burden on non-ecological enterprises. It is obvious that the Russian tax system is excessively lenient. We assume that in order to achieve the best results in the protection and protection of the environment, it makes sense:

- increase in tax rates for enterprises polluting the environment (industrial factories that neglect cleaning products, etc.);
- tax preferences for the introduction of innovative technologies, artificial intelligence into industry to reduce harm to the health of employees of enterprises;
- reduction of the tax rate for enterprises that take on responsibilities not only to minimize damage to nature, but also to restore the ecology of additionally appointed territories.

Thus, the ecologization of human activity should be systematic and considered by representatives of various scientific fields, including economists and lawyers. Only in close connection and with the introduction of a great number of economic and legislative restrictions and preferences – the safety of the environment is possible.

References

- [1] Federal Law No. 7-FZ of 10.01.2002 (as amended on 12/25/2023) "On Environmental Protection" (with amendments and additions, intro. effective from 01.01.2024) // SPS Consultant-Plus
- [2] Aguzarova L., Aguzarova F., Tsallaeva K. The impact and prospects of using artificial intelligence in the economy / // Reliability: Theory & Applications. 2023. Vol. 18, No. S5(75). P. 323-329. DOI 10.24412/1932-2321-2023-575-323-329. EDN PPGKLI.
- [3] Artemenko D.A., Aguzarova L.A., Aguzarova F.S., Porollo E.V. Causes of Tax Risks and Ways to Reduce Them. European Research Studies Journal, 2017, Volume XX, Issue 3B, pp. 453-459 (in Greece). EDN: YCAWZN
- [4] Aguzarova, L. A. F. S. Aguzarova, K. E. Tsallaeva Tax regulation of investment activity // Audit and financial analysis. 2022. No. 1. pp. 82-86.
- [5] Kopaygorodskaya A.P. Recognition in Russia and abroad // SKIf. 2020. N04 (44). pp. 302-308
- [6] Kruchinina N. V. Ecologization of taxation as an economic tool for environmental protection management // Digest-finance. 2011. No. C. 58-63
 - [7] The official website of the President of Russia <u>www.kremlin.ru</u>
- [8] The official website of the Federal Tax Service of Russia https://www.nalog.gov.ru/rn77/related activities/statistics and analytics/forms/
- [9] Climate change taxation reforms and incentives in Germany https://cms.law/en/int/expert-guides/cms-expert-guide-to-climate-change-tax-reforms-and-incentives/germany
- [10] Carbon Taxes in Europe https://taxfoundation.org/data/all/eu/carbon-taxes-in-europe-2023/
- [11] China's Environmental Protection Tax https://www.china-briefing.com/news/china-environmental-protection-tax/
- [12] UK environmental taxes: 2022 https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/ukenvironmentaltaxes/2022
- [13] The main directions of budget, tax and customs tariff policy for 2024 and for the planning period of 2025 and 2026 https://www.consultant.ru/document/cons doc LAW 458280/