THE EXTERNAL FACTORS' INFLUENCE ON THE TRANSPORT ENTERPRISE'S MANAGEMENT OF ENVIRONMENTAL AND ECONOMIC SAFETY

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Abstract. Improving the production capacity of modern transport enterprises requires increased attention to the environmental component of their activities. The close connection between the transport enterprises' environmental and economic activities contributed to the formation and popularization of the concept of ecological and economic safety management. The conducted research allows us to identify the directions and features of the environmental factors' influence on the ecological and economic safety management of transport enterprises. As part of the research, the legal framework in the field of environmental and economic safety management of a transport enterprise was studied, and the peculiarities of the influence of external environmental factors on the environmental and economic safety management of enterprises were analysed.

The purpose of the study is to explore the environmental factors that affect the management of environmental and economic safety of the enterprise. As part of achieving the goal, the following tasks were solved: groups of environmental factors affecting the ecological and economic safety management of the transport enterprise were identified; the primary importance of factors was determined; the legal framework in the field of environmental and economic safety of transport enterprises has been studied; the intricacies of the influence of environmental factors on the ecological and economic safety of transport enterprises were analysed. The conducted analysis of the environmental factors' influence on the management of ecological and economic safety of transport enterprises can be used to form a system of indicators for assessing the level of ecological and economic safety of a transport enterprise, direct assessment and development of a mechanism for increasing the level of ecological and economic safety of a transport enterprise.

Introduction. Thanks to the high rates of scientific and technical development, the modern world is becoming more and more united. Accordingly, the events and problems of individual countries have a greater impact on other countries and humanity as a whole. In such conditions, the development of humanity is largely determined by its ability to solve global problems, namely environmental ones. The main reasons contributing to the emergence of the ecological crisis are a terrible attitude towards nature, multi-functional use of natural resources, imperfection of technological processes, environmental illiteracy of people, etc. All these reasons contributed to the emergence and formation of the concept of environmental safety, in particular at the level of a separate (transport) enterprise.

The state of the natural environment is inextricably linked with the socio-economic development of society, with the protection of its health, the creation of favorable conditions for natural reproduction and life activities not only of the current population, but also of future generations. This means that no transport company can carry out its activities in isolation and without taking into account the interests of society, which is affected by the negative impact of its activities. Solving the problem of ensuring environmental safety on the part of enterprises, including transport enterprises, is possible due to the development and compliance with national and international norms of maximum permissible emissions and discharges of harmful substances into the natural environment, as well as compliance with environmental requirements for finished products, their operation and disposal. Unfortunately, nowadays there are practically no enterprises in the territory of the post-Soviet space that are ready to voluntarily carry out comprehensive environmental control of raw materials and technologies used for the production process, operation and disposal. This is explained by the need for large financial costs for environmentally friendly technologies, the use of environmentally friendly raw materials by enterprises, etc. In such conditions, the only motivating factor for compliance with environmental legislation and preservation of the natural environment is the application of existing fines for violation of current legislation and strengthening of preventive measures for its violation. The ideas mentioned above confirm the impossibility of studying the environmental safety of the enterprise without taking into account the economic component, that is, without taking into account economic safety.

Main Part. The factors affecting the company's activities are divided into external factors that cannot be influenced and are quite difficult to predict, and internal factors that the company is able to regulate and predict. It is important that each factor that directly affects the environmental and economic safety of a transport

enterprise has both a positive and a negative impact, that is, it has a dual nature.

The first among the external factors that affect the environmental and economic safety of a transport enterprise is the regulatory and legal framework. It is from the level of its development that the level of state support for environmental protection activities, the level of control in the field of protection and preservation of the natural environment depends. In addition, both the level of development of the regulatory and legal framework in the field of environmental protection and the appropriate mechanism for its implementation are important. This is one of the key problems of many countries. So, despite the fact that in recent years, most countries, including developing ones, have developed many normative legal acts in the field of environmental protection, only some of them have been put into practice.

The leading countries in the field of environmental protection are the EU countries, Japan and the USA. The environmental legislation of these countries is based on three main principles: protection of the natural environment and improvement of its quality, protection of public health, rational use and preservation of natural resources. In addition, one of the main legislative trends of foreign countries is the stimulation of resource conservation and waste minimization programs. Serious attention in European countries and the USA is paid to work with the population and the formation of an ecologically thinking society. This approach to the formation of a regulatory and legal system in the field of environmental protection has already proven its effectiveness. The regulatory and legal framework of Ukraine, which regulates the management of environmental and economic safety of the enterprise, continues to expand (Laws of Ukraine; Strategy of environmental security...)

The next external factor is the influence of scientific and technological progress. The use of the results of scientific and technical progress is one of the conditions for the effective operation of each transport enterprise and its achievement of a high level of environmental and economic safety. The level of scientific and technical progress can ensure the functioning of the enterprise in ecologically and economically safe conditions due to several possibilities.

First, scientific and technological progress affects production equipment and production technology. That is, if the external environment provides the appropriate opportunity to use the most efficient equipment and technology, this will allow the enterprise to carry out its activities as efficiently as possible. To use the influence of such a factor on the ecological and economic safety of the enterprise, the external environment in the form of the state must create appropriate conditions. This can be described using a category such as technological device. A technological system is a set of connected productions that have a single technical level and develop synchronously at a certain stage of historical progress. The change of dominant economic technological systems is defined as the course of scientific and technological progress and the inertia of society's thinking: new technologies appear much earlier than their mass development (Vasylenko, 2013:68). Therefore, sustainable development, preservation of technological sovereignty and technological achievements, the level of competitiveness and sales markets of transport enterprises are possible on the condition that they carry out their activities in accordance with the developing technological frameworks. Currently, enterprises of only developed countries carry out their activities almost completely in accordance with the development of technological cycles. 30% of the production systems of these countries are systems of the 6th technological system. Unfortunately, about 85% of Ukrainian enterprises are enterprises of the 3rd and 4th technological orders. The degree of technological backwardness of the country is estimated from 10 to 25 years from various sources (Ladychenko, 2019:256).

Secondly, carrying out the enterprise's activities using effective technologies and efficient production equipment will allow rational use of natural resources and minimize the negative impact on the surrounding natural environment by reducing the volume of waste. This, in turn, will positively affect the state of the surrounding natural environment, the preservation of natural resources and the social development of our society.

Therefore, scientific and technical progress within the scope of achieving a high level of ecological and economic security plays a primary role. However, in order to obtain the maximum possible effect, appropriate actions of the state to ensure a high level of scientific and technical progress on the one hand, and appropriate actions of the enterprise to implement and use the results of scientific and technical progress on the other hand are necessary.

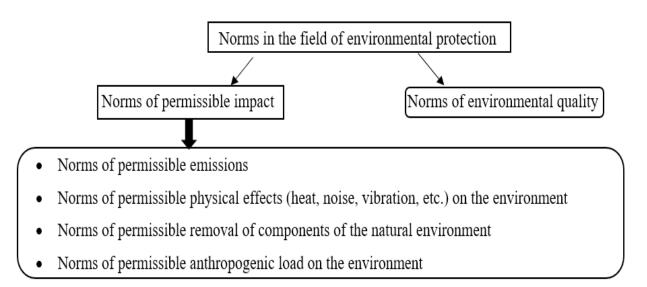
An important external factor that affects the environmental and economic safety of a transport enterprise is the environmental policy of the state. Drawing a parallel between the level of development of the national economy and the environmental policy of the state, it is important to consider that the main contradiction between them is that environmental needs are often opposed to economic interests. In most countries of the world, it has long been realized that the growth of economic activity and the increase of national income are the reasons for the deterioration of the quality of the natural environment and, as a result, the deterioration of the social and physiological wellbeing of millions of people. But, despite this, economic interests prevail. One of the ways to deal with the existing situation is environmental policy, which is an integral part of state policy. The strategic goal of the state policy in the field of environmental development is to solve socio-economic tasks that ensure ecologically oriented growth of the economy, preservation of a favorable environment, biological diversity and natural resources to meet the needs of current and future generations, realization of the right of every person to a favorable environment, strengthening of law and order in the field of environmental protection and environmental safety. («On Ensuring Sanitary and Epidemic Welfare of the Population», 2021).

A feature of environmental management tools is state support. The goals, tasks, principles and features of their use are fixed in the regulatory and legislative acts of many states. Therefore, an effective mechanism for using environmental management tools can ensure a high quality level of the environment. An ecologically clean natural environment is important for the ecological and economic security of the enterprise, because:

- It affects the quality of raw materials used for the manufacture of finished products (with the exception of factories that cannot use environmentally safe raw materials in the production process);

- It determines the level of financial burden on the enterprise, as an unfavorable environmental situation increases the amount of payments from the enterprise to social funds and the amount of payments for environmental impact. To regulate the negative impact on the natural environment on the part of transport companies, rationing is used. Standardization in the field of environmental protection is carried out for the purpose of state regulation of the impact of economic and other activities on the environment, which guarantees the preservation of a favorable environment and ensuring environmental safety («On Environmental Protection», 1991). According to the legislation of Ukraine, standards are divided into standards of environmental quality and standards of permissible impact on the environment is shown in figure 1.

Figure 1. Norms in the field of environmental protection



Source: formed by the author on the basis of researches.

This factor directly affects the ecological and economic safety of the enterprise, because: first, it determines the maximum permissible norms of pollution of the natural environment, exceeding which requires the enterprise to incur significant financial costs; secondly, it ensures the preservation of the natural environment, from which the company will take raw materials for its products in the future. Therefore, depending on the regulation policy in the field of environmental protection, including, the level of environmental safety of the company's products depends. In addition, the enterprise, depending on its activity, affects the standardization process to some extent. This is due to the fact that the lack of desire of enterprises to comply with the established regulations, the introduction of ineffective environmental policy can cause the strengthening of current regulations.

Another important factor affecting the ecological and economic safety of the enterprise, within the framework of environmental policy, is the level of state support and stimulation of environmental protection measures. The influence of state support on the ecological and economic safety of the enterprise is primarily determined by the fact that the state guarantees the realization of the rights of every person to a natural environment safe for his life and health. The basis for state support for the activities of enterprises within the framework of ecological and economic security is their implementation of actions and measures in the field of environmental protection related to the introduction of energy and resource-saving technologies, the use of secondary raw materials, waste processing, and the use of alternative types of energy. The following methods of state support and stimulation of measures for environmental protection are enshrined in law («On Environmental Protection», 1991):

- assistance in the implementation of investment activities aimed at the implementation of the best available technologies and the implementation of other measures to reduce the negative impact on the environment;

- assistance in the implementation of educational activities in the field of environmental protection and

provision of informational support for measures to reduce the negative impact on the environment;

- assistance in the implementation of the use of renewable energy sources, secondary resources, the development of new methods of environmental pollution control and the implementation of other effective environmental protection measures in accordance with the legislation of Ukraine.

It is important to consider that means of state support and stimulation of measures in the field of environmental protection will have an effect only if there is an appropriate mechanism for their implementation. If in developed European countries this system is established and works effectively, then in Ukraine, despite the presence of an appropriate regulatory and legal framework, state support and stimulation of environmental protection measures is carried out less actively. The characteristics of external factors influencing the management of environmental and economic security are shown in table 1.

Factor	Characteristic
Regulatory framework	Protection of the natural environment and improvement of its quality, protection of public health, rational use and preservation of natural resources.
Scientific and technical progress	Scientific and technical progress Modern production equipment and production technology, rational use of natural resources and minimization of negative impact on the environment.
Environmental policy of the state	The level of state support of the country, stimulation of environmental protection measures and social development of society.

Table 1. Characteristics of external factors influencing the management of environmental and economic security

Source: formed by the author on the basis of researches (Vasylenko, 2013:66)

The effectiveness of the state's environmental policy and the level of development of the national economy determine such a factor as the social development of society. As part of the social development of society, it is necessary to pay attention to such a category as environmental illiteracy of the population. Such a problem is present, despite the fact that environmental education of people is envisaged at the legislative level. Environmental education is carried out with the aim of forming an ecological culture in society, fostering a thrifty attitude towards nature, rational use of natural resources due to the dissemination of ecological knowledge about environmental safety, information about the state of the environment and the use of natural resources. Despite the legal establishment of this category, there is no corresponding mechanism for conducting environmental education. The main problem of the low ecological culture of the population is the low level of development and, as a result, the low standard of living of people, since in conditions of low quality of life it is impossible to "force" people to consciously treat the problems of environmental protection.

Conclusions. The analysis of the influence of external factors on the management of environmental and economic safety of the enterprise was carried out and a close connection between them was determined. The perfection of the legal framework of the state and the effective mechanism of its implementation are the basis of each of the considered factors and significantly affect the level of state support for ecological and economic security, the system of regulation in the field of environmental protection, the level of development of the national economy and scientific and technological progress. Given that issues of environmental safety can be investigated and resolved only under the condition of a stable economic situation, the level of development of the national economy as well as the legal framework is one of the main factors. The level of development of the national economy affects the level of state support, social development of society and the effectiveness of the state's environmental policy. The effectiveness of environmental policy, in turn, is determined by both the level of resource availability and the state of the environment. Such interdependence of external factors indicates the need for their comprehensive accounting in order to achieve the appropriate level of environmental and economic safety of the transport enterprise.

References

1. Law of Ukraine «On Environmental Protection» No. 1264-XII dated June 25, 1991 Document 1264-XII, valid, current edition — Edition dated 07/10/2022, basis - 2321-IX URL: <u>https://zakon.rada.gov.ua/laws/</u> <u>show/1264-12#Text</u>

2. Law of Ukraine «On Protection of Atmospheric Air» dated June 21, 2001 No. 2556-III. Document 2707-

XII, valid, current edition — Edition of 19.08.2022, basis - 2468-IX URL: <u>https://zakon.rada.gov.ua/laws/</u> <u>show/2707-12#Text</u>

3. Law of Ukraine «On Environmental Impact Assessment» dated March 15, 2022 No. 2139-IX. URL: https://zakon.rada.gov.ua/laws/show/2059-19#Text

4. Strategy of environmental security and adaptation to climate change for the period until 2030 URL: <u>https://zakon.rada.gov.ua/laws/show/1363-2021-%D1%80#Text</u>

5. Law of Ukraine «On Ensuring Sanitary and Epidemic Welfare of the Population» dated January 14, 2021 Document 4004-XII URL: <u>https://zakon.rada.gov.</u> <u>ua/laws/show/4004-12#Text</u>

Vasylenko V. Technological devices in the context of striving for ideality of economic systems / V. Vasylenko // Socio-economic problems and the state. — 2013. — No. 1. - pp. 65-72.

 Ladychenko V.V. Environmental policy and EU law: Study guide / V.V. Ladychenko, I.V. Girenko, L.O. Golovko, V.A. I greeted - K.: Publishing center of NUBiP of Ukraine. – 2019. – 363 p.