

ЧЕРЧИК Л. М.

доктор економічних наук, професор

Східноєвропейський національний університет імені Лесі Українки

Проспект Волі, 13, м. Луцьк; Україна, 43025

E-mail: larysacherchuk@gmail.com

ORCID: org/0000-0002-3901-216X

## МЕХАНІЗМ ЗАБЕЗПЕЧЕННЯ ЕКОЛОГІЧНОЇ БЕЗПЕКИ В СИСТЕМІ МЕНЕДЖМЕНТУ ПІДПРИЄМСТВА

**Актуальність.** Для діяльності сучасних підприємств характерні неузгодженість екологічних і економічних інтересів, неефективна політика у сфері екологічної безпеки, що призводить до негативних зовнішніх та внутрішніх наслідків. Тому потребують удосконалення інструменти забезпечення екологічної безпеки підприємства.

**Мета та завдання.** Метою статті є розвиток теоретичних і методологічних положень формування механізму забезпечення екологічної безпеки підприємства. Завданнями дослідження є: уточнення сутності екологічної безпеки, механізму її забезпечення; визначення принципів, критеріїв, передумов формування механізму забезпечення екологічної безпеки; обґрунтування мети, цілей, функцій, структури цього механізму.

**Результати.** Удосконалено теоретико-методологічні положення формування механізму забезпечення екологічної безпеки підприємства, що полягають в уточненні таких елементів методології як базові теорії та парадигми, підходи, згідно яких уточнюється предметна область, цільові орієнтири, суб'єкт-об'єктна структура, критерії, методи, що визначають змістовне наповнення складових зазначеного механізму. Набули подальшого розвитку визначення сутності механізму забезпечення екологічної безпеки підприємства як сукупності інституцій, принципів, важелів, методів та інструментів впливу щодо забезпечення таких умов його (підприємства) функціонування, за яких гарантується досягнення економічних та соціальних цілей розвитку, недопущення (мінімізація) деструктивного впливу та збереження (поліпшення) якісних та кількісних параметрів зовнішнього оточення підприємства. Розвинуто функціональний підхід до змістовного наповнення механізму як сукупності таких блоків: формування інституційних умов забезпечення екологічної безпеки підприємства; організаційного та інформаційно-аналітичного забезпечення; цілепокладання; обґрунтування стратегічного набору розвитку підприємства; розробки екологічної політики; стратегічного планування; вибору інструментів правового, економічного, технічного, організаційного характеру; контролю.

**Висновки.** Забезпечення екологічної безпеки підприємств можливе лише завдяки підбору такого комплексу ефективних інструментів впливу на всі процеси та сфери його діяльності в межах єдиного механізму, що дозволить вчасно виявити та попередити внутрішні та зовнішні загрози розвитку підприємства, реалізувати поставлені цілі без нанесення шкоди навколишньому середовищу.

**Ключові слова:** підприємство, екологічна безпека, механізм забезпечення екологічної безпеки підприємства.

SHERCHYK L.M.,

Dr. Sc. (Economics), Prof.

Lesya Ukrainka Eastern European National University

13, Volya Avenue, Lutsk, Ukraine, 43025

E-mail: larysacherchuk@gmail.com

ORCID: org/0000-0002-3901-216X

## MECHANISM OF ENSURING ENVIRONMENTAL SECURITY OF THE MANAGEMENT ENTERPRISE

**Topicality.** The activities of modern enterprises are characterized by a mismatch of environmental and economic interests, an inefficient policy in the field of environmental security, which leads to negative external and internal consequences. Therefore, tools need to be improved to ensure the environmental security of the enterprise.

**Aim and tasks.** The purpose of the article is to develop theoretical and methodological provisions for the formation of a mechanism for ensuring environmental security of the enterprise. The objectives of the study are: to clarify the essence of environmental security, its mechanism of maintenance; definition of principles, criteria, prerequisites for the formation of a mechanism for ensuring environmental security; substantiation of the purpose, goals, functions, structure of this mechanism.

**Research results.** Theoretical and methodological formation provisions of the mechanism of ensuring the ecological security of the enterprise, which consist in the refinement of such elements of methodology as basic theories and paradigms, approaches according to which the subject area, target orientations, subject-object structure, criteria, methods, determine the content content of the components of this mechanism. Determined the essence of the mechanism of ensuring the environmental security of the enterprise as a set of institutions, principles, levers, methods and instruments of influence to ensure such conditions of its (enterprise's) functioning, which guarantee the achievement of economic and social development goals, prevent (minimize) destructive impact and preserve (improvement) of qualitative and quantitative parameters of the external environment of the enterprise. A functional approach to meaningful filling of the mechanism as a set of the following blocks has been developed: formation of institutional conditions for ensuring the environmental security of the enterprise; organizational and information analytical support; goal setting; substantiation of the strategic set of enterprise development; development of environmental policy; strategic planning; choice of instruments of legal, economic, technical, organizational character; control.

**Conclusion.** Ensuring the ecological security of enterprises is possible only through the selection of such a set of effective instruments of influence on all processes and spheres of its activity within a single mechanism, which will allow timely identification and prevention of internal and external threats to the development of the enterprise, to realize the set goals without harming the environment.

**Keywords:** enterprise, ecological security, mechanism of ensuring ecological security of the enterprise.

**Problem statement and its connection with important scientific and practical task.** Modern domestic enterprises are characterized by a high level of resource-intensive, energy-intensive production, which has a destructive impact on the environment, which consists in air, soil, surface and groundwater pollution, waste accumulation. This has a negative impact on the quality of ecosystems, the lives of the population and the activities of many businesses, as environmental pollution causes significant economic damage. It is a consequence of unresolved contradictions in the development of environmental and economic character, inconsistency of environmental and economic interests of enterprises, inefficient environmental and economic policies of the state, declarative nature of European integration processes and low level of compliance with international requirements in the field of environmental security. Therefore, the economic growth of enterprises is closely linked to the environmental component of their activities, the greening of production, the introduction of eco-oriented innovations, and ensuring environmental security.

**Analysis of recent publications on the problem.** Various aspects of ensuring environmental security are covered in the works of domestic and foreign scientists, most often at the macro level. In particular, the content of national security, individual tools and mechanisms for managing it. However, the problem remains urgent because of the constant changes in the natural and social systems that are occurring both globally and at the level of businesses that have to respond to these challenges.

In the scientific literature, there are different approaches to determining the nature of the mechanism of environmental security. In particular, I. Illyashenko defines the organizational and economic mechanism of strategic management of natural-technogenic and ecological security as a system of organizational-administrative and economic measures for guaranteeing the security of the population, environmental management, and environmental protection [1]; V. Kuchmiyov defines the mechanism of ecological security management of the economic system as a set of elements of managerial influence with the help of organizational-economic tools, levers, methods, interrelated processes of planning and implementation of ecological pricing policy, promotion of ideas, products and services that satisfy needs of ecological security at the level of individuals, enterprises, the economic system as a whole [2, p. 251-259].

Sectoral aspects of enterprise activity reflected:

- L. Boginska, O. Yurchenko in defining the essence of the organizational and economic mechanism of ensuring the environmental security of the road economy as the set of all possible practical measures, tools and factors of organizational and economic nature, relevant structures and regulators, management methods by which the regional environmental policy is implemented. Scientists have analyzed the effectiveness of existing economic instruments of environmental and economic security and substantiated the elements of information, legal, organizational and regulatory support within the mechanism [3];

- O. Shkuratov in substantiating the mechanism of environmental security in the agrarian sector as a set of forms, tools, levers, models for neutralization and elimination of threats and risks, as well as prevention of eco-destructive processes and degradation of agroecosystems [4];

- A. Zhulavskiy, V. Hordiienko, who consider the mechanism of ensuring environmental security as a system of certain functions, methods and levers of influence on the process of development and implementation of environmentally oriented management decisions in the field of economic activity [5];

- O. Sudakova, D. Sudakova, who interpret the organizational and economic mechanism of ensuring the ecological security of an enterprise in the production sphere as a set of economic, organizational and management means, economic instruments for ensuring the proper level of ecological security of an industrial enterprise in terms of the impact of the production process on the ecological and economic status of both the enterprise itself and the quality of the environment [6];

- I. Mamchuk in substantiating the organizational and economic mechanism of ensuring the environmental security of chemical industry enterprises on the basis of their integration into an ecologically oriented cluster [7];

- A. Cherchyk, in defining the essence of the mechanism of ensuring the ecological and economic security of forestry enterprises as «a set of interrelated norms, rules, methods and techniques of managerial influence on different spheres, processes and resources of the enterprise to achieve sustainability, security, adaptability, rapid and flexible response to changes in its internal and external environment aimed at detection, prevention of threats, elimination of their negative consequences, ensuring sustainable development, achieving the goals set without harming the environment» [8].

The main targets of environmental management of enterprises by scientists are called:

- minimizing the negative impact of the enterprise activity on the environment without reducing the value of profit while observing the current environmental standards in the production process (O. Illyashenko, O. Budryk [9]);

- timely detection of external and internal environmental threats, their prevention and elimination (A. Zhulavskiy, V. Hordiienko [5], O. Shkurato [4]);

- ensuring a balance of economic and environmental interests (S. Shherbyn [10]);

- harmonization of economic and environmental interests of social production as vertically – national, regional, local, and as horizontal – territorial, departmental, at the level of relations between enterprises, etc., as well as establishing a certain procedure for preparing an effective security guarantee (L. Boginska, O. Yurchenko [3]);

- formation of an integrated system that provides stability, integrity, security and timely response to the changing environment of the enterprise to protect its interests, stable environmentally safe and cost-effective development, taking into account threats, opportunities and constraints (A. Cherchyk [11]).

As you can see, scientists apply different approaches to interpret the mechanism of ensuring the environmental security of enterprises, the main of which are institutional, functional, hierarchical, process, systemic, and set such targets for its functioning, which combine economic efficiency and environmental responsibility.

**Allocation of previously unsolved parts of the general problem.** The results of studies of the ecological and economic situation in Ukraine and the study of current instruments of regulation of ecological and economic processes, including protection of natural environment, revealed the main problems and imperfection of the existing mechanism for ensuring the environmental security of enterprises. There is a need for further development of theoretical and methodological basis for the formation and implementation of an effective mechanism for ensuring the environmental security of enterprises, in particular, clarification of the essence of the enterprise's ecological security, mechanism for its provision and its components, which forms a special direction of scientific research, taking into account the patterns of enterprise functioning in the market economics, transformation processes, negative changes that occur in the environment.

**Formulation of research objectives (problem statement).** The purpose of the article is to develop theoretical and methodological provisions, to substantiate practical recommendations for the formation of a mechanism for ensuring environmental security of the enterprise. The objectives of the study are: to clarify the essence of environmental security, its mechanism of maintenance; justification of the purpose, goals, functions, principles, criteria and structure of its mechanism.

**An outline of the main results and their justification.** The development of theoretical and methodological provisions of the mechanism formation of ensuring the enterprise environmental security provides clarification of such elements of the methodology as basic theories and paradigms, approaches according to which the subject area is specified, target orientations, subject-object structure, criteria, methods, tools that will determine meaningful filling of applied research developments.

As we have pointed out, in the present circumstances, the existing calculations of economic theory cannot fully serve the theoretical basis for the development of society, since they are constructed from the anthropocentric, consumer positions and the postulate of the need to meet the growing needs of humanity, economic growth and macroeconomic equilibrium. society is nature. This has led to the emergence of new

paradigms such as environmental economics, environmental economics, sustainable development economies, green economies, which underpin the economic interests of environmental interests and ensure global environmental security. Therefore, the theoretical basis for substantiating the mechanism of ensuring the ecological security of the enterprise is the concept of sustainable development, the theory of security and external effects, social welfare, evolutionary institutionalism.

Since environmental security is a complex concept and is achieved through the use of different instruments and areas of application, it is advisable to use a synthetic approach in the study as a set of scientific, systemic, institutional, and functional approaches.

The peculiarities of the application of these approaches are described in considerable detail in the scientific literature [4, 12].

In our study, a systematic approach allows us to establish the elements and causation between phenomena, processes and tools for environmental security as a whole. It is the study of various internal and external system interconnections that allows to determine the specificity of environmental security mechanism itself, to form an appropriate institutional environment for business.

The application of the institutional approach is conditioned, on the one hand, by the interdisciplinary status of environmental security as a phenomenon that involves the combination of different spheres of activity (modern institutional environment), constant and rather rapid changes in the external environment of the enterprise, on the other - with the need to use heterogeneous, different in character institutions as a complex of formal and informal norms, principles, guidelines that govern these areas of activity.

The functional approach involves the decomposition of ensuring environmental security mechanism as a single system into conditionally independent functional blocks, in accordance with the tasks set [4].

The application of these theories and approaches in the study makes it possible to determine the basic principles of forming a mechanism for ensuring the enterprise environmental security:

- the principle of systematic nature, which involves the establishment of all entities, objects of environmental security management and causally consequential relationships between processes occurring in the external and internal environment of the enterprise, which ensures the formation and, subsequently, the functioning of the mechanism of environmental security as a single whole;

- the principle of prevention, which involves the inclusion in the mechanism of such levers of influence on economic entities that will ensure the degradation of natural ecosystems, the depletion of natural resources through the introduction of eco-innovations, environmentally friendly technologies;

- the principle of responsibility and compensation, which implies the application within the mechanism of sanctions, incentive and compensatory levers of influence on enterprises (state regulation), within the enterprise - on management for the results of the decisions taken on the use of natural resources and the assimilation potential of the environment;

- the principle of flexibility and adaptability, which involves making adjustments to the changes in the internal and external environment, the goals of enterprise development;

- the principle of perspective, economic feasibility and efficiency, which is to create an institutional environment that renders environmentally harmful activities economically unprofitable, even unacceptable, and economic activities to become socially important.

These principles determine the criteria for selecting the levers and tools of the mechanism for ensuring the environmental security of the enterprise. As a general criterion, we propose to use the socioeconomic optimum, which characterizes such a state of objects, which ensures the socially useful needs of consumers, an acceptable level of profitability of enterprises within environmentally reasonable activities, which does not allow environmental destructions and allows long-term preservation of environmental quality.

Partial criteria may be: to prevent economic damage from environmental pollution; increase in income from the sale of products obtained through the use of non-waste technologies; reducing the negative impact on environmental security, increasing the quantity and improving the quality of natural resources; saving and preventing loss of natural resources; maintaining ecological balance.

Given the above, let's clarify the author's interpretation of the essence of environmental security of the enterprise as, on the one hand, the state of protection against negative influences of the internal and external environment, on the other - its ability to quickly eliminate threats, to ensure its functioning on the environmentally friendly technological basis and managerial innovations that make it impossible damage to the environment, life and health of people.

Therefore, the mechanism of ensuring the environmental security of an enterprise is a set of institutions, principles, levers, methods and instruments of influence to ensure such conditions of its functioning, which guarantee the achievement of economic and social development goals, preventing

(minimizing) destructive impact and maintaining (improving) quality and quantitative parameters of the external environment of the enterprise.

The block diagram of the mechanism of ensuring the environmental security of the enterprise is shown in Fig. 1.

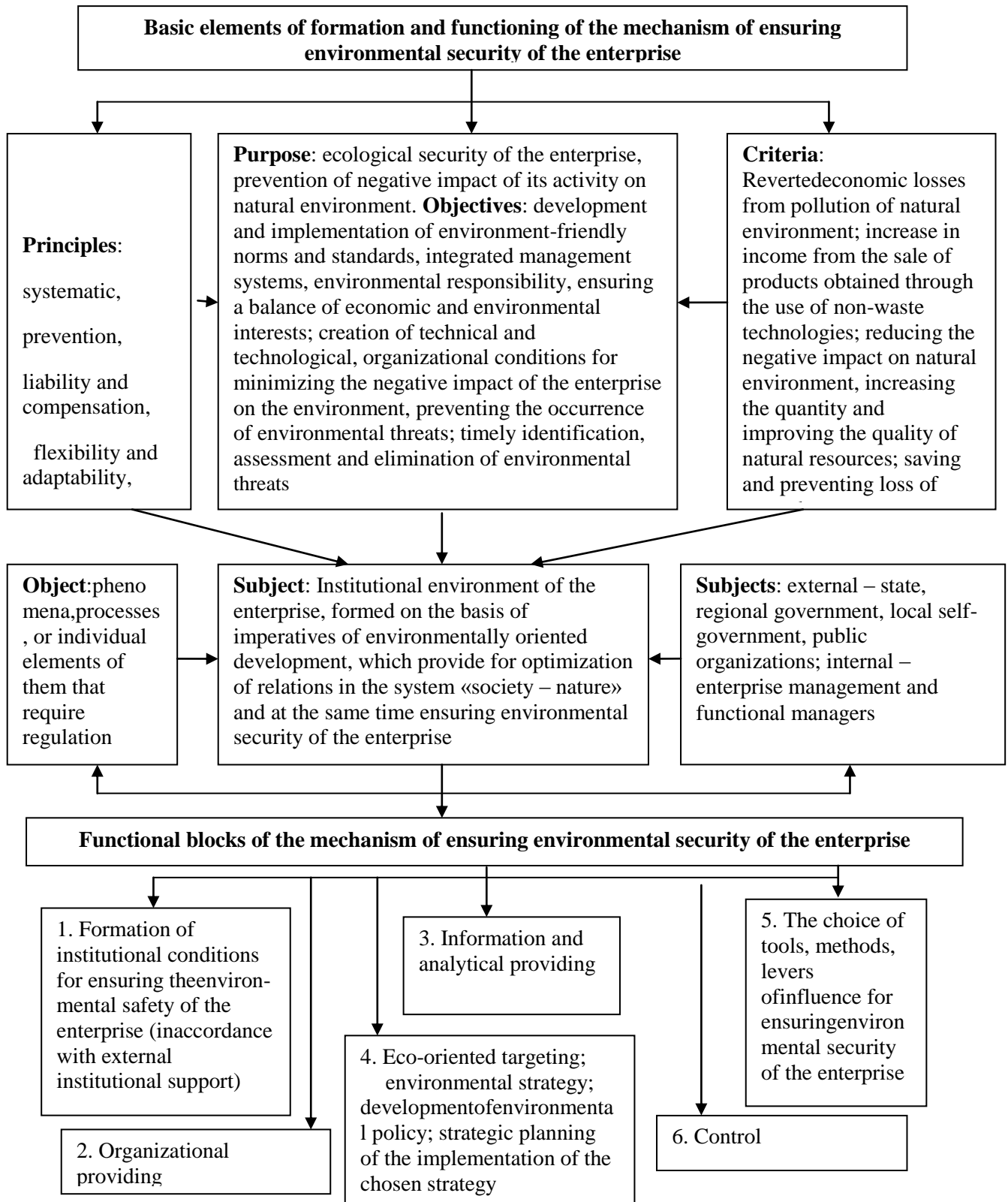


Fig. 1. Structural and logical scheme of the basic elements of the formation and functioning of the mechanism of ensuring environmental security of the enterprise

The object of an enterprise's environmental security mechanism is the phenomena, processes, or individual elements that require regulation. As they are in constant development under the influence of objective and subjective factors, the desired state of these elements may change.

The entities of the mechanism of ensuring environmental security are divided into internal and external enterprises. External bodies include state, regional government, local government, public organizations; to internal – enterprise management and functional managers whose activities are related to business processes that have a direct or indirect impact on environmental security.

The subject area of the mechanism of ensuring the environmental security of the enterprise is determined by the strategic goals of enterprise development in general, the goals of environmentally sound development, which are decomposed into functional goals of enterprise development. That is, the formation of an internal institutional environment, starting with the top management system of the enterprise, ending with the smallest production processes of the operational level, which embedded external imperatives of ecological security meso-, macro- and global level. Namely, the mechanism of ensuring the environmental security of the enterprise is the enterprise institutional environment, formed on the basis of environmentally oriented development imperatives, which provide for the optimization of relations in the system «society – nature» and at the same time ensuring the environmental security of the enterprise.

The purpose of the formation and further implementation of this mechanism is to achieve environmental security of the enterprise itself, to prevent the negative impact of its activities on the environment.

This goal is achieved through the following goals:

- development and implementation of environmental norms and standards, integrated management systems, environmental responsibility, ensuring a balance of economic and environmental interests (tools and measures of a strategic nature);
- creation of technical, technological and organizational conditions for minimizing the negative impact of the enterprise activity on the environment, preventing the occurrence of environmental threats (tools and measures of preventive nature);
- timely detection, assessment and elimination of environmental threats (tools and measures of an operational nature).

According to O. Shkuratov, structuring an object is a necessary condition for its study, which allows to distinguish and then describe the essential components of the object – elements, subsystems, components, relationships, properties, functions, etc. The essence of a process or phenomenon as a system is reduced to its structure, but is implemented in its functions. This makes it possible to consider environmental security in the agricultural sector as a structural and functional integrity in which each element (subsystem, component) has a specific functional purpose that must be consistent with the overall goals of the system [4]. The proposed structural and logical scheme highlights such elements as principles, functions, goals and objectives, approaches and methods, criteria and indicators, organizational structure of the supply and four subsystems - support, functional-instrumental, information-analytical, result-based [4, p. 157].

L. Bohinska, O. Yurchenko in the scheme of organizational and economic mechanism of ensuring environmental security distinguish organizational, legal, informational and socio-cultural support [3, p. 174]. I. Mamchuk in the scheme of organizational and economic provision of ecological security [7, p. 76]. I. Prozhoga, M. Abramchuk, I. Kobushko I. Prozhoga, M. Abramchuk, I. Kobushko in «Structural and Logical Scheme of the Mechanism of Ensuring Ecological Security of an Enterprise in Technopark Design» [13, p. 129] focus on eco-security tools.

The application of the functional approach to the formation of the mechanism of ensuring the environmental security of the enterprise, as noted, provides for the allocation of conditionally independent functional blocks, namely:

1) formation of institutional conditions for ensuring the environmental security of the enterprise, which includes two subsystems: external and internal institutional support. The legislative and regulatory framework, the state economic and environmental policy, the development of procedures and rules taking into account international practice, the implementation of international law are in need of improvement. The internal institutional environment is formed taking into account the above and includes principles, procedures, rules, norms, communication system that determine the features of the enterprise management system, its organizational structure, implementation of effective quality standards and leverage to ensure their compliance;

2) organizational support, which implies improvement of the organizational structure; implementation of environmental management; integrated quality management systems, personnel development

management, taking into account environmental management requirements; creation and development of new competitive environmentally friendly products using the appropriate technologies;

3) information and analytical support, including approaches, methods of gathering information, monitoring the level of environmental security in the enterprise and its location, the formation of information base, methods of processing and analysis of the internal and external environment factors of the enterprise that affect the environmental security of economic entities, detection of threats, formation of analytical base; forecasting changes in the main factors and identifying trends for the strategic perspective; enterprise diagnostics and environmental security assessment;

4) environmentally-friendly targeting; substantiation of strategic set of enterprise development, including environmental strategy; development of environmental policy; strategic planning of the implementation of the chosen strategy;

5) the choice of tools, methods, leverage to ensure the environmental security of the enterprise. It is important that they all be organically linked to the goals set and encourage the staff of the company to achieve them; formation of technical, organizational and economic conditions for ensuring the environmental security of the enterprise, in particular, through the introduction of environmentally friendly technologies for all business processes;

6) control, which involves a comparison of indicators of the desired state with the actual achieved and the implementation of corrective actions, if the results differ significantly from the desired ones. Environmental monitoring, audit and control are used for this purpose.

It is these blocks that form a meaningful outline of a mechanism that is filled with appropriate instruments of legal, economic, technical and organizational nature.

It is important to ensure the motivational nature of the mechanism, which implies a balanced combination of leverage and instruments of coercive restraint with incentive-compensation instruments.

At the same time, it is advisable to combine tools of discretionary and non-discretionary types in the mechanism of ensuring the environmental security of the enterprise. The discretionary type involves the use of measures that are appropriate to the situation, since without these measures it can not improve. Non-discretionary type is based on the use of built-in stabilizers that automatically regulate the situation: taxes, social welfare payments, subsidies, etc. The action of the mechanism of ensuring of the enterprise environmental security is based on the use of levers of influence of the opposite action - sanctions and incentives. At the same time, the emphasis is on the use of incentives, as they can provide the motivation to switch to resource-saving, social-ethical marketing, etc.

Therefore, appropriate regulatory methods should be applied:

- regulatory (legislative restrictions and incentives, environmental standards, norms, limits, quotas);

- administrative, providing influence through laws and regulations, state control and planning of environmental measures (environmental management regulations: declaring the security of high-risk objects, direct prohibitions, standardization, certification, normalization, licensing, limits, restrictions, quotas, permits, sanctions, expert examination of projects, establishment of legal responsibility for violation of environmental legislation, etc.);

- organizational (formation and development of corporate environmental management systems implementation of an integrated environmental quality management system at meso- and macro-levels; applying a strategic approach as a basis for development; organizational restructuring of the environmental security management system; introducing innovative forms of entrepreneurship; environmental certification; voluntary certification; bodies of environmental control and enterprises, between enterprises of commodity producers, formation of public associations; themes institutions, transparent procedures for state supervision of compliance with environmental laws, regulations and standards, environmental monitoring, assessment, auditing, environmental education, advocacy, education, etc.);

- economic methods that provide economic incentives to ensure environmental security (natural resources payments and charges for environmental pollution, purchase and sale of environmental pollution rights, pricing, intervention to adjust prices and support producers, loans, targeted subsidies and subsidies for environmental measures, accelerated depreciation, investment privileges, lending to environmental and eco-friendly technologies, preferential taxation under the same conditions and in the case of sales measures for rational use of natural resources, environmental funds, banks ecological, environmental insurance, collection of appropriate fees, imposing penalties for environmentally adverse technology, goods and services).

Let us return to the first functional block that envisages the formation of external and internal institutional environment.

It is proved that in order to ensure an adequate level of environmental security, it is necessary to create a state mechanism that will help to prevent and deter negative processes in the environment, will stimulate enterprises to carry out activities in accordance with environmental principles [10].

In our opinion, in Ukraine the institutional prerequisites for ensuring the environmental security of the enterprise, defined by the integration processes in the European Union, have been formed. A significant part of international environmental conventions has been ratified, EU environmental laws are in place, which provide for: control of emissions from vehicles, hazardous chemicals in consumer goods, movement of waste, control of hazardous substances and preparations, and more; control of activities, production processes that affect the environment or human health; environmental protection. However, it is important that the EU experience is put to use and put into practice. Procedures and procedural rights for assessing the environmental impact of projects and activities have been identified. Accordingly, processes are underway in Ukraine to create and implement integrated quality management systems (DSTU ISO 9001, DSTU ISO 14000, OHSAS 18000) that meet the requirements of international standards. Provision of environmental monitoring and environmental forecasting has been implemented. A number of provisions have been reflected in development strategies, programs and projects, and national concepts.

Therefore, the main prerequisites for the formation of a mechanism for ensuring environmental security of the enterprise are:

- recognition of the environmental imperatives of the Concept of Sustainable Development and the ecological and economic paradigm of enterprise management;
- adoption of the principles of greening of production, energy and resource saving, introduction of technologies compatible with the peculiarities and capacity of the environment, production of environmentally safe products;
- implementation of environmental management and integrated quality management systems.

Although there is a sufficiently developed environmental law in Ukraine, an appropriate institutional structure has been established, experts have repeatedly mentioned the need to improve the regulatory framework in the field of environmental security, as there are significant problems and contradictions in the application of legislative acts [5].

Effectiveness of instruments that shape the institutional environment - in their interdependence and complementarity: external influence tools define the general rules of the game, legal to the regulatory field to prevent / minimize external threats by motivating entrepreneurs to create their own internal environment, tools which prevent / minimize the negative impact of the enterprise to the environment.

It is clear that this is an ideal situation, far from reality, so the enterprise's environmental security mechanism must include tools that are resilient to negative internal influences and external environmental threats. The following functional blocks are aimed at the realization of this task.

In particular, organizational support involves the introduction of environmental management as a modern tool in the system of strategic management of enterprises on the basis of sustainable development, capable of ensuring: compliance with internal (corporate), state and international norms in the environmental sphere; rational use of natural resources; ecosystem degradation prevention; achievement of economic efficiency of production; harmonization of relations in the system «man – enterprise – nature».

Its components are:

- ecological expertise, which allows to evaluate internal and external threats to environmental security, compliance with current norms and requirements of the legislation on environmental protection, rational use of natural resources at the location of potentially environmentally hazardous industrial enterprises, substantiation of their production capacity, in the process of reconstruction, functioning;
- environmental audit, which involves the verification of environmental aspects of the enterprise in order to determine its compliance with the legal and environmental requirements, the identification of deviations from norms, standards, requirements, planned tasks [15];
- environmental control, which, in contrast to the audit, is carried out on an ongoing basis and is the basis of regulation of environmental relations at the enterprise;
- eco-labeling, which is carried out to inform about the conformity of products with environmental requirements (national mark of conformity) or about the environmental hazard of certain products (cargo) [10];
- eco-insurance - liability insurance of enterprises for damage caused by an accident, technological failure or natural disaster that lead to environmental pollution;



- environmental marketing, enabling an enterprise to timely align environmental goals and objectives with specific financial results and thus have the assurance that resources are directed to where their use gives the greatest economic and environmental benefits [10];

- management of personnel development in accordance with the requirements of environmental management;

- environmental certification of enterprises in order to determine the class of their environmental security and economic stimulation of its increase [3].

Effective in application of such modern organizational tools as eco-outsourcing (saving environmental costs by performing certain functions in the field of environmental security by other enterprises or institutions), ecocleantech (search and implementation of innovative solutions in ensuring environmental security), eco-sponsoring (enhancing the environmental image of enterprises) - sale of emission rights (discharges) between enterprises, mutual environmental insurance (provides protection of material interests of enterprises in the form of partial compensation and damage caused by environmental security due to technological and natural disasters) [7, 13].

However, as most scientists point out, the basis of the mechanism for ensuring environmental security is economic tools and levers of influence on the activities of enterprises. They are divided into three groups: financial security instruments for environmental security (budget, environmental bank, environmental funds, environmental financing and environmental investment, etc.); non-financial economic instruments (markets for environmental goods and services, environmental insurance, certification, licensing, regional programs, economic assessment of natural resources, customs regulation, etc.); economic instruments of compulsory-restrictive and incentive-compensatory action (environmental tax, pricing, depreciation of environmental assets, environmental excise duty, preferential loans, taxes, subsidies and loans, etc.) [3, 5].

The action of these instruments is aimed at the greening of production as a comprehensive transition of production activity of enterprises to the use of environmental technologies and the use of environmentally friendly technical means, which will prevent pollution of the environment [6].

For this purpose the following can be applied:

- business process eco-engineering,

- environmental modernization of fixed assets – «green modernization» (introduction of waste-free and low-waste, energy-saving technologies, technologies of integrated raw material processing, use of non-traditional energy sources.

- eco-leasing allows to rent or lease property for environmental security, modernization, purchase of environmentally friendly environmental equipment and technologies.

The effective functioning of the mechanism depends on the timely detection and analysis of environmental and internal environmental impacts, which will allow for optimal management decisions adapted to the external and internal environment.

The information and analytical unit for environmental security also contains external and internal components. The external form an information field on the activities of economic entities, the state and amount of natural resources and environmental security according to environmental monitoring (a system of the environment state monitoring is created in Ukraine), inventories of natural resources, ecological passport of enterprises (unfortunately it is a declarative document) and territories (analytical data collection on the status of environmental security in the territory) [5]. The internal component involves the formation of a single information environment and information infrastructure at the enterprise and includes: methods of gathering and processing information on the basis of modern information technologies; implementation of a single standard for working with documents; bank information.

Information and analytical support includes the collection, accumulation, storage, processing of information, analytical support of management decisions. The main sources of information support are documents and records, the results of monitoring, control, financial and environmental audit.

Environmental monitoring and audit is used to obtain the necessary information. At the stage of strategic analysis, it is advisable to use the method of portfolio analysis, which allows to process large arrays of heterogeneous information, to determine the main indicators for the diagnosis of environmental and economic security of the enterprise, to predict their changes for the future. The value of the method is that it provides sufficient information to make informed management decisions and is the basis for defining the goals of developing and developing strategies [14].

Diagnostics, as a type of practical activity, involves a set of formalized procedures aimed at determining the actual state of the enterprise, forming a model of its future state and identifying a strategic gap (gaps) [16].

On the basis of the analysis of factors, assessment of the level of environmental security, diagnostics of the state of the enterprise, secondary information flows are formed, which are the basis for making management decisions, first of all – environmentally oriented targeting. As noted above, these are hierarchical, strategic, tactical, and operational-level goals, preventive goals, and targets for responding to identified threats.

In accordance with the set goals, the strategic set of environmental security is substantiated. It is important that businesses, taking into account possible situations, have pre-developed strategic alternatives, the content of which will, of course, be corrected, but their availability will significantly save resources and time at this stage.

In particular, A. Kuchmiev substantiates marketing strategies for ensuring environmental security (strategy of change, adaptation, support, eco-friendly production, initiative, motivation of producers and others) [17].

A. Stepanenko substantiated ecological and economic strategies in the system of ensuring environmental security from the point of view of ecocentrism. Such environmental strategies as bifurcation, eco-innovation, eco-efficiency, international, technological, strategy of ecological modernization are distinguished [18].

The implementation of the chosen strategy (or strategic portfolio) involves the development of environmental policy and strategic planning.

The implementation of environmental policy aims to ensure: cost savings and resources (primarily natural – raw materials, water, energy) through the introduction of non-waste production, environmentally friendly production, recycling of waste of the main activities; reduction of discharges, emissions of harmful substances in environmental security; improving product quality in accordance with international environmental management standards; improving the image on entering the world markets, carrying out foreign economic activity; easing of administrative pressure on the enterprise by the controlling state bodies; expanding product markets and attracting new consumers who are focused on environmentally friendly products; entering a new level of technological development through the introduction of eco-innovations [14].

Strategic planning covers an extensive system of plans: long-term, medium-term, operational. It consists in the development of appropriate measures, justification of terms, the definition of the necessary material, financial and other resources [5].

The unit of control in the system of mechanism of ensuring the environmental security of the enterprise also has external and internal components, which we described above, considering such tools as environmental monitoring, audit, state control over compliance with environmental legislation, norms and standards, etc. The most effective way of environmental control at the enterprise is certified quality management systems according to international standards. The same block provides an assessment of the ensuring mechanism effectiveness of the enterprise environmental security, which is to determine the level of achievement of the set goals, together with the cost of all resources.

**Conclusions and perspectives of further research.** Analyzing the works of scientists, studying the experience of using the tools of environmental security management at domestic enterprises, prove the need for their systematization and improvement through different approaches to the interpretation of the essence of environmental security and the prevailing economic interests over environmental. enterprise security, including clarification of the concept of environmental security of the enterprise, the mechanism of its provision, its components, subject-object structure, principles and criteria of construction, which forms a special direction of scientific research taking into account the regularities of enterprise functioning in the conditions of market economy, transformation processes, negative changes that occur in the environment.

In the course of the research it was found that different approaches are used to determine the essence of the mechanism of ensuring environmental security, in particular, institutional, process, system, functional, institutional.

Since environmental security is a complex concept and is achieved through the use of different instruments and areas of application, it is advisable to use a synthetic approach in the study as a set of scientific, systemic, institutional and functional approaches. The systematic approach allows us to establish the elements and cause and effect relationships between phenomena, processes and tools for environmental security as a whole; institutional – provides for the formation of an institutional environment based on the

use of heterogeneous, different in nature social institutions; functional – provides for the allocation of conditionally independent functional blocks, in accordance with the purpose and objectives of ensuring environmental security.

This allows us to interpret the mechanism of ensuring the environmental security of the enterprise as a set of institutions, principles, levers, methods and instruments of influence to ensure such conditions of its (enterprise) functioning, which guarantee the achievement of economic and social development goals, prevent (minimize) destructive impact and preserve (improve) qualitative and quantitative parameters of the external environment of the enterprise.

To determine the instrumental content of the enterprise's environmental security mechanism, a functional approach was used, based on which the enterprise's environmental security mechanism functions as an adaptive flexible system of interconnected and interdependent functional blocks, namely: the formation of institutional conditions for ensuring the environmental security of the enterprise, which includes two subsystems: external and internal institutional support; organizational support; information and analytical support; environmentally-friendly targeting; substantiation of the strategic set of enterprise development; development of environmental policy; strategic planning of the implementation of the chosen strategy; selection of tools, methods, levers for ensuring the environmental security of the enterprise; control. It is these blocks that form a meaningful outline of a mechanism that is filled with appropriate instruments of legal, economic, technical and organizational nature. The advantages of this approach are to ensure the clarity of the elements interaction of each block on the basis of specialization and grouping of business processes, which allows for optimal results in the decision-making process, increases the efficiency and adaptability of the business entities.

The conducted review of organizational and institutional tools shows that their application is capable of achieving the ecologically oriented development goals of the enterprise in general and the desired level of environmental security in particular.

Particular attention should be paid to the formation of internal and external institutional environment, its filling with the most effective rules and norms that exist in domestic and international practice, which is a prospect for further research.

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