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## MECHANISMS FOR IMPLEMENTATION OF ENVIRONMENTAL TAXES AND INSURANCE

**Abstract.** A major areas of practice in environmental management, adapted to the standards ISO 14000: justification, demonstration, practical application of environmental policies and objectives of the company; public declaration of basic principles, commitments and areas initiating environmental performance; determining for each of the accepted objectives and performance criteria for planning activities and evaluating results; active use of various internal quantitative indicators; study specific environmental objectives; determining appropriate quantitative and qualitative indicators and criteria for each of the adopted environmental objectives; effective planning and organization of environmental activities in accordance with the goals and objectives; development of specific measures and actions for each set environmental goals and objectives given priority measures

and actions to prevent negative effects on the environment; involvement of all personnel to environmental activities; Analysis and evaluation of achieved performance; Systematic review and improvement of environmental policy, planning and organization of activities according to the results achieved; use independent performance evaluation (environmental audits); exercise now active foreign environmental performance; preparation and dissemination of environmental reporting initiative; Analysis reports.

Environmental insurance defined new for our country type of insurance which development because the objective conditions associated with a number of problems: the development of the legal framework of environmental insurance; lack of specific and sustainable concepts, defining environmental insurance as part of the economic and legal framework; imperfection, and in some cases the lack of legal and technical framework for quantitative evaluation of environmental risks and related damage; lack of experience of environmental insurance in Ukraine and abroad.

**Keywords:** mechanisms, public administration, public policy, environmental taxes and insurance.

## МЕХАНІЗМИ РЕАЛІЗАЦІЇ ЕКОЛОГІЧНОГО ОПОДАТКУВАННЯ ТА СТРАХУВАННЯ

**Анотація.** Запропоновано найважливіші напрями практичної діяльності в галузі екологічного менеджменту, адаптовані відповідно до стандартів серії ISO 14000: обґрунтування, демонстрація, практичне використання екологічної політики і цілей підприємства; публічне декларування основних принципів, зобов'язань і напрямів ініціативної екологічної діяльності; визначення для кожної з прийнятих цілей показників і критеріїв планування діяльності та оцінювання результатів; активне використання різноманітних внутрішніх кількісних показників; обґрунтування конкретних екологічних завдань; визначення відповідних кількісних і якісних показників і критеріїв для кожної з прийнятих екологічних цілей; ефективне планування й організація екологічної діяльності відповідно до прийнятих цілей і завдань; розроблення конкретних заходів і дій для кожної з поставлених екологічних цілей і завдань з урахуванням пріоритету заходів і дій щодо запобігання негативному впливу на навколишнє середовище; залучення всього персоналу підприємства до екологічної діяльності; аналіз і оцінювання досягнутих результатів діяльності; систематичний перегляд й удосконалення екологічної політики, планування й організації діяльності відповідно до досягнутих результатів; використання незалежного оцінювання результатів діяльності (екологічний аудит); здійснення підприємством активної зовнішньої екологічної діяльності; підготовка і поширення ініціативної екологічної звітності; аналіз звітності.

Екологічне страхування визначене новим для нашої держави видом страхової діяльності, розвиток якого через об'єктивні умови пов'язаний з низкою проблем: недостатнім розвитком законодавчої бази екологічного страхування; відсутністю конкретних і сталих понять, які визначають екологічне стра-

хування як складову економіко-правового механізму; недосконалістю, а у деяких випадках і відсутністю нормативно-методичної бази для кількісного оцінювання екологічного ризику і пов'язаної з ним шкоди; відсутністю достатнього досвіду проведення екологічного страхування як в Україні, так і за кордоном.

**Ключові слова:** механізми, державне управління, державна політика, екологічне оподаткування, страхування.

## **МЕХАНИЗМЫ РЕАЛИЗАЦИИ ЭКОЛОГИЧЕСКОГО НАЛОГООБЛОЖЕНИЯ И СТРАХОВАНИЯ**

**Аннотация.** Предложены важнейшие направления практической деятельности в области экологического менеджмента, адаптированные в соответствии со стандартами серии ISO 14000: обоснование, демонстрация, практическое использование экологической политики и целей предприятия; публичное декларирование основных принципов, обязательств и направлений инициативной экологической деятельности; определение для каждой из принятых целей показателей и критериев планирования деятельности и оценки результатов; активное использование различных внутренних количественных показателей; обоснование конкретных экологических задач; определение соответствующих количественных и качественных показателей и критериев для каждой из принятых экологических целей; эффективное планирование и организация экологической деятельности в соответствии с принятыми целями и задачами; разработка конкретных мер и действий для каждой из поставленных экологических целей и задач с учетом приоритета мер и действий по предотвращению негативного воздействия на окружающую среду; вовлечение всего персонала предприятия к экологической деятельности; анализ и оценка достигнутых результатов деятельности; систематический просмотр и совершенствование экологической политики, планирование и организация деятельности в соответствии с достигнутыми результатами; использование независимого оценивания результатов деятельности (экологический аудит); осуществление предприятием активной внешней экологической деятельности; подготовка и распространение инициативной экологической отчетности; анализ отчетности.

Экологическое страхование определено новым для нашего государства видом страховой деятельности, развитие которого в силу объективных условий связано с рядом проблем: развитием законодательной базы экологического страхования; отсутствием конкретных и устойчивых понятий, определяющих экологическое страхование как составную экономико-правового механизма; несовершенством, а в некоторых случаях и отсутствием нормативно-методической базы для количественной оценки экологического риска и связанного с ним ущерба; отсутствием достаточного опыта проведения экологического страхования как в Украине, так и за рубежом.

**Ключевые слова:** механизмы, государственное управление, государственная политика, экологическое налогообложение, страхование.

**Target setting.** Today Ukraine characterizes with misunderstanding and underestimating of the changes which occur in approaches to solving environmental problems until their complete ignorance of such changes or extreme simplification and reduction to formal implementation of a number of general requirements. This position leads (in some cases it has already led) to the imminent loss of economic opportunities and direct losses for individual industrial companies, and for the country as a whole. For example, the emergence of a growing number of explicit and implicit constraints and corresponding losses for Ukrainian producers in the international product and financial markets. Similar restrictions in many cases are associated with the lack of declaring and demonstrating intentions, plans and the results of the companies' activity in the field of environmental management, carried out, in particular, in accordance with international standards of series ISO.

The development of environmental management becomes generally recognized of practical way for solution of environmental problems, especially to the problems associated with the production and consumption of goods and services. The activities in the field of environmental management have gained a wide practical application at this time in all industrialized countries and those ones that are developing. The most significant achievements in solving environmental problems of industrial production are connected with it in the recent years.

**Analysis of recent research and publications.** The historical roots of the research problems of interaction

of society with the environment back to the sources of economic theory. The scarcity of land and food resources attracted D. Ricardo and T. Malthus and environmental consequences of the industrial economic model considered in his writings John. Art. Mill. Marx studied indirectly environmental issues in the analysis of environmental costs of industrialization and the growth of cities, the uneven distribution of the burden between capitalists and wage labor party. The ideas of the classical school of economic theory concerning the nature of interaction between society received further development in the works of Pigou – especially in the theory of externalities and questions about the right allocation of resources between different generations of people.

The problems of global socio-economic development in the context of possible environmental catastrophes dedicated research F. Osborne, E. Pestel and D. Forrester.

Later, the degradation of the environment, undermining the ecological foundations of social reproduction considered in his writings S. Bauman, Z. Bodryar E. Weizsäcker, J. Galbraith, S. Grof, G. Daly, W. Katton, B. Commoner, R. Londer, D. Meadows, Rostow, A. Toffler, T. Chardin, S. Schneider. A great contribution to the theory of interaction between society and nature belongs to Vernadsky, D. Hvizhnyi, K. Losev, Moiseev, PA Oldaku, M. Reimers et al.

However, despite considerable research remains not fully solved the problem of identifying the content and features of the environmental component of social reproduction in the

context of globalization, assessment of its impact on the reproductive process and its individual stages.

**The purpose of the article** is to develop theoretical foundations and practical approaches for the mechanisms of environmental taxes and insurance.

**The statement of basic materials.** The environmental management can be defined as the process and outcome of the initiative activity of economic entities aimed at consistent improvement in achieving their own environmental goals and objectives developed independently based on the individually adopted environmental policy.

A part of total production management system is implied under the system of environmental management that includes the necessary organizational structure, planning of activities, distribution of responsibilities, practical work and also procedures, processes and resources for developing, implementing, evaluating of the achieved results and improvement of environmental policy.

The formation of an environmental management system begins with the development, approval and the public declaration of environmental policy and goals by the enterprise. The environmental policy should include “continuous improvement” and “prevention of negative environmental impact” as fundamental principles.

In conditions of restructuring and the change of form of ownership, the use of market mechanisms of environmental regulation is especially important because existing in Ukraine models of organization and management of nature using do not provide the consistency of economic and environmental

goals across the country, and, accordingly, implementing of optimal ecologically safe management decisions. In this regard, there is need to develop an environmental management system as a more advanced model of environmental management of nature using in the conditions of market transformation [1, p. 5].

It should be noted that central place in this system belongs to the economic instruments for environmental management, which, unlike the administrative commanding allow the possibility of choice and directly affect the “expenses and benefits”.

Taking into account this, it is necessary for Ukraine to develop acting scenarios for the implementation of economic instruments of environmental management and their transformation with a wide application of international experience.

We believe that the use of such groups of economic instruments of market regulation makes the environmental management system more effective. It should be noted that some legal, organizational and legal conditions for its implementation have been created in Ukraine today on the way of development of environmental management.

The most effective and perspective economic instrument of environmental activities for the implementation in Ukraine is the charge for manufactured and imported environmentally dangerous products.

The product which pollutes the environment in one of the periods of its life cycle is taxable.

The taxation of environmentally hazardous products is introduced in

some countries, which has enabled to get significant targeted revenue to the budget and trust funds. [2]

This may include: a tax on petroleum products (gasoline, diesel, fuel oil), natural gas, coal, paint products, fertilizers and pesticides, synthetic washing agents, packaging materials, refrigerators, batteries, tires, ozone destroying and other products.

The indicated taxation is also known under the name “embedded-deposit system”. Its essence is that the funds from the tax (extra charges) for products are transferred to the special account mainly for the environmental funds. After this the received funds are partly returned to the customer after delivery of the waste products to a special reception center, such as batteries, tires, that subject to reuse (recycling) and partly spent on measures for collecting, receiving, processing.

Other financial scheme of expenses operates on taxation, for example, gasoline, paint products, washing powders. In this case, on their using, the direct environmental pollution is carried. Consequently, the obtained funds are directed to the prevention of pollution and elimination of its consequences. This is upgrading of refineries to produce not only unleaded, more environmentally friendly fuel, construction of sewage treatment plants and other events.

These payments for certain types of products are introduced in Germany, France, Norway, Sweden, Finland, Hungary, Latvia, Armenia.

The important criteria for the selection of the products which is subject to taxation as environmentally harmful are:

- “massive” nature of consumption;
- moderate, gradual scale of the damage inflicted to the environment.

It is important to pay attention that, using extra charge, you can stimulate the consumers to choose more environmentally-friendly products, replacing environmentally harmful from the market. Here, for example, you can include leaded or unleaded gasoline, detergents (with or without the addition), sodium tripolyphosphate (here in after – TPN). It is known that TPN cannot be caught even by the most modern cleaning plants. Getting into the river, TPN effects on the aquatic vegetation as fertilizer. Only 1 ton of TPN stimulates the growth of 5–10 kg sea weed. The release of powders with TPN is prohibited in the United States, Germany, Italy, Switzerland. Thus, the introduction of higher eco charge to leaded gasoline and powders will force the customers to choose cheaper and environmentally safer products.

The amount of money that can be collected through taxes imposed on environmentally harmful products, according to expert estimates, ten times exceeds the amount of funds received from pollution charges (for emissions, discharges of pollutants, waste disposal).

Using targeted environmental character of financing through funds, it is possible to invest the received funds in large-scale program of creation of recycling of hazardous kinds of products.

The development of such a mechanism may be started by the introduction of the relevant rules to the project of Tax Code and the Law of Ukraine “On Environmental Protection”.



The use of sea areas (waters) of Ukraine is not considered as the object natural and economic territorial system in the national legislation. As a result, there is a deterioration of the ecological state of marine resources, inefficient use of natural resources and loss of revenue of about 1 billion per year.

Such fees are introduced in specific foreign countries, such as Australia, Russia. The importance of the introduction of fees for the use of sea water area is connected to the fact that a significant part of the territorial waters of Ukraine is occupied by military bases, landfills, where the military training of the Russian Black Sea Fleet and Naval Forces of Ukraine is carried out. In addition to the caused losses as a result of the use of military means (torpedoes, mines and especially depth charges) on aquatics, leading to their death, recreational resources get dirty and lost, other damages are caused.

It is necessary to adopt a particular law for the implementation of such type of nature using.

Today in Ukraine in the procedure for calculating fees for water use such important factor as the withdrawal of water from a water body and its repeated return into the water is not taken into consideration, for example, at cooling at thermal power plants or withdrawal forever. The stimulus for nature users for rational and economical use of water resources get lost.

It is necessary to conduct a research and make changes to the current procedure of charging fees for special use of water resources, approved by the Cabinet of Ministers of Ukraine.

An important financial instrument for attracting investment in the envi-

ronmentally crisis sectors of economics and implementation of priority environmental measures is preferential taxation.

For example, Czech Republic and Slovakia exempt from taxes for 5 years the income that has been obtained by the enterprise on the implementation of solar, wind, hydroelectric energy. In Poland, the tax benefits are provided on using the wastes of the enterprise, on the investments for environmental protection in the agriculture. The voluntary contributions and the activities of environmental organizations are not taxed. The law of Russian Federation "On tax on income of enterprises and organizations" provides a significant benefit for those companies which make investments for environmental protection measures at the expense of their profit. The profit before taxation in this case is reduced in the amount of 30 % from such investments [3].

In Ukraine, the specific benefits have been provided recently on taxation in the area of the use of wastes of the enterprise. In particular, the income from the provision of services as for the collection and the provision of the certain types of waste as secondary raw materials are exempted from taxation.

But this is not enough, it is necessary to define and expand the list of specific environmental protection measures that require priority development. The establishing of benefits in taxation encourages capital inflows into this sector, which will help to create environmental business, the market of environmental services and activities.

Today, highly developed countries and the countries of transition econo-

mics are moving in the direction of the so-called “greening” of the tax system, while the environmental payments are increasing while reducing other taxes. The change in tax legislation is usually a difficult work, it needs stability in the economy and tax law, the validity and suspension. However, today it is necessary to lay these foundations in the tax law for the future.

The implementation of this principle in the tax system will encourage manufacturers to reduce the share of energy, resource input per unit of output. The reduction of energy and resource input per unit of production will allow to increase the cost of other items, including wages. In the conditions of the competition of production it is one of the main ways to increase (shares) the size of the employee’s salary.

Of course, the changes in tax legislation regulate the laws of Ukraine.

The review of standards of collection and pollution to approach them to the size of compensation of damage to the environment will increase the earnings of eco funds and stimulate the pollutants to take preventive environmental measures.

The necessary conditions on viewing the normative collection for pollution are:

- taking into account the economic condition of the enterprises in the industry;
- the amount of funds necessary to implement the objective environmental programs (water, waste, air);
- the possibility of assimilation of the environment.

Consequently, the restructuring of the economy and its development must be carried out taking into account the

economic assessment “of losses and benefits” from the activity of the sectors of economy (enterprises).

The marking of environmentally friendly and energy- and resource-saving products is quite important economic tool. Such marking is actually an advertising of the products by the state, guaranteeing its environmental and economic efficiency. In the conditions of increasing competition such marking will encourage the manufacturers to produce environmentally friendly, energy and resource saving products. The introduction of this economic instrument can be made through the Cabinet of Ministers of Ukraine.

The issue about the form of conducting of the environmental insurance is one of the most important. The highest efficiency of the insurance will be reached when insurance is obligatory. This is because together with the insurer and the insured, the third party of relations is the victim, whose objective interest is to get the rightful insurance compensation for the caused damage and the availability of the relevant treaties of environmental insurance of all economic objects may be the guarantee which are potential sources of risk of accidental pollution of the environment. This can be achieved only with the obligatory form of insurance.

The example of solving this problem can be provision by the entities in obtaining a license for activity related to the potential danger for the environment, the financial guarantees that possible damage to the third parties within the defined by the legislation amount will be refunded. The made up agreement of environmental insurance may be a financial guarantee.



The need for environmental insurance in Ukraine, despite the difficult financial situation of many enterprises-polluters, due to the constant increase in the load on the environment and the increasing number of accidents that result in pollution, deterioration of health of people and considerable material damage.

However, there is still no relevant institution, despite the presence of direct links to the necessity of its implementation in the following acts of environmental legislation.

The delays in the legislative regulation of insurance institution in the environmental area are mostly connected to the fact that environmental insurance is new for our country type of insurance which development is associated with a number of problems because of the objective conditions: the insufficient development of the legal framework of environmental insurance; lack of specific and sustainable concepts, defining the environmental insurance as a part of the economic and legal framework; imperfection, and in some cases, the lack of legal and methodical base for quantitative evaluation of environmental risks and related damage; lack of sufficient experience in environmental insurance both in our country and abroad.

**Conclusions.** The last element, however, requires a more in-depth analysis, because in the international and law context, at the level of separate state-legal systems the institute of environmental insurance have undergone some development. The consideration of the relevant experience will be useful in the process of creation and implementation of this institution in Ukraine. But as insurance is voluntary, and it has no relevant by-law acts which regulate the insurance process, this system does not work.

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