FORMATION OF THE SYSTEM OF FINANCIAL-INFORMATION SUPPORT OF ENVIRONMENTALLY-ORIENTED MANAGEMENT OF THE ENTERPRISE

Abstract. The relevance of the study is due to the need for changes in the methodology and organization of financial and information support for the activities of business entities taking into account modern socio-economic transformations.

It has been established that awareness of limited resources and the introduction of programs for their conservation, ensuring the harmonious development of mankind has an impact on the conduct of economic activity. In addition, the need for systematic research aimed at creating modern information support for an environmentally-oriented enterprise management system is maximally connected with the need for close cooperation with international financial organizations, among which are comparability and objectivity of indicators. This confirms the importance of reflecting the above trends in the accounting methodology — a system that generates information about the results of an enterprise.

The article substantiates that the formation of a modern system of financial and information support for business activities aimed at the conservation and rational use of natural resource potential at the micro level will minimize financial risks associated with environmental changes, and at the macro level it will help to achieve the goals of environmentally sustainable development and implementation of state programs environmental safety of Ukraine. The main global forms of non-financial reporting are analyzed, as well as the domestic Management Report for the publication of information on environmental aspects of economic activity. Given the recommendations of the International Federation of Accountants on the dissemination of the use of integrated reporting, considerable attention is focused on the study of the reflection in it of the environmental components of the enterprise. It was found that based on integrated reporting, not only climate change strategies are formed, but also information on how climate change affects the enterprise’s business strategy and its ability to create value. Thus, integrated reporting formalizes the process of building strategies. Building an enterprise management system based on long-term strategies will not only reduce climate risks, but also create better models for building business structures, increase the stability of capital markets and global financial stability.
It is proved that the development of modernization tools for the domestic financial accounting system, the introduction of environmentally oriented accounting systems will, in addition to increasing the quality of accounting and analytical information, achieve global sustainable development goals and ensure environmental safety, stimulate the subjects of the domestic economy to protect, reproduce and rational use of natural resources.

**Keywords:** financial information system, sustainable development, environmental safety, environmentally oriented management, non-financial reporting.

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ФОРМУВАННЯ СИСТЕМИ ФІНАНСОВО-ІНФОРМАЦІЙНОГО ЗАБЕЗПЕЧЕННЯ ЕКОЛОГІЧНО ОРІЄНТОВАНОГО УПРАВЛІННЯ ПІДПРИЄМСТВОМ

Анотація. Актуальність дослідження зумовлена необхідністю змін у методиці та організації фінансово-інформаційного забезпечення діяльності суб’єктів господарювання, зважаючи на сучасні соціально-економічні трансформації. Установлено, що усвідомлення обмеженості ресурсів і впровадження програм щодо їх збереження, забезпечення гармонійного розвитку людства чинять вплив на ведення господарської діяльності. Окрім цього, потреба в системних дослідженнях, спрямованих на створення сучасного інформаційного забезпечення екологічно орієнтованої системи управління підприємством, максимально пов’язана з необхідністю тісної співпраці з міжнародними фінансовими організаціями, серед вимог яких — порівняння та об’єктивність показників.

Обґрунтовано, що формування сучасної системи інформаційного забезпечення господарської діяльності, спрямованої на збереження та рациональне використання природничо-ресурсного потенціалу, на мікрорівні дозволить мінімізувати фінансові ризики, пов’язані з екологічними змінами, а на макрорівні — сприятий досягненню цілей екологічно сталого розвитку, реалізації державних програм екологічної безпеки України. Проаналізовано основні світові форми нефінансової звітності, а також відомий Звіт про управління на предмет оприлюднення інформації про екологічні аспекти господарської діяльності. Зважаючи на рекомендації Міжнародної федерації бухгалтерів щодо поширення використання інтегрованої звітності, значну увагу зосереджено на дослідженні відображень в ній екологічної компоненти діяльності суб’єкта господарювання. Установлено, що на
Система фінансово-інформаційного забезпечення, сталій розвиток, екологічна безпека, екологічно орієнтоване управління, нефінансова звітність.

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ФОРМИРОВАНИЕ СИСТЕМЫ ФИНАНСОВО-ИНФОРМАЦИОННОГО ОБЕСПЕЧЕНИЯ ЭКОЛОГИЧЕСКИ ОРИЕНТИРОВАННОГО УПРАВЛЕНИЯ ПРЕДПРИЯТИЕМ

Аннотация. Актуальность исследования обусловлена необходимостью изменений в методике и организации финансово-информационного обеспечения деятельности субъектов хозяйствования, учитывая современные социально-экономические трансформации. Установлено, что осознание ограниченности ресурсов и внедрение программ по их сохранению, обеспечение гармоничного развития человечества оказывают влияние на ведение хозяйственной деятельности. Обосновано, что формирование современной системы информационного обеспечения хозяйственной деятельности, направленной на сохранение и рациональное использование природно-ресурсного потенциала, на микроуровне позволит минимизировать финансовые риски, связанные с экологическими изменениями, а на макроуровне — способствовать достижению целей экологически устойчивого развития, реализации государственных программ экологической безопасности Украины.

Доказано, что разработка инструментов модернизации отечественной системы финансово-бухгалтерского учета, внедрения экологически ориентированных учетных систем позволит, помимо роста качества учетно-аналитической информации, достижение глобальных целей устойчивого развития и обеспечения экологической безопасности,
Introduction. The greatest concern of the world community is the inevitable change in climatic conditions, their negative threatening impact on the continued existence of mankind. The importance of this issue is confirmed by the adoption of the Paris Agreement within the framework of the UN Framework Convention on Climate Change at the end of 2015, aimed at reducing the rate of global warming, which stipulates that all states undertake obligations to reduce harmful emissions into the atmosphere, regardless of their degree of economic development. Worldwide trends in socio-economic development, orientation towards solving a complex of issues of harmonious and balanced development of the whole earthly civilization has a direct and indirect effect on the financial and information support of the economic activity of enterprises.

Moreover, the International Federation of Accountants has identified the following tasks in combating climate change and its consequences, which are relevant to the profession of an accountant and should be reflected in the methodology and organization of accounting:

1) increase resistance and ability to adapt to dangerous climatic events and natural disasters in all countries;
2) integrate climate change responses into national policies, strategies and plans;
3) contribute to the growth of education and ensure the ability of individuals and institutions to alleviate the severity and weaken the effects of climate change, adaptation and early warning of such changes [1, p. 23].

Analysis of research and problem statement. The work of many domestic and foreign scientists and practitioners is devoted to the study of methodological and practical issues on improving the financial and information support of enterprises to ensure environmentally sustainable development.

In particular, theoretical and practical approaches to the decomposition of integrated corporate reporting in terms of solving the problem of maintaining environmentally sustainable development were studied in the works of N. Lokhanova, V. Maksimova, [1] S. Levytska, L. Akimova [2]. A theoretical generalization of the role of business social responsibility to society and the main aspects of the practical organization of accounting and analysis as components of information support for the enterprise are given in the work of M. Pushkar and L. Golinach [3]. Scientists claim that social responsibility for sustainable development, which leads to a harmonious relationship between the business and the natural environment, is in the plane of the professional management of the enterprise. In turn, it is impossible to manage the process of social responsibility without an effective accounting and analytical (information) system. In order to objectively reflect information on the results of activities of business entities in the context of achieving sustainable development goals, attention is being paid to ensuring the quality of financial statements. In the works of T. Plakhtiy, O. Osadcha, the prospects of applying a qualitative approach to the development of the theory and methodology of accounting are formulated [4; 5].

When creating a system of financial and information support for economic activities aimed at achieving the goals of environmentally sustainable development, it is important to take into account the achievements of foreign researchers to comprehensively disclose the impact of globalization on accounting and analytical tools in developing countries (T. Hopper, Ph. Lassou, T. Soobaroyen), the role of accounting and scientists researching in this field to achieve the sustainable development goals declared by the UN (J. Bebbington, J. Unerman) [6; 7]. Focusing attention in the study on the need to create an information support system aimed at rational nature management (which is of particular importance for Ukrainian society), the methodology for constructing an ecologically oriented accounting and analytical system, i.e. environmental management accounting
The results of the research. In Western Europe, economic losses from inefficient management of environmental aspects, according to various estimates, reach 3—5% of GDP. Therefore, a systematic approach in environmentally oriented management, i.e. internally motivated initiative activities of business entities aimed at achieving their environmental goals and objectives can be considered a promising way to solve the environmental problems of industrial enterprises [10].

International Standard ISO 14001: 2015 «Environmental Management Systems. Requirements and Application Guidelines» determine the importance of the formation and proper storage of documented information about the environmental management system, which is largely generated by the accounting system.

A significant amount of foreign scientific research and practical work is devoted to the creation of an environmentally oriented accounting and analytical system, i.e. a system for identifying, collecting, summarizing and analyzing two types of information to provide internal management decisions: in physical terms for the consumption of electricity, water and gas, other natural resources and raw materials for the production of products, as well as in monetary units for expenses and revenues related to the environment.

In 2018, the Law of Ukraine «On the National Security of Ukraine» was adopted, which determines that the fundamental national interests of Ukraine are the sustainable development of the national economy, civil society and the state to ensure the growth of the level and quality of life of the population, and state policy in the field of national security is aimed at ensuring, including economic, information and environmental security of Ukraine. This, in turn, confirms the causal link between achieving the goals of environmentally sustainable development and ensuring national security.

Therefore, the formation of a modern system of financial and information support for economic activities aimed at preserving and rational use of natural resource potential at the micro level will minimize financial risks associated with environmental changes at the macro level; it will help achieve the goals of environmentally sustainable development, implementation of state environmental safety programs of Ukraine.

Under certain conditions, professional accounting is directly associated with the environmental component. For example, audit companies confirm the validity and effectiveness of the costs incurred in the implementation of environmental projects, government environmental programs. On the other hand, the accountant can provide valuable professional advice, take into account the opportunities and risks of the enterprise, ensure the sustainability of economic activity in the face of changing climatic conditions and the implementation of environmental measures. The skills of a modern accountant include the ability to objectively and fully cover the results of activities, ensuring the accumulation of resources for the implementation of measures to protect the environment, the introduction of environmental innovations. Moreover, both in scientific circles and in the business environment, there is no doubt about the relevance of developing new reporting forms, for example, the Profit and Loss Statement of environmental activities, integrated reporting, non-financial reporting of sustainable development, which would provide stakeholders with information about the company’s contribution to combating negative environmental changes.

Now extremely widespread worldwide is non-financial reporting, which provides for the disclosure of information on the economic, managerial, social and environmental aspects of economic activity. Although such reporting forms are not standardized, enterprises in the process of its formation use recommendations developed by well-known international organizations: United Nations Global Compact, Global Reporting Initiative, Climate Disclosure Standards Board, Global Initiative for Sustainability Ratings, International Integrated Reporting Council.

Ukraine, as part of the European integration course, also monitors global trends regarding the publication of information on the activities of business entities, as evidenced by the adoption of amendments to the Law of Ukraine «On Accounting and Financial Reporting». Thus, already at the
end of 2018, large and medium-sized enterprises have an obligation to submit a Management Report, in addition to the usual forms of financial reporting. According to the Guidelines for the preparation of the Management Report, it covers the following environmental aspects of the enterprise: information on the impact of the enterprise on the environment, depending on the industry in which the enterprise operates, and on measures to protect the environment and mitigate the impact of the enterprise on the environment. In this direction, the indicators described characterize rational use of water; waste management; greenhouse gas emissions; energy consumption etc. [11].

It should be noted that the above list of directions for disclosing information on the environmental aspects of the enterprise in the Management Report is not exhaustive; therefore, the company may also disclose other information, if it considers it appropriate.

We are convinced that when building domestic forms of non-financial reporting, disclosing indicators on the environmental components of activity, we should focus on the best world standards, one of which is integrated reporting, which is developed by the International Integrated Reporting Council.

Despite the existence of many approaches to the forming of reports containing non-financial indicators, even the International Federation of Accountants recommended the use of integrated reporting in January 2017. In their document «Enhancing Organizational Reporting: Key Aspects of Integrated Reporting» («Enhancing Organizational Reporting: Integrated Reporting Key»), they emphasized that integrated reporting is a way of achieving a more coherent corporate reporting system through a transparent algorithm for preparing individual reports. Integrated reporting, according to experts of the International Federation of Accountants, allows displaying the full picture of the organization and creating long-term business value. The International Federation of Accountants supports all the initiatives of the Council for International Integrated Reporting and the proposed conceptual framework for integrated reporting. Experts are convinced that integrated reporting can serve as an «umbrella» for large enterprises, protecting against possible risks and combining financial and non-financial information. Its use provides transparency of the activities of any business entity [12].

The integrated report provides a wide range of stakeholders who are its users with an idea of the relationship of financial and non-financial results of the enterprise for the reporting period through the prism of the existing business model and its strategy, as well as provides information on development plans and goals for the future.

At its core, integrated reporting is a management tool that allows you to collect, monitor and provide stakeholders with information on how effective the enterprise is, including the social, economic and environmental aspects. Evaluation of these parameters in value terms gives a more complete picture of the activities of the market entity.

The developers of integrated reporting claim the formation of inevitable processes that will replace the profession of an accountant in the near future, namely, a turn to system design in the market, which they called «moving from Luca Pacioli to King» [13]. Of course, the accounting profession is based on judgments and opinions, but they cannot be more accurate than the information and context on which they rely. Therefore, it is important to attract a wider range of information and analyze it more deeply and comprehensively, which cannot be realized only on the basis of financial data.

Financial capital, which primarily focuses on past facts and the short-term perspective, has been reduced to absolute for a long time, so the previous approaches to managing and developing a system of managerial decisions were imperfect, because they were based on limited information about financial performance. The fundamentals of the accounting profession have also been developed as part of the narrow competencies of financial transactions. In addition, a financially-oriented reporting system is not able to fully display information on the results of activities of a business entity.

World practice indicates that investors need information at two main levels. The first level is strategic, where integrated reporting is the source of information for decision-making. In the context
of environmentally-friendly management, based on integrated reporting, not only a strategy for combating climate change is formed, but also information on how climate change affects the business strategy and its ability to create value. Thus, integrated reporting formalizes the process of building strategies. Building an enterprise management system based on long-term strategies will not only reduce climate risks, but also create better models for building business structures, increase the stability of capital markets and global financial stability.

The second level of information needed by investors includes detailed data, which are formed in the relationship between the structure of the enterprise and reporting standards [15; 16; 25—27]. It can be argued that the financial statements in its classic form are isolated from management decisions regarding risks and the business model. The requirements of the modern socio-economic environment pose a different task for the business, namely the preparation of new reports, which will be considered as a system, and not as separate components, as a catalyst for the successful consideration of external risk factors. Such reporting should become an integral element of the capital market and the latest global economic system [17—21].

In order to ensure high-quality disclosure of information on financial risks associated with the climate, business entities, in 2016, the International Climate Integrated Reporting Task Force established the Climate Financial Information Disclosure Panel when providing information to investors, creditors, policyholders, and other interested parties [22—24].

The climate finance disclosure task force is chaired by an American businessman and politician, Michael Bloomberg, who describes the benefits of integrated reporting as follows: «Increasing transparency makes markets more efficient and economies more stable and sustainable» [14].

In June 2017, this group developed Recommendations of the Task Force on Climate-related Financial Disclosures, which are structured into four main elements of the activity of any enterprise: management, strategy, risk management, indicators and goals (Fig.).

![Fig. Key areas of climate-related financial disclosure](source:形成的basisof14).

These key elements are interpreted as follows: management is the governing of a business entity related to risk prevention and identifying climate-related opportunities; the strategy should take into account the current and potential impact of climate threats and opportunities on the economic activities of the enterprise, its development strategy, financial planning; risk management embraces the processes that are used by an enterprise to identify, assess and manage climate-related risks; indicators are used to assess climate risks, and goals are set to minimize their negative impact.

**Conclusions.** In order to make informed financial decisions, investors, lenders, and management must understand how climate risks and opportunities can affect the future financial situation of an enterprise and be reflected in its financial statements. It should be borne in mind that although climate change affects almost all sectors of the economy, the magnitude of this impact and
its nature will be differentiated depending on the industry, geographical location and ownership of the enterprise. Therefore, an important applied problem in the field of economics and environmental management is the formation of a modern system of financial and information support for the economic decision-making process of enterprises regarding the use of natural capital to achieve sustainable development goals and ensure environmental safety of Ukraine.

The need for systematic research aimed at creating modern financial and information support for an environmentally-oriented enterprise management system, ensuring transparency of information, which is reflected in the enterprise reporting, is maximally connected with the need for close cooperation with international financial organizations, among which are comparability and objectivity of indicators (as financial, and non-financial). The development of modernization tools for the domestic accounting system, the introduction of environmentally oriented accounting systems will allow, in addition to increasing the quality of accounting and analytical information, achieving global sustainable development goals and ensuring environmental safety, stimulating micro and macro levels of the domestic economy to protect, reproducing and rational use of natural resources.

Література
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