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Inna Povorozniuk
Associate Professor of the Department of Technology and Organization of Tourism and Hotel and Restaurant Business
Pavlo Tychyna Uman State Pedagogical University

Liudmyla Neshchadym
Associate Professor of the Department of Technology and Organization of Tourism and Hotel and Restaurant Business
Pavlo Tychyna Uman State Pedagogical University

ECONOMIC AND SOCIAL DEVELOPMENT OF HOSPITALITY INDUSTRY ENTERPRISES IN THE REGION: GLOBALIZATION CHALLENGES AND ECOTRENDS

Summary

The socio-economic development of regions has always been and will be distinguished from the whole set of state interests as an actual and priority direction, since each region, being part of a single state, contributes to its history, internal political, economic, cultural life, and the achievement of certain results in the international arena. And the organization of economic activity of the regions in the form of interaction of the productive forces of their territories is a single economic complex of the country. It is the activation of economic life in the regions that determines the trends of economic growth throughout the country.

Today, the hospitality industry is an integral part of the tourism industry in Ukraine. Hospitality is the most dynamic branch of the Ukrainian economy. Features of the hotel sector in tourism are transport, retail, gastronomy, insurance, culture and art, architecture and design, excursions, service, advertising industry. The active development of this sphere will create new, additional jobs, budget revenues to create a positive tourist landscape for certain regions of the country and in general, which represents the future development of hotel and restaurant business in Ukraine, but there are problems that make Ukrainian hospitality industry enterprises uncompetitive compared to Western ones. Hotel business in Ukraine is unstable and with significant risk. There was a need for modification and improvement, requiring quick reaction and hospitality, including additional resources.

The region is an integral part of not only the administrative-territorial structure, but also the entire economic system of the country. The region, being an agglomeration of productive forces, the nature of which is determined by natural-geographical, socio-economic, demographic and other features, acts as the central link in economic development throughout the state. Developing,

reviving after a depression, overcoming crises, war and progressively functioning, each individual region contributes to the development of the economy of the whole country. Therefore, the problems of sustainability of regional development do not cease to be relevant today, when deep transformations of the economy make it the most vulnerable and sensitive to the influence of various factors.

World experience shows that the state is stable and viable only in cases where its subjects (administrative-territorial institutions) are politically stable, economically and socially vital. Thus, it is obvious that the study of the problems associated with the development of concepts of socio-economic development of the regions, namely the impact of the Eco trends of the hospitality industry, will be aimed at optimizing the use of available resources, choosing the main priorities in the development of each of the regions of Ukraine and will become the most relevant at present.

Chapter 1. The principles of the "green recovery" of the economy

The latest globalization challenges and confrontations, which have a hybrid character and exponential growth of threats to the national and ecological economic security of Ukraine due to Russian military aggression, have radically changed the life of every Ukrainian and caused serious damage to the domestic economy, slowed down the economic activity of business. As a result – forced migration of the population, large-scale deindustrialization, destruction of physical capital, transformation of business models and loss of economic progress of the country, significant degradation of the environment, excessive pollution of surface and groundwater, air and land. According to the Ministry of Economy, gross domestic product (GDP) our state in 2022 decreased by 30.4%, which is the largest fall in the recent history of Ukraine [1].

The total amount of economic losses from the war at the end of 2022 amounted to $ 700 billion and significantly exceeded the country's GDP [1]. The number of people in Ukraine living below the poverty line has increased more than 10 times since the beginning of the full-scale war (from 2.0% to more than 25.0%). With the current dynamics, by the end of 2023, the number of Ukrainians living below the poverty line may increase to 55%. Damage and damage caused to land and water resources, environment and atmospheric air, according to the State Environmental Inspectorate of Ukraine reached about 1.7 trillion hryvnias [2].

This, of course, is a big problem of deepening economic, social and environmental crises. Therefore, for the time being, a comprehensive solution to the problems of preserving and restoring the natural, physical and human capital, stimulating economic activity of business in order to ensure sustainable economic development and the future of our state in the post-war period,

aligned with the 2030 Agenda for Sustainable Development and the Paris Climate Agreement, as well as the development and creation of methods for promoting and implementing environmentally safe types of products and services, namely, eco-innovations.

The need to live in a well-being, healthy environment, having fresh air, clean water, quality food and stable climate, actualizes the development of effective strategies for post-war reconstruction and economic development of Ukraine innovative principles. Its basis should be the concept of greening the social production, resilience of socio-economic systems and "better Build Back Better, focused on a "green" recovery from compliance with the principles of fair, inclusive and transparent implementation regeneration actions according to the existing plan [3].

The principles of the "green recovery" of the economy are:

– the priority of "green recovery" for the health, safety and well-being of Ukrainians;

– Strengthening the autonomy and resilience of Ukraine through the energy transition;

– taking into account environmental and climatic factors in all decisions;

– visionary investments in sustainable infrastructure and the best technologies, in particular in nature-oriented solutions;

– promote effective coordination of local and international stakeholders' parties. Local governments and communities play a major role under decision-making time;

– ensuring the principles of transparency, inclusiveness, joint adoption

– decisions and accountability for post-war reconstruction;

– dissemination of sustainable development values, skills and practices among the population of Ukraine [4].

Of course, the development of the economy in the global dimension is influenced by various trends, in particular, transnationalization, regionalization, institutionalization, digitalization, intellectualization, innovation, technologization, inclusiveness, greening of the economy. But today, the development of Eco trends is of particular importance in modern conditions. If we analysed the countries that have had positive changes in digitalization and informatization of the economy, the first positions in this indicator are China, Kuwait, the United Arab Emirates, Croatia, Norway, Brunei, Iran and Luxembourg. The last positions on this list are taken by Burundi, Madagascar, Niger, Rwanda, Malawi, Haiti, Guinea-Bissau, Uganda and Togo [5].

According to scientists Stukalo N. and Simakhova A., scientific and technological progress, the development of industry 4.0 and 5.0, the creation of smart enterprises and cities, digital transformations affect the connection between technology and the economy, resulting in a social division of labor,

the development of productive forces, increased productivity, specialization, cooperation and international cooperation. Of course, this affects the socialization of the economy. Socialization of scientific and technical activity together with socialization of productive forces provide interaction between the worker and means of work, including artificial intelligence [6].

The main goal to which scientific and technological progress seeks is the creation of such a new technology that will save energy, labour, raw materials, and therefore financial resources. The use of innovative technologies allows the region to significantly get ahead in socio-economic development. In modern conditions, such new directions of scientific and technological progress as complex mechanization, automation, informatization, active innovation activity, etc. have a particularly favourable impact on regional development. The active use of innovative technologies allows the region to significantly get ahead in socio-economic development.

It should also be noted that the influence of the agglomeration factor also contributes to an increase in the scale of production, concentration of labour resources, enterprises and non-production facilities. Such a concentration of forces contributes to the emergence of new types of production, an increase in individual labour productivity, etc. Among all the factors, there are also factors that negatively affect the development of the region. One of the most significant factors that have a negative impact is the presence of a shadow economy in the region. The actions of corrupt officials, the presence of crime reduce the region's revenues, which come in the form of taxes and fees, which in turn negatively affects the regional budget.

Another factor is the deterioration of production assets, which occurs as a result of transitional processes in the economy, which entails additional costs for the restoration and modernization of production.

If in domestic economic theory traditionally distinguish the following main groups of factors that affect the development of the region: natural, demographic, economic and geographical, economic, then in foreign literature there are two large groups of factors – these are "hard" and "soft." Under the "hard" factors understand the factors that are measured quantitatively. Factors include this type:

a) oriented production resources (land, labour, capital);

b) oriented production and sales of products (proximity of cooperation partners, infrastructure, population structure and consumption);

c) established by the state (taxes, economic system and support programs).

Soft factors are those that are quantitatively very difficult to measure, namely:

− stability of the political situation;

− stability of the social climate;

− qualification of employed for hire;

− regional structure of the economy and individual enterprises;

− quality of education and training;

− equipping the region with institutions of higher education, technological centres, research organizations. Of course, these factors that affect the socio-economic development of the region are not limited, but can have a number of many more factors that have the appropriate specifics for the region and the corresponding situations of today.

The external environment of the region of direct influence includes relationships with partners: external suppliers of goods and services; external consumers; competitor regions; financial institutions; transport enterprises.

The environment of indirect impact on the region may include the following groups of factors: general economic; general political; scientific and technical; natural and ecological; demographic.

Based on the analysis of factors affecting the socio-economic development of the region, it is possible to group them into five main groups: natural resources, population, enterprises, innovations and investments Figure 1.

Any region cannot have an advantage in all factors. Each region has its own set of advantages, which makes it both economically and socially developed. In order to maintain and increase the level of socio-economic development of the region, it is necessary to constantly improve the group of factors that affect this development. Thus, regional development is influenced by a particular set of factors. As a rule, it is the factors of regional development that are used to explain, predict and assess the socio-economic situation in the region.

One of the influential groups of factors that directly affect the socio-economic development of the region is the introduction of Eco trends in the hospitality industry. After all, today it is the most demanded direction of development of enterprises of the hospitality industry, and the introduction of environmental «green» innovations in accommodation and catering establishments contributes to increasing their competitiveness in the tourism market and demonstrates the existence of a socially responsible economic and production policy as a component of the hotel or restaurant brand, which for the modern generation is an important factor in the formation of consumer choice. Because the greening of production activities in the hospitality sector will not only improve the quality of life of the population, effective integration into the local regional ecosystem, but also serves as a source of competitive advantages of hotel and restaurant enterprises, which is extremely relevant in modern conditions of instability.

The sphere of influence of eco-innovations on the development of the economy and society significantly expanded somewhere since the mid-2000s – starting from the introduction a narrow range of simple technical solutions at the final stages of production products within industrial ecology to more complex systemic tasks to raise resource and energy efficiency of production

and consumption from considering the entire product life cycle (including used materials) and services, creating new business models and organizational structures, in accordance with changes in the nature of work and lifestyle of people [7; 8]. Accordingly, there was a regulation and expanded the range of studies to clarify their content and classifications from the standpoint of greening the economy.

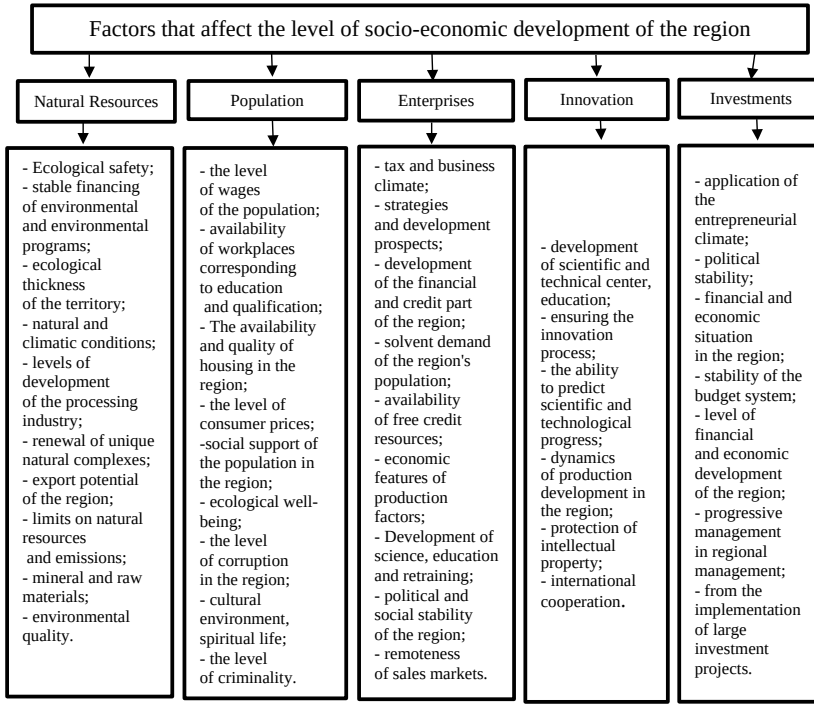

Figure 1. Analysis of factors affecting the socio-economic development of the region

Source: [3; 5; 10]

The importance of eco-innovation stems from the European Commission's Strategy for Europe 2020, which sets out three main objectives:

– intelligent development (in the process of development, the economy should be based on knowledge and innovation);

– Sustainable development (development of the economy based on increasing the efficiency of the use of resources, the development of competition and friendly to the environment);

– comprehensive development (development of an economy that will ensure social and territorial unity, based on a low level of unemployment).

Today, there is no single generalizing definition of the term «eco-innovation». Now this term is understood quite widely and it has different content.

Table 1

Definition of «eco-innovation» by Ukrainian scientists

Author	Definition of "eco-innovation"
Prokopenko O.V.	Changes in the socio-economic development of the economic system, which along with the positive socio-economic effect improve the environment or significantly reduce the negative impact on it [3].
Savchuk O.Y, Yavorska N.P.	Production, assimilation or operation of a product, production process, maintenance, management or business method that is new to the enterprise, and as a result, throughout its life cycle, environmental risk, pollution and other negative consequences of resource use are reduced, compared with the corresponding alternatives [4$ 7].
Andreeva N.N., Martyniuk E.M.	The final result of the activity on the creation and use of environmentally oriented innovations implemented in the form of improved or new environmental products, technologies for their production, which contribute to the development and improvement of the socio-economic efficiency of the functioning of enterprises, ensuring resource-ecological safety and environmental protection [4].
Lapko O.	The result of creative activity aimed at developing, creating and introducing innovations in the form of new products, technology, method, form of organization of production, which directly or indirectly contributes to reducing the Eco destructive impact of production and consumption on the environment and solving environmental problems [6].

Source: [2; 8; 12]

At the same time, analysing the opinions of scientists, it can be argued that most of these definitions relate to the macro level (state), and less meso- (industry) and macro level (enterprise). A thorough study of the classification of eco-innovations was conducted by scientists in studies [6; 8]. Many foreign scientists also gave thorough research on eco-innovations (Table 2).

Organization for Economic Cooperation and Development (OECD) Europe defines eco-innovation "as the creation or introduction of new or significantly improved products (goods and services), processes, methods marketing, organizational structures and institutional arrangements that – with intention or without it – lead to environmental improvement compared to the corresponding alternatives [11].

Table 2

Definition of «eco-innovation» by foreign scientists

Author	Definition
P. James	These are new products and services that provide the consumer and business with income, while significantly reducing the impact on the environment [7].
A. Reid, M. Medzinski	Creation of new and competitively valued goods, services, processes, systems and procedures designed to meet human needs and ensure a better quality of life for everyone, which is achieved together with a minimum use of natural resources (raw materials and materials, energy and surface area) per unit of output and minimum emissions of toxic substances [3].
R. Kemp, P. Person	Creation of new competitive types of products, services, processes, systems and procedures to meet human needs and ensure a better quality of life while minimizing the consumption of resources per unit of products or services, as well as minimizing emissions to the environment throughout their life cycle compared to existing alternatives [8].
The main thing statistical management the Republic of Poland	New or significantly improved product (product or service), process, organizational or marketing methods that bring environmental benefits compared to existing alternatives [9].
M. Carly, P. Spapence	The planned development of the enterprise, including the stage of product development and integrated management throughout its life cycle (taking into account environmental problems), contributes to the environmental modernization of industrial society [7].
E. Jones, D. Harrison	Create new products and processes that provide consumer and business values and also reduce the impact on the environment [10].
M. O'Brien, M. Medzinski	The introduction of any new or significantly improved product (product or service), process, organizational or marketing solutions that reduce the consumption of natural resources (including the consumption of materials, energy, water and land) and reduce emissions of harmful substances throughout the life cycle [4].
M. Andersen	Innovations that generate «green» economic rents create value for consumers, gradually reducing the impact on the environment [6].

Source: [6; 8; 14]

The European Commission formulates eco-innovation as any form of innovation that aims or results in significant and demonstrable progress towards achieving sustainable development goals by reducing environmental impact, increasing sustainability or achieving more efficient and responsible use of natural resources [11].

The United Nations Environment Programme (UNEP) defines eco-innovations from the standpoint business, namely: «is the development and

application of a business model formed a new business strategy that incorporates sustainability into all business transactions that based on life cycle thinking and collaboration with partners value chain» [12].

With certain approaches, eco-innovations serve as a means of ensuring efficient use of natural resources, reduction of ecological environmental load and lever for use of additional sources value creation, business competitiveness enhancement, expansion productive employment. They provide win-win solutions for improving economic competitiveness and business sustainability, since they begin at the level of strategy of business entities and exert influence beyond their limits in the supply chain and the formation of added value.

Eco-innovations lead to complex solutions aimed at reducing expenditure of resources and energy, while improving the quality of products and services. However, in terms of load characteristics, they can to change quite significantly.

This is best reflected in the expected results impact of eco-innovations on the economy, natural environment, society and stages of value addition in global value chains. The specificity of eco-innovations highlights the modernization of the model of economic development, the development of new forms of management, the evolution of business [14].

Attracting eco-innovations increases the level of greening of business, which carries one of the main goals of the concept of sustainable development. Achieving mass implementation of environmentally oriented innovations requires real sources of funding [10] and legislative support from the state. The concept of sustainable (sustainable) tourism development of UN-WTO (UNWTO), the Global Code of Ethics for Tourism, the Charter of Tourism, as well as the recommendations of international tourism conventions and declarations assume careful and reasonable tourist nature management, as well as the preservation and increase of tourism resources.

In 2015, the UN declared that sustainable development is a strategic course for every state. This course was supported by 192 countries, including Ukraine. For Ukraine, sustainable development involves economic and social changes aimed at economic growth and one of its directions is the greening of all spheres of human economic activity. Today in Ukraine, entrepreneurs are responsible for the country's resources and are ready to invest in the modernization of production, and therefore in the future of Ukraine as a state, realizing the consequences of global changes and ready to adapt to them, but with the support of the state [14].

At the same time, to understand the essence of the effective design of the relationship between the state and business, we have ways out of the following fundamental principles, Firstly, that the main task of the state is to solve existing problems and prevent potential threats to citizens by ensuring a balance of interests of different parts of society, secondly, that the government is a body

that forms state policy – the main content of the state's activities to solve problems and prevent threats. The activities of the state should be periodically evaluated for effectiveness. This means that the government should work to achieve specific, measurable goals, and the Verkhovna Rada of Ukraine should periodically measure the effectiveness of the government.

In Ukraine, there is an increase in environmental threats, while threats are systemic in nature and should be considered primarily as a threat to national security in the environmental sphere. In accordance with Art. 50 of the Law of Ukraine "On Environmental Protection" of June 25, 1991, environmental safety is a state of the environment in which the prevention of environmental degradation is ensured and the prevention of danger to human health is ensured. The State Environmental Policy in the field of environmental protection (protection), the component of which is environmental safety, should be aimed at promoting sustainable development, namely: the inclusion of environmental protection issues in policies in other areas, in particular in the fields of industry, energy, transport, regional development and agriculture; increasing the level of food safety for consumers and simplifying their trade through reforms and modernization of the sanitary and phyto-sanitary sphere; efficient use of renewable sources, etc.

Program of activity of the Cabinet of Ministers of Ukraine, approved by the Verkhovna Rada

The 9th convocation on October 4, 2019 provides for the priority goals that the Government sets for itself with the aim so that Ukrainians live longer, safer, richer and happier – «a Ukrainian lives in a favourable and clean environment», «Ukrainians suffer less from waste accumulation, performance indicators», «Ukrainians preserve natural ecosystems for posterity», «Ukrainians use natural resources more efficiently and economically», «Ukrainian is aware of the consequences of global climate change, takes measures to prevent them, but is ready to adapt to them».

In order to fulfil the stated goals, it was, is and remains the development (preparation) of draft laws that will contain the principles and mechanisms for implementing the goals declared by the government and correspond with the environmental policy in the country until 2030. Ukraine joined the Global Development Agenda until 2030. and in 2017 adopted national SDGs (Sustainable Development Goals), which are the basis for coordinating actions aimed at economic growth, social justice and rational nature management. These tasks were taken into account in 126 strategic documents, including 39 action plans, but progress in achieving the SDGs has slowed down.

Many SDG indicators defined for the period up to 2020 have not been achieved. Many key indicators of the SDGs have deteriorated, including the national poverty level, which in previous years had an encouraging decline, but in 2020 increased from 41.3 to 47.2%. Economic indicators and investment

levels, which are incredibly important for achieving sustainable development goals, have also declined significantly. The effectiveness of the transition to sustainable development is determined on the basis of economic, social, environmental and managerial criteria that the respective spheres are evaluated and the Efficiency Index values are generated

Transition to Sustainable Development (IEP). According to the General Directorate the European Commission for Research and Innovation in 2021 Ukraine with EU member states and 45 other countries (76% of the world's population) ranked 64th efficiency of transition to sustainable development [15]. Given the above, in the context of a promising vision of the post-war innovative development of Ukraine the role of the leading driver of change is seen for effective eco-innovation policy driven by European Ukraine's choice and support by the Government of Ukraine of the European Green the course in accordance with the declared tasks for achieving national Goals sustainable development until 2030 [13]. At one of the priorities is to increase development efficiency and introduction of environmental innovations of domestic business entities and approaching countries that are leaders among EU countries in terms of efficiency eco-innovations. According to the statistics of the State Statistics of Ukraine, we can analyse the indicators of the introduction of technological processes that are associated with eco-innovations in Ukraine.

Analysing the tendency to involve new technological processes in production, we can observe a small number of technological processes that meet the goals of sustainable development. On average, only 1/3 of new technologies introduced into production have been improved and take into account methods of preserving the environment: they are low-waste and resource-saving. Sources of investment resources for eco-innovations can be divided into own financing (equity of the enterprise), state financing and financing from non-resident investors. Most often, the volume of financing in eco-innovation occurs on the part of business.

The low level of support for green business leads to a slow pace of attracting eco-innovations. Only when the enterprise decides to switch to the level of greening of the technical process, only then the type of eco-innovation is chosen. The lack of incentives and foundations for the functioning of eco-innovations delays the implementation of sustainable development.

Therefore, it is necessary to actively change the principles of work in the field of innovative business. Possible reasons for such a low trend are that the impact of entrepreneurial activity on the environment is analysed relatively recently. Often, environmental priorities in entrepreneurship are not of paramount importance. This is because from an economic point of view, environmentally-oriented projects should be financially feasible and economically sustainable. Moreover, in order to mobilize funding for such

projects from the private sector, the project must provide attractive profitability taking into account risks. Economically sustainable eco-oriented projects provide for the creation of jobs and help increase the country's GDP. When making public investments, the economic sustainability of eco-innovation projects is a key element in the process of conducting a comprehensive audit of public investment.

In order to make private investments, the prospects of the project for the implementation of eco-innovations in terms of financing should be determined, that is, the project provides investors with attractive profitability taking into account risk. In particular, it is important to ensure that the magnitude of risk-based profitability is competitive with that of traditional infrastructure, even if policy provisions and prices do not fully reflect the benefits associated with a higher level of sustainability [16].

Some eco-innovation projects are not able to provide the expected rate of return of 10-15%, since investors do not want or cannot pay a fee sufficient to fully cover the amount of costs, taking into account the income for investments. At the same time, attracting green investments from outside in many cases will lead to an alternative organization of production, because the organization and implementation of eco-innovations is a rather costly component of the organization of production.

Promoting green business will effectively balance entrepreneurial activity. Achieving the greening of small and medium-sized businesses will accelerate the preservation of the environment and minimize the use of natural resources [11]. In the stages of the life cycle of projects for the implementation of eco-innovations, it is necessary to single out a separate point of study of the residual moment in order to understand whether or not the implemented eco-innovations will have a short-term benign effect. According to the concept of sustainable development, efficiency should be achieved not only for us and our children, but also for future generations.

Thus, the efficiency of attracting green investments in eco-innovation implies long-term benefits, increased risk and availability of profitability. According to the survey of the Razumkov Ukrainian Centre for Economic and Political Research [9] among different levels of business, on investment in green projects, the reasons for the low desire to invest in the development of eco-innovations were identified.

It was found that the main reasons for not wanting to attract investment in green projects by entrepreneurship are the lack of incentive to attract green investments – 52.5% and the inflated cost of green investments – 51.3%. It is also established that the lack of legislative regulation by the state makes it impossible to specifically identify the types of business that are part of the green pool in terms of entrepreneurial image. The absence of such a classification does not allow investors to be sure that the investments directed will be used in

the life cycle of the production of eco-innovations and green technologies. The evolution of the green investment market is slow, so this is another reason for the refusal to raise capital. The risk of a refund and a long-term payback period also deters businesses from attracting green investments to switch to environmentally friendly technologies [11].

Chapter 2. Economic and social development of hospitality industry enterprises

The trend towards green investment includes effective management and control of the state at all levels of business, subject to support by the legal framework, therefore, to implement it, an important point is society's awareness of this type of responsible investment. The mechanisms for stimulating investment support for the spread of eco-innovations are to develop standards for financial support for green initiatives, in particular, information support for the effectiveness of green projects. On the basis of world experience and research of theoretical and practical aspects of regulation of attraction of investments in eco-innovations, it is determined that presentation by economic entities of timely and open reporting enables investors to more actively participate in the support and implementation of green projects. The introduction of a national standard on this issue is the basis of the mechanism for regulating eco-investments. But in turn, it is necessary to optimally combine regulations with economic means and methods of control.

Scientists Shkarupa O.V. Ignatchenko A.S., Vlasenko K.A. grouped elements of the mechanism for regulating eco-investments [14]:

– implementation of normative legal acts, summarizing the main provisions of scaling eco-innovations (state monitoring and control of compliance with legislation);

– development of the system of standards in the field of application of financial instruments to attract green investments, investments in eco-innovations;

– motivate and disseminate the practice of developing economically sustainable green projects;

– create conditions for providing a business project with the necessary funding for the entire life cycle;

– create a mechanism for regulating investment activities while scaling eco-innovations.

In the broader context, the main problems that slow down the development of financing for scaling eco-innovations at the global and national levels are: the lack of strategic signals and mechanisms at the national level; disparate methods for assessing the volume of "green" financing and the effect of "green" investments; a low level of awareness of funding for eco-innovations; low potential of market participants in terms of assessing environmental and

financial risks associated with innovative activities underlying financing. It should be noted that the efficiency of eco-innovations is assessed by the value of the Environmental Innovation Index, determined on the basis of the following indicators:

– eco-innovation contributions (allocations and expenditures for government research and developments in the field of ecology and energy;

– total number of researchers;

– total value of green investments at the initial stage;

– eco-innovation activities (implementation of measures for resource efficiency and environmentally friendly products; number of certificates ISO 14001);

– eco-innovative results (patents and academic publications related to environmental innovations);

– results of resource efficiency (reduction of pollution volumes and waste);

– socio-economic results (export of ecological goods and services;

– employment in environmental and management activities resources; added value in environmental protection) [10].

While in developed European countries the share of business entities, implementing environmental innovations is about 70-80%, according to the State Statistics Service of Ukraine share of technological processes environmental direction in the total number of innovations introduced in 2021 is 37% among industrial enterprises that were engaged in innovative activities in 2020, the share of enterprises that introduced new low-waste and resource-saving technologies, is 30,3%. Total number of new technological processes implemented in 2021 was 2,318 units, up 15.8% from 2020. These data demonstrate relatively low interest of Ukrainian business in the development of innovative processes and the introduction of high-tech eco-processing. But despite this, it is worth stimulating and developing eco-innovative potential of business entities taking into account business environment factors, consumer preferences, features and measurements of their eco-innovation activities.

External factors affecting the development of eco-innovative the potential of business entities is: political stability of the country, legislation, regulatory framework and regulations, macroeconomic stability, fiscal policy of the state and the size of population incomes, climatic conditions, natural resources and fields, availability of appropriate infrastructure.

Internal factors are the presence of an automated or robotic technology park, contractual relations and obligations of the enterprise with counterparties, the availability and access to high-quality incoming raw materials and materials, the qualification of hired personnel, a stable image, the prestige of the brand [12; 15]. In complex interaction, their influence leads to loyalty consumers to eco-corners, stimulating innovation in manufacturing, facilitating access to human resources; and strengthening social commitment to the enterprise in the

world market. Therefore, at present it is not enough to use eco-innovations only to develop a new product or reduce production costs, it is necessary to apply new methods in order to gain the prestige and trust of society. Given this, it is appropriate from the standpoint of innovative business development to develop effective strategies implementation of eco-innovations of the enterprise based on the concept environmental marketing, and provide for the formation of consumers environmental needs, relevant production and promotion technologies environmental products, as well as optimization of systems of rational environmental management, environmental protection and environmental protection security. The high dynamics of changes in the geopolitical environment and the growth of risks for the sustainable development of countries have determined the tendency to expand the subject of rating research: from assessing achievements in its individual components (in particular, environmental friendliness) towards assessing the quality of the introduced policies in all three components in selected groups of indicators representatives (more complex aggregate indices). First, some specialized indices (index of environmental efficiency, ecological footprint, water stress, etc.) serve as initial information for aggregate. Secondly, there is a dynamic process of improving the methods of evaluation and indicators in view of new trends. Thirdly, with adoption in 2015. UN member countries' commitments to the development agenda for the period up to 2030, research methods of international organizations widely take into account indicators and criteria for achieving the SDGs.

Among such aggregate international studies and indices it is worth mentioning: Index of efficiency of transition to sustainable development (IEP, English Transition Performance Index, TRI), Index of green future (ISM, English Green Future Index (GFI), Index SDG – assessment of commitments and efforts of governments to achieve the SDG, Green Growth Index (GIZ; Green Growth Index (GGI), Global Green Economy Index (The Global Green Economy Index™, GGEI), Global Sustainability Competitiveness Index, GSCI), etc. (Table 3).

Table 3

Indices in which Ukraine is represented

№	Name of study/index	Place of Ukraine	Year of publication
1.	Sustainability Transition Performance Index	64/72	2022
2.	Green Future Index	61/76	2022
3.	Index SDG	37/163	2022
4.	Green Growth Index	33/117	2020
5.	Global Sustainable Competitiveness Index	66/180	2021

Source: [5; 7; 11]

The Sustainability Transition Performance Index (IEP) was launched by the European Commission's Directorate-General for Research and Innovation in 2021. The index ranks EU member states and 45 other countries (76% of the world's population), by efficiency in four transitions: economic, social, environmental and managerial.

The IEP showed that almost all EU countries have made significant progress towards sustainable development over the past decade since 2011, with an average of 4.9% compared to a global average of 4.3% (Table 4).

Ukraine on IEP took 64th place among 72 countries, improving its estimate by 4.6% compared to 2011. and by 0.4% – from 2020. According to the social sub-index, she scored 70.5 points (38th place), entering the group of strong adapters. According to the other three sub-indices, Ukraine scored less than its average score: 40.3 points on the economic sub-index (48th place), 42.7 on the environmental (61st place), 45.7 on the managerial (62nd place). At the same time, according to the indicator «Energy Productivity», Ukraine was in the lowest place for it 71, and in two indicators it took 67th place – «Rule of Law» and «Resource Productivity».

Table 4

Place and scores of non-EU and Central Asian countries in Europe according to the Index of Efficiency of Transition to Sustainable Development (IEP)

Place on IEP		Countries	IEP value in points by transition directions				
Region	World		Total	Economic	Social	Eco-friendly	Management
1	1	Switzerland	78,4	79,8	82,9	71,7	83,0
2	5	The Great Britain	73,3	58,2	77,1	78,0	75,7
3	8	Norway	71,3	67,3	85,8	54,2	86,8
4	31	Iceland	61,2	67,2	89,7	28,7	79,1
7	44	Armenia	54,2	33,1	66,2	55,6	59,6
8	49	Georgia	53,2	29,8	61,8	56,0	61,1
9	53	Turkey	51,9	47,1	53,5	55,6	49,3
10	56	Moldova	50,6	41,4	65,8	46,8	51,3
13	61	Serbia	49,4	37,5	63,4	42,8	57,1
14	64	Ukraine	48,5	40,3	70,5	42,7	45,7

Source: [10; 13; 15]

The MIT Green Future Index measures the degree to which 76 countries direct their efforts towards a sustainable, low-carbon future through renewable energy (RES) investment, innovation and green growth. The index measures the effectiveness of the studied economies relative to each other based on

19 indicators grouped into five sub-indices: SO2 emissions, energy transition, green society, clean innovation and climate policy.

According to this index, in the ranking of 2022 many countries have shown a decline in previous rates of movement towards a green future, driven by pandemic-related quarantines. In addition, uncertainty about the end the pandemic has prompted many countries to return to old carbon habits to recharge their economies. At the same time in 2022 there has been an incredible increase in investment in renewable energy (this is more than 70% of all new electricity generation in 2021) and many of the world's leading companies, including some of the largest polluters, intend to achieve carbon neutrality. Therefore, collective efforts to create a green future are gaining momentum (albeit somewhat moderately). The first two sub-indices – carbon emissions and clean energy – measure how successfully a country reduces carbon dioxide emissions and generates electricity from clean sources. UNEP estimates that in the United States and Europe, the level of carbon dioxide emissions in 2020 fell by 10% compared to pre-pandemic levels in 2019, but in 2021 the reduction was already half that. In the context of the global energy transition, tremendous progress has been made in decarbonizing grid energy as the growing the scale of production and technological maturity made RES much more affordable and reliable. Emerging economies, including China, Brazil actually increased their emissions as a result of the pandemic.

The next two sub-indices – green society and clean innovation – measure progress towards sustainability goals of a somewhat higher order, such as the transition to a low-impact lifestyle and the development of innovations that are designed to ensure the maintenance of habits necessary to mitigate climate change. Green society leaders are represented by countries from Asia that have included the SDGs in policy documents and green infrastructure spending. The leaders of the rating in the region are Singapore and South Korea, which regularly expand programs to encourage better waste management. The green future sub-index has the greatest weight – 40% of the overall rating, which proves the importance of political support for the decarbonization of the country not only today, but also for the future. Most climate policy leaders are European countries that support a European Green Deal with the aim of turning the EU into the world's first decarbonised economy by 2050. European countries are leaders in this sub-index for the second year in a row.

In the 2022 ranking Iceland and Denmark rank first and second, and third and fourth are the Netherlands and the United Kingdom, which have made significant leaps through climate policy. The UK is aggressive in investing in clean energy: almost 36% of the country's electricity came from clean sources 2021, and Britain intends to bring this share to 100% by 2035. Iceland is one of two European countries that produce more electricity from renewable energy sources than they consume. Of it, 80% goes to heating and cooling, more than

three times the EU average (23%). The Green Future Index 2022 confirms a potentially worrying trend: the widening gap between country – leaders and those whose results remain unchanged or begin to decline.

The 16 countries that may be left behind in the green future due to lack of progress and commitment to developing a modern, clean and innovative economy include Argentina, Ecuador, Malaysia, Dominican Republic, Peru, Indonesia and Turkey, which have lowered their ranks because of the pandemic. These countries either lack the "political will" to implement green programs, or their economies are too rich in resources to strive for real progress. This group includes Ukraine, occupying the first place in it. The highest seventh place Ukraine took the first sub-index "emissions SO2" (Table 5), although last year Ukraine ranked first in this indicator. According to the "climate policy" sub-index, the rating has worsened, according to others three sub-indices improved.

Table 5

Distribution of organizations and projects by regions of Ukraine

Subindex Name	Ukraine's place among 76 countries in:	
Emissions of SO2	1	7
Energy Transition	75	64
Green Society	72	70
Clean Innovation	41	27
Climate Policy	62	64

Source: [8; 11; 14]

Ukraine took the best places in terms of SO2 emissions growth in the industrial and transport sectors, in terms of nuclear energy consumption (Table 6), and the worst in terms of: green construction, readiness for carbon capture and storage, renewable energy consumption energy, climate measures and pandemic recovery. Moreover, the deterioration of Ukraine's positions occurred in nine indicators, and the improvement of the position in five indicators, in particular due to the new indicator of nuclear energy consumption (third place among 76 countries). Although the study of the Green Future Index – 2022 was completed before Russia's invasion of Ukraine, the authors warn that this the conflict «is likely to have far-reaching and permanent consequences for the efforts of countries around the world for sustainable development».

The Sustainable Development Report (SDR) annually reviews progress towards SDGs by calculating the sdgindex for each of the 193 UN Member States, and presents a panel of data and trends for each goal, identifying priorities for accelerating progress in SDGs until 2030. The SDR 2022 report, titled "From Crisis to Sustainable Development: SDGs as a Roadmap

to 2030 Beyond," covers 94 global indicators as well as 26 additional indicators for OECD countries, providing a comprehensive estimate of distance to targets based on the latest available data. The SDG Index covers countries for which data are available on at least 80% of variables included in 17 global SDGs. Thus, this year's ranking compares only 163 countries out of 193. The CSR 2022 Index is headed by three Scandinavian countries – Finland, Denmark and Sweden. The top ten countries also include European countries (Table 7).

Table 6

Ukraine's place in terms of the Green Future Index in 2021–2022

Podindex	Indicator	Place of Ukraine	
		2021	2022
Emissions of SO2	Rate of growth of SO2 emissions	1	16
	Emissions growth rates in the industrial sector	2	
	Growth rates of emissions in the transport sector	1	13
	Emissions growth rates in the agro-industrial sector	12	34
	SO2 emissions relative to GDP	46	47
Energy transition	Production of renewable energy	75	52
	Consumption of renewable energy	61	61
	Nuclear power generation	–	26
	Nuclear power consumption	–	3
Green Society	Change of forest areas	26	26
	Consumption of meat ¬ dairy products	31	31
	Recycling of waste	58	58
	Green Transport	–	59
	Green Building	73	72
Clean Innovation	Green Patents	58	19
	Investments in clean energy	7	18
	Private investment in food technology	64	57
Climatic policies	Climate measures	58	62
	Ready for carbon capture and storage	–	71
	Carbon prices	31	32
	Sustainable Agriculture Policy	40	43
	Recovery from the pandemic	71	68

Source: [10; 12; 15]

The assessment of the effectiveness of the movement of these countries to reach the threshold – the 2030 goals – is high, more than 80%, but not 100%. Even these countries face challenges in achieving several SDGs, in particular SDGs 2, 3, 6, 9, 13, 16, 17, given the higher national targets that EU countries have set. in front of you.

Table 7

Ratings and trends in the movement of individual countries to achieve the SDG 2030

Ranking of the country in the world	Country	Score in points	No. CSR, according to which trends in the movement towards the 2030 goals are determined				
			Deterioration	Significant calls/ stagnation	Remain problems/ Slow improvement	On the way to Achievements	Data no
1	Finland	86,5	13	12	2, 3, 5, 6, 9–11, 14–17	1, 4, 7, 8	–
2	Denmark	85,6	–	12, 14	2, 3, 4, 8, 11, 13, 16	1, 5, 6, 7, 9, 10, 15, 17	–
3	Sweden	85,2	–	13, 14	2, 3, 4, 9, 10, 11, 12, 15	1, 5, 6, 7, 8, 16, 17	–
4	Norway	82,3	–	2, 12	3, 4, 6, 8, 9, 13, 14, 15	1, 5, 7, 10, 11, 16, 17	–
5	Austria	82,3	–	10, 15	2–5, 8, 9, 12, 13, 16, 17	1, 6, 7, 11	14
10	Estonia	80,6	–	12	1, 2, 3, 7–11, 13, 14, 16, 17	4, 5, 6, 15	–
24	Slovakia	78,7	–	2, 13, 17	3–6, 9–12	1, 7, 8, 15	14
30	Romania	77,7	4	7, 10–13, 15	2, 3, 5, 8, 9, 14, 16, 17	1,6	–
34	Belarus	76,0	–	13	2, 3, 6–9, 11, 12, 15–17	1, 4, 5, 10	14
37	**Ukraine**	**75,7**	**–**	**2, 3, 5–9, 13–17**	**11**	**1, 10, 11**	**4**
65	Kazakhstan	71,1	–	2, 4, 5, 7, 11, 15, 17	3, 6, 8, 9, 13, 16	1, 10, 12	14

Source: [7; 10]

SDGs 2, 3, 6, 9, 13, 16, 17, given the higher national goals that EU countries have set for themselves. Ukraine is ranked quite high 37 position among 163 countries and is on the way to achieving SDG 1 (overcoming poverty), SDG 10 (reducing inequality) and SDG 11 (sustainable development of cities and communities). The most problematic are SDG 9 (industry, infrastructure and innovation), SDG 2 (good health and well-being), SDG 15 (protection and restoration of land ecosystems), SDG 16 (peace, justice and strong institutions). Figure 2 illustrates these results.

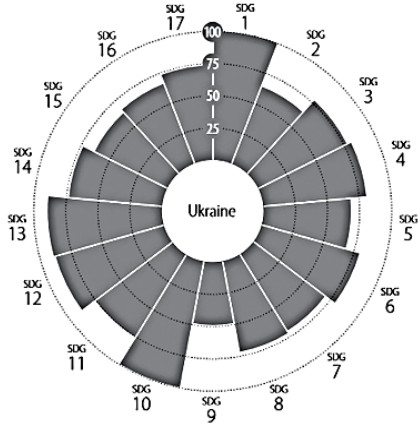

Figure 2. Averaged estimates of progress towards CSR in Ukraine
Source: [6; 9]

Mid-way to 2030 political efforts and commitments in support of the SDGs vary significantly between countries. Ambitious and well-grounded national goals, strategies and plans are crucial to transforming the SDGs into a programme of action. To this end, index developers track how targets are integrated into national plans, budgets and monitoring systems. As for Ukraine, the global SDGs were adapted to the country's conditions in the National Report "Sustainable Development Goals: Ukraine," supported by the Decree of the President of Ukraine of September 30, 2019 № 722/2019.

A voluntary national report on SDG achievement was presented at the UN High-Level Political Forum on Sustainable Development in July 2020. This is taken into account in the estimates of the index of Ukraine. The SDG index is calculated in three steps: setting efficiency thresholds and removing extreme values from the distribution of each indicator; scaling of data to ensure comparability between indicators (normalization); aggregation of indicators within and between SDGs. The country's overall SDG score and its scores on individual SDGs represent the percentage of optimal performance. The difference between any score and maximum value of 100 is the distance in percentage points that a country must overcome to achieve optimal SDGs. To assess trends at the level of indicators, the developers calculated the rate of linear annual growth (annual percentage improvements), which are necessary to achieve the target by 2030 (during 201–2030), which were compared with the average annual growth rate for the last period since the adoption of the SDGs (for example, 2015–2020). Here it is worth paying attention to the fact that about two-thirds of the data come from international organizations, and

almost a third – less traditional statistics, in particular household surveys (Gallup World Poll); civil society networks, peer-reviewed journals.

Advantages of the SDG Index: 1) dashboards for each country contain a wide range of information from various sources, available to analysed trends in achieving all 17 SDGs and gaps in the management system; 2) during evaluation points for each SDG, the worst results have more weight compared to the best, which ensures greater objectivity during the ranking of countries. The seventh edition of SDR 2022 was published in May 2022. amid multiple health, safety and climate crises. For the second year in a row, the world is no longer advancing in achieving the SDGs, whereas before the pandemic, during 2015–2019, the world was advancing in achieving the SDGs. CSR at a rate of 0.5 points per year, with poorer countries achieving greater success than the rich. In most low-income and lower-middle-income countries, SDG 1 (poverty eradication) rates and CSR 8 (decent work and economic growth) remain below pre-pandemic levels.

Today, there is an opinion that it is precisely in times of growing global risks and shocks that the SDGs should continue to be a roadmap for achieving sustainable development by 2030. Six major social transformations are proposed as a basis for national governments to build integrated strategies to achieve the SDGs in: 1) education and skills; 2) health and well-being; 3) clean energy and industry; 4) sustainable land use; 5) sustainable cities; 6) digital technologies.

The Green Growth Index (GGI) is a combined index that measures a country's performance in achieving sustainability goals, including the SDGs, the Paris Climate Agreement goals and the Aichi Biodiversity Targets for four aspects of green growth: efficient and sustainable use of resources, protection of natural capital, green economic opportunities and social inclusion (integration). The index was developed by the Global Green Growth Institute (GGGI), an international intergovernmental organization established in 2012 [17]. to support and promote inclusive and sustainable economic growth in developing countries and emerging economies. The headquarters of the Institute is located in Seoul (Republic of Korea). These four dimensions of green growth are closely related. Efficient and sustainable use of natural resources allows to produce more goods and services with less resources. This protects natural capital, in particular water, energy, land and materials, as well as the ecosystem services that this capital provides. A healthy ecosystem with fertile soil, productive land and seas, quality fresh water and clean air increases productivity and creates new economic opportunities. Protection of natural capital provides sources of economic growth, namely, environmental jobs, trade and investment. This extends not only to people who benefit from growth, but also to defenders of natural resources. This makes social integration a key mechanism for both achieving and sharing the benefits of green growth.

The concepts of low carbon economy, sustainable society, ecosystem health and inclusive growth defined four categories indicators that represent each measurement. They are interpreted as "pillars" of green growth, forming the basis for the transition to efficient and sustainable use of resources, strengthening the protection of natural capital, creating green economic opportunities and ensuring social integration [16].

Table 8 presents the results of evaluation of the Green Growth Index for individual European countries, including Ukraine, as well as four components of the set of indicators (measurements). Ukraine ranks 33rd among 11 countries of the world,

having an average performance score of 51.31. It is due to rather high scores on the indicators of measurement «Social integration» and «Protection of natural capital».Worse are the results in terms of «Efficient use of natural capital». The lowest score was obtained on green economic opportunities.

Table 8

Green growth index, its components and ratings of individual European countries

Country	Index of PPE		Index of PPE			
	Rating	Evaluation	Effective use Resources	Protection natural capital	The Greens economic Opportunities	Social integration (inclusion)
Sweden	1	78,72	87,78	78,14	59,53	94,06
Denmark	2	76,77	86,12	73,19	59,68	92,33
Czech	3	76,74	72,92	83,15	65,49	87,35
Republic of	4	75,83	70,37	82,37	63,73	89,49
Germany	5	75,22	79,21	80,67	56,10	89,31
Austria	6	74,49	78,21	71,53	60,34	91,21
Finland	7	74,25	71,88	85,53	58,58	94,37
Slovakia	8	73,21	83,26	77,99	48,66	90,93
Switzerland	9	71,60	76,42	75,62	52,20	87,10
Lithuania	10	71,40	63,63	81,47	62,24	80,54
Hungary	11	71,01	68,36	81,85	51,34	88,53
Slovenia	16	68,90	59,69	76,83	55,05	89,29
Poland	22	67,06	59,54	74,53	49,27	92,51
Bulgaria	27	61,29	54,84	78,32	41,16	79,24
Ireland	30	52,55	54,83	59,16	27,65	85,01
Moldova	32	51,64	57,93	58,49	31,72	66,17
Ukraine	33	51,31	45,02	62,57	35,34	69,62

Source: [7; 11; 18]

The findings, which are published from the 2021 GISK (Global Sustainable Competitiveness Index), state:

1. The average GISK score is 45.3, less than 50% of the possible best estimate. The highest score – 61.8 indicates that even leading countries are far from being truly sustainable and competitive.

2. Scandinavia continues to lead the ranking: Sweden leads the GISK ranking, as in 2020, all other Scandinavian countries in the ranking are located after it. Only in third place burst Switzerland. Germany ranks eighth place, Great Britain – 17 [17; 19].

3. Nordic countries also lead the rating of social capital, showing that social cohesion is the result of economic growth combined with nationwide social consensus.

4. Only two countries in top 20 are not European: Japan is 13th and New Zealand is 14th. China ranks 32nd – the country is very strong in intellectual capital, but weak in natural.

5. Asian countries (South Korea, Japan, Singapore and China) are leading in the index of intellectual capital – the basis of innovation, but have low positions in the indices of natural capital and resource consumption.

6. The United States ranks 30th due to its particularly low ranking on the index of resource efficiency and social capital [19].

So, in our opinion, in Ukraine, despite a significant number of state strategic documents and a large number of tasks, not all tasks of the SDGs are carried out effectively enough, not all have clear quantitative one's performance indicators, and responsibility for their implementation is blurred.

Conclusions

Towards recovery and building the economy of the future, integration into world political, economic and business community Ukraine already has comply with the requirements of the "green economy", innovation, transparency and business responsibility, reducing the negative impact on the environment and society etc.

The defining concept of greening the economy is the transition to energy-efficient, resource-saving, innovative and socially inclusive development model based on the optimal balance between natural, physical and human capital, and involves the use of innovation (information and communication, technological, environmental, social, etc.) and changing the value cycle through the application of digital technologies. Modern business in the hospitality industry needs innovative ideas that can withstand the latest challenges of mankind (climate change; environmental pollution; exhaustion of valuable natural resources; degradation of ecosystems, etc.), and creates favourable conditions for entrepreneurs who are ready to produce new value through the implementation of eco-innovations. Now for business it is not enough to use environmental approaches only to develop a new product or

reduction of production costs. It is also necessary to apply the latest methods and tools to win the prestige and trust of society.

The economic development of the country should ideally be accompanied by sustainable use of natural resources and waste management, support for biodiversity, conservation of natural ecosystems and economic use of natural resource potential. In these circumstances, state policy should be aimed at creating conditions for increasing the competitiveness of the national economy on the basis of eco-innovations as the basis of dynamic development and reducing significant imbalances between them in productivity and living standards. Scaling of environmental innovations is not only a modern trend of innovation and investment stage for sustainable development of European countries, which requires an increased sense of environmental awareness of each subject of the market and normalized load on the environment. This is a necessary impetus to create conditions for effective stabilization of the level of development of the EU countries and Ukraine. In view of this, financial support for eco-innovations is a strategic task aimed at solving global social challenges, in which the state should play the first role of attracting capital.

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