

# GOVERNANCE BY NATIONAL ECONOMY

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## ENVIRONMENTAL COMPONENT IN THE CONDITIONS OF WARTIME AND POST-WAR RECOVERY OF UKRAINE'S ECONOMY

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### Abstract

The ecological component in the conditions of wartime and post-war recovery of the economy of Ukraine becomes a priority for scientific and government structures. Considering the extent of the damage and the consequences of ecocide as a result of the Kakhovka hydroelectric power plant being blown up by the aggressor in Ukraine, it is important to take effective measures to restore ecosystems, ensure environmental safety and sustainable development. This requires a systematic approach, scientific understanding and implementation of innovative solutions. Only by working together and coordinating efforts we can overcome these challenges and create a future where environmental sustainability and economic development go hand in hand. The unique context of modern Ukraine, reflecting the sad reality of the war and the need to restore the country's economy, requires a serious analysis and understanding of the environmental component in these conditions. Due to the ruthless actions of the aggressor, the Russian regime, Ukraine has witnessed a large-scale act of ecocide, which is equated with the consequences of an atomic bomb explosion or an accident at a nuclear power plant. Ukraine, as a state, must mobilize all its resources to combat the environmental challenges of the war and ensure a sustainable economic recovery. Ukrainians face the challenge of preserving the national heritage, protecting nature and creating favorable conditions for future generations. The use of a wide range of sources and research methods, in particular, analytical literature and author's research, materials for the sustainable development of the country's economy in the context of global transformation processes and post-war recovery, directive materials from various sources, world experience in industrial modernization, contributed to a deep understanding of this issue. Research and analysis of information testify to Ukraine's extreme gratitude for the support of its partners in this difficult period. Ukraine recognizes that with the help of these partners it can win the war and rebuild its country, including the normalization of the ecological situation. Poland expressed its support and the Interreg NEXT Poland-Ukraine 2021-2027 Program is aimed

at a number of areas, including nature protection, improving the quality of water resources, healthcare, and improving the functioning of the Polish-Ukrainian border. According to the analysis of the expert discussion of ways to restore Ukraine, it was noted that for Ukraine today the economic front is becoming increasingly important, where key aspects of successful restoration should be: human potential, attraction of technologies and management experience, use of funds provided to Ukraine for recovery, proposed innovative ideas and, together with partners of Ukraine, the issues of economic punishment of Russia for the crisis phenomena that it created for everyone, in particular, Poland, Hungary, Germany, Great Britain, Italy and other countries. The scientific approach to the analysis of the economic situation in Ukraine shows that after the war the country should focus on economic recovery through the transition to European management standards and rapprochement with the European Union.

**Keywords:** post-war economic recovery, ecological component, war in Ukraine, ecocide, environmental safety.

**JEL:** N40, H56, Q28.

## **Introduction**

The unique context of modern Ukraine, reflecting the sad reality of war and the need to restore the country's economy, requires serious analysis and understanding of the environmental component in these conditions. Due to the brutal actions of the Russian aggressor – merciless destruction of nature, damage to infrastructure, hatred towards people – Ukraine has witnessed a large-scale act of ecocide, which is equivalent to the consequences of an atomic bomb explosion or an accident at a nuclear power plant. The explosion of the dam of the Kakhovka hydroelectric plant, which caused catastrophic consequences for the environment and the economy, became a tragic event, causing serious destruction of the economic potential of the Kherson region. The dependence of 70% of the local population on the irrigated agriculture sector was significant, which was directly affected by the lack of a sufficient water level in the Kakhovsky Reservoir.

The consequences of this tragedy significantly spread to neighboring regions, in particular to Zaporizhzhia and Dnipropetrovsk regions, as well as to the Ukrainian Crimea. The extent of damage to the environment, the economy, and man-made consequences turned out to be extremely terrible. Due to the flooding of many cities, the threat of the disappearance of the National Nature Park "Nizhnyodniprovskiy" and large crops of agricultural crops, Kherson Oblast, Zaporizhzhia and Dnipropetrovsk were plunged into a wave state of despair and uncertainty. The general economic decline, the threat of destruction of agricultural crops and the forced migration of the population arising from the impossibility of living in harsh climatic conditions and the lack of jobs are only part of the problems that Ukraine has faced since this ecological disaster.

According to the Ministry of Environmental Protection and Natural Resources of Ukraine, during the full-scale invasion by Russia, the amount of environmental damage inflicted on Ukraine as a result of the war has increased fivefold, reaching 2 trillion hryvnias as of August 2023. The chronological breakdown of environmental damage is as follows: May 2022 – 13.2 billion hryvnias; August 2022 – 395 billion hryvnias; December 2022 – nearly 1.5 trillion hryvnias in environmental losses; August 2023 – 2 trillion hryvnias. The growth in the total damage amount continues. A comprehensive picture of the damage will be known after the de-occupation of the entire Ukraine, and everything that Ukraine will inherit from nature will be a cost borne by future generations, as reported by Minister Ruslan Streltsov (Katsimon, 2023). According to Ukrainian environmentalists, "It will take 20-30 years to restore the environment naturally."

The purpose of the study involves a thorough analysis of the impact of armed conflicts on Ukraine's ecological state, as well as the formulation and development of strategies and recommendations for the effective restoration of the country's economy, taking into account the damages inflicted on the environment. The primary objective of this research endeavor is to comprehend the intricate interplay

between wartime events, environmental factors, and economic development. Additionally, it aims to devise strategies conducive to Ukraine's restoration and the preservation of its natural heritage for future generations, while also implementing effective measures to ensure environmental security and sustainable development.

### **Research Methodology**

Searching for and implementing effective measures for ecosystem restoration, ensuring environmental safety, and sustainable development, taking into account the scale of damages and consequences of ecocide in Ukraine caused by the aggressor's actions. This research is based on the utilization of a wide range of sources and research methods, including analytical literature reviews, original research studies, materials on the country's sustainable economic development in the context of global transformation processes and post-war recovery, directive materials from various sources, and insights from global industrial modernization experiences. Additionally, it draws from materials related to Ukraine's support by friendly partners within the European Union during emergencies. Addressing the issues of Ukraine's economic recovery will require a systemic approach, scientific analysis of the problem, and the implementation of innovative solutions. Through collaborative efforts and coordinated actions, we can overcome these challenges and create a future where ecological resilience and economic development go hand in hand.

Taking into account all the above-mentioned facts, it becomes obvious that the environmental component in the conditions of wartime and post-war economic recovery of Ukraine is of indisputable importance. The scientific community, government structures and all responsible citizens must direct their efforts to the development and implementation of effective environmental strategies. This involves consideration of issues of restoration of ecosystems, creation of innovative technologies, ensuring environmental safety and implementing sustainable economic practices. Ukraine, as a state, must mobilize all its resources to combat the environmental challenges of the war and ensure sustainable recovery of the economy. This requires a high level of coordination and cooperation between relevant ministries and authorities, as well as the involvement of scientific institutions, public organizations and international partners. Only through careful analysis of the causes and consequences of the environmental disaster, development and implementation of effective strategies and policies, Ukraine will be able to get closer to the sustainable recovery of its economy and the achievement of environmental sustainability. We face the challenge of preserving national heritage, protecting nature and creating favorable conditions for future generations.

As the scientists note, the socio-economic development of the country means the state of the environment, the rational use of the available natural resource potential, where ensuring environmental safety based on the principles of sustainable development should be the main way of solving environmental and socio-economic problems that guarantee proper level of development and living conditions of the population (Varlamova & Varlamova, 2017).

Thus, the ecological component in the conditions of wartime and post-war economic recovery of Ukraine becomes a priority task for scientific and power structures. Considering the extent of damage and the consequences of ecocide, it is important to take effective measures to restore ecosystems, ensure environmental security and sustainable development. This requires a systematic approach, a scientific understanding of the problem and the implementation of innovative solutions. Only by working together and coordinating efforts can we overcome these challenges and create a future in which environmental sustainability and economic development go hand in hand.

### **Materials and Methods**

The events set in motion by the war and post-war reconstruction in Ukraine resulted in a serious environmental problem, which today has a significant impact on the region and the international community.

The results of research and discussion of this topic indicate the extreme importance of preserving the environment and natural resources, as well as restoring what was lost during full-scale aggression.

The use of a wide range of research sources and methods, in particular analytical literary and author's studies, materials of sustainable development of the country's economy in the conditions of global transformation processes and post-war recovery, directive materials from various sources, global experience of industrial modernization, contributed to a deep understanding of the issue.

Information provided by the Ministry of Environmental Protection and Natural Resources indicates significant environmental damage as a result of the full-scale aggression of the Russian Federation. The cost of these damages, which amounts to three trillion hryvnias, as well as the loss of a part of natural resources forever, testify to the serious impact of the conflict on the ecological situation. Such actions of the Russians have a destructive nature, encroaching on the environment, which, unfortunately, does not recognize borders.

Among the environmental damages, it is worth noting the pollution of land and air, the loss of forest plantations, as well as natural resources. Forests were particularly affected, where about a third of the forest territories of Ukraine, which is almost three million hectares, were damaged. Natural diversity is also suffering as a result of Russian aggression, with damage to around 600 species of fauna and 750 species of flora.

Results and Discussion. Solving the environmental problem in the conditions of war and post-war reconstruction is a complex task that requires a comprehensive approach and joint efforts on the part of government bodies, scientific institutions, public organizations and international partners. Research and analysis of information testify to the extraordinary gratitude of Ukraine for the support of its partners in this difficult period. Ukraine recognizes that with the help of these partners it has the opportunity to win the war and rebuild its country, including the normalization of the environmental situation. Poland in particular, expressed its support and noted that while the Russians are wreaking havoc on the environment in Ukraine their representatives continue to actively participate in international organizations aimed at preserving nature. This shows that environmental issues have become a silent victim of this war, and a joint call to court is necessary to stop Russian military actions on Ukrainian territory (Boron, 2023). Poland also provides unprecedented political support to Ukraine in the face of Russian aggression (Kancelaria Prezesa Rady Ministrów, 2022). As part of the meeting of the representatives of the governments of Poland and Ukraine, a number of bilateral documents were signed, which relate to national memory, environmental protection, energy and trade. Issues of rebuilding the country were also discussed, and the Polish government unequivocally declared its support for Ukrainian companies in the process of rebuilding destroyed cities. These signed documents open the way to strengthening bilateral cooperation between Ukraine and Poland.

The Interreg NEXT Poland-Ukraine 2021-2027 program is also an important tool for supporting Ukraine after the cessation of Russian aggression. This program is aimed at a number of directions, including nature protection, improving the quality of water resources, health care, cooperation between the administration and local communities, as well as improving the functioning of the Polish-Ukrainian border. As part of this program, work on the preparation of projects is already underway, and the first call for proposals is scheduled to open in May 2023 (Interreg NEXT Poland – Ukraine, 2023).

Poland, implementing various support measures, demonstrated its trust and partnership with Ukraine, even in the difficult conditions of the war. This is confirmed by such actions as the visits of the prime ministers of Poland, the Czech Republic and Slovenia to Kyiv, as well as the speech of President Andrzej Duda in the Ukrainian parliament. Poland is ready to continue cooperation and engage in joint projects with Ukraine aimed at restoring the country and strengthening bilateral relations.

In general, the support of partners, in particular Poland, is extremely important for Ukraine in the fight against Russian aggression and in the process of restoring the country. This creates positive prospects for the restoration of the ecological state and the development of Ukraine as a whole and stable country.

In light of the recent events related to the blowing up of the dam at the Kakhovka hydroelectric plant, it is important to pay attention to the ruthlessness and brutality of the actions of the Russian army. The President of Poland, Andrzej Duda, in his speech in Bratislava noted this problem and called for appropriate material and criminal responsibility of the criminals. He noted that the destruction of the dam is an example of the ruthlessness of the Russians, who are trying to destroy Ukraine and its future. He also called for financial compensation from Russia and the prosecution of the perpetrators of the crimes before a specially created tribunal.

In addition, it is known that seven countries of the European Union (Poland, Austria, the Czech Republic, Germany, Switzerland, Norway and Finland) provided assistance to Ukraine in the context of this disaster. These countries have shown their understanding and solidarity with Ukraine at this important time. Their attention includes humanitarian aid and other means to ensure the development of the region and the relief of the humanitarian situation. Director of the Department of Economic Diplomacy of the Ministry of Foreign Affairs of Ukraine, Oleksandra Vasylenko, emphasized this fact during a briefing at the "Ukraine-Ukrinform" media center.

In this situation, it is important to note that the act of undermining the dam in Nova Kakhovka is a terrible tragedy and another example of the brutality of the occupiers, who devastate civilian infrastructure and lead to a humanitarian disaster. The condemnation of these acts of brutality and the provision of humanitarian aid to Ukraine as a result of the explosion of the Kakhovka hydroelectric plant reflect the appropriate attitude of the world community to this act of barbarism. These measures are aimed at supporting Ukraine and alleviating the consequences of this disaster, which has serious consequences for the region and the local population.

Scientific research and analysis of such events are important for understanding the causes and consequences of conflict, as well as for developing strategies for settlement and prevention of similar situations in the future. Accountability and appropriate response to ruthlessness and brutality ensure the establishment of truth, justice and peace in the region.

The scientific analysis of the mentioned information demonstrates the importance of a strategic approach and high-quality development of investments in the process of building a new economy space. Attracting investments and creating a favorable business climate are key factors for restoring the productive potential of the economy and ensuring further economic growth, especially in the context of a reduction in official international aid. The process of rebuilding a country after a conflict is individual for each country and depends on its economic, geopolitical and cultural characteristics.

An important step for building a new space is the introduction of a strategic approach and the ability to properly master investments. The restoration of new production potential of the economy, as well as the formation of a favorable business climate, will allow attracting investments and maintaining economic growth in the future in the conditions of a reduction in official international aid. Each country's recovery model is individual and depends on its economic, geopolitical and cultural characteristics. The All-Ukrainian Forum "SEB-2022" (Obrambalskyi & Kushnirenko, 2023) – cooperation of science, education and business for the post-war revival of countries, noted the modern requirements set by leading global and domestic companies and employers to institutions of higher education to the quality of specialists and their of practical training, which are extremely high. The goals of sustainable development, the implementation of the European Green Course in the conditions of globalization and climate change, are currently impossible without sufficient investments in education and science. This can be achieved only in cooperation with business, joint mastering of new technologies, their improvement and creation, involvement of students, young scientists and scientists in these processes.

A large number of studies by domestic and foreign authors are devoted to the consideration of the economic and legal factors of the management system in the context of the post-war reconstruction

of the country, aspects of the sustainable development of the country's economy. Separate directions of such consideration, for example: an important trend in the development of the modern world economy, as noted in the work (Ukrainian Institute for the Future, 2022) – a new epochal crisis is currently taking place, where outright evil has removed its masks and manifested itself in full. Who will stand on the side of good? Not all countries have taken a clear position in this war. February 24, 2022 is not only a new, larger stage of the Ukrainian-Russian war, which has been going on for centuries, but also the beginning of the European civilizational breakdown. The "Marshall Plan" was also about a significant historical contribution to the new architecture of the world, which determined the path of its development for 80 years. Key features of the State of Emergency regime: determination of resource allocation priorities, among which the transformation of the state resource analysis system is a key change in the management system. Creation on the basis of the Accounting Chamber of a structure that has full and comprehensive information about the real state of affairs: resource base, human potential, effectiveness of management decisions, operational analysis and statistics. In matters of post-war reconstruction, an urgent issue will be the search and attraction of resources for the restoration of the economy, infrastructure, and industry, where the main sources of such resources will mostly be long-term loans, to a lesser extent grants, from Western countries, as well as financial assistance through the funds of international organizations, in particular the UN, but for targeted programs related to humanitarian aid, demining and reconstruction of settlements. Regarding the return of people – according to the Razumkov Center survey, 79% of refugees plan to return home. In addition to the loss of population, Ukraine will face another challenge – the mass return of people in circumstances when the country is unable to provide them with work, income, and in the case of refugees from the war zone, possibly housing. It is emphasized that the program to restore the lost infrastructure can become the largest in modern history, will require the involvement of huge resources and time, where urgent infrastructure problems must be solved already during the war and prepare the basis for large-scale reconstruction after its end.

According to the research (Stepaniuk, 2022), a long war is observed in Ukraine, which is accompanied by an assessment of the damage caused and a search for optimal ways to restore the economy. According to the calculations of the Ministry of Economy, the total losses of the economy of Ukraine as a result of the war are estimated from 564 to 600 billion dollars. Similar figures were given by the leadership of the government of Ukraine. It is worth noting that these estimates are not final, and the recovery of the economy will require considerable time.

The increase in patriotism and national unity, which Ukraine has not seen since 2014, could be a window of opportunity to attract the best managers in the public and private sectors with experience in crisis management and reforms. As Columbus said, "You will never cross the ocean unless you have the courage to lose sight of the shore." The war does not give us the opportunity to return to the past and the usual in all aspects of life. Therefore, we have no choice but to move forward to new qualities. Any goals are achievable. "After the Victory" can be done.

According to the expert discussion of ways to rebuild Ukraine, which took place at the round table "European integration and war: the economic dimension" in 2022, it was noted that "today, the economic front is gaining more and more importance for Ukraine. Without victory on this front will make all further military successes of our army difficult. The way to victory lies in the transition of Ukraine to European principles of economic management. Therefore, the rapprochement of the economic system of Ukraine and the EU becomes a necessary condition for victory in the hybrid war with Russia," Viktor Borshchevskiy, an expert of the Agency for Local Economic Development of the Yavoriv Oblast, expressed his opinion.

One of the important prerequisites for post-war economic reconstruction is the return of people who were forced to leave Ukraine. It is important to consider the policy of returning Ukrainians home and acquiring the status of a candidate for EU membership, which will open up new opportunities for access

to financial funds. Involvement of technologies, innovations and experience are also important aspects that were noted by people's deputies of Ukraine. According to the Chairman of the Board of the Institute of Economic Research and Political Consultations, Professor Igor Burakovsky: "It is very important to show how we will use the funds provided to us for recovery. It is important to propose innovative ideas and, together with our partners, raise questions about the economic punishment of Russia for the crisis phenomena that it has created for everyone, including Poland, Hungary, Germany, Great Britain, Italy and other countries. Such collective demands for reparations can further unite us with our partners. However, the main focus of our recovery must not only be money, but also people, because recovery carried out by hands and for future generations. The experience of post-war reconstruction of other countries should be viewed critically, as it depended on different social and historical conditions. The post-war reconstruction of Ukraine should be considered as a large investment project, in which the priority is to carry out reforms and define clear criteria for entry to the EU".

Thus, the scientific approach to the analysis of the economic situation in Ukraine shows that after the war, the country needs to focus on economic recovery by transitioning to European management standards and rapprochement with the European Union. The return of people, the involvement of technology and innovation, and the proper use of financial resources are key aspects of successful reconstruction. It is also necessary to learn to be critical of the experience of other countries and to focus on our own reforms and the development of clear criteria for joining the EU. The implementation of these measures will help Ukraine to go on the path to a new quality and achieve success after the war.

According to the study of Anna Kondratieva (2022), such recovery is determined by the needs and characteristics of specific territories, taking into account the available resources and opportunities. Reconstruction of Ukraine's infrastructure and economy after the war is considered by experts taking into account the consequences of the conflict, development ideas are outlined in the Marshall Plan for Ukraine (Toms, 2022). Analysis of the experience of countries that successfully recovered after the war, can serve as the basis for the development of such a plan that deserves attention and can enter the history books, describing the economic miracle. The success of restoration depends on many factors, such as available resources, political, economic, legal, social and environmental situations, as well as natural and geopolitical conditions. However, the common element of success is external support and effective use of opportunities.

In modern wartime conditions, the authorities of Ukraine and leading experts are actively discussing and considering the ways of post-war renewal of the country, including its settlements, buildings, structures and infrastructure. In such a complex matter, not only specialists in construction and architecture, but also managers, project management and logistics professionals have an important role. The uniqueness of projects for the reconstruction of infrastructural elements in conditions of limited resources requires a systematic approach to management. The effectiveness of the project approach to reconstruction processes has already been proven. The general methodology of project management and its relevance to Ukrainian society have been considered.

One of the priorities of Ukraine's post-war development is ensuring economic security. Already today, the formulation of recovery priorities provides an opportunity to raise the country to a new level of economic development. Granting Ukraine the status of a candidate country for membership in the European Union will also motivate the country and its defenders to protect European values.

Therefore, the post-war recovery of Ukraine's economy and infrastructure requires a systematic approach to project management and development priorities. Taking into account the experience of countries that successfully survived the war and achieved an economic miracle, Ukraine can achieve recovery and development by attracting external support and using existing opportunities (Kondratieva, 2022). It is also important to ensure economic security, adapt to climate change and develop environmental management, which will contribute to the country's sustainable development.

In general, solving the above-mentioned tasks requires the joint efforts of economists, government officials, specialists from various fields and the entire Ukrainian society. Only thanks to cooperation and skillful use of opportunities, Ukraine will be able to successfully go from recovery to sustainable development after the war.

An effective environmental policy, which envisages a holistic and balanced strategy of nature use and environmental protection, is considered in work (Drachuk et al., 2022). For the successful implementation of such a policy in a market economy, it is necessary to ensure proper attention to management structures and real resources. In the modern conditions of the market economy, there are several reasons that determine the need to take into account environmental factors. First, environmental performance is becoming an increasingly important factor in competition. Secondly, an increase in economic and administrative sanctions should be expected for violating the requirements of the legislation in the field of environmental protection.

Taking into account environmental priorities in socio-economic processes is of great importance for ensuring international competitiveness and a favorable image of companies. Special attention should be paid to the metallurgical sector and other carbon-intensive industries, as they face pressure from environmental activists to reduce greenhouse gas emissions. To ensure the achievement of climate equilibrium in the next decade, it is necessary to implement new climate-friendly technologies in the production of steel and iron, as well as to develop effective policies and incentives for metallurgical plants.

One of the most important technological tasks of modern production is the complex and rational use of raw materials at all stages of processing. Special attention should be paid to the problem of man-made waste, in particular ferroalloy slag. In the context of the depletion of ore reserves and the decrease in world prices for ferroalloys, companies are forced to look for ways to reduce the cost of production. Therefore, it is important to improve the ecological component through complex processing of slag. First of all, it is necessary to develop the possibilities of utilization and use of metallurgical production waste, in particular blast furnace slag (Drachuk et al., 2021).

In the environmental issue, we should turn to the preservation of nature, which should happen together with all of us, because nature can do everything: feed us with bread, water from its sources, surprise us with its beauty. Only she cannot protect herself. Therefore, the sacred duty of nature protection rests on the shoulders of those who eat bread, drink its water, are proud of its nature, that is, us. It is necessary to protect HER! On issues of nature protection in Ukraine, we refer to individual domestic studies carried out by today's scientists. Thus, in the work of M.V. Andriienko and V.S. Shako (2016), the modern market economy requires careful regulation and control of natural resource potential and the state of the environment to ensure sustainability and environmental safety. This is the importance of a territorial approach in the implementation of environmental policy, the role of systemic management through regulation with feedback, and the need to use economic mechanisms to ensure environmental security. First of all, it is worth emphasizing the priority of the territorial approach in the implementation of environmental policy. This approach makes it possible to take into account the peculiarities of each region, since environmental problems can differ significantly depending on the location. The regional model of environmental management becomes a key component of the implementation of environmental policy at the regional level. The implementation of the state environmental policy depends on a set of interacting factors of system management. Feedback regulation is important for improving management methods and ensuring the effectiveness of measures in the field of ecology.

Environmental safety is one of the key components of sustainable development, as noted in the State Institution "Institute of regional research named after M.I. Dolishniy of NAS of Ukraine" (Kravtsiv et al., 2020). To ensure it, it is important to use effective economic mechanisms, such as environmental taxes, which are taken into account in European countries. In Ukraine, it is necessary to review the structure



of environmental taxes and increase rates in order to create a financial base for the development of environmental infrastructure. Environmental safety has its spatially delineated boundaries and depends on territorial specificity. Studies show that the ecological condition of the territory of Ukraine differs from that of European countries, and it is necessary to take into account these features in the development of environmental policy. In conclusion, the implementation of environmental policy in the conditions of a market economy requires a comprehensive approach, which includes a territorial approach, systemic management through regulation, the use of economic mechanisms and consideration of regional characteristics. Ensuring environmental safety is an important goal, and to achieve it, it is necessary to take into account the best European experience and improve environmental mechanisms in Ukraine.

Modern state regulation in the field of environmental protection, according to the work of Y. Dmitrieva, S.I. Tereshchenko (2018), requires the presence of an effective system of monitoring the state of the environment, which provides the possibility of constant monitoring. Geoecological monitoring, based on the application of information technologies, represents a modern form of implementation of environmental activities, aimed at assessing and forecasting the state of the environment, the conditions of functioning of ecosystems, and making management decisions in order to ensure environmental safety, preservation of the natural environment and rational use of nature. Geoecological monitoring involves the performance of tasks at different levels: global (biosphere) monitoring, which is carried out at the international level; state monitoring, which takes place within each state and is organized by special bodies; regional monitoring, which is carried out at the level of large regions; local monitoring, which is carried out within individual settlements and at specific enterprises. The main goal of geoecological monitoring is to register the state of natural systems, forecast its changes, provide information to management structures for timely adoption of measures regarding environmental safety, preservation of the natural environment and rational nature management. The structure of geoecological monitoring is characterized by high "rigidity". However, this "rigidity" has its advantages, since each subsequent level of monitoring has its own operational body capable of summarizing primary information, providing an operational assessment of the state of the environment and recommendations for its protection within its territorial scale. This is especially important for the local administration, which has to implement recommendations for environmental protection in specific territories. Thus, geoecological monitoring acts as a necessary tool of state regulation in the field of environmental protection. This surveillance system allows effective control and analysis of the state of the environment at various levels and ensures support for rational nature management and conservation of natural resources.

New modern scientists should consider the legal concept of institutional and functional support for the formation and implementation of Ukraine's environmental policy in a broad sense (Feloniuk, 2023). This concept includes a system of state, non-state and supra-state institutions (entities) that have a direct or indirect influence on the processes of formation and implementation of the country's environmental policy by performing the tasks, functions, duties assigned to them, as well as exercising their rights and powers. The modern environmental policy of Ukraine is characterized by the complexity and multifacetedness of its institutional and functional support. In this context, the leading role in the regulation of the environmental sphere is played by the state, which acts as one of the subjects of the system of institutional and functional support for the formation and implementation of the environmental policy of Ukraine. State management in the system of institutional and functional support for the formation and implementation of environmental policy is considered as the activity of state authorities, including the legislative, executive and judicial authorities, which are endowed with the appropriate competence. Judiciary bodies are also considered to be subjects that carry out state management in the environmental sphere, as they resolve disputes and conflicts related to the use of natural resources and environmental protection. Public participation in the formation and implementation of environmental policy in Ukraine is regulated by normative acts, but the practical

implementation of these norms and the activity of public representatives in the field of environmental protection are insufficiently effective. It is assumed that among the promising priorities for the coming years is the activation of public involvement in the formation and implementation of the country's national environmental policy.

In concluding the consideration of issues of environmental protection of Ukraine, it is appropriate to use the results of the research of the young scientist Yu. Krasnova (2018), dedicated to the evolution and legal foundations of environmental security, as one of the important branches of environmental law. It is noted that the doctrine of the law of environmental security is based on the security nature of the relationship between humanity and nature. This is reflected in beliefs, customs, traditions, philosophical and other doctrines. The concept of environmental security includes measures to prevent harmful effects on the environment, ensure sustainable use of natural resources and preserve nature. Historically, the concept of environmental security has been reflected in various cultures and civilizations through beliefs and rituals aimed at preserving nature. However, the real evolution of environmental security law took place in the 20<sup>th</sup> century. During this period, problems of environmental pollution arose, which required legal regulation. Legislation and international agreements have become an important component of the evolution of environmental safety law.

The term "environmental safety" has been introduced into legislation and national policy documents by many countries, including Ukraine. This happened as a result of the adoption of resolutions of the UN General Assembly in 1986-1987 and national legal acts. Scientific approaches to understanding environmental security are divided into two main directions: anthropocentric and biocentric. In the anthropocentric approach, the emphasis is on human interests in the context of environmental security, while the biocentric approach puts nature and all components of the biosphere at the center of attention, placing the main emphasis on their preservation and protection. Basic Principles Environmental security law has its own principles and methods of legal regulation. The fundamental principles of this right include: prevention of environmental risks, payment for dangerous effects on the environment, compensation for environmental damage, access to environmental information, public participation in decision-making, as well as international cooperation.

It is important to understand that environmental safety is of great importance for the preservation of the environment, life and health of citizens. The mechanism of legal regulation of environmental safety involves the use of various legal measures to ensure environmental safety and prevent environmental threats. The enterprises' own environmental policy and their environmental management systems act as a continuation of the national environmental policy. Enterprises not only fulfill the requirements of national norms and standards, but also contribute to the implementation of the country's environmental goals, ensuring effective protection of nature and human health. In general, institutional and functional support for the formation and implementation of environmental policy of Ukraine is an important element of modern management of environmental issues.

In the context of environmental preservation, sustainable development of enterprises involves the implementation of strategies and practices that enable businesses to thrive without compromising the ecological balance. This encompasses taking measures to reduce emissions, optimizing resource utilization, adopting environmentally sustainable technologies and products, as well as adhering to environmental standards and regulations. Enterprises that act responsibly and consider ecological aspects in their operations contribute to nature conservation and the creation of a sustainable future for society (Shyra et al., 2020). Overall, achieving sustainable development for enterprises in wartime conditions necessitates a creative and adaptive approach. It is crucial to consider the conflict's context and the specific challenges it presents, while taking actions to maintain environmental resilience and social responsibility, despite the adverse impacts of wartime events.

Conclusions. Ukraine is actively working on the development of a national action plan for the recovery of the country after the war. The National Council for the Recovery of Ukraine from the Consequences of the War was created as a consultative body under the President of Ukraine. Determining priorities for the post-war development of Ukraine already today provides an opportunity to bring the country to a new level of economic development. According to the words President of Ukraine Volodymyr Zelenskyi, the continuation of the war leads to an increase in the cost of protecting freedom not only for Ukraine, but also for the whole world. Therefore, preserving unity and working towards victory is the most important national task, which will definitely be fulfilled. This opens up opportunities to achieve what previous generations failed to achieve, including protecting independence, joining the European Union, and establishing Ukraine as one of the most modern countries in the world.

Ukraine has a powerful potential and an extremely talented people who are capable of achieving great flourishing achievements. Through the course of trials and efforts of its citizens, Ukraine deserves peace, prosperity and a place among countries striving for democracy, freedom and economic security.

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