Annotation. Ukraine has committed itself to developing and implementing long-term measures aimed at reducing greenhouse gas emissions. As a party to the Paris Agreement to the United Nations Framework Convention on Climate Change, the state is obliged to make its nationally determined contribution to achieve the goals of sustainable low-carbon development of all sectors of the economy and increase the ability to adapt to the adverse effects of climate change. The official announcement of joining the European Green Deal demonstrates Ukraine’s unwavering intention to overcome the challenges posed by climate change and environmental degradation by transforming into a modern resource-efficient and competitive economy. In June 2022, Ukraine was granted the status of a candidate for EU membership. These measures should be implemented despite Russia’s anti-Ukrainian armed aggression and difficult economic challenges.

The purpose of this work is to determine the main directions of development of the legal mechanism for preventing climate change, which is being formed in the context of military realities, while ensuring that Ukraine strictly complies with its obligations under the European Green Deal.

It is concluded that when developing the conceptual legal framework of the environmental security component as part of the Strategy for Post-War Recovery and Development of Ukraine and the relevant Action Plan, as well as sectoral programs for the restoration of the State, an appropriate climate policy should be formulated, coordinated with Ukraine’s further European integration.

These include updated priority measures of the national climate policy, broad state support for environmental protection measures; digitalization of environmental relations; provision of funding for measures and investments aimed at developing competitive renewable generation and improving existing infrastructure, developing the potential of the hydrogen ecosystem, increasing the energy efficiency of buildings through the integration of renewable energy sources, decarbonizing insulation and cooling of buildings, ensuring the development of transport with low/

Key words: environmental safety, climate change prevention and adaptation, European Green Deal.

1. Introduction.

Experts of the World Economic Forum have identified 15 global risks that will determine the direction of global development over the next decade. The top 10 risks for the next two years include environmental risks, which account for half of the list. These include natural disasters and extreme weather (2nd position), failure to mitigate climate change (4th position), events with significant environmental damage, failure to adapt to climate change, and the natural resource crisis. In determining long-term risks (up to 2033), the projected impact of environmental factors will increase, with the inability to mitigate climate change, failure of adaptation to climate change, natural disasters and extreme weather, loss of biodiversity and ecosystem collapse ranked as top risks, and the natural resource crisis and events with significant environmental damage remaining relevant in the ranking. [1, p.10]
These factors are key to identifying environmental safety as one of the most important state priorities, as national security is directly dependent on environmental safety. In modern conditions, the vector of environmental policy in most civilized countries is determined by environmental safety issues. The purpose of state measures is to achieve a proper state of the environment through the implementation of measures by the state to identify, prevent and eliminate threats to it, preserve and restore natural ecosystems, as well as implement a balanced use of natural resources.

The Association Agreement between Ukraine, on the one hand, and the EU, the European Atomic Energy Community and their Member States, on the other hand, signed on June 27, 2014, defines the development and implementation of climate change policy as an area for mutual cooperation. Accordingly, Ukraine committed to the development and implementation of long-term measures aimed at reducing greenhouse gas emissions (Annex XXXI to the Agreement), which should be implemented despite Russia's anti-Ukrainian armed aggression and difficult economic challenges. In June 2022, Ukraine received the status of a candidate for EU membership. This has increased the responsibility of our country for implementing important reforms, including in the field of ecology. It should also accelerate the implementation of European integration environmental transformations.

2. Analysis of scientific publications.

The issues related to the formation of a legal framework for regulating relations on green recovery of Ukraine attract the attention of lawmakers, scholars and practitioners. Thus, along with the issues of implementation of the environmental and security protective function of the state in the context of modern challenges and threats (V.I. Andreitsev, A.P. Hetman, G.V. Anisimova, N.S. Havrysh, A.K. Sokolova, M.K. Cherakashyna), the issues of European integration innovations in the legal regulation of the use of natural resources (A.P. Hetman, V.L. Bredikhina, M.A. Deinega), etc. have become the subject of special attention. At the same time, the issue of measures to restore Ukraine as a key area of national environmental policy in the context of full-scale Russian armed aggression and post-war recovery requires constant scientific research and the formulation of ideas and proposals aimed at solving the problem of environmental threats and creating conditions for environmental safety that would meet European environmental standards.

3. The aim of the work.

The purpose of the article is to determine the main directions of development of the legal mechanism for climate change prevention which is being formed in the context of military realities, while ensuring that Ukraine strictly complies with its obligations under the European Green Deal.

4. Review and discussion.

Ukraine was one of the first European countries to ratify the Paris Agreement to the United Nations Framework Convention on Climate Change (adopted in December 2015), which is a continuation of the Kyoto Protocol starting in 2021. Ukraine, as a party to the agreement, is obliged to make its nationally determined contribution to achieve the goals of sustainable low-carbon development of all sectors of the economy and increase its ability to adapt to the adverse effects of climate change, in particular by reducing greenhouse gas emissions. Fulfilling the goals of the Paris Agreement requires simultaneous measures to reduce greenhouse gas emissions and adapt to the already existing effects of global climate change by all states. In 2021, Ukraine officially declared its desire to join the European Green Deal, which aims to overcome the challenges posed by climate change and environmental degradation by transforming the EU into a modern resource-efficient and competitive economy.

And even in the face of war, Ukraine plans to recover and develop in line with the goals of the European Green Deal. Despite numerous challenges, the long-term course of the EU's climate change policy for Ukraine remains unchanged. Ukraine's enhanced European integration opens up
new opportunities for jointly overcoming these threats, as well as obtaining additional sources of funding, as M.A. Deinega rightly notes. [2, p.53]

The content of environmental security is a set of interrelated political, economic, technical, organizational, state-legal and other measures aimed at ensuring environmental protection, preventing pollution and negative environmental impact, as well as ensuring sustainable development, as defined in part 2 of Article 50 of the Law of Ukraine “On Environmental Protection”. This indicates that their list should be a guideline in determining the directions of development of environmental policy and legislation. However, under current conditions, this list cannot be recognized as complete and needs to be supplemented.

In agreement with T.V. Yermolaieva, in the current situation, the basis for restoring the state of the environment should be not only actions related to the protection and preservation of existing ecosystems and the balanced, limited, controlled use of natural resources, but, first of all, intensification of the reproduction of natural resources; elimination of the impact of negative factors on the environment; bringing it back to its previous state, if possible. [3, p.199]

In addition, recognizing the inordinate complexity of implementing such measures during the war, it should be noted that the condition of natural objects is deteriorating, and, accordingly, the inevitability of negative consequences for the ecosystem from the inability to implement measures to ensure environmental safety in such conditions, and as a result, the danger to human life and health both now and in the future.

Already in 2015, when the ATO was de jure ongoing on the territory of Ukraine, environmental researchers pointed to environmental threats. A comparison with the criminal acts of the aggressor state in 2022-2023 shows a much more horrific map of the damage caused to Ukraine’s environment in terms of its nature and extent.

In such circumstances, the development of the legal mechanism for environmental protection directly depends on the degree of risk of natural and man-made disasters, as well as on the emergence of negative processes caused by the war that cause or may cause negative consequences.

Ukraine’s intention to continue its climate policy was confirmed at the EU-Ukraine Summit on October 12, 2021, where the EU welcomed Ukraine’s commitment to align its policies and legislation with the EGD, including Ukraine’s Updated Nationally Determined Contribution to the Paris Agreement, and made a number of proposals aimed at achieving climate neutrality no later than 2050 through a long-term low-carbon development strategy, as well as through the implementation of reforms that will facilitate and accelerate its green transition.

Currently, the Action Plan for its implementation is being developed, which has been somewhat delayed due to the need to take into account the changes that have taken place in many sectors and the circumstances in which the state is currently facing due to possible threats (for example, in the context of the constant risk of missiles hitting nuclear power plants, possible reduction of surface water runoff, etc., the construction of new nuclear reactors looks risky now, so it is obvious that alternative safer options should be considered).

The draft Ukraine Recovery Plan, presented by the Government of Ukraine at the Ukraine Recovery Conference (Lugano, Switzerland, July 4-5, 2022), is primarily aimed at developing a strategy to overcome the negative environmental consequences of the hostilities. It reflects such a direction of the recovery process aimed at accelerating sustainable economic growth as an integrated climate policy: prevention and adaptation to climate change. An important guiding principle for Ukraine’s recovery process, which was enshrined in the Declaration (the so-called “Lugano Principles”), is the principle of sustainable development. [4] It means focusing the recovery process on the sustainable reconstruction of Ukraine in accordance with the 2030 Agenda for Sustainable Development and the Paris Agreement, with the integration of social, economic and environmental aspects, including a “green” transition, i.e., compliance with the European Green Deal, which aims to overcome the challenges posed by climate change and environmental degradation by transforming the EU into a modern resource-efficient and competitive economy.
Pursuant to clause 2 of the Operational Plan for the implementation in 2022-2024 of the Strategy for Environmental Security and Adaptation to Climate Change for the period up to 2030, approved by the CMU Order No. 1363-r dated October 20, 2021, the Ministry of Environmental Protection and Natural Resources of Ukraine Order No. 386 dated June 3, 2023, approved Methodological Recommendations for Assessing the Risks and Vulnerability of Socio-Economic Sectors and Natural Components to Climate Change. The context and objectives of the climate change risk and vulnerability assessment, the main impacts and chains of climate change impacts, indicators of climate threats, indicators of exposure of a sector or component to climate factors, indicators of climate change sensitivity and indicators of adaptive capacity of a sector or component to climate change are disclosed in the guidelines for different sectors and the natural component. Implementation of these methodological recommendations will contribute to the fulfillment of the tasks of achieving the goals of the state environmental policy set out in the Strategy and the formation of priority adaptation measures.

The recommendations state that the restoration of the affected areas should be carried out as a “green” recovery, taking into account projected trends in climate change, assessments of risks and vulnerability of socio-economic sectors and natural components to climate change, and the inclusion of climate change adaptation in regional development strategies, community development strategies and action plans for their implementation, and in programs for the social and economic development of regions, districts and cities. It takes into account the consequences of armed racist aggression.

The European mechanism for regulating carbon emissions and joining the European emissions trading system should be gradually implemented in Ukraine. A carbon tax or emissions auctions could be a source of financing for the recovery. But they would also place a significant burden on Ukrainian businesses, as carbon is a global negative. Ukraine needs time and financial support to gradually reduce carbon dioxide emissions and bring carbon prices to European levels.

The key role of Ukraine in supporting the transition of the European energy sector as a country that will supply large volumes of “carbon-free” energy on favorable terms to renewable sources is recognized by both politicians and scientists.

The formation and implementation of state policy, as well as the implementation of the provisions of EU legal acts in the field of climate change, in particular the European Climate Law, is one of the main vectors of lawmaking and a relevant subject of legal research. This is rightly noted in the literature. [5].

Competitive renewable generation, existing infrastructure, and the strong potential of the hydrogen ecosystem are favorable prerequisites for Ukraine to become a strong “green energy partner” of the EU. For Ukraine, this means not only building a strong and sustainable energy system, but also attracting significant foreign investment in the energy sector to accelerate economic growth. Approximately one third of the €1.8 trillion NextGenerationEU fund is earmarked for the implementation of the EU’s Green Deal, and part of this amount can be directed to Ukraine’s energy sector, which will be mutually beneficial for Ukraine and the EU. Ukraine has at least three competitive advantages to become a reliable partner of the European Green Deal: 1) Ukraine’s strong position in the “low-carbon” electricity sector; 2) a well-developed energy infrastructure, including large capacities for transporting electricity and gas to Europe; 3) all the components for developing a hydrogen ecosystem to maximize exports of “green” goods to Europe. There are also several sectors of the Ukrainian economy, such as metallurgy, ammonia and fertilizer production, that would benefit from the ability to consume hydrogen and thus maximize domestic value added. [6, p.227-229].

The update of the Acquis on the greenhouse gas emissions trading system, which provides for the inclusion of emissions from buildings and road transport (amendment to Directive 2003/87/EC), is relevant. A new instrument such as the Social Climate Fund aims to provide financial support to EU member states. It was introduced by the EU regulation of May 10, 2023 to implement the innovations. States prepare Plans. They should be coordinated with other state planning documents, such as building reconstruction plans, etc. The plan is subject to public discussion, the results of which are reflected in it. At the stage of developing the Recovery Plan for Ukraine, such measures should be reflected at the national level, taking into account the European experience.
Special consideration should be given to public participation, which is not subject to restrictions due to martial law. [7, p.130]

### 5. Conclusions.

The prospects for the restoration of Ukraine, whose destruction of all spheres of life is caused by the impact of armed military Russian aggression, for the preservation and sustainable use of the environment should be considered on the basis of scientific substantiation and organizational and legal support for the transformation of the national environmental policy, determination of its current priorities, directions and an effective system of measures to achieve the goals, development and implementation of the necessary changes to the current legislation, including those aimed at implementing sustainable development goals in line with the European Green Deal. When developing the conceptual legal framework of the environmental security component as part of the Strategy for Post-War Reconstruction and Development of Ukraine and the corresponding Action Plan, as well as sectoral programs for the restoration of the state, an appropriate climate policy should be formulated, coordinated with Ukraine's further European integration.

Adhering to and developing the basic principles and strategic goals of the state environmental policy proclaimed and enshrined in legislation in the pre-war period, it should be noted that other goals have been actualized, which lead to the search for new measures to achieve the goals of the state climate policy, namely broad government support for environmental protection measures; digitalization of environmental relations; provision of funding for measures and investments aimed at developing competitive renewable generation and improving existing infrastructure, developing the potential of the hydrogen ecosystem, increasing the energy efficiency of buildings through the integration of renewable energy sources, decarbonizing insulation and cooling of buildings, and ensuring the development of low-emission transport.

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