

ENVIRONMENTAL, ECONOMIC AND AGRICULTURAL LAW

A. Getman, Yaroslav Mudryi National Law University, Doctor of Legal Sciences, Professor, Pro-Rector **for Scientific Work**, Ukraine, Kharkiv

Y. Hetman, National Academy of Legal Sciences of Ukraine, Doctor of Legal Sciences, Senior Research Fellow, Ukraine, Kharkiv

V. Lozo, Gregory Skovoroda Kharkiv National Pedagogical University, Doctor of Legal Sciences, Professor, Ukraine, Kharkiv

CLIMATE PROTECTION LAWS: EUROPEAN REALITY AND UKRAINIAN PROSPECTS

The global problem of climate change, originally manifested in the air pollution and ozone layer depletion,¹ is evolutionary and anthropogenic in its nature, while its scale affects the interests of the entire humanity, with its present and future, calling for scrutiny and coordination of all the planetary efforts,² as the regional activity alone is no longer enough for the purpose.

The society and nature are open interacting systems; a continuously growing exchange of substances, energy, and information between the environment and man may cause an inexorable scaling-up and aggravation of environmental challenges. “Domestication” of the environment by man brings about a change in intensity and even directivity of the

natural exogenous processes. According to V.I. Vernadsky’s noosphere concept, from biological entities people evolved into planetary beings, which is why they should think and act not only as individuals, but also in the planetary aspect; moreover, they can exist exclusively within the environment – a biosphere, a shell of the Earth, with which they are connected naturally and inseparably, and which they are not able to leave.³

In accordance with a classical concept, climate is a years-long weather pattern, typical of a particular global region, which is one of its geographic characteristics. By the middle of the twentieth century, climate got to be characterized as a statistic ensemble of states, through which the ‘ocean – land – atmosphere’

system goes over several decades. To build a climatic system pattern at the existing level of scientific and technical progress is virtually impossible. However, the task can be simplified to one parameter – the global (i.e. average annual) temperature of the surface air of the planet⁴. Yet a rise in temperature, being a sort of “a sick person’s cough”, may well be caused by an increased concentration of CO₂ and other greenhouse gases in the atmosphere. As a result of fossil-fuel combustion, the atmospheric concentration of CO₂ increased by one third compared to that of 50 years ago – something that has never occurred in the human history.⁵ And while the World ocean level may rise by 80 cm over the twenty-first century, the global catastrophe or extinction of men as a biological species is not threatening the humanity as yet.

Background Information

The start of global climate regulation of the climate was marked by the Vienna Convention for the Protection of the Ozone Layer adopted on 22 March 1985, and the attached 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. One of the co-authors of this Convention became the European Community.⁶

Under the Convention, the Parties’ obligations are as follows: cooperation by means of systematic observations, research and information exchange in the said sphere; adoption of the appropriate legislative or administrative measures and harmonization of environmental policies; formulation of agreed measures, procedures and standards for

the adoption of protocols and annexes; and cooperation with competent international bodies to implement effectively the Convention. The Parties undertake to facilitate and encourage the exchange of scientific, technical, socio-economic, commercial and legal information, and to protect its confidentiality. Fulfillment of the obligations should be facilitated by the Conferences of the Parties annually convened by the Secretariat for coordination of procedures and financial rules, continuous review of the implementation of the Convention, and harmonization of appropriate policies and strategies in the relevant sphere. Thus, the international environmental law established an institutional structure to regulate the Earth’s climate by means of intergovernmental bodies, conferences of the parties, and NGOs.⁷

The Annexes to the Convention regulate the procedure of systematic observations over the ozone (radiation level, ozone distribution, physicochemical parameters of the atmosphere), and that of information exchange (collection and distribution, criteria of selection and completeness, evaluation of results).

The scientific and technical progress and the entailed anthropogenic impact on the natural environment, including the global climate, have motivated significantly the world community to join together efforts to create the conditions for ensuring climate protection. A meaningful outcome of those efforts to control the global climate was the UN Framework Convention on Climate Change (UNFCCC),⁸ signed at the UN Conference on Environment and Devel-

opment (UNCED) on 9 May 1992, and Kyoto Protocol to the UNFCCC dated 11 December 1997. The ultimate goal of the Convention was stabilizing the atmospheric greenhouse gas concentration level to the value that would prevent hazardous anthropogenic intervention in the climate system, safeguarding sustainable development.

The Convention binds all the Parties to develop, periodically update and report to the Conference of the Parties the national data on anthropogenic emission of all the greenhouse gases that is not covered by the Montreal Protocol, using compatible methodologies, approved by the Conference. Additionally, the Convention binds the Parties to elaborate, implement, and update periodically national and regional programs that include measures aimed at climate change mitigation.

The Convention established a number of principles:

1. The Parties must protect the climate system in the name of the present and future generations, acting in accordance with common, yet differentiated, obligations and possibilities. Developed countries are to become initiators of dealing with the climate change and its unfavorable consequences.

2. It is necessary to take into complete account the special needs and particular circumstances of developing countries, vulnerable to adverse impact of the climate change, and those Parties, which would have to assume, consistent with the Convention, inadequate burden.

3. The Parties should take measures to prevent or minimize the causes of cli-

mate change and mitigate its adverse effects. In case of an outbreak of a major hazard or unpreventable environmental threat, lack of complete scientific certainty cannot be used as a pretext for postponement of such measures.

4. The Parties must cooperate with the aim of facilitating creation of a favorable and open international economic system, which would lead to sustainable economic growth and development of all the convening Parties, in particular developing countries, allowing them to better respond to the climate change problems, without any discrimination.

In terms of the undertaken obligations, the Convention specified that the convening countries will:

- cooperate in the course of adaptation to the climate change impact, in an integrated planning for management of coastland, water resources and agriculture, as well as protection and restoration of areas that suffered from droughts, desertification or floods;

- consider climate change in social, economic and environmental policies; aiming to mitigate the negative impact on economy, healthcare and the quality of the environment, to apply the relevant national methods in order to understand the reasons for, consequences, scope and time of climate change, as well as economic and social effects of different global response strategies.

The Sixth Environmental Action Programme of the European Community (6th EAP) adopted in 2002 (presently in force) updated the tasks and priority spheres of action on climate change. It was planned to attain the set objec-

tives through fulfillment of the following tasks:

- ratification and bringing into effect of the Kyoto Protocol to the UN Framework Convention on Climate Change by 2002, as well as fulfillment of the European Community obligations as to cutting down emissions by 8% in 2008–2012 compared to 1990, as implied by the Council of the European Community conclusion dating 17 June 1998;

- achievement of a demonstrative progress in fulfillment of the Kyoto Protocol commitments;

- a productive stand of the Community, defending the international agreement on a greater emission abatement at the second stage of fulfilling the obligations of the Kyoto Protocol. The agreement in question aimed to cut emission significantly, considering the necessity for a fair distribution of greenhouse gas emissions.

These tasks were planned to be fulfilled by effecting of the following priority arrangements:

- 1) meeting international commitments on climate, including those of the Kyoto Protocol, by way of:

- reviewing the output of the European Climate Change Programme, adoption of general and coordination policies and the relevant measures, and additionally – those for various sectors of engagement of the member states;

- establishment of a structure in the European Community aimed to develop an effective trade in CO₂ emissions, with a possibility of its extension to other kinds of greenhouse gases;

- upgrading the monitoring of greenhouse gases and progress toward meeting the commitments of the member states on the internal burden-sharing agreement;

- 2) reduction of greenhouse gas emissions in the energy sector by way of:

- providing, to the extent possible, subsidies encouraging the efficiency and a stable use of energy with a tendency to a gradual general reduction;

- encouraging the use of renewable and low-carbon fuels for generation of energy;

- promoting the use of renewable energy sources;

- stimulating the use of heat and energy up to 18% of the total electrical power generation;

- reducing methane emissions in energy generation and distribution;

- contributing to energy-saving;

- 3) reduction of greenhouse gas emissions in the transport sector by means of:

- encouraging transfer to more effective and cleaner modes of transport;

- creating a stable transportation system;

- contributing to development and use of alternative fuel and fuel-saving transport means;

- taking environmental indicators into account when calculating transport rates, and in case of inconsistency between traffic growth and its impact on the environment;

- 4) reduction of greenhouse gas emissions in industrial production by:

- promoting environmentally-efficient industrial practices and technologies;

- supporting small and middle businesses in the field of innovations;

- encouraging environmentally significant and technically feasible alternatives, including reduction of fluorine-containing gases: HFC (hydrofluorocarbons), PFC (acid fluorocarbons) and SF₆ (sulfur hexafluorides);

5) reducing greenhouse gas emissions in other sectors due to raised energy efficiency, particularly for heating, cooling and hot-water supply in designing buildings as well as through reduced emissions in common agricultural policies and waste management strategies;

6) application of such tools as:

- fiscal measures, including energy taxation schemes, encouraging transfer to effective use of energy, clean engineering and transport, and introducing technological innovations;

- creating incentives for reduction of greenhouse gas emissions in industrial sectors;

- ensuring the priority of climate change research and technological development.

Alongside with preventive measures, the European Community regulates adaptation to the climate change effects by means of:

- revision of the European Community policies related to climate change so that the adaptation was adequate in terms of investment decisions;

- incentives for regional climate simulation and evaluation with a simultaneous preparation of such regional adaptation measures as water resource management, preservation of biological diversity, prevention of desertification

and flooding, and raising the awareness of population and business circles.

The climate problems are considered when it comes to enlargement of the European Union. The candidate countries are supposed to apply the Kyoto mechanism with higher standards of reporting and monitoring of emissions, more stable transport and energy sectors, and activation of joint research in the climate change field.

Combating climate change became an integral part of the European Community policies in the sphere of foreign relations and one of the priorities of sustainable development policy. It required intense coordination on behalf of the European Community when providing assistance to developing countries and countries in transition, e.g. through support for projects related to implementation of The Clean Development Mechanism (CDM), defined by the Kyoto Protocol, and its joint implementation; ensuring a transfer of technologies, and rendering assistance in adaptation to climate change results.

In 2005, the Kyoto Protocol at last turned into reality.⁹ The entry into force of the Agreement became possible only after the document had been ratified by the countries with a minimal 55% share of greenhouse gas emissions.¹⁰ That minimum was reached after ratification of the document by Russia, whose industry is answerable for 17% of all the world greenhouse gas emissions. Kofi Annan the Secretary-General of the United Nations emphasized that it was a huge step forward in fighting against one of the major dangers of the twenty-first cen-

ture, and called climate change a global problem that requires a coordinated global answer.¹¹

The Protocol determined that 39 developed countries of the world and countries in transition must cut emission of carbon dioxide and five more substances, the presence of which in the atmosphere affects the global climate change.

According to the World Bank, by 2050 developing countries will need about \$100 bln per year to protect their population against grave consequences of global climate changes: natural calamities, hurricanes, tsunamis, and floods. If the necessary measures are taken timely, it can help to save funds in the future and to reduce the risks of the worst scenario development in those countries. Financing of the said measures should be effected by industrial countries, because it is these countries that produce a lion's share of hazardous emissions to the atmosphere.¹²

The Role of Ukraine in Prevention of Climate Change on the Globe

Ukraine is one of the world leaders in implementation of joint environmental projects within the framework of the Kyoto Protocol, which provided for reduction of CO₂ emissions by 53 mln tons before 2012,¹³ since the main task of our country, according to the Protocol, was stabilizing emissions, while the USA would have to reduce it by 36%.¹⁴

At the same time, unbalance of the climate system threatens Ukraine with natural disasters, extreme temperatures, climate belt shift. For the southern and eastern regions, there is a risk of drinking water problems. And in Western Ukraine,

the Transcarpathian region, there is a threat of frequent storm rainfalls and precipitation. In this view, there exists a possibility of malaria transmitters spreading. Thus, climate change is a socio-economic problem that affects people's health and life. Ukraine being an agrarian country, climate change will have an adverse effect on the productivity of its lands and agricultural crop capacity.

According to the Climate Change Expert Group (CCEG), the humanity will be able to adapt to a temperature rise on condition that it does not exceed 2°C. In the last hundred years it grew by 0.8°C. Thus, the remaining 1.2°C do not give the humanity much ground for optimism. Providing that the industrial countries of the Kyoto Protocol cut their greenhouse gas emissions by 25–40% before 2020, the humankind will fit with the 2°C threshold value with a probability of 50%. However, presently the world expects a temperature rise of 3–4°C by 2050, i.e. the human race is heading stubbornly towards self-destruction. This testifies to the lack of willpower, including in Ukraine, which is planning a gradual increase in emissions, declared at the international level.

The Present State of the Ukrainian Legislation on Climate Protection

For a long time, the national environmental laws left unaddressed the legal issues of climate protection. Scientific research also stayed out of examining environmental problems, basically being engaged in the legal aspects of environmental social relations. Considerable changes occurred after adoption of the UN Framework Convention on Climate

Change of 9 May 1992 and the Kyoto Protocol to the Convention dating 11 December 1997. The Framework Convention was signed on behalf of Ukraine on 11 June 1992, ratified by the Law of Ukraine on 29 October, 1996, and came into effect in Ukraine on 11 August 1997.¹⁵

The ultimate objective of the Convention and of all the related legal documents consists in stabilizing, through implementation of its provisions, the concentration of greenhouse gases in the atmosphere at the level, which would prevent a dangerous anthropogenic impact on the climate system. This should be achieved within the time limits, necessary for a natural adaptation of ecosystems to climate change, without threatening food production, and providing further economic growth on a stable basis (Article 2 of the Framework Convention).

Among the principles, which guide the activity of the Parties on fulfillment of the Convention goals, one can highlight the following: climate system protection for the benefit of the present and future generations on an equity basis; taking prevention measures to forecast, prevent, or minimize the causes for climate change and mitigate its negative consequences; policies and measures aiming to protect the climate system against anthropogenic changes must comply with the specific conditions of each Party and be integrated into the national development programmes; cooperation with a view of establishing a favorable and open international economy.

Adoption of the UN Framework Convention on Climate Change and the Kyoto Protocol gave a mighty impetus to essential transformations within the environmental legislation of Ukraine and launched scientific research of the relevant sphere. In particular, the Decree of the Cabinet of Ministers of Ukraine “On the Climate Programme of Ukraine” of 28 June 1997 defines climate as one of the main natural resources, which determines the living standards and vital activity of people, the direction and level of economic development. One of the first scientific publications on this problem was a paper by V. Komarnitsky titled “Ukraine in international legal cooperation on climate change”, published in 2005. In the author’s opinion, the Kyoto Protocol covered a variety of trends, aimed at a global solving of economic and environmental problems, and is a component of sustainable development i.e. a harmonious economic, environmental, and social development of the society. Besides, Ukraine’s joining the Kyoto Protocol called for fulfillment of certain national commitments: establishment of a national system for assessment of anthropogenic emissions from sources and absorption of greenhouse gases by absorbents; creation and keeping of the national record of the set amount of greenhouse gas emissions; encouragement of public involvement in climate change decision-making.¹⁶

Later on the problems of legal regulation and protection of climate change have been elucidated in a number of scientific works by such authors as A. Hetman and V. Lozo,¹⁷ S. Kuznetsova,¹⁸

A. Miroshnichenko,¹⁹ A. Surilova.²⁰ A specialized dissertation research on climate as an object of legal environmental protection in Ukraine was conducted by K. Prokhorenko.²¹

The legal literature regards the concept of climate (in the environmental legal aspect) as an integral total (system) of natural conditions and processes that are in a continuous interaction, exchange, and distribution of energy among natural objects, subject to legal protection as a prerequisite for, origin, and indicators of a safe, stable, and quality condition of the natural environment – an integrated object of environmental law,²² or as a natural object, which is characterized by a climate system condition (atmosphere, hydrosphere, biosphere, and geosphere in their interrelation and interaction), recognized by the norms of international environmental law as an object, on which a dangerous anthropogenic impact is exerted in the form of legally ascertained activities, related to greenhouse gas emissions, and requires taking of special international and national legal measures to stabilize the concentration of greenhouse gases in the atmosphere at the level, which does not allow unbalancing the climate system, with a resulting lowered quality and safety standards of the natural environment.²³

The legal literature shows some skepticism towards the legal framework that regulates climate change, qualifying it as understudied. Specifically, according to S. Kuznetsova, the regulatory system existing in Ukraine is inadequate and needs a considerable improvement,

mostly with regard to legal regulation of climate change issues. The author believes that it is necessary to adopt strategic documents on global climate changes and their influence over the natural environment, economy and people, which will shape the state policy in the said sphere for the next few years (political programmes, state strategies for industrial development, power industry, transport, public utilities sector, agriculture, waste management, land use and forest management and other economic branches).²⁴

However, in view of the recent trends in international and national legal regulation and protection of climate, it is essential to look at the climate problem from a new perspective. In the first place, it is referred to the UN session that was held from 30 November to 11 December 2015 where the Paris Agreement to the UN Framework Convention on Climate Change was adopted (ratified by Law of Ukraine dating 14 July 2016).

The Paris Agreement, supporting the implementation of the Convention and accomplishment of its goals, aims to strengthen the global response to the climate change threat, in the context of sustainable development and efforts to eradicate poverty, including by the following means: curbing the growth of average global temperature, keeping it much lower than the set figures, with a view to reduce the risks and consequences of climate change to a large extent; enhancing adaptability for adverse impacts of climate change, and fostering resilience to climate change and low greenhouse gas emissions development,

in a manner that does not threaten food production; ensuring coordination of financial flows making the consistent with the pathway towards low greenhouse gas emissions and climate-resilient development (Article 2 of the Agreement). Part 2 of Article 5 of the Agreement recommends the Parties to take action to implement and support, including through results-based payments, the existing framework as set out in related guidance and decisions already agreed under the Convention for: strategic approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.

Acknowledgement by Ukraine of its commitments under the UN Framework Convention on Climate Change was the Order of the Cabinet of Ministers dated 7 December 2016 “On approval of the Concept for implementation of the state policy in the sphere of climate change for the period till 2030”.²⁵

The purpose of the Concept is improvement of the state policy in the sphere of climate change for attainment of the country’s sustainable development, laying the legal and institutional groundwork to ensure a gradual conversion to low greenhouse gas emissions development in the conditions of eco-

nomie, energy and environmental safety, and raising the well-being of the people.

The Concept emphasizes that the urgency of addressing climate change problems is connected with: the need for improvement of the legal environment in this sphere; unclear distribution of functions, low level of action coordination and insufficient institutional capacity of public authorities for planning and pursuing activities in the said field; inconsistency of climate change policy with legal and other regulatory acts in various socio-economic spheres; lack of systemic approach to scientific capacity building related to climate change activity; low awareness of the civil society and public authorities of all the aspects of the climate change problem and the country’s low greenhouse gas emissions development.

The main lines of the Concept implementation are as follows: enhancement of the institutional potential for forming and promoting implementation of the state climate change policy; climate change prevention due to reduction of anthropogenic emissions and increased absorption of greenhouse gases, providing for a gradual transfer to low greenhouse gas emissions development of the state; adaptation to climate change, strengthening of resilience and lowering of climate change risks.

Conclusions

Thus, Ukraine undertakes commitments and is building its climate policy in terms of harmonization of the national legislation to the existing international climate protection standards. The first harmonization stage was marked by the country’s adoption of the Concept for the implementation of the state policy in the

sphere of climate change for the period till 2030, which envisaged a number of measures on strengthening institutional capacity, forming and implementing the state climate change policy; prevention of climate change due to reduction of anthropogenic emissions and increased absorption of greenhouse gases, ensuring a gradual transfer to low greenhouse gas emissions development; adaptation to climate change, enhancing resilience and reducing risks resulting from climate change. The Concept acknowledges that its realization will make it possible: to improve the state climate change policy and enhance the institutional capacity for the policy implementation; to guarantee the observance of all the obligations of Ukraine under the UN Framework Convention on Climate Change and other international agreements in the field of climate change, Association Agreement between Ukraine and the European Union, the European Atomic Energy Community and its member states; to ensure legal and normative regulation of market and non-market tools for reducing anthropogenic emissions and increased absorption of greenhouse gases, including introduction of an internal system for the sale of greenhouse gas emission quotas and upgrading environmental laws with regard to greenhouse gas emissions; strengthen the capacity of local executive bodies and local governments for designing and implementing measures on climate change preven-

tion and adaptation to it; to enforce legislative regulation of market and non-market tools for reduction of anthropogenic emissions and increasing greenhouse gas absorption, including the introduction of an internal system for selling greenhouse gas emission quotas and improvement of the eco-tax system with regard to greenhouse gas emissions; to enhance the capacity of local executive authorities and local governments for development and implementation of actions on climate change prevention and adaptation to it; to provide a systemic scientific, methodological and educational support for all the aspects of the climate change activity; to raise the level of public participation in administrative decision-making in the sphere of climate change, etc.

In the future, Ukraine should focus its attention on international cooperation with the participants (Parties) of the UN Framework Convention on Climate Change in the following spheres: deepening scientific knowledge of climate, including research, regular observation of the climate system and early-warning system, in the manner that creates an information background for delivery of climate services and support of decision-making processes; strengthening of institutional mechanisms for consolidation of the relevant information and expertise for providing the Parties with technical support and guidelines; other areas, mentioned in the Framework Convention.

Notes

1. Louka, Elli. 2006. *International Environmental Law. Fairness, Effectiveness, and World Order*, at 343–382. Cambridge: University Press.
2. Birnie, P., Boyle, A. and Redgwell, C. 2009. *International law and the Environment*, at 43–47, 335–378. Oxford: University Press.

3. Vernadsky, V. I. 1977. *Reflections of the naturalist. Scientific thought as a planetary phenomenon*, at 21, 24. Moscow, Book 2 [in Russian].
4. Terez, I. 2005. "IE Global warming is a myth or a reality?". *Weekly 2000*. May 27, at <http://2000.net.ua/2000/aspekty/intel/18116> [in Russian].
5. "Conference on global climate change in Copenhagen. Climate change: it's not about temperature". *RFI* 04/12/2009, at <http://www.russian.rfi.fr>. [in Russian].
6. "The Montreal Protocol on Substances that Deplete the Ozone Layer. Adopted on September 16, 1987", at http://www.un.org/ru/documents/decl_conv/conventions/montreal_prot.shtml [in Russian].
7. Birnie, P., Boyle, A. and Redgwell, C. 2009. *International law and the Environment*, at 84–86. Oxford: University Press.
8. *Official Journal of EU* (OJ) L 033. 07.02.1994, 11–28.
9. "The Kyoto Protocol will enter into force on February 16", 2005. *BBC*. 2004. Nov. 18 [in Russian].
10. See: <http://unfccc.int/2860.php>.
11. *BBC*. 2005. February 16 [in Ukrainian].
12. "Economics. Climate change will cost developing countries nearly \$100 billion a year". *Deutsche Welle*. 2009. September 30 [in Ukrainian].
13. *Deutsche Welle*. 2009. September 10 [in Ukrainian].
14. Birnie, P., Boyle, A. and Redgwell, C. 2009. *International law and the Environment*, at 361. Oxford: University Press.
15. *Official Bulletin of Ukraine*. 2012. No. 83. Art. 3381 [in Ukrainian].
16. Komarnitsky, V. M. 2005. "Ukraine in international legal cooperation on climate change", at 20–21. *Visnyk of Lugansk State University of Internal Affairs, issue 4* [in Ukrainian].
17. Getman, A. P. and Lozo, V. I. 2012. "Legal protection of the Earth's climate: historical dynamics, main components and perspectives of the Kyoto process development", at 104–115. *Problems of legality, 120* [in Ukrainian].
18. Kuznetsova, S. V. 2014. "National legislation of Ukraine on climate protection and prospects for its improvement", at 211–219. *State and Law, issue 66* [in Ukrainian]; Kuznetsova, S. V. 2014. "Development of Legal Regulation of Climate Protection in Ukraine", at 297–304. *State and Law, issue 64* [in Ukrainian].
19. Miroshnichenko, O. P. 2005. "Combating climate change as one of the leading directions of the EU ecological policy (legal aspects)", at 21–31. *International law and national legislation, issue 4* [in Ukrainian].
20. Surilova, O. O. 2012. «Legal regulation of climate change in the second period of the Kyoto protocol», at 408–409. *Legal life of modern Ukraine: International Scientific and Practical Conference*. (Vol. 1). Odessa: Phoenix [in Ukrainian].
21. Prokhorenko, K. A. 2013. *Climate as an Object of Environmental and Legal Protection in Ukraine*. Extended abstract of candidate's thesis. Kyiv [in Ukrainian].
22. Prokhorenko, K. A. 2011. "Theoretical Aspects of the Concept of "Climate" in Environmental and Legal Regulation", at 105. *Bulletin of the Taras Shevchenko National University of Kyiv: Law Sciences, issue 86* [in Ukrainian].

23. Prokhorenko, K. A. 2013. *Climate as an Object of Environmental and Legal Protection in Ukraine*. Extended abstract of candidate's thesis. Kyiv [in Ukrainian].
24. Kuznetsova, S. V. 2014 "Development of Legal Regulation of Climate Protection in Ukraine", at 303. *State and Law, issue 64* [in Ukrainian].
25. *Official bulletin of Ukraine*. 2016. No. 99. Art. 3236 [in Ukrainian].

Published: Environmental Policy and Law. 2019. 49(2-3). P. 190–195.