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## International legal solution to the problems of climate change and sustainable development

**Abstract.** In the article are researched the main problems in the field of protection of the environment and steady development. Are analysed international treaties and other documents in this field, national ecological legislation, and the role of international organisations.

In the modern world, in spite of emergence a lot of common views of the ecological problems and measures taken by the parties of international law, is continuing the deterioration of the condition of the environment, which threatens the welfare of people, and in some cases – and the existence of life on planet. Abidance of the quality standarts of the environment are becoming one of the most key parameters of the competitiveness of states. Adapting optimal international legal regime of its protection and application of taken decisions depend on political will, on functioning and development of the hard system of cooperation, based on international treaties and including states, international organisations, governmental and non-governmental organisations.

The Secretary-General of the UN Ban Ki-moon has designated the fighting with the climat change as a moral and practical imperative of our time.

The problems of saving auspicious environment and steady usage of resources are closely related with social requirements, demographic pressing and poverty in developing countries, contrary to excessive and often wasteful examples of consumption in developed countries. Searching for acceptable solutions of ecological problems with considering needs of developing countries, using different way for making obligations, when developed countries are capable of taking for themselves more strict obligations on provision of auspicious quality of global environment, is important.

Especially keenly is being felt the need of achievement of universal participation in international treaties of the UN, their equable interpretation and implementation, in general the need of careful attitude to legal instruments in the sphere of protection of the environment and created regimes.

It has become obvious that further economic development of humanity, directed to the growth of people's welfare in combinated with the social guarantees becomes possible only in frames of «ecologically steady development». Suitable legal rules, and economic instruments, accepted either on national, and on international level, could have provided the equality between economic growth, increasing of production of material goods and saving of the environment.

**Key words:** environment, international treaty, states, global organizations, climate change, steady development, mechanism of interstate cooperation, climatic system, the atmosphere, greenhouse gases, the framework strategy, energy sources, Framework Convention, ratification, implementation, UN, legal obligations, The Kyoto protocol, energy saving, world community.

### Introduction

Environmental change happens not only by a result of human impact, but also under the influence of natural causes. This applies above all to the climate. Considering the problem of global climate change, depletion of the ozone layer in Earth's atmosphere, the proposed measures to reduce the emission of greenhouse and ozone-depleting gases, the possible relationship of the natural and manmade causes of humanity disturbing deviations

from recognized them optimum environmental conditions should be analyzed.

# 1 The concept of climate change and its prevention mechanisms: global vision

Under the terms of United Nations Framework Convention on Climate Change 1992, the term "climate change" means a change that is directly or indirectly to human activity that alters the global atmosphere, and in addition to natural climate variability observed over comparable times.[1,39]

Earth's climate system has changed significantly in the global and regional scale compared to preindustrial levels; some of these changes were caused by human activity. [2,383]

The concentration in the atmosphere of the main greenhouse gases generated by human activity (i.e. carbon dioxide, methane, nitrous oxide and tropospheric ozone) has reached its highest levels during the observation period the relevant processes, which is primarily due to the burning of fossil fuels, agricultural activities and changes in land use.[3,484]

Agreed scientific approach to climate change presented by the Intergovernmental Panel on Climate Change, established in the late 1980s under the auspices of the World Meteorological Organization.

Summary of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, published in early 2007, concluded that global warming is beyond doubt, and that this process is accelerating. It further affirms that the observed increase in global average temperature in the world, with a high degree of probability (with the reliability of more than 90 percent) is a result of greenhouse gas emissions (caused by human activity), which is higher than the reliability of more than 60 percent contained in estimation report in 2001.

# 1.1 Global organizations in the system of measures to prevent climate change

In 2014-2015, the World Bank Group has decided that it should do more to resolve the problem of climate change. However, it has had trouble in developing an approach that would satisfy the often-contradictory interests and views of its Member States.[1,59]

In fact, the need to go to the procedures of legal obligation that set clearly and effectively the priority of the environment not so important for any else as for the World Bank Group. None of organizations in the world is comparable to its level of influence on government policies and standards, which adhere to both the public and private sectors in the creation of this kind of project.

At the same time it is necessary to develop the rule of law, which would promote the following objectives:

- 1) reduction of the negative impacts of climate change;
- 2) increase access to energy in developing countries;[2,487]
- 3) support resources for vulnerable adapt to climate change.

Together with investment funds to combat climate change, the World Bank Group has assumed an important role in the development of projects that take into account the climate problem, which falls under the Strategic Framework for Development and combat climate change. As part of investment funds, it created two trust funds - the Clean Technology Fund and the Strategic Climate Fund, which supports numbers of programs aimed at addressing the problem of climate change. Clean Technology Fund finances projects for the development of low-carbon energy and energy technologies that reduce carbon emissions. It does not restrict the types of financing covered by the new technologies of renewable energy (such as solar energy, wind energy and small hydropower), but on the contrary, provides a full opportunity to support the development of clean technologies related to the use of coal and large hydroelectric dams. In the opinion of management, clean coal technology is highly profitable opportunities to significantly reduce greenhouse gas emissions or the potential for capture and storage of carbon dioxide. The problem is that there is no legal mechanism for regulating these relations, both at the international and national

Now it is necessary to establish the fact that the World Bank Group has done considerable work on the creation of a legal concept in the field of climate protection on the planet. And it can be seen from the chronology of the commitments of the World Bank:

- The Global Environment Facility, 1991: Resolution of the Board of Executive Directors of the World Bank from 1991 led to the establishment of the Global Environment Facility, which in 1992 was named as the financial mechanism of the UN Framework Convention on Climate Change. Since then World Bank's trust fund managed by the Global Environment Facility and functions as the main implementing organization of investment projects in the field of climate change
- The energy sector of the World Bank, 2001: Energy Sector Strategy of the World Bank has identified four main objectives: direct assistance to the poor, improving macroeconomic and financial balance, promotion of good governance and private sector development, and also environmental protection. Strategy outlined targets for 2011 on greenhouse gas emissions and energy efficiency in developing countries and countries with economies in transition. In addition, the strategy of the energy sector supported the policy measures in the area of fossil fuels.
- Extractive Industries Review / Bonn Commitment, 2004: In response of the heads

of the World Bank to the Extractive Industries Review (2004) and the International Conference for Renewable Energies in Bonn in June 2004, the World Bank Group announced its commitment to increase the volume of lending, allocated for the development of new renewable energy and energy efficiency by 20% between 2005 and 2009 annually.

- · A framework mechanism for investment in the development of clean energy, 2006: In 2006, in response to the request of the Group of Eight, the Bank has developed and implemented a framework mechanism to invest in the development of clean energy, designed to facilitate a consistent increase in the volume of investments in clean energy and the inclusion of climate change in order to help with development. A framework mechanism for investment in the development of clean energy has identified four main activities of strategic importance: the acceleration of the transition to an economy that produces less carbon emissions, especially in Brazil, China, Indiaand Mexico. Also, this problem was solved by increasing the analytical, technical and investment support; acceleration of investments that promote the growth of environmentally friendly energy supply; extension for the poor accessibility to the permissible means of energy, especially in Africa; and help developing countries adapt to climate change through the analysis and development management tools lawsuits. Finally, one of the most important international documents -Strategic Framework for Development and Climate Change.
- Strategic Framework for Development and Climate Change, October 2008: In the annual meeting of the Bank's Development Committee, which took place in October 2008 a successor Framework to invest in the development of clean energy approved: Strategic Framework on Development and Climate Change, which regulates much broader Bank's role in climate change issues. This strategy represents the International Finance Corporation, the Multilateral Investment Guarantee Agency, International Bank for Reconstruction and Development, and other organizations of the Bank Group's objectives, guidelines, directions and major initiatives for the rapid response for the next three years.

The Strategic Framework is based on six areas of action, each of which focused on adaptation and mitigation of climate change:

1. Support measures to combat the effects of climate change within the frame of development programs, implemented under the leadership of the countries themselves.

- 2. Mobilization of additional financial resources on favorable terms and with the use of innovative financing schemes;
- 3. Promote the development of market-based financing mechanisms;
- 4. The effective involvement of private sector resources;
- 5. Support accelerated development and deployment of new technologies; and
- 6. Expansion of policy research, measures to build knowledge and capacity.[4]
- 2 Climate change and sustainable development: the relationship and balance of interests.

At the same time the consequences of climate change could undermine efforts to achieve the goals of sustainable development, including through the aggravation of poverty in the developing countries. [1,271]https://translate.googleusercontent.com/translate f – footnote6

Scientists predict that by 2080, millions of people will suffer from annual floods due to sea-level rise; while special risk will be subject to the densely populated and low-lying areas where opportunities for adaptation are quite limited and which already face other challenges such as tropical storms or coastal subsidence. It is expected that climate change will have an uneven impact on food production. A moderate increase in temperature will increase the efficiency at the global level, but at lower latitudes, especially in areas with a dry season in tropical regions, crop productivity is projected to decrease even with a slight increase in local temperature (1-2 ° C), which will increase the risk of hunger.

Development directions and structures of production and consumption have different effects on the climate system. Climate change is often seen in the wider context of sustainable development, for example, based on the integration of national policies related to climate change.[5]

The problem of climate change and sustainable development is relevant in the environmental, economic and energy aspects. [6,276]

From a legal point of view, this issue should be considered at the national level and at the level of groups of countries, such as the Scandinavian countries, and within the continent and at the regional level and, of course, on a global globally. At each of these levels of legal regulation would not be the same. [7,38]

### 2.1 National vision of global problems

Within the framework of national law to this problem has to do with both criminal and civil, and administrative law.

For example, if you take the legislative framework of the Republic of Kazakhstan, the administrative law of Kazakhstan pays great attention to technical regulation, as in the case of violation of technical regulations is a negative impact on people and the planet as a whole. Technical regulation – is a matter of global technical compatibility concerning, including the problem of emissions and waste.

International legal regulation in this area is a very complex and important problem.[2,379]

Fundamental international legal document defining the legal framework for cooperation in the field of stabilization of greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the climate system is the United Nations Framework Convention on Climate Change, adopted by the 1992. The Convention was ratified by the Decree of the President of the Republic of Kazakhstan "On Ratification of the UN Framework Convention on Climate Change" from 04.05.1995. The Convention sets out the legal basis for solving global environmental problems of adverse climate change. In accordance with the provisions of this Convention, the primary role in ensuring the stabilization of greenhouse gas concentrations in the atmosphere at a safe level belongs to the developed countries with adequate financial resources.

Within the frame of the UN Framework Convention on Climate Change established a number of obligations of States – participants of the Convention, including:

-development of national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases;

-adoption national and, where appropriate, regional programs containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change;

-rendering assistance and cooperation in the development, application and diffusion of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases; etc.[8]

The Republic of Kazakhstan in accordance with the Convention assumes the following obligations:

- to develop, periodically update, publish and provide the Conference of the Parties national inventories of anthropogenic emissions by sources not controlled by the Montreal Protocol, using comparable methodologies;
- to implement measures for the implementation of national and regional programs containing

measures to mitigate climate change.

 periodically provide detailed information on policies and measures to limit anthropogenic emissions of greenhouse gases and protecting and enhancing its sinks and reservoirs of greenhouse gases and others.

Данные задачи в зависимости от того, насколько эффективно они будут выполняться государствами, во многом зависит результативность усилий мирового сообщества в устранении неблагоприятных последствий изменения климата, оказывающих значительное негативное воздействие на естественные экологические системы, на здоровье и благополучие человека.

In order to fulfill the obligations arising from the Convention, in 1998, the First National Communication of Kazakhstan United Nations Framework Convention on Climate Change was prepared and submitted to the Secretariat.

In addition, since 2000, an inventory of greenhouse gas emissions is regularly carried out. The inventory of greenhouse gas emissions for 1990, 1992, 2004 have been made in the format of reporting for Annex 1 countries and posted on the UNFCCC website. This work will be continued in accordance with the requirements of the Convention.

These tasks, depending on how well they will be performed by States depends largely on the effectiveness of efforts by the world community to address the adverse effects of climate change have a significant negative impact on natural ecosystems, to human health and welfare.[6,279]

# 2.2 The Kyoto Protocol: problems of implementation in the Republic of Kazakhstan and energy saving

The development of the main provisions of the Convention the Kyoto Protocol was adopted in December 1997. Kazakhstan ratified the Kyoto Protocol to the end of February 2009 without the application 1, the putative mechanism of quantitative emission limitation and "emissions trading", which involves the parties referred to in this application. https://translate.googleusercontent.com/translate\_f – footnote11 [3,486]

The essence of the trade is that the State has fulfilled its obligations and having a surplus of allowances can sell their emission rights to other parties.

Legal nature of the studied international instrument can be determined taking into account the two legal positions. On the one hand, this document aims to establish the legal conditions for limiting and reducing greenhouse gas emissions, which

means, of course, the main purpose of the adoption of the Kyoto Protocol – reducing the anthropogenic load on one of the components of the environment – atmosphere air. On the other hand, this document contains the legal regulations, which began to form an international market mechanism to address global environmental problems. This, above all, is to create the legal conditions for the implementation of emissions trading of greenhouse gases into the air, which determines the greater economic interest in reducing the volume of greenhouse gas emissions. [7,97]

The Kyoto Protocol provides the legal mechanisms created conditions for reducing greenhouse gas emissions, the clean development projects and joint implementation in particular and emissions trading mechanism for greenhouse gas emissions.[9,56]

The implementation of each of these legal instruments requires compliance with the mandatory conditions:

- 1) any project related to the sale or transfer of quotas, must be approved by the States participating in the project;
- 2) each project must provide a reduction in emissions by sources and removals by sinks, that is additional to any that would have otherwise occurred;
- 3) the State party to the Kyoto Protocol does not acquire any emission reduction units if it does not comply with its obligations under the formation of a national system for estimating anthropogenic greenhouse gas emissions; does not include in its national communication the supplementary information necessary to demonstrate compliance with its commitments under the Kyoto Protocol; does not fulfill other obligations in accordance with the provisions of the Kyoto Protocol;
- 4) the acquisition of emission reduction units shall be supplemental to domestic actions for the implementation of obligations to prevent exceeding the amount of greenhouse gas emissions set by the Kyoto Protocol.[10]

Only under these conditions the State may be considered to fulfill its obligations under the Kyoto Protocol.

These obligations set by the Kyoto Protocol can only be bear by the State with a stable economy and developed markets.

In Kazakhstan, there are very few realized projects directly aimed at reducing greenhouse gas emissions. One of the main sources of pollution are thermal power plants using technology high-ash Ekibastuz coal burning. It is hoped that with the

development of alternative energy, the Republic of Kazakhstan in 2017 (Expo 2017) is to reach international standards (subject to compliance with the national legislation in this area). The changes in the global atmosphere cannot cause domestic human activity, so the main cause of climate change – emissions of greenhouse gases.

According to the editor of "Energy Saving" M.N. Komolova: "Energy efficiency – solution to problem of climate change. Namely it is necessary to make more efforts to create special rules that would regulate this issue".[11]

Climate change is largely due to the high heat consumption of buildings, now using almost half of all energy produced. In this regard, one of the main tasks of the nearest future is to seek ways to improve energy efficiency is an important part of all economic systems. [11]

#### Conclusion

Climate change and sustainable development – is today not only legal, but also an economic and political problem. Errors in the dynamics of climate change poses a major economic catastrophe. For a number of future climate change – it is no longer a question of geopolitics and problem of survival. [3,484]

One of the obvious problems in the fight against climate change is the lack of development of ecological consciousness. In this process, an important role is played by social and political organizations in our country, but unfortunately, is not very active. In general, legal science should actively develop the rule of law, covering the entire range of legal. Economic, technical, financial, energy and social problems associated with climate change.

One of the objectives of the international community – to achieve a balanced and equitable solutions to economic, environmental and energy problems. No doubt human activity affects the climate. In this regard it is necessary to consolidate efforts to curb the harmful effects on the environment.[12,5]

The process of international cooperation in the sphere of protection of the environment will let to provide the steady usage of nature, to realise different ways in different situations, to find the individual solutions, which as much as possible are suitable for the unique situations and problems, to effectively implement the protection of the environment for providing its auspicious quality on the base of the rules of the international law.

In light of the above it can be recommended as a strategy for the sustainable development of the world community, the following provisions:

- 1. There should be a significant increase in the level of scientific research all the problems associated with global warming; especially problems changes in solar activity and the growth of greenhouse gases.
- 2. It is desirable to prove the most secure and affordable way of adaptation of human activities
- to global warming. It should be emphasized that the problems caused by the ongoing warming, are specific to each region.
- 3. Due to the lack of full understanding of the causes of climate change is impractical to develop and adopt global international legal projects impact on the climate, the personal responsibility of fixing.
- 4. Conduct scientific basis of global energy and related current trends of climate change.

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