

Doc.: GA30/LC30/REP/07

THE THIRTIETH PLENARY SESSION OF THE GENERAL ASSEMBLY
LEGAL AND POLITICAL AFFAIRS COMMITTEE

REPORT^{*}

GLOBAL CLIMATE CHANGE:
CONSEQUENCES FOR THE BSEC STATES

Rapporteur: Mr. Petru Nicolae IOTCU, Member of the Committee (Romania)

^{*} *Text considered by the Thirtieth Meeting of the Legal and Political Affairs Committee in Belgrade on 17 October 2007 and adopted by the Thirtieth General Assembly in Tbilisi on 11 December 2007.*

I. INTRODUCTION

The Legal and Political Affairs Committee at its Twenty Ninth Meeting in Bucharest on 25 April 2007, being of the opinion that the climate change is a serious global threat which requires timely response at global, national and local levels, deemed expedient to take up at its next meeting the subject concerning the consequences of the global climate change.

The priority concern of this matter was commended with the 15th Anniversary Summit Declaration of 25 June 2007, where the Heads of state or government of the BSEC Member States stress “the serious consequences of climate change and the need for widest possible regional and international cooperation to address this issue in a comprehensive and effective manner”.

The Thirtieth meeting of the Committee in Belgrade on 17-18 October 2007 discusses “Global Climate Change: Consequences for the BSEC States” with a view to elaborate the Report and the Recommendation for the Thirtieth Plenary Session of the General Assembly in Tbilisi in November 2007.

The report is designed to examine the current state of knowledge and understanding with regard to general and regional-specific impacts of climate change in order to tackle the climate change challenges in adequate and most efficient way.

The report has benefited from the contributions by the national delegations of Armenia, Azerbaijan, Bulgaria, Georgia and Romania. In addition, the reference material has been obtained through the Internet resources of the related national and international agencies.

II. GLOBAL CLIMATE CHANGE: CONSEQUENCES FOR THE BSEC STATES

1. Climate change is one of the most critical global challenges of modern times. Climate change affects us all through warmer temperatures, increased storminess, more intense rainfall, extensive flooding, severity of droughts, earlier springtime occurrences, changes in ocean circulation, scarcity of water resources, destruction of ecosystems, decline in biodiversity, reduction of cultivated lands, frequent forest fires, increased desertification, melting mountain glaciers, etc. Global warming also affects human health as unusual hot weathers shock human body, increase chronic illnesses and dissemination of infectious diseases.
2. It is universally recognised nowadays that the global climate change is a matter of urgency that requires sustained and concerted high level attention. The G8 leaders at the Summit in Gleneagles signed a Communiqué with a political statement on climate change, clean energy and sustainable development stressing the role of human activity in global warming and the need for urgent action. A package of measures was approved to combat climate change including improvements to energy efficiency in both - appliances and buildings, cleaner vehicles, aviation, work on developing cleaner fuels, renewable energy and promoting research and development and the financing of future necessary projects.

3. As in many parts of the world, the Black Sea region also experiences the consequences of the global climate change. The diverse nature of regional geography, with the attendant diversity of expression of climate change impacts, represents a particular challenge for monitoring and management of climate change at regional and local levels. The most common feature in the region is the widespread increase in summer temperatures. It is estimated that although the temperature increase is predicted to be relatively small, the effects of climate change are still likely to be quite large. The sea level rise in sea basins triggers erosion and flooding. In addition, over-exploitation of water resources leads to their decrease, which tends to become a serious problem in the future. Scientific estimates show a future reduction of agriculture crops due to the changes in temperature and rainfall caused by global warming.
4. According to the research by the Turkish Marine Research Foundation (TÜDAV) the climate of the Black Sea region is changing into a more Mediterranean climate and ecology and is upsetting the Black Sea ecological balance. The constant change in atmospheric rhythm precipitates completely different wind and current systems in the seas. Traditional fishing methods will be seriously impacted, fish farms would be under the effect of strong winds; and navigating would be harder.
5. Changing climate conditions during the last years in Georgia, for example, have had a certain impact upon intra-annual distribution of river run-off that was revealed in frequent catastrophic floods and reduction of water content of rivers other than of those with glacier alimentation. For the last four years, during the period of vegetation irrigation, unusual low river water content was observed in Eastern Georgia creating the situation for insufficient provision with necessary water even in case of irrigation system rehabilitation. To prevent anticipated hydrological disasters, the regulation of water resources by reservoirs is considered to be necessary, thus making it possible to use water for irrigation, energetic, recreational, drinking and industrial purposes. Extreme droughts in Moldova this year halved the farm yields and placed country's food industry in a critical situation. Climate change in Albania with increased temperatures and decreased precipitation caused more droughts affecting economic development. For the past few years the tendency in Bulgaria was towards warmer and drier climate with 60% less rainfalls compared to standard values. Raging forest fires in Greece and Turkey due to rather dry weathers have entailed immense damages for these countries.
6. In its current study the IPCC* stresses that “nearly all European regions are anticipated to be negatively affected by some future impacts of climate change and these will pose challenge to many economic sectors. Climate change is expected to magnify regional differences in Europe's natural resources and assets. Negative impacts will include increased risk of inland flash floods, and more frequent coastal flooding and increased erosion. The great majority of organisms and ecosystems will have difficulties adapting to climate change. Mountainous areas will face glacier retreat, reduced snow cover and

* *The Intergovernmental Panel on Climate Change (IPCC) has been established by WMO and UNEP to assess scientific, technical and socio-economic information relevant for the understanding of climate change, its potential impacts and options for adaptation and mitigation.*

winter tourism, and extensive species losses. In Southern Europe, climate change is projected to worsen conditions in a region already vulnerable to climate variability, and to reduce water availability, hydropower potential, summer tourism and, in general, crop productivity. It is also projected to increase health risks due to heat waves and the frequency of wildfires. In Central and Eastern Europe, summer precipitation is projected to decrease, causing higher water stress. Health risks due to heat waves are projected to increase. Forest productivity is expected to decline and the frequency of fires to increase. In Northern Europe, climate change is initially projected to bring mixed effects, including some benefits such as reduced demand for heating, increased crop yields and increased forest growth. Adaptation to climate change is likely to benefit from experience gained in reaction to extreme climate events, by specifically implementing proactive climate change risk management adaptation plans.”

7. Scientists agree that many of these occurrences are largely due to emissions of gases as a result of industrial processes, fossil fuel combustion and deforestation. For decades, greenhouse gases have been increasing in the atmosphere. These gases absorb solar radiation that is reflected by the surface of the earth and in this way traps the energy of this radiation in the atmosphere. The greenhouse effect is a natural phenomenon without which the earth would be much colder place. Human activities, however, increase the amount of these gases in the atmosphere, generating more heat to be trapped. Six main gases considered to be contributing to global climate change are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), plus three fluorinated industrial gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆). Also water vapour is considered a greenhouse gas. With stronger effect of the greenhouse gasses more heat gets trapped than needed which gradually will make the earth less habitable for humans, plants and animals. It is the reality today that the climate change has already been disrupting natural ecosystems and if it gets worse, it is likely to lead to rather extreme conditions. The burning of fossil fuels, the unsustainable destruction of forests, and the use of heat-trapping aerosols are the main culprits behind the climate change phenomenon that could lead to unprecedented climatic changes in the coming decades. The World Meteorological Organization announced in July 2003 that “recent scientific assessments indicate that, as the global temperatures continue to warm due to climate change, the number and intensity of extreme events increase.”
8. Human beings have always influenced their environment. Human activities, especially, those involving the combustion of fossil fuels for industrial or domestic usage produce greenhouse gases and aerosols which affect the composition of the atmosphere. At the same time, urbanisation and agricultural practices affect the physical and biological properties of the planet surface altering its radiative forcing and having a potential impact on regional and global climate. It has been estimated that concentration of various greenhouse gases has been increasing, but today the amount of carbon dioxide mounts at an unprecedented rate of on average 0.4% per year.
9. Global Warming report of IPCC released in February 2007, confirms the increase in atmospheric concentrations of greenhouse gases. The report stresses that “expected repercussions of the uncontrolled and non-scientific usage of the planet’s resource in

the name of “progress” will affect every nation on earth”. The scientific community increasingly recognizes that environmental degradation caused by unsustainable energy production and consumption is having a significant impact on human development which is a complex issue of sustainable development. On one hand, climate change influences key natural and human living conditions and, thereby, the basis for social and economic development, while, on the other hand, countries’ priorities for development increase greenhouse gasses emissions causing climate change.

International framework

10. Being aware of the fact that no one country alone is able to solve the climate change problem, the countries globally are acting to adapt to climate change and to reduce the risks by reducing contribution to the causes. In 1992, world leaders and environmental experts at the Earth Summit in Rio de Janeiro agreed to adopt the United Nations Framework Convention on Climate Change* (UNFCCC) setting forth an overall framework for intergovernmental efforts to adequately tackle the challenge posed by climate change. The objective of the UNFCCC is “to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”.
11. The third Conference of the UNFCCC Parties in Kyoto in 1997 was a further step in addressing climate change from a global perspective adopting the Kyoto Protocol** to the UNFCCC, which became legally binding on 16 February 2005. The Protocol establishes three flexible mechanisms known as Joint Implementation - a mechanism that permits the industrialised countries, which are unable to reach their reduction target solely by domestic means, to reduce their greenhouse gases emissions through investing in the economies of the countries in transition; the Clean Development Mechanism - a mechanism, which allows developing countries to receive investments for the construction of new facilities in order to replace old ones; and International Emissions Trading - a mechanism that allows trading the parts of the reduced emissions, which exceed the commitments, i.e. the countries who fail to diminish their emissions can buy “credits” from countries, which have reduced their greenhouse gases below the committed level. It should be noted that the environmentalists protest against this emission carbon credit trading as it does not contribute to alleviating climate change. The Kyoto protocol expires in 2012 and the parties to the UN Framework Convention on Climate Change are going to meet in Bali in December this year to seek to advance future action on climate change after the first commitment period of the Kyoto Protocol expires. In this framework, the “Vienna Climate Change Talks 2007” under the auspices of the UNFCCC was held in August this year in order to agree on key elements for further effective international response to climate change.

* *All the BSEC states are parties to the United Nations Framework Convention on Climate Change (entered into force on March 21, 1994)*

** *All the BSEC states apart of Serbia and Turkey have ratified the Kyoto Protocol to the UNFCCC*

12. The UN Framework Convention on Climate Change and its Kyoto Protocol provide the only international framework to combat climate change, safeguard socio-economic growth and achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. It obliges all its signatories to establish national programmes for reducing greenhouse gas emissions and to submit regular reports. By differentiating between industrialised and economies in transition countries (Annex I countries) and developing countries (non-Annex I countries), the UNFCCC recognises that industrialised countries are responsible for most of the global greenhouse gas emissions and also have the institutional and financial capacities for reducing them. The Parties meet annually to review progress and discuss further measures, and a number of global monitoring and reporting mechanisms are in place to keep track of greenhouse gas emissions.
13. The BSEC member states as other parties of the UNFCCC implement their national policies in the sphere of preventing global climate change and their negative consequences in the framework of the basic principles and provisions of these international instruments. Subsequently, the national programmes on economic and social development imply the formulation of an action plan in line with international challenges and adjusted to the specific national circumstances.
14. The UN Development Programme has unique role to assist countries to strengthen their capacity to address the challenges at global, national and local levels, sharing best practices, providing innovative policy advice and linking partners through pilot projects. It mobilizes large and small-scale projects in partnership with other UN organizations, governments, NGOs, civil society organizations, and the private sector. UNDP focuses on building the capacity to manage energy and environmental change that is crucial to ensuring economic and social stability as well as sustained progress. The UNDP programmes successfully are realized in the BSEC member states. For example, supported by UNDP and the Global Environment Facility, the Climate Change Programme works in Albania within the Ministry of Environment, Forestry and Water Administration. In this framework the Albanian Government has taken considerable steps to meet its obligations to the UNFCCC and aims at reducing greenhouse gases, mainly through energy efficiency measures and promotion of renewable energy sources.
15. The European Union, in its turn, is at the forefront of international efforts to combat climate change. The EU is taking serious steps to address its own greenhouse gas emissions. In March 2000 the Commission launched the European Climate Change Programme (ECCP) with a range of new policies and measures. The EU is committed to deliver the collective 8% cut in emissions by 2008-2012 to which it signed up under the Kyoto Protocol. A cornerstone of EU climate change policies is the Emissions Trading Scheme launched on 1 January 2005. The EU governments have set annual limits to power plants and energy-intensive factories that account for almost half of the EU's CO₂ emissions. The Emissions Trading Scheme makes sure that emissions are cut where it is cheapest, and lowers the overall costs of reducing emissions. Other ECCP measures are, for example, aimed at improving the fuel-efficiency of cars and the

energy efficiency of buildings; increasing the use of renewable energy sources, such as wind, sun, tidal power, biomass and geothermal power; advancing combined heat and power generation because this requires less energy; controlling the fluorinated greenhouse gases; reducing methane emissions from landfills; raising awareness; and strengthening research and development and the uptake of climate-friendly technologies. The European Commission's Environment Directorate-General is in charge of the European Commission's work on climate change. It initiates new EU environmental legislation, including climate change legislation. The European Commission also ensures that measures which have been adopted are actually put into practice in the Member States by monitoring implementation. Furthermore, the Commission is mandated to represent the EU in international negotiations, keeping the EU at the forefront of international efforts to combat climate change.

16. The relevant EU legislation also binding for the three BSEC member states that are the members of the EU are: Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC; Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol. 2004/156/EC: Commission Decision of 29 January 2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council Commission Regulation (EC) No 2216/2004 of 21 December 2004 for a standardized and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision No 280/2004/EC of the European Parliament and of the Council; Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.
17. At the same time, various research and monitoring programmes and projects are presently carried out in the BSEC states funded by the European Union. For example, EU funded project is the Technical Assistance to Armenia, Azerbaijan, Georgia and Moldova with respect to their global climate change commitments, as well as assistance in building institutional and technical capacity for participation in the UNFCCC and the Kyoto Protocol.

National framework

18. The wide variety of national policies and measures to limit and reduce greenhouse gas emissions include regulations and standards, financial incentives, research and development programmes and information instruments. Climate change policies are tailored to fit specific national circumstances and also overlap with other national policies relating to the environment, forestry, agriculture, waste management, transport and energy.

19. Except for the laws on ratification of the UNFCCC and the Kyoto Protocol there are important legal instruments and regulations in climate change policy. *In Armenia* - the climate change strategy aims to help national institutions and civil society reconcile environmental concerns with the national economic development and poverty reduction goals and policies, in order to make progress on environmental sustainability. The National Capacity Self-Assessment process provides a unique opportunity for a country to carry out a comprehensive evaluation of their national capacity to fulfill their commitments under global environmental conventions in a coordinated and synergistic manner. *In Azerbaijan* - State Commission on Climate Change was established in 1997 by the Order of the President of the Republic. The Government adopted and implemented the following State Programs: “National Program on Environmentally Sustainable Socio-economic Development”, “National Program for the Restoration and Expansion of Forests” and “State Program on the development and application of renewable energy in the Republic of Azerbaijan”. In addition some larger projects are under development concerning energy and reforestation. *In Bulgaria* - the National Action Plan on Climate Change has been updated and extended. The Second National Plan on Climate Change, which is implemented in the 2005-2008 period, is intended to streamline and guide the efforts in mitigating the effects leading to climate change. It defines mainly the legislative framework and the institutional structure required for implementation of the climate change policy. *In Georgia* - intensive works are conducted on the mitigation of negative impact caused by climate change and working out adaptation measures by the National Agency on Climate Change at the Ministry of Environment. A number of environmentally friendly projects have been prepared and are still in the process of preparation for various sectors of economy. Georgia has making concrete steps by the country’s Government, in particular, an official declaration of the principles of environmental protection and sustainable development as the country’s priorities, as well as continuation of the National Program on Climate Change since 2001 are rather important. *In Greece* - a comprehensive policy has been elaborated for tackling climate change, based on specific measures designed to fully meet the country’s obligations under the Kyoto Protocol. Other new measures proposed by the government include renewing the country’s fleet of taxis, promoting cargo transport by rail, systems to manage animal wastes and forestation of agricultural lands. The measures already underway include revision of the National Programme for Climate Change, with the addition of measures necessary for meeting the country’s targets, including use of the emissions trading scheme. Climate change mitigation is one of the main targets identified in the Greek policy for sustainable development. Desertification constitutes a complex phenomenon, resulting from the extreme degradation of soil and water resources in a region. *In Romania* - the first National Strategy on Climate Change of Romania was approved by the Governmental Decision no. 645/2005. The Strategy represents the general framework for implementing climate change policies and measures in the period 2005-2007. With this Strategy, Romania has taken its first steps towards a targeted and coordinated national effort to limit greenhouse gas emissions and to deal with the climate change impacts that are to be expected. The National Action Plan on Climate Change is the main instrument for the implementation of the National Strategy on Climate Change and establishes how implementation progress is to be reported.

20. Public awareness, capacity-building, adaptation and mitigation mechanisms play important role in successful implementation of the national policies in meeting the challenge of global climate change. The policy-making process at government level implies complex mechanism involving many stakeholders, yet, the political calculus used to choose a particular instrument differs for each government. In practice, an instrument that works well in one country may not work well in another due to different social norms and institutions. There is no doubt that the instruments must be supplemented with workable systems of monitoring and enforcement.
21. Climate policies can be more effective when embedded within broader strategies designed to make national and regional development paths more sustainable. There is a wide synergy between climate change and economic, social and environmental sustainability and it is important that policies in the sphere of renewable energy, transport, agriculture, industry and development complement climate change policies. The pace of any response to climate change concerns depends upon the social context, as well as the availability of necessary technologies. Technology development, technology cooperation with other countries, and establishment of new environmental technologies become important component in mitigating climate change. It is also crucial that efficient energy policy, diversification of energy resources and a switch to alternative, more sustainable and environmentally friendly types of energy is secured.

Parliamentary contribution

22. The recent G8 Parliament Speakers Conference in Berlin in September 2007 paid particular attention to the climate change issue and the role of parliamentarians in backing international climate protection agreements.
23. Parliaments have to pay more attention to policies and programmes that achieve a better balance between development and environmental concerns and explore more effective approaches on global climate change.
24. National parliaments should take leadership role in promoting deeper understanding of global climate change issue entailing serious social, economic, and even security implications and bring their contribution to facilitating more informed decision making regarding this all-encompassing threat.
25. Parliamentarians can also mobilise public opinion with a view to avert dangerous human interferences in the climate system.
26. Parliaments can reinforce climate change policy and legislation and can enhance international cooperation on the basis of common but differentiated responsibilities under the international instruments in climate change area.
27. The role of the parliaments is especially important in order to forge the laws, guidelines, frameworks and incentives that will allow efficient implementation of national and international engagement on the challenge of global climate change.

III. CONCLUDING REMARKS

28. The environment is undoubtedly in need of pressing attention. The deterioration of global environment poses one of the greatest social and economic threats with severe impact on human security. The consequences of climate change are likely to affect us all in the immediate rather than long-term future. Lives risk destruction as the regions risk desertion.
29. Addressing the issue of global climate change is not solely a matter of environmental consciousness, it is rather a problem of broader scale implying socio-political sphere. As time advances natural resources become scarcer, agricultural production gradually reduces, drinking water disappears, high temperatures cause food insecurity and frequent appearance of infectious diseases. In today's globalised and interlinked world, the effects of climate change have a universal impact on the security of peoples across the planet.
30. While national and international actions to reduce greenhouse gas emissions are being implemented, their existing level in the atmosphere and impacts are likely to persist for several decades. This is a long-term problem requiring long-term solutions. Even the most stringent mitigation efforts cannot avoid further impacts of climate change in the near future. This means that the governments have to be equipped with mitigation, adaptation and technological development strategies to increase adaptive capacity and reduce vulnerability.
31. No effective action could be taken today without stronger international cooperation and solidarity. Cooperation at the trans-national, regional and local levels is of significant essence for efficient and effective address to the issue of climate change. The states along with the international organisations and civil society must engage in a constructive dialogue which yields tangible results. The international community must demonstrate its capacity to provide people with secure livelihood and individuals, in their turn, must and do care for the environment.
32. Climate change does not pose a single threat. It is rather a multi-faceted threat which impacts whole humanity in a direct or indirect manner. It is time that the countries around the world, also including the BSEC member states, join forces and work shoulder to shoulder under a consolidated international commitment to make the world a safer place.