

INTERNATIONAL CLIMATE POLICY COOPERATION AND HUNGARY

Background

Scientists had long ago called the attention to the possibility of the global climate change, caused by human activities, but nearly a century had to be elapsed until politicians and decision makers also started to deal seriously with this issue. From the early 1970s high ranking politicians started to recognize more seriously the increasing amount of information from the scientific circles on the significant changes of the quantities of greenhouse gases in the atmosphere, the long-term trends of global climate characteristics and the scenarios derived from the simple early numerical models. At the UN Conference on Human Environment held in Stockholm in 1972 and in the documents adopted by the participants, the risk of the changing climate as caused by anthropogenic activities was mentioned already in very general terms. Complex dynamic climatological modelling studies were carried out in the second half of the 1970s in the framework of the interagency and intergovernmental Global Atmospheric Research Programme (GARP) carried out with the joint coordination of WMO and ICSU in a period of 15 years. This programme contributed to strengthening of the cooperation of those scientific centres, which were dealing with various aspects of the climate system. The World Climate Conference (WCC), held in Geneva in 1979, was the first large-scale gathering of scientists devoted expressively to the state and changes of the global climate and this conference reviewed the results gained that far. Hungarian scientists actively contributed to both the cooperative work of the GARP and to activities of this conference (Czelnai, 2006)¹.

The real break-through in the relation between climate change science and climate policy (more precisely, climate change policy) happened in the 1980s and this resulted in launching the international cooperation on climate policy, i.e. the cooperation concerning the climate change related policy-making. The World Climate Programme (WCP) was launched and several international conferences were held on various topics of the changing climate. The UN General Assembly in 1987 adopted a resolution on the report of the Brundtland Commission, which *inter alia* emphasized the danger of the anthropogenic change of climate. Upon the initiation of the WMO and the UNEP, the Intergovernmental Panel on Climate Change (IPCC) was established in 1988. The Brundtland Report proved to be of great significance of this era also having a large influence in forming the international environmental policy cooperation². The UN General Assembly decided to convene in 1992 the UN Conference on Environment and Development (UNCED), and also passed a decision on the elaboration of an international agreement on the protection of Earth's climate. Both the Second World Climate Conference of 1990 and the first assessment report of the IPCC issued in the same year considerably influenced the work related to the preparation of that agreement.

Hungary contributed to and participated also in these events. A special national report was presented to the Second World Climate Conference³, and the President of the Republic of Hungary also has issued an important statement regarding the need for international cooperation in combating the climate change⁴. Studies were published in this era also in Hungary in relation to carbon dioxide emissions to the atmosphere⁵. A Climate Subcommittee of the Meteorological Scientific Committee of the Hungarian Academy of Science was established and prepared in 1991 the statement of the Academy on climate change and the necessary actions⁶. In Hungary, preparatory activities started also under the auspices of the ministries of the environment and foreign affairs on the participation in the UNCED (1992). As part of this process, comprehensive analyses were made and published on the risk, causes and potential impacts of climate change, and on the opportunity of the various response measures⁷.

¹ Czelnai R., 2006: Commemoration on the first World Climate Conference convened by the WMO (in Hungarian); Megemlékezés a Meteorológiai Világszervezet (első) Eghajlati Világkonferenciájáról. *Légtér*, 51. évf., spec. issue

² Láng I., 2002: History of the environmental protection to save the Earth (in Hungarian); A Föld védelmében; a környezetvédelem történetéből, 1962-92. *História*, 05-06

³ Antal E., Starosolszky Ö., 1990: Role of the climate and climate change in the life of Hungary: Contribution of Hungary to the Second World Climate Conference. Hungarian Ministry for Environment and Regional Policy, Budapest

⁴ Göncz A., 1990: Statement of the President of the Republic of Hungary to the Second World Climate Conference

⁵ Lévai A., Mészáros E., 1989: Energy production and carbon dioxide emission in Eastern Europe with special reference to Hungary. *Időjárás*, pp.196-204

⁶ HAS, 1991: Statement by the Meteorological Scientific Committee of the Hungarian Academy of Sciences on the future of our climate. Hungarian Academy of Sciences, Budapest

⁷ Faragó T., Iványi Zs., Szalai S. (eds.), 1990-1991: Climate variability and change vol. I, vol. II. Ministry for Environment and Regional Policy, Hungarian Meteorological Service, Budapest (authors: T. Faragó, E. Führer, L. Garbai, Zs. Iványi, Z. Járó, T. Jászay, L. Márkus, J. Mika, Á. Molnár, B. Nováky, T. Práger, S. Szalai, G. Szász, T. Szentimrey, F. Tóth)

International agreements and national tasks

International negotiations were conducted in the period 1991-92, under the auspices of the United Nations. Concerning the formulation of the Hungarian position for these negotiations, the Climate Change Sub-Committee of the Hungarian National UNCED Preparatory Committee was established which was composed of representatives of all interested national organizations. (The Hungarian National UNCED Preparatory Committee was engaged in the coordination of the preparations for the Rio Summit.) The minister of environment appointed a chief-negotiator for the climate negotiations (Tibor Faragó) similarly to such appointment in relation to the parallel negotiations on the international biodiversity convention. Already in this period, close cooperation of the ministries and professionals of environmental protection, energy management and forest management was set up by taking into account of the critical relationship between these sectors in terms of control of greenhouse gas emissions. International negotiations were very intensive in the period between February 1991 and May 1992. The Government decided on the most essential elements of the national standpoint in the closing phase of these negotiations⁸. The regular consultations with the representatives of the European Communities and the Central-Eastern-European countries with „economies in transition” had a significant influence on the forming and presentation of the Hungarian position. Dutch experts also assisted Hungary to more precisely assess the energy related emissions within the framework of a Dutch-Hungarian cooperation agreement by the environmental ministers⁹. All these preparatory processes provided a solid basis for Hungary to actively support the objectives and provisions of the projected international climate change agreement, including the acceptance by the countries with „economies in transition” of the commitment on stabilisation of emissions as a first step towards global climate protection.

The United Nations Framework Convention on Climate Change was eventually adopted and opened for signature in 1992, and according to this international agreement, the developed countries committed themselves to stabilize their emissions by 2000 at the level of these emissions in 1990¹⁰. The countries with economies in transition, and among them Hungary, could have some flexibility in this regard, since the level of their emissions in 1990 could not be considered adequate due to the deep recession. Hungary requested the opportunity of setting the reference (or base) level as the average annual emissions for the period of 1985-87 (i.e. a period which preceded the start of recession). Several other countries of our region used a similar approach with different reference levels. Besides the stabilization of the emissions, the convention set other obligations for the acceding parties. In particular, the tasks for the developed countries included the following: adoption and implementation of national programmes of mitigation and adaptation activities, development of detailed inventories of anthropogenic sources and sinks of greenhouse gases; support of scientific and technological cooperation; provision of financial and technological assistance to the developing countries. In Hungary, the national Commission on Sustainable Development was established in 1993 and became also responsible for supervision of the national implementation of this Convention.

In the meantime, the IPCC continued its activities and had a substantial role in providing scientific support for the international climate policy cooperation. The second assessment report of the IPCC was issued in 1995 and was followed by the third one in 2001. The fourth report was finalized and published in 2007. These reports provided increasingly unambiguous evidence, scenarios and evaluation of the global climate change hazard and its implications. Basic outcomes of these reports have been disseminated and utilized in Hungary, as well.

It was obvious that the emission related objectives of the UN Framework Convention on Climate Change could be considered as a „small step forward” only. Consequently, Parties to the Convention made a decision already at their first session held in 1995 in Berlin on launching a new round of negotiations, which eventually resulted in the „Kyoto Protocol”. According to the Protocol¹¹, the developed countries shall achieve an about 5% annual emission reduction for the period of 2008-12, in comparison to the emission level of 1990. The country-by-country contribution to this average is listed in an annex to the

⁸ Declaration of the Government of the Republic of Hungary on emissions of greenhouse gases, climate change, limitation of emissions from energy consumption and on the international climate change framework convention. (in Hungarian) A Magyar Köztársaság Kormányának nyilatkozata az üvegház-gázok kibocsátásáról, az éghajlatváltozásról, az energiafelhasználásból eredő hazai szén-dioxid kibocsátás korlátozásáról és a nemzetközi éghajlatváltozási keretegyezményről. 1992. ápr.16.

⁹ Faragó T., G. Szerdahelyi, M. Poós, F. R. Rijsberman, J. Gupta, 1994: Energy use and carbon-dioxide emissions in Hungary and in the Netherlands: estimates, comparisons, scenarios; contribution to the national energy and environmental policy-planning in relation with the energy-climate issues.. Hungarian Commission on Sustainable Development, Budapest (based on technical paper of 1992)

¹⁰ Faragó T., T. Pálvölgyi (eds), 1992: The United Nations Framework Convention on Climate Change. (in Hungarian). Hungarian National Committee for the UNCED, Budapest (authors: T. Faragó, I. Gyebnár, I. Lánszki, I. Mersich, J. Mika, T. Pálvölgyi, M. Poós, J. Sudár, S. Szalai, Gy. Szerdahelyi, M. Szoboszlai)

¹¹ Faragó T. (ed.), 1998: Reduction of the greenhouse gas emissions: the Kyoto Protocol to the UN Framework Convention on Climate Change and the national tasks. Hungarian CSD, Budapest

Protocol, which in particular indicates for Hungary a 94% target. It means a threshold for our average annual greenhouse gas emissions for the above mentioned commitment period as compared to the same reference level set for Hungary under the Convention. This Protocol provides for calculating the greenhouse gas emissions in carbon-dioxide equivalent, more concretely identifies those gases which should be taken into account and communicated, and it also requires to develop concrete general and sectoral measures for mitigation of their emissions and also for adaptation. The most specific elements of this Protocol are the “flexibility mechanisms”. These allow for a developed country Party in addition to the national level measures, to fulfil the prescribed emission mitigation objective, by acquiring additional emission allowances either from another developed Party through the “emission trading”, or by means of technology investments in another developed or developing country, which result in emission reduction.

Representatives of Hungary also directly assisted the work of these international institutions. In 2003-2004 the elected chairman of the Bureau of the Convention was the head of the Hungarian ministry of environment. Upon the ministerial invitation extended to the IPCC, it held its 23rd session in Budapest in 2008. Furthermore, the first chairman of the scientific advisory body of the Conference of the Parties to the Convention during 1995-97 was a representative of the Hungarian environmental ministry (Tibor Faragó). Several Hungarian experts took part in the international negotiations and also in the preparation of the reports of IPCC.

Hungary has become a Party both to the Convention and the Protocol. The national tasks relating to these international agreements and the results of the IPCC had a significant impact on development and strengthening of the Hungarian climate policy^{12,13,14}. In turn, these national policy mechanisms also facilitated the fulfilment of the obligations under those international agreements, including the development of the relevant policies and programmes, regulatory instruments, monitoring of the greenhouse gas emissions and reporting etc. Regarding the policy formulation, the first National Environmental Programme adopted in 1997 was dealing with these issues in general terms, e.g. by taking into account the greenhouse gases emission stabilization commitment or by means of enhancing the climate change related research and development work. The second Programme for the period of 2003-2008 already included a detailed thematic action plan on national climate change response policies and measures. The National Climate Change Strategy was finalized in 2008 and it defines all the important subject areas of action such as, the requirements to meet our obligations under the international agreements, measures to control the anthropogenic processes contributing to the climate change hazard, mitigation of greenhouse gases emissions and preparation for the environmental and socio-economic impacts. The solid scientific basis of forming this programme and the strengthening of climate change awareness was established to a large extent by a research project /VAHAVA project/ which was completed within the framework of cooperation between the environmental ministry (MoEW) and the Hungarian Academy of Sciences in the period of 2003-2007¹⁵.

We underline again that the development of the international cooperation in the field of the global climate change was a crucial motivating factor regarding the above mentioned research programme and more generally, all the relevant national sectoral and cross-sectoral policy development activities of the past two decades with the participation of government institutions and non-governmental organizations¹⁶.

Tasks stemming from EU membership: its internal and external dimensions

Hungary became a Member State of the European Union in 2004, a member of the Community, which has been playing a leading role in forming the international climate change policy since its beginning. The common policies and regulatory instruments were also developed in such a way that to able the Community and its Member States to comply with their international commitments. Stemming from these conditions, on the one hand, the new Member States had to adopt the policies and legal instruments that were adopted before they joined the EU and, on the other hand, after 2004 they were involved already in further development of the „acquis communautaire” with special regard to those instruments, which were relevant for the EU’s climate change policy. Their EU membership also enabled these countries to participate in the international negotiation processes in form of contributing to the common position and its representation.

The general framework of the climate change policy of the Community is provided by the European Climate Change Programme (ECCP), which was adopted in 2000 and updated as its second phase (ECCP-

¹² Pálvölgyi T., T. Faragó (eds.), 1996: The climate change hazard: causes, impacts, mitigation and adaptation opportunities (IPCC 2nd Assessment Report, SPM). Hungarian Commission on Sustainable Development, Budapest (in Hungarian)

¹³ Takács-S. A. (ed.), 2005: Climate change at global level and in Hungary. (incl. IPCC 3rd Assessment Report, SPM). Alinea, Budapest (in Hungarian)

¹⁴ Mika J. (ed.), 2008: Climate Change – 2007 (IPCC 4th Assessment Report, SPM). MoEW, Budapest (in Hungarian)

¹⁵ Láng I., Jolánkai M., Csete L. (eds.), 2006: The Vahava project – summary (in Hungarian) MTA, Budapest

¹⁶ Faragó T., 2008: Climate Change and International Cooperation (in Hungarian); Klimaváltozás és a nemzetközi együttműködés. ”Klíma-21” Füzetek, 52.

II) in 2005. Objectives, policies and means related to climate change are also forming a central component of the Environmental Action Plan and the Sustainable Development Strategy of the EU. Besides these policy instruments, certain sectoral (energy, transport, agriculture, etc.) and development programmes were also devoted to various aspects of climate change mitigation and adaptation policies (e.g., the recently adopted climate-energy package).

Among the concrete regulatory means, the Emission Trading Scheme (ETS) of the EU is gained the most attention. The transposition and implementation of this system in Hungary needs huge efforts. Along with developing the relevant national legal framework, including the respective act¹⁷, more than 200 Hungarian industrial installations were subject to permitting, reporting and quota allocation procedures for the pilot period of 2005-2007. It was followed by a basically similar procedure for the period of 2008-2012, which is actually coincides with the first commitment period under the Kyoto Protocol. In addition to these tasks, there is a series of matters, which need specific policy measures, regulatory action or institutional setup in order to meet the provisions of the related international agreements and/or the EU requirements. These include *inter alia* such issues as further development of inventories of the greenhouse gas emissions and reporting, regulation of participation in the joint implementation projects and international emission trading (quota transactions) including the national registry etc.

What may we expect in the future?

There is already a global political consensus at global level on the need to strengthen and accelerate the international efforts to combat the climate change hazard. Considering the latest results and recommendations of the IPCC, leading politicians worldwide have agreed that if we wish to avoid a global mean surface temperature rise higher than 2°C that would result in dramatic and irreversible global environmental change, then we must accept the science based recommendations, that is, to halt the further increase of atmospheric concentration of greenhouse gases and keep it below a certain critical level (around or even below 450 ppm). To do so the present anthropogenic emissions of these gases should at least be reduced by 50% by the middle of this century. Based on this generally accepted goal, Parties to the UN Framework Convention on Climate Change at their session in 2007 decided to launch international negotiations on the elaboration of a new global and comprehensive agreement, so that to finalize it by the end of 2009 (this is the decision on the Bali Action Plan, which includes the negotiation mandate and the roadmap).

In this negotiation procedure the EU's approach is that the group of the developed countries should contribute to the global mitigation efforts with a 30% emission reduction by 2020. Moreover, the global target can be achieved only if the developing countries with rapid economic development also make efforts to ensure that their further development will be associated with much more moderated increase of the greenhouse gas emissions (i.e. economic growth with lower carbon intensity or in other words, significant "decoupling" of this growth from the environmental pressure in terms of greenhouse gases emissions). Until such international agreement is achieved, the EU is committed to cut "unilaterally" these emissions by at least 20% by 2020 in comparison to their 1990 level. For this purpose, the distribution of emission mitigation efforts among the Member States must be agreed ("effort sharing"), the Community's emission trading scheme should be extended and strengthened, the energy efficiency should be significantly improved, the share of renewable energy sources should be considerably increased. The recently adopted EU's climate-energy package incorporated all these policy and regulatory elements. Hungary gave a full support to the basic climate-protection measures of the Community with a clear articulation of principles of solidarity and responsibility in context of the effort sharing. We also actively participate in the formulation of the EU's common position for the ongoing international negotiations. The ultimate objective of all these efforts is to avoid a dangerous level and rate of global climate change by taking into account the precautionary approach, and in order to meet this objective, all States, including the EU Member States should do considerably more than before - by both mitigating their greenhouse gases emissions and preparing for the apparently already unavoidable changes.

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¹⁷ Act XV of 2005 on the greenhouse gas emission trading (in Hungarian); A 2005. évi XV. törvény az üvegházhatású gázok kibocsátási egységeinek kereskedelméről)