

Overview of the requirements for the post-2012 climate change agreement

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This report has been read, commented and approved by all members of the PROMITHEAS-4 Scientific Committee.

It was also disseminated for comments, through BSEC – PERMIS and BSEC – BC, to all relevant governmental and business authorities and partners before its finalization.

Partners from the beneficiary countries* of the consortium were encouraged to contact direct national authorities, agencies, institutions and market stakeholder for comments before the finalization of this report (Annex 1).

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Acronyms and Abbreviations

ACP	- African, Caribbean and Pacific
AWG-KP	- Ad Hoc Working Group on Further Commitments for Annex I parties under the Kyoto Protocol
AWG-LCA	- Ad Hoc Working Group on Long-term Cooperative Action
BGN	- Bulgarian Leva
CCS	- Carbon Capture and Storage
CDM	- Clean Development Mechanism
CERs	- Certified Emission Reduction
COP	- Conference of the Parties
DRC	- Democratic Republic of Congo
EBRD	- European Bank for Reconstruction and Development
EC	- European Commission
ECCP	- European Climate Change Programme
EGTT	- Expert Group on Technology Transfer
EIB	- European Investment Bank
EIT	- Economies In Transition
ERDF	- European Regional Development Fund
ESCO	- Energy Saving Company
ESF	- European Social Fund
EU	- European Union
EU-ETS	- EU Emissions Trading System
FAO	- Food and Agriculture Organization
GCF	- Green Climate Fund
GEEREF	- Global Energy Efficiency and Renewable Energy Fund
GEF	- Global Environment Facility
GHG	- Greenhouse Gases
GIS	- Green Investment Scheme
IPCC	- Intergovernmental Panel on Climate Change
JI	- Joint Implementation
LDCs	- Least Developed Countries
LEDS	- Low-Emission Development Strategies
LULUCF	- Land-Use, Land-Use Change and Forestry
MRV	- Measuring, Reporting and Verification of GHG emissions
NMHS	- National Meteorological and Hydrological Service
OECD	- Organization for Economic Co-operation and Development
PPP	- Public Private Partnership
REDD	- Reducing Emissions from Deforestation and forest Degradation
RES	- Renewable Energy Sources
SBSTA	- Subsidiary Body for Scientific and Technological Advice
SEE	- South Eastern Europe
SEEVCCC	- South East European Virtual Climate Change Center



SIDS	- Small Island Developing States
UN	- United Nations
UNFCCC	- The United Nations Framework Convention on Climate Change
UNISDR	- United Nations International Strategy for Disaster Reduction
USA	- United States of America
WMO	- World Meteorological Organization

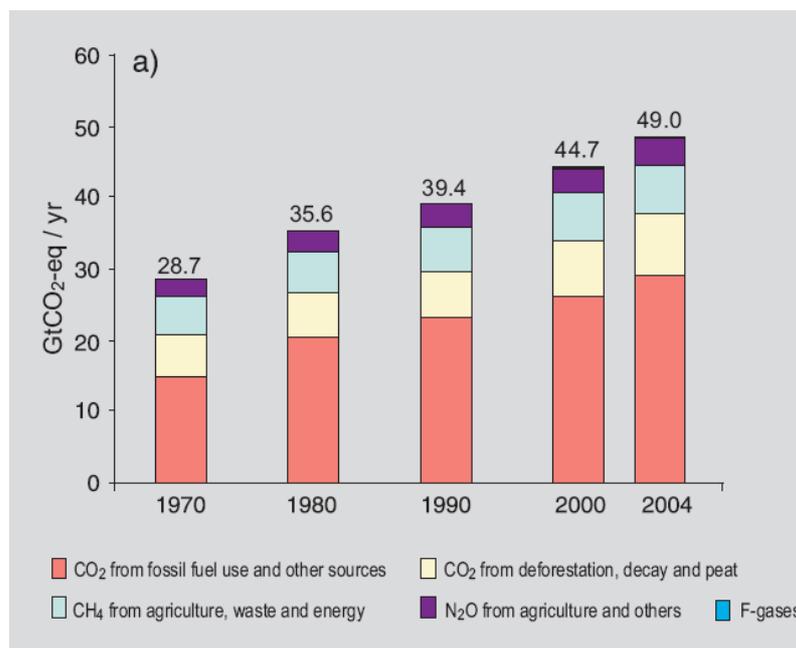


1. Preamble

There is consensus among scientists world-wide: “Warming of the climate system is unequivocal” [IPPC, 2007]. If the current level of GHG emissions is not reduced through strong national and international actions, global climate instability may occur.

The global human-induced GHG emissions have grown since pre-industrial times increasing by 70% between 1970 and 2004 with CO₂ being the largest contributor [Fig.1]. According to IPCC 4th Assessment Report “with current climate change mitigation policies and related sustainable development practices, global GHG emissions will continue to grow over the next few decades”.

Fig. 1 Global anthropogenic GHG emissions from 1970 to 2004.



Source: IPCC, 2007

The world’s most ambitious attempt of dealing with the on-going process of climate change is the Kyoto Protocol adopted in December 1997. The Protocol entered into force on February 2005 after it was ratified, in accordance with the agreement’s provisions, by countries involved in the UNFCCC and making up 55% of the total CO₂ emissions level in 1990 of the Parties included in its Annex I. Despite being one of the world’s largest CO₂ emitters the United States of America (USA) was the only signatory country that did not ratify it. Currently there are 193 Parties (192 States and the European Community) to the Kyoto Protocol to the UNFCCC and the total CO₂ emissions of Annex I Parties account 63.7% of the total CO₂ emissions in 1990 [UNFCCC, 2011].

Under the Kyoto Protocol first phase a list of 37 industrialized countries committed to specific targets to reduce their collective GHG emissions to 5% below 1990 levels for the period 2008-2012. In accordance with the Kyoto Protocol provisions, countries can meet their targets mainly through national measures but also by using the three market-based mechanisms introduced by the Treaty: Emissions Trading, Clean Development Mechanism (CDM) and Joint Implementation (JI). Negotiations have started for the second phase but questions are raised on how effective the Protocol has been.

The overall picture is not encouraging even though some countries have achieved their targets for emissions reduction (UK, Sweden, Finland) or have made substantial progress (Germany). During the period 1990-2000 the total GHG emissions of industrialized countries had a slight decrease by 5.6% [UNFCCC, 2011]. However, this happened due to the fact that countries from Eastern Europe and the former Soviet



Union went through their historic transition from centrally planned to market economies. In the early 1990s many of the inefficient state-owned industries failed leading to a steeply collapse of economic output and an emission reduction of 37%. This compensated for an 8.2% increase in emissions among developed countries in other parts of the world.

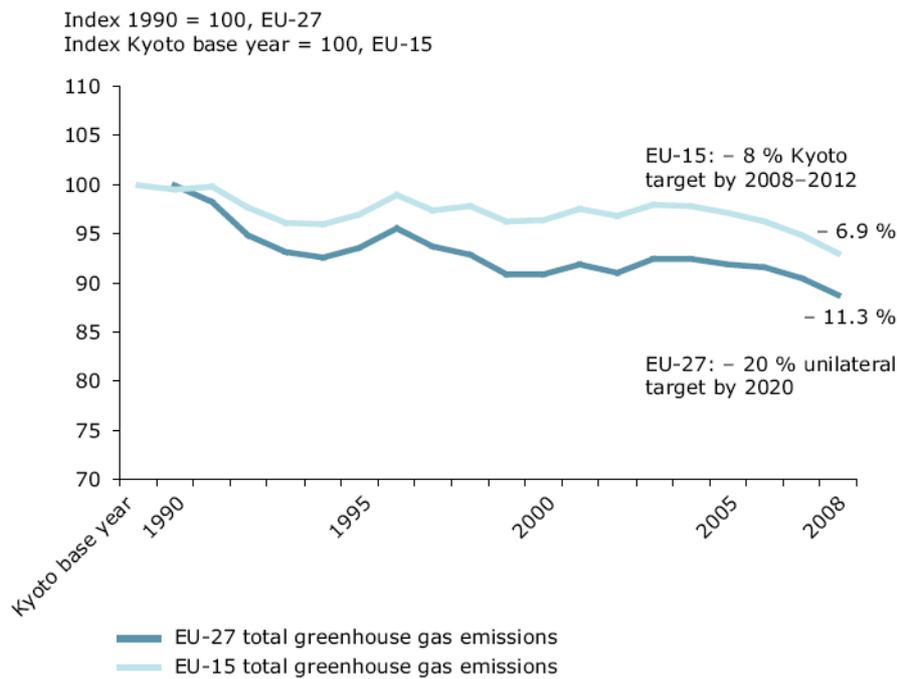
Today the Eastern European economies are back on the upward track and their emissions are following the same course. In the same time, GHG emissions from developing countries, which are not committed to reduction targets under the Kyoto Protocol, have also risen considerably.

On the bright side, many nations have followed through on their agreement and cut GHG emissions. An example is the European Union which is on track to meet its Kyoto obligations. In terms of total emissions, the EU is in third place behind China and the USA but it has been continuously reducing its anthropogenic GHG emissions.

In 2008, while including 8% of the world's population, the EU was responsible for 11-12% of global GHG emissions [EEA, 2010]. Current projections [IEA, 2009] that are considering global population growth and economic development show that while GHG emissions in emerging economies will continue to grow, Europe's contribution will decrease.

Between 1990 and 2008 the EU-15 Member States emissions decreased by 6.9% [EEA, 2010] which shows that they are not far from meeting their target of cutting emissions by 8% compared to 1990 levels. Significantly higher decreases have been reported for EU-27 domestic GHG emissions that fell by 11.3% during the period 1990-2008 [Fig.2].

Fig. 2 Domestic GHG emissions (in EU-15 and EU-27 from 1990 to 2008).



Source: EEA, 2010

Perhaps the major accomplishment of the Kyoto Protocol is that it succeeded to bring awareness to the fact that the humanity needs to reduce its GHG emissions if it wants to protect the environment against global warming. Based on binding targets and a control mechanism the Protocol enabled the world countries to develop cooperation on combating climate change and protecting the environment.

Also by focusing on finding means for reducing the GHG emissions the world countries have made significant investments on research and production of green technology. Today certain technologies that



could stabilize GHG emission levels, such as efficient technologies for fossil fuels burning or technologies for using renewable energy sources, already exist.

Despite the tremendous effort in agreeing, ratifying and implementing it, the Kyoto Protocol has proved so far only partly successful in controlling global GHG emissions. However, even though the targets are not met, the Protocol can be rightfully considered a milestone in the history of the world's environmental policy. Now that it is reaching its deadline, a new, more effective, global agreement is imperative to be established for the period beyond 2012.



2. The Post-2012 Climate Change Agreement

The Fourth Assessment Report of the IPCC provided the strongest evidence for human-induced climate change and a strong message that imperative action is required in order to keep average global temperature increase below 2°C, a threshold that would limit serious impacts of global warming. With Kyoto Protocol coming to an end in 2012 climate change policy requires a new global framework for international cooperation. Although nothing was sealed, signed and delivered so far important steps have been made towards a post-2012 agreement during the last years' rounds of negotiations under the UNFCCC Conferences of the Parties leading to: the Bali Roadmap, the Copenhagen Accord and the Cancun Agreements.

2.1. Bali Roadmap

The United Nations Climate Change Conference held in Bali (Indonesia) in December 2007 led to a final agreement known as the "Bali Roadmap". By adopting the Bali Roadmap the Governments agreed to start a two years negotiating process aiming at creating, by the end of 2009, a comprehensive global framework on carbon emissions beyond 2012 to replace the Kyoto Protocol.

2.1.1. Decisions under UNFCCC negotiations

The "Bali Action Plan" [Decision 1/CP13] calls for the establishment of a *"long-term global goal for emission reductions"*. Developed countries agreed to enhance their action on climate change mitigation by considering *"measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives... while ensuring the comparability of efforts among them"*.

On the other hand, developing countries agreed for the first time to consider taking *"nationally appropriate mitigation action... in the context of sustainable development"*. Also for developing countries mitigation actions could include *"policy approaches and positive incentives"* to reduce deforestation and *"cooperative sectoral approaches and sector-specific actions"*.

The Bali Conference foresaw development in financing and technology transfer. Therefore, it was stressed that mitigation actions of developing country Parties should be *"supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner"*.

The Bali Action Plan did not specify clear binding targets to reduce GHG emissions nor suggested which countries should make emissions cuts. But an indicative range of mitigation commitments for developed countries (25–40% compared to 1990 levels by 2020) that IPCC considers necessary for climate change mitigation was sent to a reference in a footnote to the preamble.

A great achievement was the agreement that established an "Ad Hoc Working Group on Long-Term Cooperative Action under the Convention" (AWG-LCA) with the participation of developing countries and the USA, the only industrial power that has remained outside the Kyoto Protocol. The AWG-LCA mission is to work in parallel with the Ad Hoc Working Group on Further Commitments for Annex I parties under the Kyoto Protocol (AWG-KP) and present their work outcomes for adoption, after two years, at the UN Conference in Copenhagen (Denmark).

Furthermore, the Bali Action Plan called for enhanced efforts to support adaptation to climate change impacts, remove obstacles to and support financially the technology development and transfer to developing countries and provide financial support for mitigation and adaptation actions undertaken by developing countries. Priority actions to be supported include: vulnerability assessments, specific projects and programmes, risk management and risk reduction strategies, disaster reduction strategies.



Over the years, the UN has introduced its Reducing Emissions from Deforestation and Degradation in Developing Countries Programme (REDD+) seeking to reduce the GHG emissions from deforestation by giving forests a monetary value based on their capacity to store carbon. As a step towards recognizing REDD efforts, the Conference of the Parties (COP) adopted a decision that encourages the so-called REDD-countries to undertake demonstration activities addressing the drivers of deforestations relevant to their national circumstances by using the provided “*indicative guidance*” (Decision 2/CP13). The demonstration activities consist mainly in developing emission baselines, based on the emissions from deforestation and degradation activities during a predetermined historical reference period, against which emissions reduction can be calculated. The decision does not specify what form the incentives will take to reduce deforestation.

As regards technology development and transfer, the Expert Group on Technology Transfer (EGTT) was reconstituted by COP for another five years with the mission to evaluate the ongoing efforts on technology transfer, make recommendations for a strategy paper for strengthening these efforts beyond 2012 and to identify potential new financial mechanisms. Among the areas considered as priorities for funding are joint research and development of new technologies, demonstration projects, North-South and South-South cooperation and licenses to support the access to and transfer of low-carbon technologies and know-how.

2.1.2. Decisions under Kyoto Protocol negotiations

The Bali Road Map recognized the need to increase the effectiveness of the CDM aiming of streamlining administrative procedures and processes and expanding its accessibility among the developing countries.

Additionally, it highlighted the “Adaptation Fund” concept to be financed with 2% of the Certified Emission Reduction (CERs) issued for projects under the CDM for assisting developing countries that are particularly vulnerable to the effects of climate change. During the Bali Conference, the parties agreed on the mechanism to supervise and manage this fund by establishing a 16-member Adaptation Fund Board, under the authority of the COP. Its functions include, among others, the development of strategic priorities and policies, development of criteria to ensure that countries seeking funding are capable to implement the administrative and financial management guidelines and approval of fund allocation for adaptation projects.

The Global Environment Facility (GEF) was designated as the Adaptation Fund’s secretariat and the World Bank as the trustee, on an interim basis, to be reviewed after three years.

2.2. Copenhagen Accord

Two years after the adoption of the Bali Road Map, the Parties participating to the 2009 United Nations Climate Change Conference in Copenhagen were expected to “seal the deal” on a new, fair and comprehensive climate agreement for the post-2012 period.

Released in December 2009, after two weeks of debates and negotiations, the “Copenhagen Accord” [Decision 2/CP15], drafted by the USA, China, India, Brazil and South Africa, is a three-page political declaration aiming at serving as background for future UN negotiations on climate change. Because the document was not accepted by unanimous consensus of the delegates the COP only “took note” of it.

In essence, this Accord addresses all the core elements of the Bali Action Plan: a long-term goal, mitigation, adaptation, technology development and transfer, forestry and financial support.

The Accord recognizes climate change as one of the greatest challenges of the present times and that enhanced actions for combating it are urgently needed in order to keep the global temperature below 2°C. Also it calls for a review of the Accord implementation by 2015 including a consideration of strengthening the long-term goal “*in relation to temperature rises of 1.5 degrees Celsius*”.



In terms of climate change mitigation, developed countries committed to voluntarily implement “*quantified economy-wide emissions targets for 2020*” and have them measured, reported and verified in accordance with COP guidelines. Developing countries agreed to implement mitigation actions and communicate their mitigation efforts every two years whilst least developed and small island developing countries “*may undertake actions voluntarily and on the basis of support*”.

Perhaps the most important achievements of the Copenhagen Conference were:

- to have, for the first time, significant developing country emitters like China and India, that were exempt from reporting their GHG emissions under the Kyoto Protocol, agreed to implement and report mitigation actions, and
- to bring the USA to the negotiation table willing to discuss real emission reduction commitments.

The agreement on adaptation provides for developed countries the mobilization of “*financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries*”.

The Governments also decided the establishment of a Technology Mechanism for enhancing technology development and transfer for the support of both mitigation and adaptation “*that will be guided by a country-driven approach and be based on national circumstances and priorities*”. Although this shows strong political support for a technology mechanism, further details regarding the implementation of such mechanism were not provided.

Industrialized countries agreed to provide substantial funding to developing countries in order to support intensified action on mitigation (including REDD+), adaptation, capacity-building and technology development and transfer. For the period 2010-2012, developed countries committed to an amount up to \$30 billion to be distributed in a balanced manner between adaptation and mitigation. Additionally, they committed to mobilize jointly \$100 billion a year by 2020 from a mix of public and private sources of finance. A High Level Panel was created under the guidance of COP to identify the potential financial sources that could contribute towards meeting the funding goal.

In addition, it was decided to set up the Copenhagen Green Climate Fund as an operating entity of the UNFCCC financial mechanism that will be responsible for but not limited to the distribution of an important amount of this finance to the developing nations.

The Copenhagen Accord fell short of the public high expectations because even though it provided for submissions of national pledges to cut GHG emissions by 2020 by all major economies, it drew no clear course towards an agreement with legally binding reduction targets. Not only the Copenhagen negotiations failed to lead to a new treaty but the Accord did not even set a future deadline for an agreement.

Developed countries subsequently submitted national pledges to cut and limit GHG emissions by 2020. Two types of pledges are recorded in the Accord. The low pledge is an unconditional pledge by countries to reduce their emissions and the high pledge is a conditional additional emission reduction. Nevertheless, these pledges together are not sufficient for combating climate change. They sum up to a 12-19% reduction of emissions below 1990 levels, which is far less than the emission reduction range (25-40% below 1990 levels by 2020) that the IPCC considers to be necessary for keeping the average global temperature under 2°C [WRI, 2010].



3. The Cancun Agreements

The UN Conference on Climate Change, held in December 11, 2010, in Cancun (Mexico), concluded with the Cancun Agreements representing key steps for moving international action on climate change forward.

The Cancun Agreements consist in a set of decisions adopted under the same two tracks: the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) under the UNFCCC and the Ad Hoc Working Group on Further Commitments for Annex I parties under the Kyoto Protocol (AWG-KP). It established commitments for developed and developing countries, a framework for adaptation to the effects of climate change, capacity building support and climate finance. Success was possible only when progress was shown under both tracks.

3.1. *Decisions adopted by the AWG-KP*

Mitigation commitments by Parties to the Kyoto Protocol for the period after 2012 are still under consideration. Annex I Parties agreed that in a second commitment period emissions trading and the Clean Development Mechanism (CDM) and Joint Implementation (JI) shall continue to be available as additional means for reaching their emission reduction targets.

CDM was strengthened to drive major investments and technology towards underrepresented project activity types and regions from developing countries or countries with economies in transition. This will be done by setting up and making operational a loan scheme to support the development of CDM project activities in countries that have fewer than ten (10) such activities registered [Decision 3/CMP6].

It was decided that Carbon dioxide Capture and Storage (CCS) in geological formations is eligible as project activities under the CDM, provided that a range of technical issues and safety requirements are solved and fulfilled. To this end, during 2011 the Subsidiary Body for Scientific and Technological Advice (SBSTA) of the Convention will elaborate modalities and procedures for solving these issues with the aim of recommending a final decision at the next UN Climate Change Conference in Durban (South Africa) [Decision 7/CMP6].

Under the Land-Use, Land-Use Change and Forestry (LULUCF) provisions of the Cancun agreements, governments were requested to submit reference levels for forest management. All the submitted information will be technically assessed by a review team during 2011. To this end, guidelines for the submission and review of information on forest management reference levels were created. The outcomes of the technical assessment of these forest management reference levels are intended to be the basis for a decision at the future Conference in Durban (South Africa) to regulate GHG emissions and removals of forest-related activities [Decision 2/CMP6].

3.2. *Decisions adopted by the AWG-LCA*

The shared vision for long-term cooperative action of the Cancun Agreements includes the objective to reduce global GHG emissions so as to limit average global temperature warming below 2°C compared to pre-industrial levels. The adequacy of this global goal and the overall progress towards achieving it are decided to be reviewed periodically. This includes reviewing whether it is necessary to strengthen this objective, based on best available scientific knowledge, and also to consider a 1.5°C objective in the future. The first reviewing period will be 2013 - 2015. The Parties also agreed to work towards identifying a time frame for the peaking of global emissions.



3.2.1. Commitments of developed countries

The Cancun Agreements stipulates the establishment of “a process for international assessment of emissions and removals related to quantified economy-wide emission reduction targets” [Decision 1/CP.16]. Subsequently, in March 2011, UNFCCC officially published a compilation¹ of the emission reduction targets already submitted during 2010 by all countries included in Annex I to the Convention.

Developed countries agreed to strengthen their existing reporting in the national communications by submitting annual GHG inventories and by reporting on progress in achieving emission reductions every two years. Guidelines for the strengthened reporting are to be established during 2011. In addition it was decided that developed countries will also develop low-carbon development strategies or plans.

Also industrialized countries agreed to provide adequate financial, technical and technological support to developing countries for launching concrete activities in the forests sector in order to bring their contribution to mitigation actions. These activities include:

- Reducing Emissions from Deforestation and forest Degradation (REDD);
- conservation and enhancement of forest carbon stocks;
- sustainable management of forests.

Financing options for the full implementation of these mitigation actions will be explored and recommendations for draft decisions are expected to be presented by the AWG-LCA at the UN Conference in Durban.

In order to both enhance and promote the cost-effectiveness of mitigation actions it was decided that at the 2011 UN Climate Change Conference in Durban the establishment of one or more new market-based mechanisms will be considered.

3.2.2. Decisions for developing countries

It was agreed that, with adequate support from developed countries in terms of technology cooperation, finance and help in capacity-building, developing countries will submit the so-called Nationally Appropriate Mitigation Actions (NAMAs) - their voluntary plans to limit the growth of their emissions. NAMAs have as overall objective to ensure sustainable development and are aimed at achieving a deviation in emissions relative to “business as usual” emissions in 2020. Many developing countries submitted their NAMAs during 2010. A compilation of them was officially published by UNFCCC in March 2011².

The Cancun Agreements stipulates the setting up of a formal registry (maintained by the UNFCCC secretariat) for matching the NAMAs that are seeking international support with the support available and provided by the developed countries for these actions. In a separate section of the registry the mitigation actions for which developing countries are not asking for international support will be recorded.

Specifically, developing countries will provide information on the mitigation actions for which they are seeking support, while developed countries will provide information on available support for these actions. Internationally supported mitigation actions will be measured, reported and verified domestically and will be subject to international measurement, whereas for domestically supported mitigation actions this will be done at the national level.

It was also agreed that developing countries will boost reporting in national communications, including inventories. They will submit biennial update reports containing updates of national greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received. International consultations and analysis of the biennial reports aiming at increasing transparency

¹ Document FCCC/SB/2011/INF.1, available at <http://unfccc.int/resource/docs/2011/sb/eng/inf01r01.pdf>

² Document FCCC/AWG/LCA/2011/INF.1, available at <http://unfccc.int/resource/docs/2011/awglca14/eng/inf01.pdf>



of mitigation actions and their effects will be established. In addition, developing countries are encouraged to develop low-carbon development strategies or plans.

The guidelines for the set-up of the registry matching actions and support, biennial reporting, international consultation and analysis, as well as for measurement, reporting and verification of supported actions and corresponding support are all to be developed during 2011.

3.2.3. Adaptation framework

The Cancun Agreements established an Adaptation Framework aiming at enhancing action on adaptation. The Adaptation Framework identifies a set of priority areas where the Parties are encouraged to undertake action, including:

- development of adaptation plans and strategies, programs for action and national communications;
- development of impact, vulnerability and financial needs assessments;
- strengthening institutional capacities;
- strengthening information systems, education and public awareness;
- improvement of research, observation and information management systems;
- development and implementation of adaptation technology.

The Framework addresses the people migration related to climate change and encourages the Parties to enhance climate change related disaster risk reduction strategies taking into consideration the Hyogo Framework for Action³.

In connection to this it was decided to establish for least developed country Parties a process to formulate and implement national adaptation plans in order to identify and implement programs for addressing their medium- and long-term adaptation needs.

The Conference also established an Adaptation Committee to promote the implementation of enhanced action on adaptation by:

- providing technical support and guidance to the Parties;
- consolidating knowledge-sharing and good practices;
- promoting synergy and strengthening engagement with stakeholders.

The composition and procedures of the committee, as well as its linkages to other relevant institutional arrangements, will be developed based on the ideas submitted by the Parties to the secretariat.

A work programme was established in order to identify, through workshops and expert meetings, options for reducing loss and damage related to climate change impacts in developing countries. Parties are invited to submit information regarding what elements the work program should include, considering also the possibility of developing a climate risk insurance facility and ways to address rehabilitation measures associated with climate change events, such as storm damage or permanent land degradation.

3.2.4. Finance

The developed countries committed to a “fast-start finance” of \$30 billion, for the period 2010-2012, to be equally shared between mitigation and adaptation actions. Priority access to funding for adaptation was given to the “*most vulnerable developing countries*”, which include least developed countries, small island developing states and countries in Africa.

³ Hyogo Framework for Action is a 10-year global action plan on disaster risk reduction offering guidance to vulnerable communities on achieving resilience to natural hazards (<http://www.unisdr.org/we/coordinate/hfa>).



A major achievement for climate finance was the commitment made by developed countries to provide funds of up to \$100 billion per year by 2020 to support mitigation and adaptation needs of developing countries.

In order to operate the committed funding and to attract provision of long-term financing for developing countries a Green Climate Fund⁴ (GCF) was established. This fund will be governed by a 24 members-board⁵ with equal representation from developed and developing countries. A trustee will administer the Fund and the World Bank will serve as the interim trustee. The operation of the Fund will be supported by an independent secretariat.

The Fund will be designed by a Transitional Committee that will make recommendations for COP approval in Durban.

Additionally, a Standing Committee under the COP was established for assisting the COP in mobilizing financial resources and measuring, reporting and verifying of support provided to developing country Parties.

3.2.5. Technology mechanism

A significant step forward for technology development and transfer is the establishment of a Technology Mechanism⁶ under the guidance of the COP and expected to be fully operational by 2012. This Mechanism will have two (2) main components: a Technology Executive Committee and a Climate Technology Centre and Network.

The Technology Executive Committee including 20 members, 9 from industrialized countries (Annex I Parties) and 11 from developing countries, will:

- identify the technological needs,
- recommend policies for increasing technology cooperation and
- promote development and deployment of new technologies in order to accelerate the mitigation/adaptation actions.

The Climate Technology Centre will facilitate a network of national, regional, sectoral and international technology organizations and initiatives, meaning that it will build its activity around existing initiatives. The objectives of this Centre are to boost the implementation of environmental technologies, provide advice and support to developing countries and facilitate prompt action on the deployment of existing technology. In addition, the Centre will stimulate the development and transfer of existing technologies through cooperation with the private sector, public institutions, academia and research institutions and will facilitate international partnerships among public and private stakeholders for accelerating the innovation and diffusion of environmental technologies to developing countries.

The relationship between the two components of the Technology Mechanism, the governance structure of the Centre and potential links to the financial mechanism are planned to be defined during 2011.

3.2.6. Capacity building

Acknowledging the importance of capacity-building for developing countries in addressing the challenges of climate change, the Cancun Agreements stipulates the enhancement of capacity-building support to developing country Parties by strengthening relevant institutions at various levels and by strengthening networks for knowledge-sharing and climate change communication.

⁴ http://unfccc.int/cancun_agreements/green_climate_fund/items/5869.php

⁵ http://unfccc.int/cancun_agreements/green_climate_fund/items/5938.php

⁶ <http://unfccc.int/ttclear/isp/TechnologyMechanism.jsp>



Financial resources for enhanced action on capacity-building in developing countries should be provided by Parties included in Annex II⁷. Developed countries are invited to report on the support they have provided for capacity-building through their national communications.

The ways for increasing monitoring and review of the capacity-building effectiveness and the establishment of structure of institutional arrangements for capacity-building will be developed in 2011 for consideration by COP at the UN Conference in Durban.

⁷ Annex II Parties - Parties consisting of the OECD members of Annex I, but not the EIT Parties



4. The EU Climate Change Policy

The European Union embraced the positive outcomes of the UN climate change conference in Cancun and considered the Cancun Agreements as an important further step towards a legally binding post-Kyoto climate change agreement.

Connie Hedegaard, European Commissioner for Climate Action, said: "*The EU came to Cancun to get a substantial package of action-oriented decisions and keep the international climate change negotiations on track. We have helped to deliver the successful outcome the world expected and needed. But the two weeks in Cancun have shown once again how slow and difficult the process is. Everyone needs to be aware that we still have a long and challenging journey ahead of us to reach the goal of a legally binding global climate framework*"⁸.

The European Union has been engaged for a long time in tackling climate change and has made great efforts to lead international political negotiations towards a global climate agreement.

Aiming at setting an example through strong policy making on its territory, since the beginning of 1990s the EU has implemented a significant number of climate-related initiatives.

4.1. European Climate Change Programme

Launched in June 2000, the first European Climate Change Programme⁹ (ECCP) had as main goal to help the EU reaching its target set by the Kyoto Protocol, meaning to cut the GHG emissions of the 15 EU member states at that time to 8% below 1990 levels by 2012. ECCP I consisted in a consultative process of a large variety of stakeholders, including representatives of the European Commission, of the industries and the environmental NGOs and experts of the Member States.

In order to identify and develop cost-effective measures for reducing GHG emissions working groups were created covering important areas, such as: emissions trading, JI and CDM, energy supply, energy demand, energy efficiency, transport, agriculture, industry, research or forest-related sinks.

One of the most important initiatives that resulted from ECCP I is the EU Emissions Trading System (EU-ETS), launched in 2005 (Directive 2003/87/EC). EU-ETS is an international scheme for GHG emission allowances trading, that covers over 11,000 power plants and energy-intensive industries in thirty (30) countries, responsible for about 40% of the EU's total CO₂ emissions (EC, 2010).

EU governments have set limits on how much CO₂ the large emission-emitting installations in the system are allowed to emit each year. Within these limits, the heavy emitters receive emission allowances which, if they emit less, they can sell to other companies that have emissions higher than their quotas. At the end of each year, companies that exceed their emission limits and did not cover them with emission rights bought from others must pay heavy fines. This way the EU-ETS gives a financial incentive for emissions reduction by establishing a market-based trading system. The flexibility brought by this trading system ensures that emissions are cut where it is cheapest to do so. The changes planned to be introduced after 2013, which consist in moving towards auctioning of allowances, will increase its effectiveness.

After its 2004 enlargement, the EU continued to explore further cost-effective options for reducing GHG emissions and in October 2005 started ECCP II. New working groups have been established; some reviewing ECCP I and some covering additional areas, such as: emissions from aviation and ships, CO₂ emissions from cars, carbon capture and storage and adaptation to the climate change effects.

⁸ <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1699>

⁹ http://ec.europa.eu/clima/policies/eccp/index_en.htm



4.2. *EU Climate and Energy Package*

In December 2008 the EU approved a legislation package (that became law in 2009¹⁰), known as the “Climate and Energy Package”, containing a series of proposals for concrete actions to implement a set of ambitious energy and climate targets to be met by 2020.

The “20-20-20 targets” are:

- 20% reduction of GHG emissions in the EU compared to 1990 levels by 2020;
- 20% share of renewable energy in the EU energy consumption and 10% of fuel for transport to come from biofuels by 2020;
- 20% savings in energy consumption (compared with projected trends) through increasing in energy efficiency by 2020.

The EU also committed to increase its emissions reduction to 30%, on condition that other countries commit to make comparable efforts under a global post-2012 climate agreement. The 2010 European Commission communication titled "*Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage*"¹¹ presents in a comprehensive manner what are the implications of the 20% and 30% targets and estimates the risk of carbon leakage.

The Climate and Energy Package includes four (4) pieces of legislation:

- Directive 2009/29/EC - revising and strengthening the EU-ETS - starting from 2013 a single EU-wide quantity of emission allowances will apply and will decrease annually, reducing the number of allowances for installations by 2020 to 21% below the 2005 emission levels. Also the free allocation of allowances will be replaced by auctioning;
- Decision 406/2009/EC – covers emissions from sectors not covered by the EU-ETS (transport-except aviation, households, agriculture and waste); these should be cut by 2020 to 10% compared to 2005 levels. This was agreed to be done through binding national targets (ranging from 20% emission reductions for countries with high GDP per capita and 20% emission increases for those with low GDP per capita compared to their 2005 levels);
- Directive 2009/28/EC – sets binding national targets for RES aiming at increasing the renewable share in the overall energy consumption across the EU to 20% by 2020. The national targets range from 10% in Malta renewables share to 49% in Sweden. Also it sets a 10% target for biofuels to be used in transport.
- Directive 2009/31/EC – establishes a legal framework for the development and safe use of CCS. In order to test its viability, the EU intends to provide partial funding for 12 industrial-scale CCS demonstration projects up to 2015, aiming at CCS commercial deployment by around 2020.

4.3. *EU energy efficiency policy*

Another key priority of the EU in addressing climate change mitigation is energy efficiency. This is directly addressed by the recently published “*Energy Efficiency Plan 2011*”¹². The document proposes a set of measures to be implemented in the following years in order to reach the target of 20% reduction in energy consumption through improved energy efficiency by 2020:

- requirements for public authorities to renovate at least 3% of their buildings each year through energy performance contracting so that each refurbishment to bring the building at the level of the best 10% from the national building stock;
- introduction of energy efficiency standards in public procurement of goods, services or works;

¹⁰ <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2009:140:SOM:EN:HTML>

¹¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0265:EN:NOT>

¹² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0109:EN:HTML:NOT>



- promoting the development of Energy Saving Companies (ESCO) for renovations;
- setting stricter consumption standards for household appliances;
- obligations for Member States to use smart electricity meters for at least 80% of their final consumers by 2020 leading to appliances and buildings being “smart grid ready” and capable of being integrated into the smart grid and smart meter infrastructure.

The revised Energy Efficiency Plan proposes a two step approach for setting targets and programs for energy efficiency. At first these targets will be set voluntarily by the Member States and the obtained results will be assessed by the EC in 2013; if this assessment shows that the 2020 target will not be achieved then the Commission will make proposals for national binding targets for 2020. The document has no legislative power, but the EC will prepare future legislative initiatives for supporting the suggested measures.

Energy efficiency legislation that already needs to be respected by the Member States includes:

- Directive 2010/31/EU on the energy performance of buildings – requires the Member States to apply minimum requirements regarding the energy performance of new and existing buildings, ensure the certification of their energy performance and require the regular inspection of heating and air-conditioning systems in buildings. Also, starting from the end of 2020 all new buildings must be “nearly zero-energy buildings”, which means that they should be powered to a large extent by renewable energy and should have high energy-saving standards.
- Directive 2010/30/EU on the indication by labeling and standard product information of the consumption of energy and other resources by energy-related products – provides a new layout of the energy efficiency label for household appliances.

4.4. *EU policy on adaptation*

In June 2007, the EC adopted its first policy document regarding the European Union adaptation to the climate change impacts. The Green Paper "*Adaptation to Climate Change in Europe - Options for EU Action*" was prepared based on the work and the results of the European Climate Change Programme (ECCP).

The Green Paper argued that Europe is facing two parallel challenges: to strongly reduce the GHG emissions in order to prevent the impacts of climate change and to adapt to the climate change effects that are already happening. The document described the most urgent priority actions at EU level and initiated a public consultation in order to find out whether the stakeholders agree with the proposed direction of action and to even receive new ideas.

In April 2009, the EC issued the White Paper "*Adapting to climate change: Towards a European framework for action*"¹³. The document is based on the public consultation launched in 2007 by the Green Paper and establishes a framework for the necessary adaptation policies and measures for reducing the EU’s vulnerability to the climate change effects.

The framework focuses on four (4) key areas:

- building a solid knowledge base for the EU regarding the impact and consequences of climate change;
- integrating adaptation into EU key policy areas;
- employing a combination of policy instruments (market-based instruments, guidelines, public-private partnerships) to ensure effective delivery of adaptation;
- increasing international cooperation on adaptation.

These four pillars of action are the ground base for a future EU adaptation strategy.

¹³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0147:EN:NOT>



4.5. EU funding for mitigation/adaptation

EU financial mechanisms are established to accompany national funding programs for climate change mitigation/adaptation actions.

4.5.1. EU funding mechanisms

Structural and Cohesion Funds 2007-2013 - financial perspectives for the new cohesion policy covering the period 2007-2013 amounts approximately one third of the total EU budget (€308 billion), 62% of which are meant to finance projects linked to the Lisbon agenda for growth and employment. Under the Structural and Cohesion Funds three (3) cohesion policy instruments are implemented of which two (2) are financing action in the environment field:

- *European Regional Development Fund (ERDF)*¹⁴ - supports programmes addressing regional development, economic change, enhanced competitiveness and territorial cooperation throughout the EU. Funding is provided for priority areas such as research, innovation, environmental protection, risk prevention and infrastructure.
- *Cohesion Fund*¹⁵ - contributes to projects in the field of the environment and trans-European transport networks.

*The 7th Framework Programme for research, technological development and demonstration (2007-2013)*¹⁶ – aims at stimulating cooperation and improving links between industry and research within a transnational framework. About €2 billion are allocated for projects regarding environmental protection, including climate change.

*The European Economic Recovery Programme*¹⁷ - represents the EU response to the economic crisis for protecting jobs and purchasing power in the short-term while investing in Europe's long-term economic health. One of the strategic aims of the Recovery Plan is to speed up the shift towards a low carbon economy. Under this Programme the European Investment Bank (EIB) will increase its financing of climate change, energy security and infrastructure investments by up to €6 billion per year while the European Bank for Reconstruction and Development (EBRD) will mobilize up to €5 billion for energy efficiency, climate change mitigation and financing for municipalities and other infrastructure services.

The programme is also funding a public-private partnership initiative called "European energy-efficient buildings" by providing €1 billion for the promotion of RES technologies and the development of energy-efficient systems and materials to reduce the energy consumption and CO₂ emissions of new and renovated buildings.

*The Intelligent Energy Europe Programme (2007-2013)*¹⁸ – includes about €730 million available funds supporting projects to improve the effectiveness of support schemes for RES-E generation from across Europe and to boost energy efficiency in buildings and transport.

4.5.2. EU fast-start funding

¹⁴ http://ec.europa.eu/regional_policy/thefunds/regional/index_en.cfm

¹⁵ http://ec.europa.eu/regional_policy/thefunds/cohesion/index_en.cfm

¹⁶ http://cordis.europa.eu/fp7/home_en.html

¹⁷ <http://ec.europa.eu/energy/eepr/>

¹⁸ <http://ec.europa.eu/energy/intelligent/>



As part of its contribution of €7.2 billion to fast-start finance in the period 2010-2012 in accordance with the provisions of the Copenhagen Accord, in 2010 the European Union has mobilized €2.2 billion [European Council, 2010]. Out of this:

- €735 million for accelerating adaptation action and to build resilience to the climate change effects in developing countries;
- €1,06 billion for climate change mitigation actions including the GHG emissions reductions by promoting the deployment of clean energy technologies in developing countries;
- €362 million to decrease GHG emissions by reducing deforestation and forest degradation in developing countries and enhancing the sustainable management and conservation of forest and carbon stocks.

Additionally, the EU has pledged another €150 million funding to be equally split between mitigation and adaptation (including REDD+) between 2010 and 2012. In 2010, the Commission succeeded to mobilize €50 million.

4.5.2.1. Fast-start funding for adaptation

EU fast-start funding is provided for the least developed countries, African states and small island developing countries for actions meant to enable them to adapt and build resilience to climate change. Fast-start projects are built around the priorities identified by developing countries in their NAPAs or National Communications. EU fast-start support contributes to activities, such as:

- implementation of early adaptation actions to protect infrastructure, industry and agriculture from changing weather patterns and rising sea levels;
- support for investments in water management and drought-resistant crops;
- development of capacities to prepare, plan and implement adaptation, for instance by integrating adaptation into national development planning;
- increase the knowledge resources about climate impacts;
- building experience in disaster risk reduction.

Examples of funding initiatives to help developing countries to adapt to climate change effects are:

- *Identifying cost-effective and appropriate coastland and drainage management and adaptation options in the Maldives* – a Danish initiative that supports the Maldives climate change adaptation project on “*Integrating Climate Change Risks into Resilient Islands Planning*”¹⁹, co-funded by the UNFCCC Least Developed Countries Fund. In a second phase, starting from 2011 the project will also support the Maldives in their transition to low-carbon energy generation while adopting energy efficiency measures and building capacity to administer CDM-projects.
- *Climate and Development Knowledge Network (CDKN)*²⁰ - a 5-year initiative aiming to improve the availability and quality of climate change research and knowledge in order to support the developing countries policy processes to adapt to the effects of climate change. The CDKN is an alliance of six private organizations and NGOs covering around 60 developing countries across four continents. The British Government, who launched the Network in 2010, will contribute over the five years period with £ 45 million funding (fast start contribution in 2010/2011: £ 8.7 million / €10 million) (EC, 2010).

4.5.2.2. Fast-start funding for mitigation

Fast-start funding for mitigation is meant to support developing countries to undertake activities, such as:

¹⁹ <http://www.mv.undp.org/v2/?lid=171>

²⁰ <http://cdkn.org/>



- implementation of mitigation actions (e.g., improving energy efficiency, use of RES and low carbon technologies and developing low-carbon transport projects);
- building capacities to develop and implement NAMAs and low emission development strategies (LEDS);
- building capacities to measure, report and verify emissions reduction actions;
- building capacities to implement new carbon market mechanisms.

Fast-start funding initiatives for climate change mitigation actions:

- *EU-UNDP climate change capacity building programme*²¹ – this €13 million programme is funded by the EC (€ 8 million) and Germany (€5 million) (UNDP, 2010). The initiative focuses on two components:

1) public sector capacity building for assisting a number of developing countries from Africa, Asia and Latin America: a) to Measure, Report and Verify (MRV) their GHG emissions; b) to prepare effective NAMAs in the context of national development and Low-Emissions Development Strategies (LEDS);

2) public and private sectors' capacity building to uptake mitigation actions taking into account national circumstances and economic plans;

In 2010 the EC conducted a scoping study in order to identify the capacity gaps between the national MRV and mitigation policies. Consultations are ongoing with Brazil, Chile, Colombia, Democratic Republic of Congo, Ecuador, Egypt, Kenya, Mexico, Morocco, Peru, South Africa, the Philippines, Uganda, Tanzania and Zambia.

- *Capacity building for Mitigation of Climate Change in Agriculture (MICCA) programme*²² - launched in 2010, this is a five-year project of the Food and Agriculture Organization of the United Nations (FAO) and it is funded by Finland, Germany and Norway; the MICCA programme aims at improving the livelihoods of smallholder farmers in developing countries by enabling them to make “climate-smart” agriculture, improving food security and increasing adaptability of the farming systems to environmental change. Finland supports this agriculture mitigation project with €2.58 million during 2010-2011 and has plans for a follow-up contribution for the consequent years (EC, 2010).

4.5.2.3. Fast start funding for REDD+

Fast-start funding for REDD+ activities focuses on:

- readiness activities, such as assistance in development of national forest inventories, preparation of REDD+ strategies and monitoring and demonstration activities;
- supporting initial implementation of REDD+ measures related to forest governance, such as biodiversity conservation, land tenure reforms and forest law enforcement.

The EU fast-start funding aims at covering the full scope of REDD+ activities in developing countries by:

- demonstrating ways of changing the economics and valuation of forest ecosystems;
- supporting capacity building for effective MRV of emissions and removals from land-use activities;
- supporting necessary policy and governance reforms;
- contributing to sustainable management of forests, conservation of forests and enhancement of forest stocks;
- ensuring conservation and sustainable use of biodiversity and ecosystem services as well as benefits for local communities and indigenous people.

Examples of funding initiatives for REDD+:

²¹ <http://prod-http-80-800498448.us-east-1.elb.amazonaws.com/w/images/0/04/EU-UNDP.pdf>

²² <http://www.fao.org/climatechange/micca/en>



- *Supporting sustainable forest management in the Democratic Republic of Congo (DRC)* – this is an innovative project funded by France aiming to promote sustainable forest management methods over 10 million hectares of tropical forest in three forest provinces of the DRC: Bandundu, Équateur and Province Orientale.

The project has three (3) components:

- (i) institutional support at national level;
 - (ii) capacity development for the private sector based on sustainable development principles; and
 - (iii) promoting research, staff training and knowledge transfer
- (fast start contribution in 2010: € 5 million grant) (EC, 2010).
- *Support for the development of a national REDD system in Peru* – this project that was launched in 2010 is funded by Germany and implemented by the German development bank KfW. It has the aim of supporting the Peruvian government in setting up a national REDD system, which will enable the integration of the sub-national REDD projects into a cohesive national policy. The project will establish a national REDD register and implement pilot initiatives to produce sub-national reference scenarios. MRV protocols will be developed and experience will be shared in transferring resources and responsibilities to different actors. In addition a national fund to finance feasibility studies will be set up and reference scenarios and MRV protocols will be developed for the sponsors of sub-national and national initiatives (fast start contribution in 2010: €6.3 million) (EC, 2010).

4.5.3. Other funding instruments

The EC has also launched two (2) pilot instruments targeting climate change in developing countries:

- *The Global Climate Change Alliance (GCCA)*²³ - initiated in 2007, GCCA focuses on two (2) main directions:
 - to increase policy dialogue and cooperation on climate change between European and the most vulnerable developing countries, particularly Least Developed Countries (LDCs) and Small Island Developing States (SIDS), especially in the context of the international negotiations for a post-2012 climate regime, and
 - to enhance support for implementing climate change mitigation/adaptation measures to target countries.

The main activities of GCCA are financial agreements with selected beneficiary countries, regional dialogue events for increasing cooperation on climate change and technical assistance, such as project development and capacity building activities.

GCCA includes five (5) priority areas: adaptation, Reducing Emissions from Deforestation and Degradation (REDD), enhancing participation in the CDM, promoting disaster risk reduction and mainstreaming climate change into poverty reduction development strategies.

- *The Global Energy Efficiency and Renewable Energy Fund (GEEREF)*²⁴ – structured as a Fund-of-Funds, GEEREF is a Public Private Partnership (PPP), initiated by the EC and managed by the EIB group. Aiming to accelerate the transfer, development and use of clean and renewable energy technologies to developing countries, with an emphasis on African, Caribbean and Pacific (ACP) countries, GEEREF provides risk capital through private investment for small and medium size (i.e. €5-10 million) energy efficiency and renewable energy projects. With a target funding size of €200-250 million, GEEREF has secured, as of September 2009, a total of €108 million that comes from the EU budget, Germany and Norway.

²³ <http://www.gcca.eu/>

²⁴ <http://geeref.com/>



4.6. *EU towards 2020 and beyond*

In its “*Europe 2020 Strategy*”²⁵ the Commission emphasizes the fact that Europe should mark its way towards 2020 through a “*smart, sustainable and inclusive growth*”. The energy and climate targets are included within the overall aim of sustainable growth. In reaching the proposed objectives the EU 2020 Strategy stresses that Europe will increase its efforts towards shifting to a low-carbon economy by decoupling its economic growth from inefficient resource and energy use, reducing CO₂ emissions and promoting renewable energy sources.

In the beginning of 2011, the EC adopted the “*Roadmap for moving to a competitive low-carbon economy in 2050*”²⁶ as a part of the Europe 2020 Strategy's Flagship Initiative for a Resource Efficient Europe. By adopting this document the EC is looking beyond the 2020 objectives and based on a detailed analysis of different scenarios it sets out a cost-efficient pathway to reach the long-term target of cutting domestic GHG emissions to 80-95% below 1990 levels by 2050, in line with the position endorsed by world leaders in the Copenhagen and the Cancun Agreements.

In order to achieve this 2050 overall GHG reduction objective, the Roadmap shows that domestic²⁷ emission reductions of 40% by 2030 and 60% by 2040, compared to 1990 levels, would be the cost-effective pathway. Therefore, the EU needs to start working on appropriate strategies to move in this direction and all Member States should develop national low carbon Roadmaps.

The Roadmap also gives direction on how the sectors responsible for Europe's emissions can make the transition to a low-carbon economy in the following decades by presenting ranges for emissions reductions for 2030 and 2050 for key sectors (industry, power generation, transport, buildings and construction and agriculture).

To achieve all these objectives as cost-effectively as possible a number of measures should be taken into account:

- in the power sector: the deployment of advanced technologies for using RES - for achieving this the cap on emissions from the power sector under the EU ETS should be strengthened and considerable investment into smart grids should be made;
- in the transport sector: for passenger cars a shift to plug-in hybrid cars and electric cars after 2025 and the use of sustainable biofuels in aviation and heavy duty vehicles;
- in the construction sector: improvement of energy performance of buildings by constructing intelligent low - or nearly zero - energy new buildings, retrofitting the old ones and using RES for heating, cooling and cooking;
- in the industry sector: the use of more energy-efficient technologies and the deployment of carbon capture and storage after 2035;
- in the agriculture sector: the cut of emissions from fertilizer, manure and livestock.

The Energy Technology Plan implementation is also of great strategic importance for reaching the Roadmap 2050 objectives.

An important conclusion is that the most cost-efficient pathway to the 2050 target requires also a 25% emissions reduction in 2020, which could be reached by fully and effectively implementing the revised Energy Efficiency Plan meeting the 20% energy efficiency target.

²⁵ <http://ec.europa.eu/europe2020/>

²⁶ http://ec.europa.eu/clima/documentation/roadmap/docs/com_2011_112_en.pdf

²⁷ Domestic means real internal reductions of EU emissions and not compensating through the carbon market



5. Official position of the emerging economies participating in PROMITHEAS-4 towards a post-2012 climate change agreement

The countries participating at the 2010 United Nations Climate Change Conference in Cancun made official statements at the High Level Segment of UNFCCC COP16 and CMP6 or on different other occasions regarding their commitment and participation in Cancun Agreements and to a post 2012 climate change agreement. The official positions of the twelve (12) emerging economies participating in PROMITHEAS-4 are presented below.

Albania

In his plenary statement addressed to the COP16 of the UNFCCC in Cancun, Mr. Taulant BINO, the Albanian Deputy Minister of Environment, Forestry and Water Administration highlighted the following:

Albania is a non-Annex I country that associated itself with the Copenhagen Accord in January 2010. Albania's commitment to become a carbon free economy is proved by all the adopted actions: fiscal measures, promotion of RES (90% electricity generation from hydropower and many RES projects planned to be implemented up to 2025) and exploration of carbon finance mechanisms (one registered CDM afforestation project and much interest in using this mechanism for more future initiatives).

At the regional level, Albania has joined the Mediterranean Climate Change Initiative.

The country has submitted the Second National Communication in 2009 and is currently preparing the third. By implementing the measures provided by the Second National Communication, Albania aims at reducing its GHG emissions in 2025 by about 48% compared to 1990 levels.

Albania has also prepared the Action Plan for Adaptation but there is great need for support from the developed countries in order to combat the extreme effects of climate change.

Mr. Bino said: *"... let me reiterate Albania's commitment to address climate change issues, to incorporate its principles in its development and environmental policies and to not fail in its modest contribution towards carbon emissions reduction. We remain confident that the Parties will not miss the chance of making Cancun a success!"*

Armenia

Information not available

Azerbaijan

Information not available

Bulgaria

In an interview taken by the Bulgarian News Agency on 27 December 2010, Mrs. Nona KARADZHOVA, the Bulgarian Minister of Environment and Water, has stressed that Bulgaria, as part of the European family, has to put considerable efforts into mitigating climate change. Mrs. Karadzova stated that, after being banned from international carbon trading in June 2010, it is of crucial importance for Bulgaria to gain the confidence of the European and other international institutions that it would get involved in the mitigation process. The development of the national allocation plan within the European emission trading scheme gave to the Bulgarian enterprises the possibility to receive, in 2010, 140 mln. BGN. Bulgaria has developed the legislative framework for trading of surplus allowances at international level. Furthermore, Bulgaria developed a national system for greenhouse gas emissions inventory, which was missing. The procedure of



restoring the accreditation of Bulgaria for participating in the emissions trade has been initiated in Cancun. The UN returned Bulgaria's CO₂ trading rights at the beginning of February 2011.

Mrs. Karadzhova said: *"No matter of the outcomes of the Cancun meeting or the following climate change conference, the European Union has approved and already started the implementation of the Climate and Energy Package for the period 2012 – 2020, which addresses key objectives for the entire EU. By the end of 2011 the process of mobilization of the targeted \$100 billion per year that the developed countries committed to provide for developing countries by 2020 will be running. The Ministry of Environment and Water together with the Ministry of Finance will stand firm in their position for equitable distribution of the available funding to third countries."*²⁸

Estonia

Mr. Jaanus TAMKIVI, Minister of Environment from Estonia, stated at the High Level Segment of COP 16 and CMP 6 in Cancun that Estonia's expectation from the Cancun Conference was to reach *"progress towards establishing an ambitious legally binding post-2012 regime to combat climate change"*.

As a member of the European Union, Estonia has shared the EU's wish for the establishment of a "balanced package" of decisions covering all the essential elements such as mitigation, adaptation, technology transfer, forestry, capacity-building and finance. Estonia considers that the pledges made so far under the Copenhagen Accord are not sufficient for keeping the average global temperature increase below 2°C and that the developed countries should "commit themselves to comparable emission reductions".

Mr. Tamkivi said: *"... Estonia is a country of nature and forests and sustainable forest management is important to us. We are happy to see progress made so far on accounting rules for forest management and we would be very happy to see an agreed outcome."*

Kazakhstan

The active Minister of Environmental Protection from Kazakhstan, Mrs. Eldana Makinovna SADVAKASSOVA started her statement at the High Level Segment of the COP16/CMP6 by presenting some of Kazakhstan's activities, in the last ten years, towards developing a low emission economy. After adopting a long-term program against climate change including mitigation and adaptation measures Kazakhstan is preparing today a national system for GHG emissions regulation.

At the 6th Ministerial Conference on Environment and Development in Asia and the Pacific held in 2010 in Kazakhstan the "Astana Green Bridge Initiative"²⁹ was adopted. This initiative has the main objective to establish cooperation on environmental problems between the European countries and those of Asia and Pacific Ocean, consisting in knowledge sharing, dissemination of best practices, clean technology transfer, joint investments and pilot RES projects development.

While appreciating that it is difficult to find a unified approach for a global consensus even if the world countries are striving to contribute to GHG emissions reduction and to use RES and energy efficient technologies, Mrs. Sadvakassova said: *"We appeal to all Parties to consolidate efforts for adopting a decision to approve clear, comprehensive and substantive new agreement stipulating common and urgent actions, and then to focus on development of integrated package of documents describing in details the rules and provisions..."*³⁰.

Republic of Moldova

²⁸ Unofficial translation

²⁹ http://www.unescap.org/esd/mced6/documents/Documents/MCED6_13E.pdf

³⁰ Unofficial translation



In his statement at the general debate of the 65th session of the UN General Assembly held in September 2010 in New York, H.E. Ambassador Alexandru CUJBA, Permanent Representative of the Republic of Moldova to the United Nations, stressed that the country's goals of becoming a sustainable economy based on investments, innovations and competitiveness could not be achieved without creating an eco-friendly environment.

Ambassador Cujba said: *"We believe that the adoption of a post-Kyoto treaty is actual and vital as never before. We have to address the challenge of climate change with a synergy of national and integrated international responses, and we are looking forward to the positive outcome of the forthcoming conference in Cancun."*

The Republic of Moldova is undergoing a broad process of reforms, as result of the Moldova's pursue for EU membership and an ambitious legislation is in process, which takes climate change in consideration.

The Republic of Moldova has constantly worked to live up to its obligations, as a non-Annex I Party, and as implementing an overall environmental protection policy. In addition, the Republic of Moldova associated itself with the Copenhagen Accord and submitted an emission reduction target, specified in its Appendix II: *"A reduction of no less than 25% of the base year (1990) level total national GHG emissions have to be achieved by 2020 through implementation of global economical mechanisms focused on the climate change mitigation, in accordance with the Convention's principles and provisions."*³¹

At the end of 2010, in cooperation with UNDP Bratislava Regional Center and UNDP Country Office, the Republic of Moldova started to work on two (2) important documents: the preparation of the Low-Emission Development Strategy (LEDS) and the development of the National Climate Change Adaptation Strategy. They are envisaged to be finalized by the end of 2011 and their approval aims at allowing the access to the fast start financing as well as the long-term financing committed by developed countries.

On the 28th of February 2011, Mr. Gheorghe ŞALARU, Minister of Environment of the Republic of Moldova participated to the Press Conference on launching the Third National Communication Project and expressed a statement regarding the Republic of Moldova commitments under the UNFCCC and to a post 2012 Climate Change Agreement. Mr. Şalaru said: *"In facing today's climate change challenges, the Republic of Moldova views national commitments under the UNFCCC as crucial."*

Romania

The statement of Mr. László BORBÉLY, the Romanian Minister of Environment and Forests, at the Cancun Conference began by highlighting the importance of the Copenhagen Accord which, despite its deficiencies, was *"a moment of truth in acknowledging and understanding the real dimension posed by the negative effects of climate change"*.

Mr. Borbély emphasized the importance of continuity in the process of establishing a new binding climate change agreement by reminding that the Kyoto Protocol took eight years to enter into force.

Romania considers that the carbon market is an essential tool in achieving the GHG mitigation targets in a cost-efficient manner. In the same time, Romania brings its contribution to the EU commitments to provide fast start finance for supporting the developing countries' mitigation/adaptation actions against the challenge of climate change.

Mr. Borbély said: *"We hope that the Cancun Conference will deliver a strong support to communities all over the world in dealing this challenge. We are all expecting an intermediate, but significant step forward to be made here. We need to show the willingness for building on the Kyoto Protocol and pave the way towards a global and comprehensive, legally binding framework, by integrating all along the consistent guidance given by the Copenhagen Accord."*

³¹ http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/moldovacphaccord_app2.pdf



Russian Federation

Mr. Alexander BEDRITSKY, adviser to the President of the Russian Federation, special envoy for climate, in his statement at the UNFCCC COP16/CMP6, considers that the solution for making progress in the climate change negotiations is to bind the countries' pledges, submitted during the process of their association to the Copenhagen Accord, as possible commitments. In this context, the Russian Federation is ready to confirm its commitment for emissions reduction of 15-25% compared to 1990 levels by 2020.

Even though it recognizes that the Kyoto Protocol established real mechanisms for the world nations to combat climate change, the Russian Federation's opinion, presented even at the highest political level, is that an extension of the Kyoto Protocol after 2012 *"would be neither scientifically, economically, nor politically effective"* due to the fact that the list of OECD countries, the basis for Annex I of the Convention in 1992, has been enlarged along with their cumulative CO₂ emissions.

Russia will not participate in the Second Commitment Period of the Kyoto Protocol but it believes that it would be wise to continue using the Protocol's market mechanisms after 2012 and to establish a new agreement.

Russia considers that the two-track negotiation process (on the UNFCCC and on the Kyoto Protocol) should be merged into a single agreement. In addition, the Russian Federation has repeatedly argued in favour of the idea of extending the list of countries with emission reduction commitments and to include the fast growing economies in it. Also a new agreement should be set by taking into account the specific circumstances of the economies in transition and should support their actions towards reduction of anthropogenic emissions by ensuring them access to finance, technology and capacity building.

Mr. Bedritsky concluded: *"Russia, pursuant to its commitments, actively works to counter climate change. We recognize the potential threats posed by global climate change to the people and economy of our country, as well as to those of other states and regions of the world. The facts clearly state that our country is a leader in GHG emissions reductions. Russia will continue to actively participate in all processes and with all parties, without any exception, which genuinely contribute to reducing anthropogenic stress on the climate."*

Serbia

On the 8 of March 2011, at the invitation of the Government of Japan, Serbia's President had his first official visit in Japan. During their official meeting, Mr. Naoto KAN, the Prime Minister of Japan, and Mr. Boris TADIĆ, the President of the Republic of Serbia, adopted an official joint statement concerning enhancement of bilateral relations, peace and stability of the Western Balkans and cooperation on global issues.

Regarding cooperation on global issues the two leaders welcomed the Cancun Agreements adopted at the UN Climate Change Conference in Mexico. They decided - based on the Cancun Agreements - to continue constructive cooperation towards a new global legally binding climate change agreement in order to obtain a successful outcome at the UN Conference in Durban.

On April 13, 2011, the Ministerial Meeting *"Climate Change Research for Environmental Protection, Adaptation and Risk Reduction"* took place in Belgrade. At this meeting, by acknowledging that the Cancun Agreements invited all Parties to strengthen their efforts on adaptation by promoting climate related research, the representatives from 14 participating countries from Europe (including Serbia) and the USA³² adopted a joint statement. By this statement the participating countries:

- agree that South Eastern Europe (SEE) is vulnerable to the climate change effects and that is urgent need for adaptation actions. To this end, the "South East European Research and Development

³² Albania, Bosnia and Herzegovina, Bulgaria, France, Germany, Greece, Hungary, Italy, Montenegro, Serbia, Slovenia, Switzerland, The Former Yugoslav Republic of Macedonia and the USA



Programme of regional climate modelling for 2012-2017” has been developed, aiming at providing “the knowledge necessary to improve assessment of the impacts, vulnerabilities and risks from climate change, build adaptive response capacities and foster adaptation action”;

- encourage the “enhancement of broad regional and international collaboration in research, development, transfer and deployment of climate modeling technologies” in order to improve the understanding of climate change effects on SEE and the prediction of high impact events;
- promotes the increase of cooperation between National Meteorological and Hydrological Services (NMHSs), research community and other organizations from the SEE countries regarding the exchange of climate data and information;
- encourage the enrichment of climate change policy with “actions to strengthen national climate observing networks, capacity building and investments in infrastructure of NMHSs” in SEE;
- encourage cooperation between SEE NMHSs and other regional organizations with the United Nations International Strategy for Disaster Reduction (UNISDR), the World Meteorological Organization (WMO) to achieve the effective implementation of the Hyogo Framework for Action.

The statement will be presented to the attention of the COP to the UNFCCC, the EU, the World Meteorological Congress and other interested parties in order to get access to financing for the implementation of the jointly adopted action programme.

Turkey

On behalf of Turkey the official statement at the Cancun Conference was presented by Mr. Veysel EROĞLU, the Minister of Environment and Forestry. Mr. EROĞLU began his statement by making a brief description of the steps taken by Turkey towards climate change mitigation:

- implementation of environmental projects and programs in all economic sectors;
- important investments for the efficient use of the country’s RES potential;
- sustained actions for forests protection, in particular by afforestation activities.

Turkey considers that a post-2012 regime should be “fair, balanced and inclusive” and should have a flexible structure. In the same time it believes that long-term mitigation and adaptation actions should be developed “in accordance with national and regional circumstances, as well as economic and social development requirements”.

In 2001, COP7 in Marrakesh (Morocco) recognized the special circumstances of Turkey, which led to a special position for the country in Annex I list and it’s becoming a party to the UNFCCC.

Turkey has gone through a fast and continuous economic growth which triggered an increase in energy demand. In the long term it is foreseen that this trend in the country’s development will continue leading to a further increase in the energy demand. Hence, Turkey considers that it would not be realistic to have emission reductions compared to a specific base year and aims at reducing them from the “business as usual” scenario. To this end, Turkish delegation has submitted a proposal of having its’ special status recognized by all parties in order to gain access to funds for mitigation actions.

Concluding, Mr. Eroğlu said: “I would like to assure you of our support in your efforts to reach a successful outcome in Cancun.”

Ukraine

At its turn, Ukraine recognizes climate change as a big challenge of our times and supports the international community in its efforts for GHG emissions reduction.



Ukraine is a party of the UNFCCC and is trying to fulfill its commitments under the Kyoto Protocol by using the Joint Implementation mechanism, as well as by implementing projects under the Green Investment Scheme (GIS). Under GIS, Ukraine has developed successful cooperation with Japan and Spain and around 550 projects have been registered or are ready for implementation.

Mr. Sergii ORLENKO, Head of the National Environmental Investment Agency of Ukraine, in his statement made at the High Level Segment of COP 16 and CMP 6, said: *“Ukraine is prepared to undertake obligations within the framework of a comprehensive legally binding agreement, containing specific emission reduction obligations for Parties. Ukraine supports setting quantified emission reduction obligations for the Parties in the period of up to 2020, establishing obligations for monitoring, reporting and verification, preservation of 1990 as the base year, and continuation of the flexible mechanisms of the Kyoto Protocol.”* Ukraine also considers that the new agreement should be established for a period up to 2050 and even beyond.



6. Conclusions

Climate change is a long-term challenge, that can be addressed successfully only through long-term actions and international cooperation at both regional and global levels. The Kyoto Protocol was meant to be a first step in fighting against it, preparing for a more comprehensive treaty that will be necessary.

A new, global climate change agreement should have as long-term objective the “*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system*” in full accordance with the stated ultimate objective of the UNFCCC³³. This objective can be pursued through firm targets for an initial 2013-2020 commitment period. In accordance with the 2050 Roadmap objectives, indicative targets for medium-term period (up to 2030) and for subsequent long-term commitment periods could be set. In line with the provisions of the 2050 Roadmap sector-based targets can also be incorporated.

A new agreement can be successful only if the participating countries perceive it as equitable. Therefore their mitigation engagement should be in accordance with the principle of “*common but differentiated responsibilities and respective capabilities*”. Developed country Parties should take the lead in combating climate change but serious commitment from developing countries, especially those with rapidly industrializing economies, which became major CO₂ emitters in the past decade, is also needed. In order to monitor the progress against the mitigation commitments, national emission inventories and consistent MRV systems should be developed.

For supporting the emission reduction activities in the private sector and for facilitating the flow of technology and know-how to developing countries, the Kyoto Protocol flexible mechanisms – International Emissions Trading, Clean Development Mechanism and Joint Implementation – should continue their operation and expansion and the establishment of new market-based mechanisms should be considered.

In order to reduce the accumulation of CO₂ in the atmosphere in a cost-effective way, provisions for reducing deforestation and maintaining biological sinks of carbon should be included in a post-2012 climate change treaty.

Substantial global emissions reduction will not avoid the serious impact of climate change affecting the world countries to different degrees. Adaptation must be addressed with the same priority as mitigation, including actions towards developing vulnerability assessments and adaptation plans, building institutional capacity, increasing access to information and best practices and making investments in adaptation technology for enhancing resilience of most vulnerable communities to climate impacts.

Stimulation of research, development, demonstration and deployment of efficient and cost-effective energy technologies, such as advanced clean and renewable energy or CCS, as well as overcoming the barriers that prevent the transfer of such technologies in developing countries should be a high priority of the new climate change agreement.

Last, but not least, finance from both private and public resources is a critical element in addressing climate change effectively. The mobilization of finance for supporting climate change activities in developing countries, as well as its equitable allocation and effective disbursement to the targeted countries should be largely addressed in the future climate treaty.

³³ http://unfccc.int/essential_background/convention/background/items/1353.php



Bibliography

1. IPCC, 2007. Fourth Assessment Report of IPCC Working Group III, “Mitigation of Climate Change”, Summary for Policy Makers
2. IPCC, 2007. Fourth Assessment Report of IPCC Working Group III, “Mitigation of Climate Change”, Chapter 13 - Policies, Instruments and Co-operative Arrangements
3. EEA, 2010. “Annual European Union greenhouse gas inventory 1990–2008 and inventory report 2010”
4. IEA, 2009. “World Energy Outlook 2009”
5. EEA, 2010. “State of the Environment Report 2010”
6. Levin, K., Bradley, R, 2010. “Comparability of Annex I Emission Reduction Pledges”. WRI website, available at:
<http://www.wri.org/publication/comparability-of-annexi-emission-reduction-pledges>
7. UNFCCC, 2008. “Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007”. UNFCCC website, available at:
<http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf>
8. UNFCCC, 2008. “Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its third session, held in Bali, from 3 to 15 December 2007”. UNFCCC website, available at:
<http://unfccc.int/resource/docs/2007/cmp3/eng/09a01.pdf>
9. UNFCCC, 2010. “Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009”. UNFCCC website, available at:
<http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>
10. UNFCCC, 2011. “Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010”. UNFCCC website, available at:
<http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>
11. UNFCCC, 2011. “Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its sixth session, held in Cancun from 29 November to 10 December 2010”. UNFCCC website, available at:
<http://unfccc.int/resource/docs/2010/cmp6/eng/12a01.pdf#page=3>
12. EC, 2009. “Directive 2009/28/EC of the European Parliament and of the Council, of 23 April 2009, on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC”. EUR-Lex website, available at:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:EN:PDF>
13. EC, 2009. “Decision No 406/2009/EC of the European Parliament and of the Council, of 23 April 2009, on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020”. EUR-Lex website, available at:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0136:0148:EN:PDF>
14. EC, 2009. “Directive 2009/29/EC of the European Parliament and of the Council, of 23 April 2009, amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community”. EUR-Lex website, available at:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0063:0087:EN:PDF>



15. EC, 2009. "Directive 2009/31/EC of the European Parliament and of the Council, of 23 April 2009, on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006". EUR-Lex website, available at:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0114:0135:EN:PDF>
16. European Council, 2010. Note from the European Council to the Delegations regarding "EU Fast start finance Report for Cancun". Consilium website, available at:
<http://register.consilium.europa.eu/pdf/en/10/st15/st15889.en10.pdf>
17. EC, 2010. European Union fast start funding for developing countries - 2010 progress report, EC website, available at:
http://ec.europa.eu/clima/documentation/international/docs/spf_startfinance_en.pdf
18. UNFCCC, 2011. Statements at the High Level Segment of COP 16 and CMP 6. UNFCCC website, available at:
http://unfccc.int/meetings/cop_16/statements/items/5777.php
19. Council of Ministers of the Republic of Bulgaria, 2011. Interview with Nona Karadzhova, Bulgarian Minister of Environment and Water, to the Bulgarian News Agency. Bulgarian Council of Ministers website, available in Bulgarian at:
<http://www.government.bg/cgi-bin/e-cms/vis/vis.pl?s=001&p=0239&n=557&g=>
20. Permanent Mission of the Republic of Moldova to the United Nations, 2010. Statement by H.E. Mr. Alexandru Cujba Ambassador, permanent representative of the Republic of Moldova to the United Nations, at the general debate of the sixty-fifth session of the United Nations General Assembly, Permanent Mission of the Republic of Moldova to the United Nations website, available at:
<http://www.onu.mfa.md/img/docs/65-eng.pdf>
21. Republic of Moldova regarding its commitments under the UNFCCC and to a post-2012 Climate Change Agreement - Expressed by H.E. Gheorghe ŞALARU, Minister of Environment of the Republic of Moldova on 28th of February 2011 at the Press Conference on the issue of launching the Third National Communication Project
22. Prime Minister of Japan and his Cabinet, 2010. Japan-Serbia Joint Statement. Japanese Prime Minister website, available at:
http://www.kantei.go.jp/foreign/kan/statement/201103/08serbia_e.html
23. SEEVCCC, 2011. Joint Statement by the participants in the Ministerial Meeting "Climate Change Research for Environmental Protection, Adaptation and Risk Reduction" – Belgrade Serbia, April 13, 2011. SEEVCCC website, available at:
www.seevccc.rs/rnd/JOINT_STATEMENT_final.doc

