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Promoting Climate Change Policies in Turkey

International Developments in Climate Change



Technical Report

exergia

December 2006



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**PROMOTING CLIMATE CHANGE POLICIES
IN TURKEY**

**International Developments in
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Prepared by:

EXERGIA S.A.

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INTRODUCTION

This report has been prepared in the framework of the project “Promoting Climate Change Policies in Turkey” that is financially supported by the LIFE Programme of the European Union under the LIFE05-TCY/TR/000164 contract. The leading institution of this project is the Regional Environmental Centre (REC), Country Office in Turkey and partners are the Ministry of Environment and Forestry (MoEF) of Turkey and the Greek consulting company EXERGIA S.A. who is the main responsible for this report.

In this report the issue of Climate Change policy is analysed in terms of its international dimension, forthcoming development perspectives and required procedures and rules to be established. Furthermore, the current Turkish reality regarding the country’s position and policy in the framework of international initiatives is presented in brief.

Furthermore, it is worth considering that this report was prepared not only as a general information document on current situation and past developments of international climate change policies, but also as a basis for discussion during the relevant workshops of stakeholders. Therefore some issues regarding the interests of the business community were illustrated more. We consider that the work on VCM is incorporated in the following Tasks of the proposal:

- ◆ Task 2.4 “Review of International Developments Related to Climate Change”, because of its international analysis, it should be considered as the main document of this Task;
- ◆ Task 3.3 “Build Capacity within the Administration”, because of its dissemination to the stakeholders’ workshops, including also the administration.

The structure and the level of included information of this report aims in principle at covering the needs of experts and businessmen who had not, till the issuing of the report, any substantial familiarity with the international climate change activity; most of the stakeholders belonged to this group. In addition, our effort was focused to pass efficiently basic knowledge on international activity and on the other hand attract the interest on carbon business, which especially for the Turkish companies could be carried out in the Former Soviet Union Democracies of Central Asia.

1 HISTORY

With the Industrial Revolution some 300 years ago, we learned how to exploit nature even more efficiently, increasing many aspects of human well-being, but at a growing cost to natural resources and services. By the second half of the twentieth century we faced a rapidly growing list of environmental crises triggered by a growing human population coupled with greater demands and technological capacity.

The Earth's climate system has demonstrably changed on both global and regional scales since the pre-industrial era, with some of these changes attributable to human activities.

Human activities have increased the atmospheric concentrations of greenhouse gases and aerosols since the pre-industrial era. The atmospheric concentrations of key anthropogenic greenhouse gases (i.e., carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and troposphere ozone (O₃)) reached their highest recorded levels in the 1990s, primarily due to the combustion of fossil fuels, agriculture, and land-use changes. The radiative forcing from anthropogenic greenhouse gases is positive with a small uncertainty range; that from the direct aerosol effects is negative and smaller; whereas the negative forcing from the indirect effects of aerosols on clouds might be large but is not well quantified.

Globally it is very likely that the 1990s was the warmest decade, and 1998 the warmest year, in the instrumental record (1861–2000). The increase in surface temperature over the 20th century for the Northern Hemisphere is likely to have been greater than that for any other century in the last thousand years. Insufficient data are available prior to the year 1860 in the Southern Hemisphere to compare the recent warming with changes over the last 1,000 years. Temperature changes have not been uniform globally but have varied over regions and different parts of the lower atmosphere.

Observed changes in regional climate have affected many physical and biological systems, and there are preliminary indications that social and economic systems have been affected. Recent regional changes in climate, particularly increases in temperature, have already affected hydrological systems and terrestrial and marine ecosystems in many parts of the world. The observed changes in these systems are coherent across diverse localities and/or regions and are consistent in direction with the expected effects of regional changes in temperature. The probability that the observed changes in the expected direction (with no reference to magnitude) could occur by chance alone is negligible.

The rising socio-economic costs related to weather damage and to regional variations in climate suggest increasing vulnerability to

climate change. Preliminary indications suggest that some social and economic systems have been affected by recent increases in floods and droughts, with increases in economic losses for catastrophic weather events.

2 BACKGROUND INFORMATION

The history of the main events that took place up to the present reality of measures implementation is briefly presented below.

1979: The World Climate Conference in Geneva, sponsored by the World Meteorological Organization, concludes that the '**greenhouse effect**' from the increased build-up of carbon dioxide in the atmosphere demands urgent international action.

1985: The **hole in the Antarctic ozone layer** is discovered by ground observations. It had existed for a decade, but earlier satellite data that showed the problem had been considered inaccurate and set aside. The **Vienna Convention** for the Protection of the Ozone Layer is the first step in a long series of agreements to cut pollution that destroys the ozone layer.

1986: An explosion and fire in a nuclear reactor at **Chernobyl** in Ukraine ejects about seven tonnes of radioactive material into the atmosphere, causing the world's worst civilian nuclear accident. It kills thousands in the immediate region and in cleanup crews, and leaves many others with the effects of radiation poisoning. Radiation circles world in 11 days, and fallout contaminates food in parts of Europe.

1992: Earth Summit, Rio de Janeiro produced the **United Nations Framework Convention on Climate Change** (UNFCCC), a landmark agreement with the goal of "preventing dangerous anthropogenic interference with the Earth's climate system". The conference releases Agenda 21, a blueprint for making development socially, economically, and environmentally sustainable. The meeting also sees many governments sign the United Nations Framework Convention on Climate Change, which is to stabilize greenhouse gases in the atmosphere at levels that will not dangerously upset the global climate system.

They also sign the **Convention on Biological Diversity**, which requires countries to conserve the variety of living species, and ensure that the benefits from using biological diversity are equitably shared. The conference issues a statement on the sustainable use of forests and the Rio Declaration, which contains 27 principles that define the rights and responsibilities of nations as they pursue human development and well-being. The Earth Summit will mark the peak of environmental concern and government statements of action for many years. It is followed by a decline in interest caused by a severe recession and a lack of direction on how to implement promises for more sustainable development.

Industrial countries listed in the Convention's "Annex I" were to adopt policies aimed at reducing their emissions to 1990 levels by the

year 2000. However, no specific policies were required, and Annex I countries were only obligated to “aim” to reduce their emissions, not actually to reduce them. The UNFCCC was signed by 153 countries and entered into force on March 24, 1994. It was ratified by the United States in October 1992.

The following groups of countries, called Parties in the Convention, were distinguished:

- Parties included in **Annex II** to the Convention encompass the countries that were members of the Organization for Economic Co-operation and Development (OECD) in 1992.
- Parties included in **Annex I** to the Convention (Annex I Parties) encompass both the countries that were members of the Organization for Economic Co-operation and Development (OECD) in 1992, and countries with "economies in transition" (EITs), that is, the Russian Federation and several other Central and Eastern European countries.
- Parties not included in Annex I to the Convention (**Non-Annex I** Parties) encompass those countries that are not member of Annex I, including all newly industrialized countries and developing countries.

Under the Convention, all Parties have certain general commitments (Article 4.1, UNFCCC):

- To prepare national inventories of greenhouse gas emissions
- To implement measures to mitigate climate change
- To promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that reduce greenhouse gas emissions
- To preserve sinks and reservoirs of greenhouse gases
- To cooperate in preparing for adaptation to the impacts of climate change
- To promote and cooperate in research on climate change
- To exchange information related to climate change
- To promote and cooperate in education, training and public awareness related to climate change
- To report information related to the above in “national communications”.

In addition to those general commitments, certain groups of countries have additional obligations or rights:

- Annex I Parties are to take the lead in modifying longer-term trends in emissions by adopting national policies and measures with the non-legally binding aim of returning their greenhouse gas emissions individually or jointly to 1990 levels by the year 2010 (Article 4.2, UNFCCC).
- The Parties included in Annex II have the further commitment to provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations (Article 4.3, 4.4, 4.5, UNFCCC).
- Economies in transition are allowed a certain degree of flexibility in implementing their commitments (Article 4.6, UNFCCC). For example, several of those countries have chosen a base year other than 1990 (Ukraine).
- Parties not included in Annex I are eligible for funding for the implementation of their general commitments (Article 11, UNFCCC). The general commitments as described above are interpreted weaker than for Annex I Parties. For example, the required content of the regular reports ('national communications') is less stringent and its submission is less frequent.

The guidelines for the preparation of national communications for Non-Annex I Parties do not speak of 'policies and measures' but of 'steps taken or envisaged to implement the Convention'.

The United Nations creates the **Commission on Sustainable Development** to follow up the work of the United Nations Conference on Environment and Development, and to report on implementation of the Earth Summit agreements.

1994: The **Global Environment Facility (GEF)**, an organization created to finance actions to deal with biodiversity loss, climate change, degradation of international waters, and ozone depletion, is restructured after the Earth Summit in Rio to have a broader mandate.

1995: COP1, Berlin

A meeting of nations, called the **Conference of Parties**, is held in Berlin on the Climate Convention, but fails to reach agreement on how to control greenhouse gases.

Adopted the "Berlin Mandate," a declaration that the UNFCCC would have little effect on greenhouse gas emissions unless Annex I countries were held to "quantified limitation and reduction objectives within specified time-frames," an approach now described as setting "targets and timetables" for emissions reduction. Established a two-

year “analytical and assessment phase” to negotiate a comprehensive set of “policies and measures” that should be taken by Annex I countries. No new commitments or obligations were imposed on countries outside Annex I. Countries agree to Joint Implementation by which developed countries would get credit for sponsoring emission reducing measures in developing countries.

1996: COP2, Geneva

Called for the establishment of legally binding emissions targets as proposed at COP1. Rejected the COP1 proposal that uniform policies be imposed in favour of allowing Annex I countries the flexibility to develop their own policies.

1997: COP3, Kyoto

Adopted the “**Kyoto Protocol**”, in which most Annex I countries were assigned **legally binding emissions targets to be achieved by 2008–2012**. The average target was about 95 percent of the country’s emissions in 1990. Many details of implementation were left for future negotiations.

The Kyoto Protocol adds new commitments for Annex I Parties and confirms the general commitments from the Convention for Non-Annex I Parties without modifying them. Annex I Parties agreed to reduce aggregated emissions of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), hydro fluorocarbons (HFCs), per fluorocarbons (PFCs) and sulphur hexafluoride (SF₆) jointly by at least 5 per cent in the period 2008 to 2012 relative to 1990 levels. Individual developed nations have individual limitation or reduction targets.

To a certain extent, countries can reach their targets by **trading emissions** with other countries or by implementing **emission reduction projects** in other Annex I countries (**Joint Implementation**) or in developing countries (**Clean Development Mechanism**), which do not have quantified targets themselves. Countries may also choose to implement the commitments jointly as a group. The European Union has chosen to do so and has internally negotiated other national targets that will be the basis for the assessment of their individual compliance with the Kyoto Protocol.

While the “Annex I” was used in the Convention as a vehicle to differentiate the commitments related to only one Article, the division between Annex I and Non-Annex I Parties was developed since into a very rigid divide. With the Kyoto Protocol, this division has been further manifested. The Kyoto Protocol did not define a new group of countries (sometimes referred to as “**Annex B Parties**”), it rather updated Annex I by adding those countries that applied to be included and those whose geographical borders changed as well as deleting those that had not ratified the Convention at the time of adoption of the Kyoto Protocol.

The Protocol would enter into force after it has been ratified by at least 55 Parties to the Climate Change Convention, including industrialized countries, representing at least 55% of this group's total 1990 carbon dioxide emissions. Once the Kyoto Protocol enters into force the COP of the UNFCCC will also serve as the formal Meeting of the Parties (MOP) for the Kyoto Protocol. This is referred to as the COP/MOP or CMP.

1998: COP4, Buenos Aires

The COP adopted a two-year plan of action to design mechanisms for implementing the Kyoto Protocol. Issues discussed included financial transfers and Clean Development Mechanism (CDM) for developing country participation. Also issues for incorporating “carbon sinks” were discussed.

1999: COP5, Bonn

Primarily devoted to monitoring progress on the work program was adopted at COP4.

2000: COP6, The Hague

The COP intended to finalize details on **implementation** of the Kyoto Protocol. Negotiations ended without agreement. Many issues were unresolved: how the mechanisms in the Protocol would operate; what measures would be used to enforce compliance; how large allowances would be for “sinks” that remove carbon dioxide from the atmosphere; and whether there would be restrictions on the use of the Protocol's flexibility mechanisms.

2001: COP6 bis, Bonn (July)

Continuation of COP6 following the stalemate at The Hague. However, President Bush declared in March 2001 that the *United States would not participate in the Kyoto Protocol*. Other Annex I countries agreed to proceed without the United States. Large sink allowances were granted to *Japan* and *Canada*. The COP produced a set of recommendations on implementing the Protocol that were to be discussed at COP7.

The Kyoto Protocol was saved by a last minute agreement among about 180 countries. Canada wins concessions on use of forests and farmland as sinks for greenhouse gases. Money is promised to help developing nations control emissions. Under the Bonn Agreement adopted at COP6.5, three funds are to be established to provide financial assistance to developing countries: the **Special Climate Change Fund (SCCF)**, the **Least Developed Countries Fund (LDCF)** under UNFCCC; and the **Adaptation Fund** under the Kyoto Protocol.

2001: COP7, Marrakesh (October)

The COP formally adopted most of the recommendations of COP6. Furthermore, it finalized rules for use of flexibility mechanisms, especially the Clean Development Mechanism. Also, established a “**Compliance Committee**” to “facilitate, promote and enforce” compliance with the Protocol. In the event of non compliance, the “Enforcement Branch” of the Compliance Committee may deduct 1.3 times the amount of the violation from the violator’s emissions allowance for the next commitment period. The violator may also be barred from using the flexibility mechanisms. Also, it finalized the accounting procedures to be used for sinks.

2002: (August and September)

Progress since 1992 reviewed at World Summit on Sustainable Development.

2002: COP8, New Delhi, India (October, November)

The Delhi Ministerial Declaration on Climate Change on Sustainable Development makes no reference to future steps to further elaborate the climate regime. It largely underscores principles established in the Framework Convention and themes adopted at the World Summit on Sustainable Development earlier this year in Johannesburg.

2003: COP9, Milan, Italy (December)

Following conclusion of the *Marrakech Accords* at COP7, participants continued to discuss detailed rules for implementing the Kyoto Protocol. Draft rules were adopted for two kinds of sinks – reforestation and afforestation – under the CDM.

As of 16 May 2003, the first condition for the Protocol to enter into force is fulfilled since 108 countries have ratified the Protocol. The second condition is almost fulfilled. The "Kyoto Thermometer" is on 43.9%. Only the following Annex I countries are missing: U.S., Russia, Australia, Switzerland, Monaco and Liechtenstein. Only U.S. (36.2%) and Russia (17.4%) has emissions large enough to fill the gap. However, Russia is expected to ratify the Protocol in 2003.

2004: COP10, Buenos Aires, Argentina (December)

Following U.S. rejection of Kyoto in 2001, the annual COPs had been marked by deep uncertainty over the fate of the Protocol. While Kyoto’s resurrection by Russia provided some air of relief in Buenos Aires, at least for the Protocol’s supporters, that mood quickly gave way to a new anxiety: whether it will be possible to strengthen the international effort beyond 2012 (the end of the first commitment period under Kyoto). A central issue in Buenos Aires was whether countries were prepared to create a space within the formal process to even begin considering the question of next steps.

2005: COP11 and COP/MOP1, Montreal, Canada (December)

The conference was an historic event. The Parties to the United Nations Framework Convention on Climate Change (UNFCCC) met for the 11th time, while marking the **entry into force of the Kyoto Protocol**. At Montreal, the first ever Meeting of the Parties to the Protocol (MOP) ran parallel to the Conference of the Parties to the Convention (COP). The United Nations Climate Change Conference was the largest intergovernmental climate conference since the Kyoto Protocol was adopted in 1997. Some 10,000 participants attended.

The 40 industrialised nations that are already bound by emission reduction targets and timetables in the Kyoto Protocol have established a process to negotiate further and deeper cuts for **after the 2012 expiration** of the first commitment period of the Kyoto Protocol. Not participating in this decision are the United States and Australia which have not ratified the Kyoto Protocol. That is a disappointment but it does mean that the majority of the industrialised countries are not going to let those two countries distract the rest from continuing on a path that they believe is the right thing to do bolstered by the increasing rigorous scientific evidence of human-induced climate change.

2006: COP12, Nairobi, Kenya (November)

Expected...

3 THE KYOTO PROTOCOL IMPLEMENTATION

In response to the threat of climate change, most developed countries agreed in December 1997 to legally binding targets, also known as Quantified Emission Limitation and Reduction Obligations (QUELROs) that will reduce emissions of the six main greenhouse gases by at least 5% below 1990 levels over the period 2008-2012. The resulting international agreement is known as the Kyoto Protocol, and commits countries listed in Annex I to the Protocol to reducing emissions of greenhouse gases by specific amounts over the period 2008– 2012 (the “first commitment period”).

The Kyoto Protocol sets a framework for the reduction of greenhouse gas emissions. Further detailed rules were agreed in Marrakech in 2001 and subsequently. This includes essentially four different, yet interrelated, systems. The first two systems are monitoring and reporting systems that are required under the Kyoto Protocol: a *national system to prepare national greenhouse gas (GHG) inventories* –which is the only system effectively mentioned in the Marrakech Accords as a “national system”-, and the *national registry*. In addition, two other systems are also needed domestically to participate in the flexible mechanisms, although they are not required under the Protocol, namely a **domestic emission trading system** and a **domestic framework for Joint Implementation**.

Eligibility requirements to participate in the flexible mechanisms (JI and/or ET) are set out in the Marrakech Accords. Minimum requirements for a country opting to participate in “**Track 2**” JI only (*i.e. to issue and transfer ERUs*) are:

- to be a Party to the Kyoto Protocol
- to calculate and record it’s assigned amount, and
- to establish a registry.

Countries also wishing to participate in “**Track 1**” JI (*i.e. to acquire ERUs*), Emissions Trading or the Clean Development Mechanism (CDM) also need:

- to have a national system in place to calculate greenhouse gas emissions and removals (*i.e. a national inventory system*)
- to have submitted the most recent inventory, and
- to have submitted “supplementary information”.

In addition to requirements under the Kyoto Protocol and Marrakech Accords, EIT countries that are in the process of accession to the EU will also need to implement EU legislation. Current and planned legislation covers issues related to setting up “national systems”. For example, proposals for an Emission Trading Scheme, and an amendment to the Council Decision on national programmes and annual inventories are being discussed, and Directives on JI/CDM and registries may also be developed.

Enshrining Kyoto Protocol requirements in national and community law will ensure that they become more enforceable, as there may be penalties for non-compliance. This may help encourage governments, particularly in countries with limited resources such as EITs, to raise the priority of establishing and maintaining climate change-related “national systems”.

3.1 ALLOWANCE MARKETS

3.1.1 International Emissions Trading

The Kyoto Protocol provides for countries with a target in Annex B of the Protocol to meet their targets through international emissions trading. To this end the Protocol creates **a system of units which can be traded between countries**. At the end of each commitment period, each Annex I country must retire sufficient units to cover its emissions of greenhouse gases during the commitment period.

The total amount of greenhouse gases that each Annex I country is allowed to emit (its “assigned amount”) is calculated in accordance with its QUELRO (i.e. by multiplying reviewed base-year (1990) emissions by the country’s reduction or limitation target and then by five to cover the five years of the commitment period (2008-2012)). This is then divided into **Assigned Amount Units (AAU)**, each worth one metric tonne of carbon dioxide equivalent. In addition to AAUs, the Kyoto Protocol also provides for other types of unit including project credits. All units are equivalent to one tonne of carbon dioxide equivalent and are therefore of equal face value. However the rules on how they can be used vary. All Kyoto commodities have a compliance value only until 2012.

- **Assigned Amount Units (AAU)** are issued by **governments** that have emission reduction commitments, and can be traded between countries pursuant to international emissions trading, provided that these countries are fully compliant with eligibility requirements.

- **Certified Emission Reductions (CER)** are units of greenhouse gas reductions generated from **CDM projects** (in countries that do not have emission reduction commitments under the Kyoto Protocol), verified by external, UN-accredited third party verifiers, and issued by the regulatory body of CDM, the “**CDM Executive Board**”. CERs can be used for compliance with Kyoto Protocol obligations or to meet emissions caps under the European Union Emissions Trading Scheme. CERs are often traded in forward contracts.
- **Emission Reduction Units (ERU)** are units of greenhouse gas reductions generated from **Joint Implementation projects** (in countries, i.e. typically, economies in transition, that have emission reduction commitments under the Kyoto Protocol), verified by external unaccredited third party verifiers (under what is known as Track 2, JI), and issued by the **host country**. ERUs are also often traded in forward contracts.

3.2 PROJECT MECHANISMS

The project mechanisms enable project credits to be obtained for reducing emissions in another country. These project credits can then be used to meet targets under the Kyoto Protocol. The rationale for these mechanisms is that as greenhouse gases are emitted into the atmosphere they will result in a contribution to global increases in temperature, regardless of the source. It is therefore necessary to control greenhouse gas emissions at a global level and it makes sense to make reductions where it is most efficient and cost effective to do so. These flexible mechanisms address this by reducing emissions at the lowest cost location.

3.2.1 The Clean Development Mechanism

The CDM provides a mechanism for Annex I countries to carry out projects to reduce emissions in developing countries (those without a target under Annex I of the Kyoto Protocol). Article 12(2) of the Kyoto Protocol states that the CDM is intended ‘to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention. The Certified Emissions Reductions (CER) are issued for the reductions achieved and can be used by Annex I countries to meet their obligations under the Kyoto Protocol.

The CDM benefits from a prompt start under international rules. Credits may be issued and forwarded to national registries in anticipation of the establishment of the assigned amount, trading eligibility and full international trading. This means that once links are

established between registry systems CERs may be forwarded to any Annex I country and traded within its registry. Trading between registries is only allowable after the establishment of the assigned amount.

We do not expect these links to be established until early 2007 at the earliest, pending implementation of the international transaction log at UN level.

3.2.2 CDM procedure

The Clean Development Mechanism (CDM) is intended to lead to sustainable development in developing countries and assist Annex I countries in meeting their targets.

The Marrakech Accords set out detailed modalities and procedures for the CDM. CDM crediting is supervised by the CDM Executive Board. A summary of the procedure for CDM projects is set out below.

◆ Participation requirements

In order to participate in the CDM, a country must meet the participation requirements set out in the Marrakech Accords. Participation in the CDM is voluntary and is open to countries which have signed the Kyoto Protocol and meet the participation requirements. Countries participating in the CDM must **Designate a National Authority** for the CDM (the “DNA”).

◆ Approval and authorisation

The Modalities and Procedures refer to the authorisation by countries of the participation by public and private entities in CDM in project activities. In order to participate in a CDM project activity a company must obtain a written approval of voluntary participation from the DNA of each country involved.

◆ Project Design Document

Participants in a CDM project are required to draw up a **Project Design Document (PDD)**.

◆ Validation and registration

All projects under the CDM must be validated and registered. Validation is the process of independent evaluation of a project activity. It is carried out by a **Designated Operational Entity (“DOE”)**. A DOE is a private entity which is contracted by the project participants to validate the project and submit a validation report to the Executive Board.

The validation report must, in particular, confirm that:

- the project participation requirements have been met; and

- the project is expected to result in a reduction of emissions of greenhouse gases and a baseline from which to measure this reduction has been established in accordance with the requirements of the CDM modalities and procedures. The baseline for a CDM project must be the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity.

Registration is the acceptance by the Executive Board of a validated project as a CDM project. Projects are registered by the Executive Board following submission of the validation report to the Board by the DOE. Registration may be subject to a review. A review can relate to issues associated with the validation requirements and can be initiated on the request of a country involved in the project or on the request of at least three members of the Executive Board.

◆ Monitoring emissions and verification and certification of emissions reductions

Once a project has been registered by the Executive Board, participants will be required to monitor and report emissions in accordance with the provisions of the project design document.

Periodically, the emissions reductions must then be verified by the DOE. The DOE will then prepare a certification report certifying the emissions reductions achieved by the project activity and notify the project participants and the Executive Board.

◆ Issue of CERs

The notification of the certification report to the Executive Board constitutes a request for the CERs to be issued. The Executive Board will then issue CERs equal to the certified emissions reductions. The CERs will be issued in accordance with the instructions of the project participants and the countries involved in the CDM.

The issue is subject to a review. The review is limited to issues of fraud, malfeasance or incompetence of the DOE and can be requested by a country involved in the project activity or by at least three members of the Executive Board within 15 days of the notification of the certification report.

Establishment of the assigned amount (and therefore full eligibility for international trading) is expected in 2008, following the review of a report establishing the assigned amount.

3.2.3 Joint Implementation

JI provides an alternative or supplemental mechanism to international emissions trading, enabling an Annex I country to obtain additional credits by carrying out projects to reduce emissions in another Annex

I country. These credits are known as Emission Reduction Units ERUs.

Joint Implementation does not benefit from a prompt start and as a result ERUs may only be issued following the establishment of the assigned amount. They will therefore not be available until 2008 at the earliest. Credits from both JI and CDM surrendered by operators for the period 2008-2012 will be available for retirement to meet the EU's Kyoto target.

3.2.4 JI procedure

As explained above, Joint Implementation (JI) is a project-based mechanism carried out between two Annex I countries. It enables an Annex I country to carry out a project to reduce the emissions of another Annex I country. JI can be implemented using the foreseen two tracks as mentioned above:

- **Track 1** allows an Annex I country to issue credits in respect of verified emissions subject to the adoption and notification of guidance to the UNFCCC;
- **Track 2** enables the issuance of credits following verification of emissions under the supervision of the JI Supervisory Committee.

Detailed guidelines for JI projects are set out in the Marrakech Accords. The procedures for JI projects are similar but not identical to the procedures for CDM projects. The procedure for JI is generally less stringent because the issue of ERUs does not create additional credits (as ERUs are issued by converting other Kyoto units into ERUs). The main procedure, as it is generally designed, is outlined below.

The justification of additionality under Track 1 becomes a host country decision, therefore JI projects do not need to be validated. The question arisen then is how to stop a host country from simply approving projects that are in fact business as usual? This is the reason that clear guidance is required to ensure that track 1 JI projects are additional.

1. Approval and authorisation

JI projects must be **approved by both Annex I countries** involved in the project and a country involved in a project may authorise companies to participate in a project. Annex I countries must **Designate a Focal Point (DFP)** for the approval of Article 6 projects.

2. Verification of emissions reductions

The procedure for verification of project activities depends on whether the country in which the project is carried out meets all the eligibility requirements in the guidelines. Where the eligibility requirements are

met (Track 1), the guidelines allow that country to verify the emissions reductions from the project and issue ERUs.

Where the eligibility requirements are not all met (Track 2), the guidelines provide for verification to be supervised by the Article 6 JI Supervisory Committee. Under this procedure, independent entities accredited by the Article 6 supervisory committee are required to determine whether the **Project Design Document (PDD)** is consistent with the requirements of the guidelines.

The project design document must set out the baseline against which emission reductions will be measured and a monitoring plan. The baseline is defined as the scenario which reasonably represents the anthropogenic emissions by sources or anthropogenic removals by sinks which would occur in the absence of the proposed project.

Once the project initiation document has been approved, project participants must monitor emission reductions in accordance with the monitoring plan and submit a report to an Accredited Independent Entity (AIE) in case of following the Track 2 path. The AIE verifies the emission reductions reported by the project participant. In case of Track 1 path the same procedure has to be followed using the national guidelines for monitoring the performance of the project.

3. Issue of ERUs

Once the emissions reductions have been verified, the country in which the project is carried out may issue ERUs. An ERU is issued by converting an AAU or an **RMU (Removal Unit)** - that is sink credit of net carbon absorption in forestry and agriculture - into an ERU.

The most interesting countries with important potential for JI projects are the countries of Central Eastern Europe and especially Russia and Ukraine. The case of Ukraine, which is considered that it has the most developed institutional and legal infrastructure, is presented in Annex 1.

3.2.5 Risk evaluation

There are the two main types of risk inherent in CDM and JI projects:

- carbon specific risks,
- and project risks,

and their respective impacts on (forward) contracts that trade in CERs or ERUs.

Carbon asset risks as described below and most project risks are not applicable to EU allowances, as they are issued by national governments.

3.2.6 Carbon Specific Risks

The following categorisation of main carbon specific risks should be considered:

◆ Regulatory risk

This relates to uncertainties regarding what specific regulations will be required for projects pursuant to the Clean Development Mechanism and Joint Implementation and whether the project, and ultimately the ERUs/CERs, will be registered with the CDM Executive Board or the JI Supervisory Committee.

The most significant component of regulatory risk is **additionality risk**, which relates to whether the project will be deemed additional by the CDM Executive Board or eligible by the JI Supervisory Committee. Although tools are in place to assess and demonstrate additionality, approval depends on the weight of evidence required to be submitted.

Another significant regulatory risk is **baseline risk**, which relates to the reliability of the baseline (the estimate of emissions that would have occurred without the project), the methodology for measuring ERUs/CERs vis-à-vis the baseline, and whether the ERUs/CERs verified as delivered by the registered project will ultimately be certified as eligible under the Kyoto Protocol or other regimes.

◆ Market risk

This relates to the expected market price of ERUs/CERs on delivery. ERUs/CERs are purchased in a forward contract (in most cases) at a fixed price, which may be different from the market price of ERUs/CERs at the time of delivery. When contracting for ERUs/CERs at a fixed price, the buyer assumes the risk that prices may drop in the future (and the seller, the risk that market prices will increase). The price of ERUs/CERs is highly speculative and their liquidity is not assured (for reasons of uncertainty of whether large quantities of asset classes will enter the market in the first commitment period, in particular Assigned Amount Units).

◆ Country risk

This relates to the risk that the host country will ratify and subsequently comply with its obligations under the Kyoto Protocol and for JI projects, whether the host country will transfer the Emission Reduction Units as agreed by the project sponsor.

The above-mentioned risk categories are compounded with uncertainty and time delays during the CDM/JI approval process. However, with time and experience, delays and uncertainty with project registration are expected to decrease, regulatory certainty to increase and overall carbon risks to decrease.

3.2.7 Project Risks

In addition to carbon-specific risks, carbon buyers are subject to a range of risks similar to those faced by other project investors, including whether the project will perform as expected, and for ERUs/CERs buyers, whether it will deliver the contracted quantity of ERUs/CERs. Typical risks include:

1. Construction risk – will the project begin operating on schedule?
2. Performance risk – generally, will the project operate as expected?
3. Technology risk – will the equipment perform according to expectations?
4. Financial, business and regulatory risk – has the project achieved financial closure?
5. Contract risk – are the contracts in place adequate, enforceable and durable?
6. Counterparty risk – are the signatories to key contracts (such as power purchase agreements) creditworthy and likely to abide by their terms – notably, will they pay on time?
7. Generic country risk – including political risk such as expropriation and foreign exchange convertibility.

As a background, it should be noted that carbon finance is an inherently risky business. First, because of the emergent nature of the Greenhouse Gas (GHG) market and second, because projects that generate ERUs/CERs are located in emerging markets.

4 THE DEVELOPMENTS AT EUROPEAN UNION LEVEL

The European Union is at the forefront of international efforts to combat climate change and has played a key role in the development of the two major treaties addressing the issue, the [United Nations Framework Convention on Climate Change and its Kyoto Protocol](#).

The preliminary agreement on the Kyoto Protocol in December 1997 and its entry into force on 16 February 2005 set binding targets on reducing greenhouse gas emissions from the EU and other developed countries and provided a stimulus for continued policy action. Under the Kyoto Protocol, the EU has committed itself to reducing its greenhouse gas emissions by **8%** compared to the base year (1990) during the first commitment period 2008-2012. This target is shared between the 15 countries that were EU Member States at the moment of the EU's ratification of the Protocol on 31 May 2001 under a legally binding **Burden-Sharing Agreement (BSA)**. This agreement sets an individual emissions target for each EU-15 Member State in accordance with Article 4 of the Kyoto Protocol. Article 4 enables countries to conclude an agreement for a joint target equal to the sum of the targets of the participating countries.

In the field of climate policy, it is recognised that 'common and co-ordinated policies and measures' at Community level are necessary, as the EC itself is a Party to the international climate treaty. However, these measures are a supplement to national climate policy. The countries are responsible for their relative share under the EU burden sharing agreement. Domestic implementation remains a vital part of successful emission abatement.

The EU is also taking serious steps to address its own greenhouse gas emissions. In March 2000 the Commission launched the **European Climate Change Programme (ECCP)**. The ECCP led to the adoption of a range of new policies and measures, among which the **EU's Emissions Trading Scheme (EU ETS)**, which started its operation on 1 January 2005 and will play a key role. Member State policies are diverse. Some countries started elaborating climate plans more than ten years ago, others have only recently begun to systematically take on the challenge of reducing their GHGs or limiting their increase.

4.1 THE KYOTO PROTOCOL AND the EU

Combating climate change is one of the main commitments under the EU's sustainable development strategy as endorsed by the European Council in Göteborg in 2001, which also reaffirmed the EU's

commitment to meeting its Kyoto target. The Brussels European Council of March 2003 invited the Member States to accelerate progress towards meeting the Kyoto Protocol targets. Climate change is also one of the four priority areas under the Community's 6th Environmental Action Programme, which calls for full implementation of the Kyoto Protocol as a first step towards reaching a long-term target of 70% in emission cuts.

To ensure its compliance with the Kyoto Protocol, the EU has adopted a series of measures under the European Climate Change Program. Most of these measures have recently entered into force and will start to show their full effect over the next few years. These include:

- The EU greenhouse gas Emissions Trading Scheme;
- The promotion of electricity from renewable energy sources;
- The promotion of cogeneration (CHP);
- Increasing the energy performance of buildings;
- The promotion of the use of biofuels for transport.

The backbone of the Commission's effort to implement the Kyoto Protocol is the ECCP. The program's goal is, with all the relevant stakeholders, to identify and develop cost-effective measures that will help the EU meet its 8% Kyoto target, complementing the efforts of the Member States. Since the ECCP was launched, more than 200 stakeholders have been involved in eleven different working groups.

While the ETS is the measure with most potential, the Council and the European Parliament have adopted several other initiatives, such as the **Directive linking JI/CDM to the EU's Emission Trading System**. Further proposals are in the pipeline, for example legislation on regulating fluorinated gases. The European Commission has also negotiated an agreement with all European, Japanese and Korean carmakers to cut average CO₂ emissions of new cars in the order of 25% below 1995 levels by 2008/2009.

But even the initiatives that have been adopted still need to be implemented, so it remains to be seen how far they will help curb emissions in practice. Impact assessments are always based on many assumptions and variables and whether the full potential of a measure is realised depends on a broad range of factors.

Considering that the Kyoto Protocol has only recently entered into force, the EU has made significant progress in achieving its commitments. Further progress depends on the speed and thoroughness of the implementation by Member States of Community legislation and domestic measures. The total of the projections for the EU-15 Member States show that the Kyoto target of -8%, can be met if Member States implement additional domestic measures and use flexible mechanisms, as planned.

Delivering on the Kyoto commitments does not mark the end of the EU's efforts. The EU is advocating deeper cuts in greenhouse gas emissions in order to put a halt to global climate change. The EU is committed to taking its fair share of the global efforts to reduce human interference with the climate system and has already started to take concrete steps towards that direction as outlined above.

4.2 THE EU EMISSIONS TRADING SCHEME

While the implementation of the three flexible mechanisms at international level became possible only after the Kyoto Protocol came into force, the EU has already moved ahead with its own internal emissions trading system. The Directive was approved by the European Parliament and the Council on July 2003. Starting in January 2005, the EU-ETS is the largest company-level trading system for CO₂ emissions in the world. The scheme covers installations representing more than half of the CO₂ emissions from the EU-25.

These installations covered by the system are allocated permits by governments that allow them to emit a certain tonnage of CO₂ each year. Those that emit less than their allocation can sell the surplus allowances. Those that expect to emit more than their allowance have the option of either investing in ways to reduce their emissions or of buying additional allowances on the market.

Under the EU emissions trading scheme, the EU Member States will set limits on CO₂ emissions from energy-intensive companies, approximately 10,000 steel factories, power plants, oil refineries, paper mills, and glass and cement installations, by issuing allowances as to how much CO₂ these companies are allowed to emit.

Companies that achieve reductions can sell them to companies that have problems staying within their limits or for which emissions reduction measures are too expensive in comparison with what the allowances will cost. Any company may also increase its emissions above the level of allowance it is issued by acquiring more allowances from the market. This scheme will induce companies to make emission cuts where they are cheapest, thereby ensuring that reductions are made at the lowest possible cost to the economy and that innovation is fostered.

Other sectors, such as aluminium producers, the chemicals industry and the transport sector, might be brought in later.

The first trading period is from 2005 to 2007, with a second trading period covering 2008 to 2012. The prices of carbon allowances indicate a dynamic market in particular since the beginning of 2005. Europe now has a real "Carbon Market", which puts a price on greenhouse gas emissions and requires companies to take the costs of these emissions into account in their activities.

The EU Member States must prepare and submit for approval their National Allocation Plans setting out the allowances that each sector and company will be issued. The EU has also indicated its willingness to link the EU scheme to trading schemes in other countries that have ratified the Kyoto protocol.

4.3 THE EU LINKING DIRECTIVE

Building on these provisions and the EU Emissions Trading System, the Commission adopted a proposal that links credits from JI and CDM projects with the Emissions Trading System on July 2003. Under this proposal, European companies covered by the EU Emissions Trading System will be allowed to convert credits from JI and CDM projects for use towards meeting their commitments under the trading system.

It is estimated that the linking of project credits to the Emissions Trading System will lower the annual compliance costs for companies covered by the scheme, which include companies in the ten accession countries, by about a quarter. JI and CDM will also transfer environmentally sound technology to countries with economies in transition (JI) and developing countries (CDM), which will help them move onto a sustainable path of development.

This means that the EU-ETS system will not only provide a cost-effective means for EU-based industries to cut their emissions but will also create additional incentives for businesses to invest in emission reduction projects outside the EU. This investment will contribute to the transfer of technologies to developing nations.

The Commission's proposal takes into account the obligation for Parties to the Kyoto Protocol to achieve a significant part of their Kyoto targets through emission reductions in the European Union, so that the use of **the Kyoto flexible mechanisms is supplementary to domestic efforts**. It therefore envisages the triggering of a review once JI and CDM project credits equivalent to 6% of the total quantity of allowances issued for the trading period 2008-2012 enter the emissions trading scheme. If and when triggered, this review will consider placing a limit on the credits that can be converted during the remainder of the trading period.

The proposal excludes nuclear projects in line with the Kyoto Protocol's rules and "carbon sinks." Carbon sinks - planting forests to soak up CO₂ - have been a contentious issue at UN level because they do not bring technology transfer, they are inherently temporary and reversible, and uncertainty remains about the effects of emission removal by carbon sinks. In addition, international negotiations on what types of forestry projects might be acceptable to governments have not yet been completed.

4.4 BEYOND 2012

The EU climate policy does not stop in 2012. Many of the EU policies that are already in place will have an important impact beyond the Kyoto Protocol's first commitment period. The EU greenhouse gas emissions trading scheme will automatically continue after 2012. The second European Climate Change Programme was launched in October 2005. In a number of parallel sessions, stakeholders discussed key areas of current and future European climate change policy, including ECCP I review, geological carbon capture and storage, adaptation, aviation, passenger road transport, energy efficiency, renewable energy and technology development policy.

The European Commission has also adopted a Communication outlining key elements for a strategy for further action post 2012. While it indicates that the EU is ready to engage in an open dialogue between countries concerning the further development of an international framework post 2012, it has highlighted a number of key elements for a successful global climate policy, such as the need for broader participation by countries and sectors, the development of low-carbon technologies, the continued and expanded use of market-based instruments, and the need to adapt to the inevitable impacts of climate change.

5 CONCLUSIONS

The activity around the KP emission reduction is carried out by the **Governments of the signatory countries and private companies** also, which are involved in the business created by the implementation of the flexible mechanisms.

Turkey has already chosen the path to be included in the list of Annex I countries together with the most developed and industrialised countries. Although at present it has not signed the Kyoto Protocol and subsequently has no emission reduction targets, we can assume the options that could come up after the conclusion of the negotiations to become a signatory of the KP. The most significant element regarding the GHG emissions activity is to consider the possibility of the country to develop the relevant business related to the KP flexible mechanisms, in view also of its perspective to join the EU.

1. Concerning the CDM initiative, Turkey cannot be benefited for its own projects due to its categorization as belonging to Annex I countries. However, Turkish companies could be involved in the development of CDM projects in eligible countries. The CERs could be traded or used within the country when it will be encompassed in emission reduction targets at international or EU level, or traded in international markets that have already been or will be created.
2. Concerning the JI initiative, the Protocol established two project-based flexibility procedures (Track 1 and 2) that move the concept of joint implementation beyond the pilot phase experienced in a temporary basis. The generated credits can be used by Annex I Parties towards meeting their quantified emission targets under the Protocol. Formally, Annex I Parties can use the credits, but in practice, only Annex B Parties that have ratified the Protocol will be interested. This creates a special case for the country, which is an Annex I Party that ratified, but it has not been assigned an amount of permitted GHG emissions under Annex B. Thus, the only reasonable activity to be developed might come from trading companies which will target exclusively the international markets of emission reduction permits.
3. Concerning the Emission Trading initiative, the conditions and implementation wideness might be agreed at a later stage, however, it is clear that the trade will be carried out in AAUs that means that only the countries under Annex I could be benefited, but especially Annex B countries, with emission reduction commitments will be interested also to be involved.

To participate in the flexibility mechanisms of the Kyoto Protocol in the first commitment period (2008-2012), Parties shall as of 2006;

- submit at least 1990 GHG inventories, including emissions by sources, removals by sinks for all gases,
- present a national registry system for reporting, verification and monitoring
- present a demonstrable progress report in 2006.

Except for the last one, it is **practically impossible for Turkey to fulfill the first two requirements**. Even if possible, as mentioned above, it cannot host Joint Implementation because the country is not listed in Annex-B and also cannot host Clean Development Mechanism because is listed in Annex-I. Thus, in any case it seems very difficult that Turkey, at country level, will become eligible and active in any Flexible Mechanisms projects during the first implementation period (2008-2012), with exception probably of the private sector who could explore such opportunities in the international environment of project development. On this latter case, the traditionally good commercial relations of **Turkish companies with Central Asian countries** and other regions could be further exploited through the development of CDM and JI projects. Towards this direction a number of opportunities and initiatives in the form of carbon funds have been developed internationally or are in the phase of formulation. Turkish trading companies could either cooperate within a carbon fund, or set up a carbon fund with other shareholders, or undertake the higher risk and act integrally and independently. In all these cases of involvement it is worth considering that the weak point for Turkish companies will be the issue of non existent CO₂ market in Turkey, where their trading capacity is high.

During the **post 2012** implementation period of the KP, the situation might and should be different for Turkey. The discussions, consultations and negotiations among the participating countries have already started in order to formulate the characteristics of the new implementation conditions. Under the assumption that it is practically very difficult for Turkey to participate in the first implementation period, we cannot anticipate that the same situation will continue in the post 2012 period. There are many political and policy reasons which could not be ignored; thus international isolation should be not considered as the most likely scenario against normalization of the country's relationship with the international community and the EU on the greenhouse gas issue. For this reason, the involvement in the procedures for the post 2012 implementation plan of the participating countries is of utmost importance and should take place at various levels: governmental organizations, NGOs, interested companies, etc.

ANNEX 1

THE UKRAINIAN CASE

The Ukrainian case has been selected to be presented as the most characteristic and developed one in the area of JI.

1. Kyoto Protocol compliance

On February 4, 2004 the Verkhovna Rada (Parliament of Ukraine) ratified the Kyoto Protocol (KP) which was signed by the Ukraine on March 15, 1999. The basis year for Ukraine's greenhouse gas (GHG) emissions is 1990. In this year the amount of GHG emissions corresponded to 711 million tons of CO₂eq/yr. By 1999 according to the International Energy Agency (IEA) statistics the amount of GHG emissions decreased to some 379 million tons of CO₂eq/yr (reference approach), that is equal to 53 % of the 1990 level.

Since 2001 an increasing amount of GHG emissions has been observed. Nevertheless, the current level of GHG emissions is far below the 1990 level. It is estimated that an amount of up to **300 million tons of CO₂eq/yr** could be availed for JI projects in the first period of the Kyoto Protocol implementation.

Ukraine is an Annex B country without reduction obligation of its GHG emission amounts below the level of 1990. This fact and the low current amount of GHG emissions provides the Ukraine with the possibility to significantly benefit from the implementation of the Kyoto Protocol, in particular through the flexibility mechanisms, especially Joint Implementation and - if applied - International Emission Trading. The emphasis in the following sessions will be placed on the implementation of the JI mechanism for which interest has already expressed by the market actors.

A national strategy and action plan for the mitigation of greenhouse gas emissions and effects of climate change were recently elaborated. In 2004 at the Ministry for the Protection of the Environment and Natural Resources (**MENR or Ministry of Environment**) a Working Group for Climate Change was established by order of the Cabinet of Ministers.

So far at national level the Ministry of Environment (MENR) is taking care of this development. In MENR a new Department was organized recently to undertake Climate Change issues. Moreover the **Centre on Climate Change** was established in September 2005 and now is a responsible body for fulfillment of Kyoto Protocol obligations including among others:

- GHG emissions inventory preparation,
- JI projects realization by Track 2 as well by Track 1,
- and International Emissions Trading in Ukraine.

Formally this Centre is an independent state enterprise but Ministry of Environment is one of the co-founders. Thus this centre will be in close cooperation with the Ministry of Environment. The Head of Centre is Mr. Bebeshko Taras Anatolievich. The foreseen function of the **JI Secretariat**, acting as designated focal point (DFP), will be encompassed in the Centre.

The **Inter-ministerial Commission of Climate Change** was established to co-ordinate the climate change policy at national level consisting of 30 members. Chairman of the Commission is the Vice Prime Minister and First Deputy is the Minister of Environment. Members of the Commission are Deputies of Ministers, Deputies of the State Committees, members of the Parliament and representatives of the National Academy of Sciences and NGOs. The foreseen function of the **Joint Implementation Supervision Council** is incorporated in the Commission.

The TACIS project “Technical assistance to Ukraine and Belarus with respect to their Global Climate Change Commitments” started in April 2004 aiming to assist Ukraine in establishing regular reporting on GHG emissions. Another objective is to support the development of the national implementation procedures of the flexibility mechanisms of the Kyoto Protocol. The procedure of JI projects approval and realization, as well as criteria for JI projects were firstly presented in March 2005. The criteria were considered rather strict and imposing many limitations (such as price for ERUs must be at least 70% of ERUs price at EU countries, 50.000 tons CO₂eq/yr project size down limit, etc.) After responses from all interested parties such as: JI project owners, JI project developers and Ministry of Environment some amendments were introduced into the initially proposed procedure and criteria.

The Order for consideration, approval, and realization of JI projects under the Kyoto Protocol of the UNFCCC, officially mandates the Ministry of Environment and the Centre on Climate Change as the responsible bodies for Kyoto Protocol mechanisms realization in Ukraine, is expected to be signed by the Cabinet of Ministers. This situation of the final adoption of the Order is pending for its final signing for a time of more than half year already. All involved parties are rather optimistic and expect Ukraine will have JI project approval procedure and corresponding criteria soon.

At present there is no determined procedure for JI projects approval and the relevant Order on the consideration, approval, and realization of JI projects under the Kyoto Protocol of the UNFCCC

has passed many governmental approval steps being before the Cabinet of Ministers for the final signing. The procedures applicable to the realization of the Joint Implementation Mechanism have been drafted and the relevant Order is translated and presented in Annex 2. The estimation of the Climate Change Center is that all formal procedures will be finished within the first semester of the year and by the end of 2006 JI projects will start the phase of implementation.

The Ministry of Environment supports the development of JI projects including renewable energy projects. At present, in order to receive political support and initiate the procedure for the development of a JI project, a letter and a project summary, in the form of a Project Identification Note (PIN), should be sent to the Ministry of Environment (Centre on Climate Change) asking for a "Letter of Endorsement".

The MENR supports also the set up of a market oriented instrument, the **Carbon equivalent Emission Certificates (CEC)**, that are government securities which will be used in carbon trading in Ukraine to mitigate risks for investors, sellers and carbon funds. This market of CECs will facilitate the international JI partners and the carbon funds to make agreements and deals on carbon emissions credits by better organizing the local market and reducing the JI risk. Furthermore, small projects, like most of the biomass projects, will be supported, because the criterion concerning the minimum project size will be overcome. It is expected that decisions and internal approvals will take place soon and by the end of the year the CEC market could be launched.

The forthcoming steps of development in excess of the introduction of the CEC system, comprise also the establishment of the Ukrainian Registry, the establishment of a national Carbon Fund and the start working on the idea of a National Allocation Plan.

2. Joint Implementation Procedures

Coordinator of respective activities is the **Joint Implementation Supervision Council** which is supported by the **JI Secretariat**.

The Ukrainian procedure for JI project approval is a 2-stage process that includes the stage of project endorsement through the submission of the Project Identification Note (PIN) (preliminary qualification of the project and assessment of its implementation and exploitation feasibility by the project owner) and the stage of approval after a comprehensive analysis of the project proposal through the submission of the Project Design Document (PDD) of the JI project.

The existing provision of procedures anticipates the Track 1 path for the validation and production of ERUs. However, it is among the

priorities of the MENR and the Climate Change Center to develop all the necessary procedures and infrastructure so the Track 2 path will be also applicable in the country. There is no preference on which of the two paths should be followed because the JI market to be grown in the next years might impose for reasons of the investors selecting one or the other path. Such parameters for selection will be for sure the incorporated risks and the restrictions for international acceptance of the produced ERUs.

Endorsement Stage

For the preliminary assessment of project feasibility in the framework of JI mechanism, project owner should prepare and submit, for registration and consideration to the Ministry of Environment in the established form, a short project proposal with accompanying documents, which particularly characterize the financial state of the Applicant. The examination of submitted project documentation must justify project conformity to the specified requirements (preliminary selection criteria). In case of a positive opinion, the Minister shall issue to project owner a Letter of Endorsement (LoE) of the project, or a motivated refusal, that is an official confirmation for an Applicant and foreign investor of project's potential eligibility for the JI mechanism.

The preliminary approval of a project is a reason for a project owner to prepare full project proposal (PDD) according to established requirements. The JI project owner should obtain an agreement with the foreign investor on project financing, supported by a letter of interest, before submitting an official project proposal (PDD) to the Ministry of Environment.

The Requirements (Draft) for the JI projects at the stage of preliminary approval, the priorities and the selection criteria as indicatively could be presented, are included in Annex 1.

Approval Stage

A full project proposal to be submitted should contain a LoE from the host country (Ukraine) and from the project investor's country, as well as the PDD of the project, which must include:

- Justification of project's additionality
- Baseline scenario (GHG emissions dynamic without project)
- Description of technical, economic, financial and institutional aspects of the project
- Monitoring plan of GHG emissions
- Environmental impact assessment

- Financing plan for project implementation with supporting documents (letter of interest from investor, letters of commitment from credit agencies, decisions of the Management Board of the company, letters from local government authorities, etc.).

Project conformity with final selection criteria will be indicated after a comprehensive internal evaluation of the project by authorized organizations. Letter of Approval will be issued to project owner, which satisfies the internal JI project assessment and the project meets the final selection criteria.

In case of Track 2 path, the PDD of the project must also pass through external evaluation undertaken by an Accredited Independent Entity (AIE), the so-called validation of the project, e.g. checking and confirmation that the JI project, mutually accepted by the Parties, will provide the calculated emission reductions. In addition, the AIE shall examine the adequacy of the “baseline” and monitoring plan according to established standards. All following steps identified within the 7th Conference of Parties, which regulated the details and conditions of JI mechanism implementation, will be followed:

- Providing of accessibility of the PDD
- Obtaining and processing of the commentaries from all interested Parties, including accredited reviewers by the Secretariat
- Identification of the completeness of the PDD and project’s conformity with established requirements
- Placing the validation report and determination of project’s conformity or non-conformity on the website.

The path under Track 1 for JI anticipates the involvement of a number of Ministries besides MENR. In this context, the **Inter-Ministerial Commission** established for this reason will take care of the development of the legal basis for Kyoto Protocol's implementation.

All documents for receiving support and approval of planned JI projects will be processed by the JI Secretariat. Documentation like Project Identification Note (PIN), Project Design Document (PDD) and accompanying documents (baseline study, monitoring plan etc.) will have to be prepared in Ukrainian language.

The periods for processing the required documents and receiving approval by the new structures will be determined by the respective programs and United Nations' rule on the one hand, and by the efficiency of work on the other. It can be assumed that 15 days is the least possible timeframe for obtaining the Letter of Endorsement

and about 45 days for receiving the Letter of Approval. These terms should be included into the time planning of each project.

The services to be performed under the JI mechanism shall be carried out by licensed companies. A license system for ecological parameters is currently in force and will probably be extended to the new activity area.

For the implementation of JI-related services a certain capacity is available. The respective rules for the preparation of Project Design Documents (PDD), monitoring plans, monitoring reports etc. are under preparation.

So far it seems to be common sense that ERUs (1 ERU equals one ton CO₂eq/yr reduction created in JI projects) will be exportable. The Ukrainian Government does not plan to keep a share of ERUs generated in the country.

ANNEX 2

THE CASE OF KAZAKHSTAN

The decision on the status of Kazakhstan under the Convention and Protocol opens the way to ratification of the Kyoto Protocol by the Republic of Kazakhstan. Among the numerous problems, discussed during COP7 meetings, the most important for the Republic of Kazakhstan was the question of Kazakhstan entering Annex 1 to the UN Framework Convention on Climate Change. This question was discussed at COP5, but the Parties failed to reach agreement because of the political position of the countries of Group 77 and China. Kazakhstan arrived at the Seventh Conference of the Parties with a ready-made position, preliminarily discussed with many participants of the Convention.

The first plenary meeting of COP7 decided to pass the question of Kazakhstan entering Annex 1 to the Subsidiary Body for Implementation for consideration. Having discussed the issue with the Parties, the Subsidiary Body for Implementation prepared a draft conclusion, which later, at the final plenary meeting of COP7, was adopted by consensus. The conclusion in full measure reflects the position of Kazakhstan, its interests and plans to ratify the Kyoto Protocol. It unambiguously defines both the process of Kazakhstan entering Annex 1 and its current status.

- Kazakhstan will become a Party included in Annex 1 for the purposes of the Kyoto Protocol upon ratification of the Protocol by Kazakhstan.
- Until that time, Kazakhstan will continue to be a Party not included in Annex 1 for the purposes of the Convention that will be allowed launching Clean Development Mechanism projects since the beginning of 2002.

Only an active position in implementing the economic mechanisms of the Kyoto Protocol can provide benefits to the government, public and business. Kazakhstan has a number of reasons to have an active position, since the decision on entering Annex 1 to the Convention, is based on its national and strategic interests.

Above all, it is critically important for the sustainable development of Kazakhstan, its balanced energy use e.g., although having rich reserves of different mineral and renewable energy resources, Kazakhstan uses coal to generate 90 per cent of its energy. Thus, diversification of energy consumption, which is its partial replacement with other energy resources (oil, gas, and renewable

energy: wind, solar, biogas, etc.), is a strategic goal of sustainable development in the energy sector.

Secondly, the Government has declared utilization of associate gas at oil deposits a priority approach. It is a very important strategic goal, and it is necessary to build capacity for implementation of such projects by involving both international and national oil companies. Increasing the share of gas in energy consumption and coal replacement will contribute to addressing the problem of global warming, will significantly raise the investment attractiveness of the Kazakhstan market and subsequently the image of the country.

On the third hand, the Kyoto Protocol is the first attempt to improve the global environment using financial market-based mechanisms. These mechanisms could potentially become a model to be used long time in the future and possibly to be used for other types of global environmental issues important to Kazakhstan.

Furthermore, Kazakhstan has enormous potential for implementation of energy projects aimed at reducing greenhouse gases. That's why **passive participation in CDM** projects as a non-Annex 1 member will not be the best way to participate in Kyoto mechanisms. It is more important to become **an active participant** of the process and realize Joint Implementation projects, accumulate carbon credits and later participate in Emission Trading or, using the potential they offer, to increase the competitiveness of its energy resources at the level of world market.

However, Kazakhstan's interest in becoming an Annex 1 country might also prove its adherence to the principle of common responsibility to reduce anthropogenic activities harming the global environment.

Active participation in the process of combating global warming is the choice of Kazakhstan. Generally, the decision adopted by the Conference of the Parties on Kazakhstan, has positively affected the image of the country in the opinion of other participants of the UNFCCC process. Kazakhstan chose its own way and mechanism to accede the Kyoto Protocol and made a break-through in the negotiating process that is supported by the Conference of the Parties.

ANNEX 3

THE CASE OF BELARUS

According to the justification of the presidential decree, Belarus has signed on to the Kyoto protocol on 15/8/2005, because accession to the Kyoto Protocol will allow Belarus to contribute to the prevention of climate changes, get access to financial resources in the carbon market and seek further integration into the European and world community.

The Kyoto Protocol to the UN Framework Convention on Climate Change came into force in Belarus on November 24, 2005.

Joining the Protocol will also entitle Belarus to participate in projects of Joint Implementation, thus making it easier for the country to introduce high technologies and modernize its industry reducing in parallel the greenhouse emissions. Therefore, the Belarus government is generally supportive of the JI concept and is particularly very much interested in effective investments into power and heat generation sectors of Belarusian economy, as well as into energy efficiency improvement technologies.

Immediately after signing the Protocol, the country has started development its JI policy. The preliminary long-list of JI projects in Belarus was compiled under TACIS Regional Project EuropeAid/115123 entitled “Technical Assistance to Ukraine and Belarus with Respect to Their Global Climate Change Commitments” (www.climate-by.com). In order to begin all these actions under flexible JI mechanism the Republic will have to promptly implement a number of steps:

- complete establishment of National GHG Inventory System;
- formally register its assigned amount and targets;
- install National GHG Registry;
- establish JI infrastructure (regulations, JI National Secretariat, etc.);
- adopt National rules and procedures of JI projects approval, monitoring and verification.

Upon being a Party to the Kyoto Protocol, Belarus submitted the document FCCC/KP/CMP/2006/2, to amend Annex B to the Kyoto Protocol and to assume a quantified emission reduction commitment (-5%). Based on the negotiations since COP/MOP1 in Montreal in 2005, COP/MOP2 in Nairobi in 2006 decided to amend Annex B to the Kyoto Protocol by including Belarus with -8% GHG reduction commitment. The decision also notes that Belarus shall not account for removals of GHG emissions by sinks resulting from forest

management in the first commitment period. It is also decided that in the first commitment period, Belarus shall maintain, in its national registry, a reserve of seven per cent of its assigned amount calculated pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol, in addition to the commitment period reserve as calculated in accordance with paragraph 6 of the Annex to decision 11/CMP.1. Finally, Belarus confirms that any revenues generated from

transfers under Article 17 of the Kyoto Protocol will be used for further greenhouse gas emission abatement measures.

In the period 1990-2004, the GHG emissions of Belarus decreased by 41.6% from 127.4 million tons CO₂-eq/yr to 74.4 million tons CO₂-eq/yr. Thus, it is estimated that around 40-55 million tons CO₂-eq/yr might be subject to emission trading from Belarus.

However, official involvement of Belarus in any kind of Flexibility Mechanisms (JI or ETS), will commence only after the entry into force of decision of COP/MOP2, the amendment of the Protocol, which needs a ratification by at least 50 countries to the Protocol.

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