



# Successful implementation of the CDM: Putting CDM projects into practice

Presented by the E7 Fund for Sustainable Energy Development

Klaus Töpfer, UNEP, underscored that the CDM is a flexible instrument that has the potential to benefit a wide range of actors, provided that all stakeholders approach projects in the spirit of compromise and are flexible and willing to experiment at the start of the CDM. He emphasized that lessons learned from CDM projects should be a public good to be shared for the benefit of all.

Corrado Clini, G-8 Task Force on Renewables, presented the Task Force's report for the G-8, noting that it was never formally adopted due to changes in G-8 country governments. The report recommends: bringing down the costs of renewable energy by using market mechanisms to expand markets in developing countries; building capacity, particularly local skills in installation and maintenance; mobilizing financing; and leveling the playing field of energy subsidies for renewable energy.

Pirjo-Liisa Koskimäki, European Commission (EC), outlined current European Community programmes that can be used in the context of the CDM, including capacity building in host countries, research and technology development, and investments in pilot and demonstration projects in the energy, transport and waste management sectors. She highlighted the EC's recent adoption of a "Kyoto package" that includes ratification by 2002, EU-wide emissions trading by 2005, and continuation of the European Climate Change Programme with the linking of CDM and JI projects to an early-start trading scheme.

Michel Clerc, Droit à l'Energie - SOS Futur, emphasized that access to energy would improve the lives of millions in developing countries and is a critical factor in human development. He explained that his organization believes that access to energy is a fundamental human right, and supports the diversification of energy sources, including the development of nuclear power in politically and economically stable countries. He stressed that the development needs of all human beings can be met using a sustainable development approach, while also realizing the right to energy for all.

Christian Stoffaës, E7 Fund for Sustainable Energy Development, outlined an E7-supported small hydro project in Bolivia, which was designed to be a model CDM project. The project: contributes to rural electrification and social development; tests CDM methodologies; has direct links with socioeconomic development benefits; has co-financing potential; and employs holistic project development and a built-in exit strategy.

(Continued on page 4)



Christian Stoffaës, E7 Fund for Sustainable Energy Development, highlights the link between access to electricity and poverty reduction, and emphasizes the feasibility of achieving access to energy for all.

#### More information:

<http://www.e7.org>  
<http://www.energiesosfutur.org>  
<http://www.andeancenter.com>

#### Contact:

Pirjo-Liisa Koskimäki <Pirjo-Liisa.Koskimki@cec.eu.int>  
Michel Clerc <michel.clerc@energiesosfutur.org>  
Christian Stoffaës <stoffaes@edf.fr>  
Thomas Black-Arbeláez <caema@andeancenter.com>

## The contribution of carbon sinks to the Kyoto Protocol

Presented by the European Community



Valentini Riccardo, University of Tuscia, stresses the need to use full carbon accounting.

### More information:

<http://europa.eu.int/comm/research>  
<http://www.cordis.lu>  
<http://www.bgc-jena.mpg.de/public/carboeur>  
<http://www.zew.de>  
<http://www.nioz.nl>

### Contact:

Anver Ghazi <[anver.ghazi@cec.eu.int](mailto:anver.ghazi@cec.eu.int)>  
 Valentini Riccardo <[rik@unitus.it](mailto:rik@unitus.it)>  
 Christoph Böhringer <[boehring@zew.de](mailto:boehring@zew.de)>  
 Tjeerd van Weering <[tjeerd@nioz.nl](mailto:tjeerd@nioz.nl)>

Anver Ghazi, European Commission (EC), described EC research in the field of global change, which aims to foster better understanding of terrestrial and marine ecosystems and their interactions, and to develop strategies and scenarios for responding to global change.

Valentini Riccardo, University of Tuscia, discussed the sink capacity of EU ecosystems and the possibilities for measuring EU carbon sinks. He cited a study which demonstrates that the EU has a mean carbon sink of 0.7 gigatonnes per year, which is equivalent to approximately 30 percent of its total emissions. He noted that pristine forests take up carbon at unexpected rates and that improved forest management can help to reduce the increase of atmospheric CO<sub>2</sub> concentrations in the medium term. He concluded by stressing the need to monitor the evolution of terrestrial carbon sinks to anticipate possible adverse effects, noting that increasing temporal and spatial resolution will reduce uncertainties.

Christoph Böhringer, Centre for European Economic Research, provided a socioeconomic perspective of carbon abatement policies and international spill-overs. He explained that carbon abatement measures in one country will affect the economies of other countries, and that international spill-overs could have a significant impact on Annex B countries' abatement costs. He underscored the importance of exploring policy measures to counter potential leakage.

Tjeerd van Weering, Netherlands Institute for Sea Research, described the results of the Ocean Margin Exchange project, which studied the ocean carbon cycle of the Goban Spur and the Iberian Margin. Its findings demonstrate, *inter alia*, that carbon fluxes show strong seasonality and short-term variability, and that organic carbon burial fluxes strongly decrease from the shelf to the lower slope. He stressed that there are high levels of uncertainty that need to be addressed and quantified. He concluded that the project has extended general knowledge about exchange processes at ocean margins.

## CDM in the Mediterranean region: Pilot experience, potential and prospects

Presented by the Italian delegation in collaboration with the EC and the Observatoire Méditerranéen de l'Énergie (OME)

Domenico Rossetti di Valdalbero, EC, explained that the low price of electricity in the Southern Mediterranean region hinders the introduction of renewable energy, but that the CDM could promote its penetration in the region.

Eric Nogaret, OME, stated that a project on the CDM in the Mediterranean region elaborated scenarios and strategies for implementation of CDM projects using renewable energy technologies in the region.

Peter Russ, Institute for Prospective Technological Studies, noted that the "Prospective Outlook for Long-term Energy System" model shows that emissions reduction costs will decrease if renewable energy CDM projects are implemented, and that CDM projects can contribute to sustainable development.

Abdehanine Benallou, Morocco, outlined possible renewable energy CDM projects in Morocco, such as powering hammams with solar energy, which would reduce CO<sub>2</sub> emissions by three million tonnes over ten years. He stressed that in the absence of carbon permit trading, such projects are not sufficiently profitable to attract private sector investment.

Roberto Vigotti, Erga, stated that the International Energy Agency's renewable energy initiative aims to mobilize capital for renewable technologies through innovative financial instruments and to optimize incentives and investments. The initiative established a searchable database on incentive systems, created a network of private sector representatives, and provided project development assistance.



Domenico Rossetti di Valdalbero, EC, outlines the EC's efforts to promote renewable energy.

### More information:

<http://www.ome.org>  
<http://www.cder.org.ma>  
<http://www.cesi.it>

### Contact:

Domenico Rossetti di Valdalbero <[domenico.rossetti-di-valdalbero@cec.eu.int](mailto:domenico.rossetti-di-valdalbero@cec.eu.int)>  
 Eric Nogaret <[nogaret@ome.org](mailto:nogaret@ome.org)>  
 Peter Russ <[peter.russ@jrc.es](mailto:peter.russ@jrc.es)>  
 Abdehanine Benallou <[cernet@cybernet.net.ma](mailto:cernet@cybernet.net.ma)>  
 Roberto Vigotti <[vigotti.roberto@enel.it](mailto:vigotti.roberto@enel.it)>  
 Claudio Casale <[ccasale@cesi.it](mailto:ccasale@cesi.it)>

# Asian Development Bank/World Bank donors' consultation meeting on funding mechanisms for greenhouse gas abatement projects in the Asia-Pacific region

Presented by the Asian Development Bank (ADB)

Ely Ouano, ADB, explained that the ADB promotes renewable energy, energy efficiency and greenhouse gas (GHG) abatement by developing capacity to promote renewable energy and appropriate technologies and by supporting institutional reforms. He noted difficulties ADB encountered in determining the nature of projects funded by other multilateral funding institutions, and called for closer cooperation.

Ajay Mathur, World Bank, explained that the World Bank supports mitigation, adaptation and capacity-building projects. It co-finances 68 climate change mitigation projects that focus on promoting energy efficiency and renewable energy. Capacity-building projects deal with market creation for carbon-friendly technologies. He underscored the importance of long-term partnerships between the Bank and recipient countries.

Alan Miller, GEF, noted that Asia is the largest recipient of climate change project grants, with China receiving the most financial support. He explained that GEF-funded projects address renewable energy, energy efficiency and technology development. Miller underscored that the GEF is willing and capable of assuming an operational role for the climate change funds created under the Bonn Agreements.

Florin Vladu, UNFCCC Secretariat, introduced the new UNFCCC technology transfer information clearinghouse, which aims to improve the flow, accessibility and quality of information on the development and transfer of environmentally-sound technologies. The clearinghouse assembles information from various sources, including the UNFCCC roster of experts, GEF, UNDP and NGOs. He encouraged Parties to comment on the clearinghouse.

Representatives from Kreditanstalt für Wiederaufbau, Deutsche Gesellschaft für Technische Zusammenarbeit, Japan Bank for International Cooperation, and Japan International Cooperation Agency described their institutions' aims and activities.



Alvaro Umana, UNDP, underscores that energy supply is fundamental to development and economic growth.

#### More information:

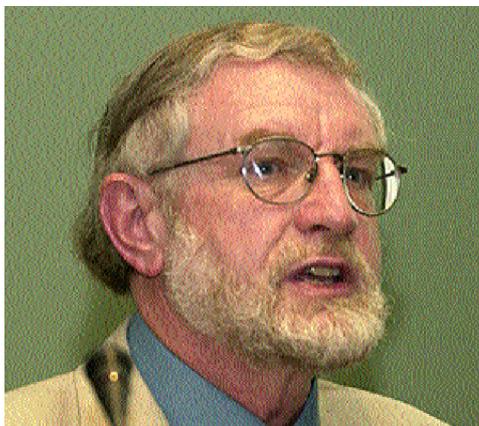
<http://www.adb.org/Projects/default.asp>  
<http://www4.worldbank.org/sprojects>  
<http://www.gefweb.org>  
<http://ttclear.unfccc.com/ttclear/Jsp>  
<http://www.kfw.de>  
<http://www.gtz.de/climate>  
<http://www.jbic.go.jp>

#### Contact:

Ely Ouano <eouano@adb.org>  
 Ajay Mathur <amathur@worldbank.org>  
 Alan Miller <amiller2@gefweb.org>  
 Florin Vladu <fvladu@unfccc.int>

## PRECIS: A PC-based regional climate model for use by developing countries to develop climate scenarios

Presented by the Hadley Centre for Climate Prediction and Research



Geoff Jenkins, Met Office, Hadley Centre, notes that data from PRECIS could be used in vulnerability and adaptation assessments.

#### More information:

<http://www.metoffice.com>

#### Contact:

Geoff Jenkins <geoff.jenkins@metoffice.com>  
 Richard Jones <richard.jones@metoffice.com>

Minister Michael Meacher, UK Department of Environment, Food and Rural Affairs, expressed the UK's pride in the Hadley Centre's work to develop a climate modeling system that can be used by both developed and developing countries.

Geoff Jenkins, Met Office, Hadley Centre, presented the "Providing Regional Climates for Impacts Studies" (PRECIS) climate modeling system. He explained that PRECIS is: a regional climate model (RCM); a full physical model of the climate system; supplied on CD-ROM and run on personal computers; applicable to any region of the globe; easy to use; and useful to national centers and meteorological offices for generating their own climate change predictions.

Jenkins noted that an RCM operates through the same physical processes as a global climate model (GCM), but has a much finer resolution. He highlighted that, compared to GCMs, RCMs: simulate the current climate more realistically; predict climate change with greater detail; represent smaller islands; and simulate and predict extreme weather events more accurately. He underscored that the Centre intends to supply PRECIS to non-Annex I countries for use in their national communications and vulnerability and adaptation studies, and that national users can add local knowledge to improve the model. Jenkins described the application of the PRECIS RCM to the Indian subcontinent and to southern Africa.

Richard Jones, Met Office, Hadley Centre, demonstrated how the PRECIS model works. He explained that the user can specify the domain of the model, length of simulation, driving fields to be used, and the quantities to be saved from the model output.

# Evaluating Bonn

Presented by the National Institute for Public Health and the Environment (RIVM)

André de Moor, RIVM, presented the findings of RIVM's recent study "Evaluating the Bonn Agreement and Some Key Issues." The study found that the Bonn Agreement reduces emissions without the US by 130 million tonnes of carbon, only 0.1 percent below 1990 levels, and the permit price approaches US\$9 per tonne of carbon. The study concludes that the US' withdrawal has the most significant impact on reducing the environmental effectiveness of the Kyoto mechanisms and bringing the permit price down, and is much larger than the effect of the sinks decisions.

De Moor highlighted that hot air becomes extremely dominant with the Bonn Agreement and threatens the development of an international permit market. He said it is realistic to assume that Russia will exercise market power by curtailing permit supply and thus the permit price will increase. If Russia banks 50 percent of its hot air, the environmental effectiveness of the agreement and financial revenues for Russia and non-Annex I countries will rise. If the US re-enters, environmental effectiveness would improve by a factor of four and the permit market would be enhanced.

John Drexhage, International Institute for Sustainable Development, underscored that the environmental integrity of the agreement is severely compromised without the US. He noted action to reduce emissions in the US, in Congress and at the state level. He flagged the need to consider the carbon intensity of Russia's economic growth, as its economy could turn around. He stressed that a limit on how much Russia can bank would provide an incentive to sell hot air now rather than restrict supply.

Jennifer Morgan, WWF, emphasized that the Bonn Agreements had a significant impact in the US, by demonstrating that Kyoto is not fatally flawed, moving closer to an agreement that the US could enter in the future, and generating bi-partisan Congressional support for mandatory measures to reduce emissions. She noted public pressure against Annex I countries buying hot air to meet their commitments, and increasing private sector interest in mandatory reductions. She stressed the need for COP-7 to: limit Russia's hot air trading; restrict countries from banking units for the second commitment period; and create a sound architecture for sinks.

Peter Vis, European Commission, expressed concern about the implications of Russia's hot air and low permit prices for the viability of the CDM. He highlighted efforts to limit the bankability of removal units as an attempt to address this concern. He said it may be in Russia's best interest to withhold supply, but also raised the issue of domestic action constraining demand. He wondered how the costs of potential US policies would compare to the abatement costs for Annex B countries who have access to the Kyoto mechanisms and hot air. He stressed that Annex B Parties will undertake significant domestic action to comply with supplementarity.



André de Moor, RIVM, explains that the Bonn Agreement opened the door for US re-entry, as it meets earlier US demands, lowers its costs, and seeks options for international cooperation.

#### More information:

<http://www.rivm.nl/iweb>

#### Contact:

André de Moor <[andre.de.moor@rivm.nl](mailto:andre.de.moor@rivm.nl)>

John Drexhage <[jdrexhage@iisd.ca](mailto:jdrexhage@iisd.ca)>

Jennifer Morgan <[jennifer.morgan@wwfus.org](mailto:jennifer.morgan@wwfus.org)>

Peter Vis <[peter.vis@cec.eu.int](mailto:peter.vis@cec.eu.int)>

## Successful implementation of the CDM: Putting CDM projects into practice

(Continued from page 1)

Thomas Black-Arbeláez, Andean Center for Economics in the Environment, outlined the impacts of the Bonn Agreements on the international emissions credit market. He explained that: additional credits for forestry activities in Annex B will reduce demand for external credits and certified emissions reductions (CERs); the US' absence will reduce demand for CERs by 40 to 55 percent; and Russia could sell all its hot air and inundate the market, or exert monopoly tactics to restrict supply until the second commitment period. In the short run, there will be excess supply of credits and very low prices, which may limit the demand for CDM projects. He explained that the price per ton of carbon equivalent in 2010 would approach US\$3.60 without US participation, with allocation of new forestry credits for Annex B, and if Russia decides to sell all its hot air. Noting that the US' non-participation will cause prices to fall by nearly 75 percent, he underscored the importance of getting the US back in the market if the CDM is to benefit developing countries.