

19 September 2007

ENGLISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

SUBSIDIARY BODY FOR IMPLEMENTATION

Twenty-seventh session

Bali, 3–11 December 2007

Item 8 (b) of the provisional agenda

Capacity-building under the Convention

Capacity-building for countries with economies in transition

Item 11 (b) of the provisional agenda

Capacity-building under the Kyoto Protocol

Capacity-building for countries with economies in transition

**Information relating to the comprehensive review of the implementation
of the framework for capacity-building in countries with
economies in transition**

Submissions from Parties and relevant organizations

1. The Conference of the Parties (COP), by its decision 6/CMP.2, invited Parties to submit information, annually, on activities undertaken pursuant to decision 29/CMP.1. The COP further invited relevant multilateral and bilateral agencies and the private sector to provide reports on their support of the implementation of the framework undertaken pursuant to decision 29/CMP.1.
2. The Subsidiary Body for Implementation (SBI), at its twenty-sixth session, requested the secretariat to compile the submissions by Parties and appropriate reports of relevant multilateral and bilateral agencies and the private sector, referred to in decision 6/CMP.2, into a miscellaneous document for consideration by the SBI annually in its second sessional period (FCCC/SBI/2007/15, para. 101).
3. The secretariat has received three such submissions. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced* in the language in which they were received and without formal editing.

CONTENTS

	<i>Page</i>
1. PORTUGAL ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES* (Submission received 17 August 2007)	3
2. UNITED STATES OF AMERICA (Submission received 18 September 2007)	11
3. WORLD BANK INSTITUTE (Submission received 20 August 2007)	22

* This submission is supported by Albania, Bosnia and Herzegovina, Croatia, The former Yugoslav Republic of Macedonia, Serbia, Turkey and Ukraine.

PAPER NO. 1: PORTUGAL ON BEHALF OF THE EUROPEAN COMMUNITY
AND ITS MEMBER STATES

**SUBMISSION BY PORTUGAL ON BEHALF OF THE EUROPEAN COMMUNITY AND
ITS MEMBER STATES**

**Subject: Capacity Building in Economies in Transition under the Kyoto Protocol
Information from Parties on the activities that they have undertaken
pursuant to decision 30/CMP.1**

1. Introduction

Under para 7 of the decision 3/CP.10 (document FCCC/CP/2004/10/Add.1), the Conference of the Parties (COP) decided to review the status of implementation of decision 3/CP.7 at the twenty-seventh session of the Subsidiary Body for Implementation (November 2007) in preparation for the first commitment period of the Kyoto Protocol, making use of information provided by Parties with economies in transition (EIT) and Annex II Parties in their national communications and other relevant documents and information to be provided by the Global Environment Facility and its implementing agencies, and bilateral, multilateral and other international agencies.

The Subsidiary Body of Implementation (SBI) invited Parties to the Kyoto Protocol to submit to the secretariat, by the 17th of August 2007, information on efforts made to implement the framework for Capacity Building relating to implementation of the Kyoto Protocol in economies in transition.

The EU is taking this opportunity to respond to this request: Portugal, on behalf of the European Community and its Member States, welcomes the opportunity to submit additional information on the topic of effectiveness of capacity-building activities in countries with economies in transition, provided by Member States, including those with economies in transition.

2. Efforts made to implement the Capacity Building framework to implement the Kyoto Protocol by the EU

The EU and its member states that are Annex II parties have provided support to the countries with economies in transition to enable them to implement the Kyoto Protocol. This support took the form of training and awareness-raising at the individual and institutional level, learning-by-doing activities, through pilot activities and technical assistance. The main areas for capacity development covered included support to:

- Development of national greenhouse gas inventories and systems for estimation of GHG emissions
- Climate change policies and measures, include support to prepare for climate change policy dialogues in the context of post 2012 climate regime
- Education, training and public awareness
- National communications and national climate action plans, reporting obligations
- Modalities for accounting relating to targets, timetables and national registries

- Joint Implementation (JI) projects and emissions trading
- Projections of GHG emissions, impact assessment and adaptation
- Research and systematic observation, transfer of environmentally sound technologies

The Member states that are also economies in transition have also reported support through the Activities Implemented Jointly (AIJ) pilot phase, support for the establishment of national registry systems and for participation in JI activities. Information on such support has been provided through national communications. The following are some examples of support provided or received by European Member states that are also countries with economies in transition.

2.1 EUROPEAN COMMISSION SUPPORT TO COUNTRIES IN EASTERN AND CENTRAL EUROPE:

2.1.1 The TACIS programme

With its enlargement, the EU shares a long common border with the region of Eastern Europe, the Caucasus and Central Asia. The main aid instrument for this region is the TACIS programme. Within that programme, the theme of Sustainable Management of Natural Resources supports action on biodiversity, water management and collaboration with other key environmental actors. Close and continual co-ordination on these issues is taking place with EU Member States, International Organisations (e.g. GEF and UNEP), and International Financial Institutions, namely the World Bank. Within the TACIS programme three regional capacity building projects for implementation of the Convention and the Kyoto Protocol were launched in 2004: one in Ukraine and Belarus, one in Armenia, Azerbaijan, Georgia and Moldova, and one project in the Central Asian republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The projects offer technical assistance to the governments of these countries in order to help them meet the objectives of the Convention and the Protocol, with a special emphasis on monitoring and reporting obligations.

The TACIS programme is also financing a technical assistance project to Russia for implementing the Kyoto Protocol that was launched in June 2005. The project assists the Russian government in establishing a national inventory and a monitoring and reporting system, a national registry, and national guidelines for Joint Implementation projects. For more information, please check the website: http://europa.eu.int/comm/external_relations/ceeca/tacis/

2.1.2. Capacity Building in New Member States, Acceding and Candidate Countries on Further Climate Change Action Post-2012

In the context of [current discussions](#) on further climate change action (post 2012), a series of six capacity building workshops and two conferences for the new EU Member States, Acceding and Candidate Countries were or are being held (2006 and 2007). The aim of these activities is to prepare the ground for discussion on further climate change action, create additional public awareness and strengthen networks of relevant stakeholders as well as the overall capacity of the new Member States, Acceding and Candidate Countries to contribute to the debate on future EU and global climate policy.

A number of country-specific issues were discussed intensively amongst regional groups of three to four countries. These activities have proven to be very efficient and effective when measured

to meet the set objectives. For more information: <http://www.ecologic-events.de/climate2012/en/index.htm>

2.1.3. Capacity building on climate change including Kyoto and post-2012 measures for the 12 NIS countries, including Russia (This programme is expected to become operational in 2008)

2.1.4 Baltic Sea Region Cooperation and the Testing Ground Facility

BASREC was established after an initiative of the Nordic prime ministers in 1996 when the Nordic energy ministers were assigned to present a programme for an enlarged energy cooperation in the Baltic Sea Region together with the ministers with energy portfolios in the region. The proposal was to be co-ordinated with the EU Commission initiative in 1997, "Baltic Energy Task Force". Eleven countries participate: Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia and Sweden.

After a test period of one year BASREC was formally established in October 1999. The organisation received a first mandate for three years (2000–2002). Working Groups were established in the following areas: Electricity and Gas Markets, Climate issues and Energy Efficiency. During 2002 a special ad hoc group was established with the aim to elaborate a programme for cooperation on sustainable development and use of bioenergy for the coming years. At the BASREC Ministerial Meeting in Vilnius in November 2002 a decision was taken on a new three-year mandate for BASREC for the period 2003–2005. The Ministers also decided to establish the Baltic Sea Region as a Testing Ground for JI in line with the Kyoto Protocol (cf. information on Testing Ground Facility). The aim of the Testing Ground Facility is:

- To develop common understanding and insights on the European Emission Trading and "Linking" directives and their implementation with emphasis on consequences for the energy sector and the scope for JI in the testing ground;
- To provide an updated, clear and correct manual for Joint implementation projects in BASREC countries;
- To make the Testing Ground (TG) known and to stimulate involvement and participation in its activities. To analyse needs and consequences for BASREC countries and provide for their interests to be taken onboard as Emissions Trading and JI are further developed.

In 2003 a decision was taken to set up a Special Working Group on Bioenergy. This cooperation programme is an excellent platform for the development and strengthening of institutional capacity in the areas of climate change, energy and electricity markets, exchange experiences and strengthen cooperation networks. All of these ultimately contribute to the preparation of the participating states, especially those with economies in transition, to address climate change.

2.1.5 Carbon Finance (Assist Spain, WB)

Several activities to enable the full engagement of developing countries and economies in transition in the carbon market. There is a need to work more in detail the programmatic CDM. Very good synergies between Carbon Finance Unit in the World Bank and CF Assist <http://carbonfinance.org/Router.cfm?Page=CFAssist&ItemID=24694&cp=24694>

2.2. ACTIVITIES IN EUROPEAN UNION MEMBER STATES THAT ARE ALSO ECONOMIES IN TRANSITION

2.2.1 Capacity building in Romania

In the period passed from the 7th Conference of the Parties to the UNFCCC, there were not so many capacity building programs, that were based on the Decision 3/CP.7, hosted by Romania. In the last period, the process has increased significantly due to the implementation of the bilateral agreements in the field of climate change and the development of Joint Implementation projects signed by Romania with Switzerland, Norway, the Netherlands, Austria, Denmark, Sweden, France, Finland, Italy and World Bank's Prototype Carbon Fund.

Romania was able to submit for the first time the GHG inventories in the required format after the participation of two experts in the GHG inventory reviews organized by the UNFCCC Secretariat in 2002. The GHG inventory reviews provided a great opportunity for the invited experts to share views on the inventory preparation and submission process and were very important for experts in the EIT countries. The training programme for members of expert review teams for the technical review of GHG inventories of Parties included in Annex I to the Convention organized by the UNFCCC Secretariat is also one of the useful instruments for enhancing the capacity of EIT countries in this field. Romania benefited from both participation in the training programme with an inventory expert and hosting reviews of the GHG inventory based on which the GHG inventory submissions were improved over the last couple of years.

One of the first capacity building projects started in January 2001 and was financed by the Greek Ministry for Environment, Physical Planning and Public Works. It consisted of improving the climate change activities in the Balkan countries like Romania, Bulgaria, etc. The main objective was to increase the participation of these countries in the international efforts regarding climate change mitigation and to strengthen the co-operation on these issues.

Based on some bilateral agreements related to the development of Joint Implementation projects, there were some capacity building activities and programmes developed by different countries, such as the cooperation with Norway based on the programme "Combined capacity building and project development" implemented in 2002 by the Norwegian Energy Efficiency Group (NEEG). The goal of the programme was to train about 30 Romanian facility managers, project developers and specialists regarding the development of business plans for climate change mitigation projects suitable for participating under the Joint Implementation mechanism.

In 2003, the Regional Environmental Centre for Central and Eastern Europe financed a project for developing the "National Action Plan on Climate Change" (NAPCC) – 1st phase "Drafting the methodology and structure of the NAPCC". The project's main scope was to facilitate the implementation in Romania of the principles and objectives of the UNFCCC and to increase the central authorities' awareness on the commitments taken under the Kyoto Protocol. The outcomes of the project were presented in a Methodological Guide covering the steps for developing the NAPCC, the existing studies and projects, and the existing legal background.

In January 2004, the United Nations Development Programme and the Global Environment Facility started the project "Romanian National Capacity Self-Assessment for Global Environment Management (NCSA)" having the overall objective to enable Romania identifying priorities and needs for capacity building to address global environmental issues, in particular those pertaining to the so called "Rio Conventions" (biological diversity, climate change, and

desertification). The NCSA explored the synergies among these Conventions, as well as linkages with wider concerns of environmental management and sustainable development. The project represented the starting point for a long-term process, which will strengthen thematic and cross-cutting programmes under the Rio Conventions.

One of the most important NGOs in Romania in the field of climate change implemented a programme financed by the Regional Environmental Centre for Central and Eastern Europe, named “Support for the Implementation of the Kyoto Protocol”. The project was carried out at a regional level in six countries from the Central and Eastern Europe in the period October 2002 – March 2003 and focused on the possibilities for developing the GHG registry. Comparing the international requirements for GHG national registries with the existing situation in Romania resulted in the need for Romania to fulfil a number of prerequisites, in order to be able to implement successfully and operate the registry.

The Government of France financed a project accomplished by the Ministry of Economy and Trade of Romania in cooperation with two consultancy companies in the period June 2003 – March 2004. The key objectives of the project were represented by the development of some GHG emissions inventories in certain sectors of the Romanian industry, using a “bottom-up” approach and assessing the potential CO₂ reductions in order to assist the Romanian industry to maximize the value of its “carbon assets” and the participation in the EU Emissions Trading Scheme.

Based on the Memorandum of Understanding signed in 2003 between Romania and Denmark regarding Joint Implementation and climate change activities, the Danish Environmental Protection Agency (DEPA) accepted the requests of the Romanian Ministry of Environment regarding strengthening of the capacity in this field. In the last period three of the most important activities were developed with the financial support from DEPA thus contributing to address the commitments taken under the UNFCCC and the Kyoto Protocol:

- development of the National Strategy and Action Plan on Climate Change;
- editing, publishing and printing of the Third and Forth National Communication;
- establishment of the National System for assessing the GHG emissions;
- establishment and operation of the National Registry.

2.2.2 Capacity Building in Lithuania

There are many obligations for Lithuania arising from the UN Framework Climate Change Convention and it's Kyoto Protocol. The administrative capacities have to be strengthened and legislation has to be revised and improved or supplemented if necessary in order to achieve the Kyoto commitments and to implement the requirements of the EU Emission Trading Directive. Lithuania has to continue strengthening the administrative and monitoring capacities, both at central and local level. Training is necessary in order to comply to the new EU requirements.

The National Committee for Implementation of EU Requirements in Climate Change Area was established in February 2004. It comprises representatives from the Ministries of Environment, Economy, Transport, Agriculture, Health Care, Lithuanian Academy of Sciences, Institute of Ecology of Vilnius University, the Lithuanian Green Movement, the Lithuanian Confederation of Industrialists and Vilnius Municipality. At several meetings of the National Committee it was decided upon more active integration of climate policy into different fields of research, economy, enhancing capacity building, strengthening institutional arrangements, raising public awareness.

After the submission of the Second UNFCCC National Communication including preliminary GHG emissions inventory data lacking consistency and completeness, the Ministry of Environment submitted the relevant reports (CRF and NIR) to the UNFCCC Secretariat. These reports were prepared in accordance with the UNFCCC related to national inventory submission with assistance of EU PHARE project EUROPEAID/112892/D/SV/LT/4 “Strengthening of institutional capacity to implement EU requirements on chemicals, GMO, IPPC and GHG” [43]. This project was implemented by national and foreign experts. The NIR contained the data on emission trends for 1990, 1998, 2001 and 2002. In 2005, this report was renewed by the data on emission trends for 2003 by experts from the Air Division of the Department of the Environmental Quality of the Ministry of Environment.

The major part of Lithuanian science and development capacity is concentrated in universities and research institutes. There are three types of research institutions in Lithuania, whose mission is stated in relevant legal acts, namely:

1. University research institutes established to carry out research of high international quality. They focus mainly on basic research and provide research basis for university education, doctoral studies and improvement of scientific qualification of university personnel;
2. State research institutes established to carry out long-term research of international quality important for the Lithuanian economy, culture and international cooperation. Research activities that state research institutes perform involve groups of specialized scientists and require data collection and specialized experimental instruments. State research institutes together with higher education institutions help to train specialists;
3. State research establishments aiming at carrying out R&D activities important for the Lithuanian economy and culture, for the development of industry, state government and other institutions.

NGOs play an important role in the process of implementation of the UNFCCC in Lithuania. They seek to use all available national scientific potential and lobby state officials for attaining common purposes. One of such organisations is the Regional Environmental Center (REC) for Central and Eastern Europe in Lithuania. The organisation is running the project of the United Nations Development Programme (UNDP) and the Ministry of Environment “National Capacity Self-Assessment for Global Environmental Management”. The project covers climate change impacts upon ecosystems, registration of GHG, introduction of gas technologies and different tools, including international instruments. The project concluded that the interaction between R&D and state institutions in implementing the convention is inefficient, officials responsible for the strategic planning do not take part in designing state orders in the area of developing research and technologies, applied research does not enjoy adequate financial support – the greatest part of research related to the implementation of conventions in Lithuania was carried out according to international projects, which proves that the care of the state for the performance of international commitments is not sufficient enough.

2.2.2 Capacity Building in Czech Republic

In the last period, the process of capacity building has been focused especially on the area of Joint Implementation projects. Currently there are project activities going on with Denmark, Austria, Netherlands, Japan and World Bank’s Prototype Carbon Fund.

Activities Implemented Jointly (AIJ)

In the framework of participation of the CR in the pilot phase of joint implementation projects as the testing phase, in which there will not be a shift of the achieved emission reduction to the investor, the National AIJ Reference Centre was established at the Ministry of the Environment in 1996 and prepared the basic general rules for their implementation. A total of 5 projects have been implemented, which were approved more or less on an individual basis. These are various types of projects: two projects for a change in the kind of fuel employed, two projects to increase energy efficiency in a given company and one project related to afforestation. A survey is given in the following table:

Central heating in Děčín	This project was approved in 1996 and the investor country was the USA. It was concerned with a change in heating medium from coal to gas, the use of cogeneration and increasing energy efficiency. The total costs of the project were approx. USD 8 mil., where the AIJ component consisted of approx. 7.5% of investment costs in the form of soft loans from a private company in the USA (USD 600,000). The installation was brought into operation in 1996 and the annual reduction in greenhouse gas emissions equals 24 kt CO ₂ .
Renewal of forest stands in the Šumava and Krkonoše National Parks	This project was approved in 1997 and the investor country was Holland. In the framework of the project, 14 thous. ha of land was afforested (9 thous. ha in Krkonoše and 5 thous. ha in Šumava), with total costs of USD 60.5 mil.; the AIJ component corresponded to 80% (USD 48 mil.) and the costs were covered by the FACE project. The annual reduction in greenhouse gas emissions equals 734 kt CO ₂ , and the life-time is estimated at 99 years.
Modernization of the Čížkovice cement plant	The project was approved in 1997, the investor country was France and the measures were concerned with aspects of energy efficiency. This project was carried out in the foreign branch in the framework of a single company, with total investments of about USD 6 mil. and achieved annual reduction in greenhouse gas emissions of about 33.6 kt CO ₂ .
Biomass heating plant in Hostětín	This was a comprehensive demonstration project for central heating using biomass together with the use of solar energy for heating hot utility water, supplemented by the construction of an information centre on renewable resources. Total costs were about USD 860 thous., of which the AIJ component was about USD 470 thous. The total annual reduction in greenhouse gas emissions equalled about 3350 t CO ₂ , which, with a lifetime of 15 years, corresponds to a total reduction of 50.25 kt CO ₂ .
Installation of a new co-generation unit in Škoda Mladá Boleslav.	This project was implemented in the foreign branch of the same company and FRG was the investing country. The project involved modernisation and renovation of the cogeneration units where, together with an increase in energy efficiency, there was a change in heating medium from coal to gas. The total costs of the project equalled approx. USD 110 mil., mostly covered by a commercial loan. The annual reduction in emissions equals 272 kt CO ₂ , corresponding to a total of 5.4 mil. t CO ₂ for a lifetime of twenty years.

In evaluation of the pilot phase of AIJ, it was pointed out that systematic procedure is not available for accepting and evaluating AIJ projects, which were accepted and subsequently evaluated on an individual basis and the basic rules were very general. In this connection, it was found out that one of the key aspects of implementation of similar projects lies in careful preparation of contracts.

Joint Implementation Projects (JI)

At the end of 2001, work was commenced on transfer of AIJ projects to the JI phase, i.e. with the assumed subsequent transfer of unit emission reductions to the foreign investor. The first step consisted in preparing institutional provision for this subject area at the Ministry of the Environment. A new task force was established, with the special task of selecting methodology for selection of JI projects, assessing the submitted proposals and making recommendations for implementation. The following have been named as top-priority areas for inclusion in JI projects

- use of renewable energy sources;
- energy savings in heating buildings (insulation, regulation) in the public sector;
- energy savings in heating buildings (insulation, regulation, low-energy buildings) in residential buildings;
- use of waste industrial heat in existing installations;

- construction of collection systems for landfill gases for old landfills and their energy-production use; and
- greening of public transport.

Nonetheless, projects outside of these priority areas can also be submitted as JI projects. Primarily for methodological reasons, the area of afforestation has temporarily been excluded. Independent projects or groups of projects can be proposed as JI projects if they (i) are of an investment character, (ii) are in accordance with the generally binding regulations of the CR, (iii) do not lead to transfer of pollution between the individual components of the environment (e.g. air – water – soil) and (iv) are prepared for implementation; activities of a non-investment character (technical assistance, consulting, expertise, education and public awareness, etc.) and also projects that have already been implemented or commenced cannot be recognized as projects in this sense.

Experience with AIJ and JI Projects

The Netherlands, Austria, Denmark, the Federal Republic of Germany and Japan have expressed active interest in cooperating on these projects. A number of other countries are also interested in closer specification of existing general cooperation in the future. Cooperation is usually based on the experience of both the investing and the host country. In a number of cases, there is potential for use of assistance from the investor countries, which is concentrated on dealing with certain specific and technical aspects. Cooperation with the World Bank (also known as the International Bank for Reconstruction and Development IBRD) and the Prototype Carbon Fund (PCF), which was commenced in 2001, is also based on the JI principle. In accordance with the national methodology for JI projects, PCF supports projects concerned with energy savings through an increase in the energy efficiency in public buildings (hospitals, schools, etc.) with central heat supply and renewable energy sources in an extent suitable for industrial buildings. Participation of PCF is based on an agreement approved by the Government in 2003 and the projects are implemented through the Czech Energy Agency. The expected degree of participation of IBRD in joint implementation projects corresponds to USD 5-7 mil. in dependence on the amount of reduction of emissions through implementation of specific projects.

3. Conclusion

The EU considers building capacity as being essential for countries to be able to implement their commitments under the Kyoto protocol, and more broadly to assist countries in achieving sustainable development. As with capacity building efforts elsewhere, capacity building for climate change policy in economies in transition has also been guided by the principle of country-drivenness, and was guided by the internal assessment of needs done by recipient countries, being consistent with their sustainable development strategies, reflecting their national initiatives and priorities. The information contained in this submission emphasizes the progress made in recent years in capacity to implement Protocol obligations, but also to take advantage of opportunities provided by the Protocol. They further emphasize the desirability of appropriate involvement of stakeholders, including regional governments, industry and non-governmental organisations, and the importance of cooperative agreements on frameworks for capacity building with potential donor countries.

The EU is of the view that the current institutional setting for capacity building is revealing its potential to increase capacity and enable recipient countries to fulfil their obligations and avail themselves of the opportunities provided by the Kyoto Protocol.

PAPER NO. 2: UNITED STATES OF AMERICA

**United States Submission on Capacity Building in Countries with Economies in Transition
Information from Annex II Parties to Support the
Review of the Status of Implementation of Decision 3/CP.7**

The United States is pleased to have the opportunity to submit information on capacity building activities in economies in transition in order to assist with the regular monitoring of the implementation of the capacity building framework pursuant to decision 3/CP.7.

We believe that the capacity building framework for countries with economies in transition annexed to decision 3/CP.7 can serve as a useful tool to help bring country-driven priorities to the attention of those bilateral, multilateral, and international organizations in a position to respond.

Many economies in transition include a number of key energy exporters as well as energy importers that are important to global and regional energy security as well as to environmental systems affecting global climate change. In recognition of these circumstances, U.S. assistance programs have focused on both systemic reform and institution-building, as well as projects that promote clean energy, more efficient technologies and private investment. Capacity building for national and regional projects have addressed the following main areas: developing sound national energy policies, energy prices and legal/regulatory systems; improving efficiency and reducing emissions in various sub-sectors; restructuring, commercialization and privatization of energy utilities and companies; encouraging clean energy project development; and promoting regional energy cooperation and the integration of energy systems into international energy markets.

For the Secretariat's ease in using the attached information for its paper, we have provided illustrative examples of our work in a format keyed, to the extent possible, to the sub-paragraphs of paragraph 20 of the Annex to Decision 3/CP.7, as found in document FCCC/CP/2001/13/Add.1. To limit the overall size of the submission, we have developed short summaries of the activities, and provided websites, where available. In doing so, it is our expectation that the Secretariat will be able to use this data to show that the capacity building framework is being implemented in a robust manner in economies in transition. In addition, we hope that all countries may be able to gain useful knowledge from our successful partnerships with economies in transition. Please note that this compilation is a mere illustration of the capacity building efforts undertaken by the United States and should not be considered an exhaustive list.

The United States appreciates the opportunity to share its views on this matter and to provide the attached information.

Illustrative Examples of United States Capacity Building Activities In Countries with Economies in Transition

(a) National GHG inventories;

Tariff Reform and Communal Services Enterprise Restructuring Project in Ukraine <http://www.mdi.org.ua/eng>

The goal of this five-year U.S. sponsored activity was to improve delivery of communal services (water, wastewater and district heating) by improving the policy and regulatory framework, building the management and technical capacity of communal service enterprises (CSEs), and increasing public sector participation in services delivery. Phase I focused on regulatory reform at the national level and application of new approaches at the local level in two pilot cities, Lutsk and Khmelnytsky. At the national level, the United States assisted the State Committee for Housing and Communal Services to prepare a National Strategy for Communal Services Reform and the law On Housing and Communal Services. At the local level, the United States helped prepare guidelines for setting cost-recovery tariffs and an accounting handbook. The United States also supported energy efficiency projects, household surveys and ability-to-pay studies, revision of utility charges as well as the preparation of capital investment plans. The United States introduced and assisted in negotiating performance agreements between municipalities and CSEs that clearly state the responsibilities of each party. In Phase II, successful approaches tested in Lutsk and Khmelnytsky were rolled out to 31 more CSEs in 16 Ukrainian cities. Formal classroom training was combined with technical assistance in the field. The United States assisted in establishing, and providing institutional strengthening of, the Municipal Development Institute, a new local NGO uniting former Project professionals. The NGO is committed to advancing the cause of communal services reform in the future.

(c) Policies and Measures, and the Estimation of their Effects;

Romania Energy Program III www.rep3.ro

This U.S. supported program expands access to energy efficiency financing and increases the efficiency of energy use. The focus includes applying energy efficiency programs to reduce energy costs to help make energy reform more affordable for vulnerable populations. This program includes a number of ongoing measures, namely: activities to establish a functioning social safety net to protect low-income Romanians affected by energy reforms and market liberalization; activities to promote regional cooperation to liberalize energy markets and improve the stability of supply; and activities to reduce marginal costs through open competition. A U.S. sponsored workshop for Romanian Banks entitled, “Capacity Building for Greenhouse Gas Emissions Reductions through Energy Efficiency in Romania: Obstacles and Barriers in Energy Efficiency Financing” took place in September 2006. At that workshop, twelve lessons learned were presented:

- An enthusiastic, empowered financial decision-maker is the key success factor.
- Beware of the Mega-Project.
- Involve a commercial financier.
- Most energy efficiency loans involve balance sheet financing.
- Creditworthy project developers usually have a preferred lender.
- A team that leverages investment needs banking, finance, and outreach skills.

- Municipalities tend to invest in buildings on a piecemeal basis.
- UNDP credentials are a huge asset when offering free technical assistance.
- Local consultants can do high quality work at lower cost than those from abroad.
- A broad geographical outreach is essential to source potential investments.
- It is useful to present energy efficiency concepts at a wide range of third party events.
- Large scale investment in Blocks will require both subsidies and thought.

Replication of Lessons Learned (ROLL-2000) in Russia

www.iscmoscow.ru

ROLL, a Russia-wide grant-making activity supported by the United States, includes the introduction of energy-saving techniques that resulted in significant cost savings.

Working in areas such as natural resource use, sustainable economic growth, energy efficiency, ecologically oriented business, public health and ecological education, this activity shared successful models with non-governmental, public, business and educational organization as well as municipal authorities and local communities in Russia. Due to a lack of funding, many communities were prevented from upgrading their heating infrastructure, and high energy costs even worsened this deadlock. U.S. seed grants allowed these communities to make a significant breakthrough by reducing energy costs. In addition, the savings allowed municipalities to expand and continue energy saving projects. With the introduction of energy-saving techniques, this U.S.-funded project resulted in significant cost savings to those municipalities. The United States provided grant capital to implement demand-driven energy saving projects. Improvements included: enhanced energy-generating facilities, better insulation, and changes in behavior pattern. As a result of a special ROLL grant round on energy efficiency, the quality of communal services was improved in 32 cities, consumption of electricity decreased, and municipal budgets saved funds for other social programs with savings of over \$700,000 per year.

Strengthening Energy Bodies in Bosnia and Herzegovina

<http://herzegovina.usaid.gov>

The United States has supported technical assistance and capacity building for the electricity sector in Bosnia and Herzegovina. As a result of this assistance, Bosnia and Herzegovina passed electricity legislation that enabled restructuring of the sector and the formation of electricity regulators. Despite some political challenges, the electricity legislation was the first approved legislation resulting in state-level energy institutions including the State Energy Regulatory Commission the transmission company and System Operator. The formation of the electricity regulators was also a direct result of the U.S. technical assistance. The United States provided extensive, hands-on assistance in initial institutional development of the three electricity regulators – one at the state level and two at the entity level – along with ongoing intensive capacity building. Further, the United States provided extensive training in tariff methodology to all three commissions, along with training in licensing. As a result, Bosnia and Herzegovina has the foundation for the predictable and sustainable development of the energy sector that is in harmony with the EU directives on electricity, European Union accession requirements, and the Energy Community Treaty signed by Bosnia and Herzegovina.

Central Asia Regional Energy Markets Assistance Program

The United States implements a Regional Energy Markets Assistance Program (REMAP) to assist the development of an electricity market in Central Asia (focused on Tajikistan, Kyrgyzstan and Kazakhstan). REMAP has the following objectives: to establish a transparent, competitive electricity market in Central Asia; to increase electricity trade in Central Asia, both of which will make development of hydroelectricity resources financially feasible, and will stimulate economic growth in the region; to introduce market-based solutions for current and future regional disputes related to hydroelectricity facilities and reservoirs; to build the capacity of electricity regulators to develop the electricity industry in the region, while protecting the interests of consumers. To achieve the goal of building an electricity market, training was provided to ministries, regulatory agencies, transmission companies, market operators and regional energy organizations, to discuss incentives and barriers to enhanced regional trade of electricity among the Central Asia and other regions. A separate training activity focused on the use of a modern transmission planning model.

Kosovo Electric Corporation (KEK) Institutional Strengthening

www.usaid.gov/missions/kosovo

Energy is widely considered to be Kosovo's most promising economic sector. World Bank analysis indicates that more than 4,500 megawatts of new generation capacity could be constructed in Kosovo over the next fifteen years, representing almost half of the region's total future needs. In order to take advantage of these emerging opportunities, Kosovo must address two major weaknesses in the sector, namely that the legal and institutional framework remains underdeveloped, and that the domestic electricity operations are riddled with problems, mostly stemming from the perpetual non-payment and theft of electricity among both residential and commercial users. The United States is providing legal and policy advice to decision-makers in the sector, strengthening their ability to engage in meaningful dialogue with potential investors. The United States is also a member of a consortium of international organizations supporting turn-around management at Kosovo's electric utility, KEK. In late 2006, the United States launched a program to support KEK improve financial controls, reduce theft, and improve management capacity. This program, which built on prior U.S. work under the Community Infrastructure Support Program (CISP), worked to improve the ability of Kosovo Electric Corporation (KEK) to assess and collect revenue to finance services and operations.

Energy Sector of Macedonia

<http://macedonia.usaid.gov>

The U.S. helped build the Government of Macedonia's institutional, operational and managerial capacities to effectively plan and implement the restructuring efforts to improve the energy sector in order to foster a favorable environment for privatization, investment and reliable affordable electricity supply. The major objective of this U.S. program was to strengthen Electricity Regulatory Commission (ERC) capacity to function as a fully independent and transparent regulatory body, which is able to establish open and transparent policies and procedures for tariff setting, licensing and oversight as

required for a reliable, environmentally sound and financially self-sufficient power sector. The United States also assisted the vertically integrated state-owned utility (ESM) to develop the financial and operational management capacities to become an effective participant in the Energy Community for the South East Europe (ECSEE) and implement the unbundling of its transmission sector and approaching the privatization of distribution. About 150 staff of the Ministry, utility and regulatory body were trained, and technical assistance was provided on the development of the ERC as well as regulatory technical assistance to the ERC such as licensing, organizational issues, training, and tariff calculation.

Legal/Regulatory/Market Development

www.erranet.org

www.energy-community.org

In Bulgaria, Romania, Serbia, Kosovo, Macedonia, Montenegro, Albania and Croatia, the U.S. government is helping to provide support for the development of the Energy Community of Southeast Europe aimed at creating regional electricity and gas markets through developing the regional frameworks and institutional capacities essential to improved performance of energy utilities and enhanced trade and investment. Key activities include support for the Energy Community Regulatory Board (ECRB); legal and regulatory technical assistance; regional transmission planning and development of investment priorities for international financial institution (IFI) lending; regional and bilateral regulatory partnerships between Southeast Europe and U.S. state regulators; regional tariff harmonization; and support for the Energy Regulatory Regional Association (ERRA). The activity also strengthens capacity of energy regulators and utility companies in Eurasia countries through training and technical assistance. U.S. assistance is provided to support development of policies promoting more efficient and reliable transmission and delivery of energy.

(d) Impact Assessment and Adaptation;

Ukraine Land Titling Initiative

In Ukraine, the United States helped to develop survey procedures and a surveyor training program to ensure that agricultural lands subject to privatization exclude environmentally sensitive land. This includes wetlands, lands with a slope in excess of 3%, a 100 meter exclusion zone around agricultural chemical storage sites, a 10 meter exclusion zone on watercourses, and lands that have been degraded by wind, or water erosion. Support was provided to conduct training for surveyors and to conduct quality control of survey works to ensure that environmentally sensitive land had been excluded in six oblasts (Kyiv, Cherkasy, Khmelnytsky, Odesa, Vinnysya, Zhytomyr, and Crimea Autonomous Republic).

Support to Enhance Privatization, Investment and Competitiveness in the Water Sector of the Romanian Economy (SEPIC)

This U.S. supported activity aimed to assist private industries and municipal water utilities implement Environmental Management Systems and Pollution Prevention projects in Romania. Under this project, the United States provided technical assistance for the development of a feasibility study and investment packaging for the implementation of a national water management project. This activity improved management of water demand/water use efficiency and resulted in the creation of adaptation plans developed to address vulnerabilities identified through risk assessments. The U.S. assistance enhanced Romania's capacity to cope with water disasters, and experience gained in the project will be used to extend the water management (WATMAN) project to other river basins. In addition, environmental management systems and pollution prevention will be implemented in other industries. A useful guidance document, a Mayor's Manual, was developed and included in the set of flood preparedness documents adopted by government ministries. As a result of this activity, the Ministry finalized its flood management strategy and the Government of Romania approved the five-year implementation of a U.S. \$180M national WATMAN project.

Croatian Climate Station Bears Fruit

<http://croatia.usaid.gov>

Like many farmers around the world, fruit growers in the City of Velika Gorica struggle with adverse conditions that affect production and quality, such as heavy rain, hail, frost, insects and plant diseases. The Bubamara Association of Fruit Producers has been providing agriculture advice to local farmers since 1998. In addition to their efforts to help farmers produce a healthier product through an "integrated" fruit production system they developed, a modern climate station was needed that would serve as an early warning system for farmers. With assistance from the United States through the CroNGO program (Assistance to Croatian non-governmental organizations), local farmers now receive advance warning by mobile phone and e-mail about all weather changes, allowing them time to protect their orchards.

(f) Education, Training, and Public Awareness;

Forest Resources and Technologies (FOREST) Project, Phase II

This U.S. supported project focused a number of major program activities, which contributed to the development of the new Forest Code in Russia thereby helping Russia combat illegal logging. These activities included: assisted in increasing public awareness and access to forest management regulations; assisted, to the level permitted by the Russian Government, in reforming the regulations affecting activities on forest lands under long-term leases, as well as non-leased forest land; and assisted in reducing illegal logging practices in the Russian Far East and implementing the FLEG (Forest Law Enforcement and Governance) process. Public hearings of the newly developed Forest Code were held in Khabarovsk Krai. Information campaigns about reforms in the forest sector, Forest Code development, illegal logging and Forest Law Enforcement and Governance (FLEG) reached over 30,000 people in the RFE. As a result of these efforts,

the U.S.-funded FOREST project made recommendations to the draft Russian Forest Code to decrease illegal logging. The project reduces the threat to Russian forests, as a globally important carbon sink, by improving sustainable forest management through economic growth, identifying forestry reform issues and assisting with greater civil participation in the forestry sector. Recommendations on preventing illegal logging, developed by the project, were used as the basis for developing the regional FLEG program. The website dedicated to development of Russia Forest Code will be operational after the project ends, providing different groups information about forest legislation and drawing attention to reforms in forestry. The Russian Ministry of Natural Resources, other government agencies as well as the public received recommendations for collaboration between the public and agencies responsible for regulating, planning, and managing activities in forest lands. The recommendations had been discussed before the final hearings of the new Forest Code were held.

Bulgaria-New Jersey Partnership

<http://www.narucpartnerships.org/library2.asp#bul>

The National Association of Regulatory Utility Commissioners (NARUC), a national non-profit membership organization whose mission is to serve the public interest by improving the quality and effectiveness of public utility regulation, along with the U.S. government are implementing a partnership between Bulgaria and New Jersey. The New Jersey Board of Public Utilities (NJBPU) and the State Commission on Energy and Water Regulation (SEWRC) of Bulgaria are pursuing a Regional Energy Regulatory Partnership over two years. The partnership is designed as a vehicle for the exchange of experience and information between U.S. and Bulgarian regulatory bodies with the goal of improving regulatory practices and providing access to advanced U.S. energy regulatory practices. This partnership will allow SEWRC to have broad access to U.S. regulatory practices and will provide the NJBPU access to applied European energy regulatory techniques and methodologies. The partnership includes technical exchange activities in both New Jersey and Bulgaria, as well as Bulgarian participation in training activities.

Croatia-New York Regional Energy Regulatory Partnership

<http://www.narucpartnerships.org/library2.asp#cro>

The National Association of Regulatory Utility Commissioners (NARUC), a national non-profit membership organization whose mission is to serve the public interest by improving the quality and effectiveness of public utility regulation, along with the U.S. government are implementing a partnership between the Croatian Energy Regulatory Agency (CERA) and the New York Public Service Commission (NYPSC) over the next two years. The partnership is designed as a vehicle for the exchange of experience and information between U.S. and Croatian regulatory bodies with the goal of improving regulatory practices and access to U.S. energy regulatory experience. This partnership will allow CERA to have broad access to U.S. regulatory practices and will provide the NYPSC access to European regulatory techniques and methodologies. The partnership includes multiple activities in both New York and Croatia as well as Croatian participation in training activities.

Macedonia-Vermont Energy Regulatory Partnership Program

www.narucpartnerships.org/macedonia.asp

Within the framework of the NARUC Partnerships Program, which is designed as a vehicle for exchange of information and improving regulatory practices, the Energy Regulatory Commission of the Republic of Macedonia and the Vermont Public Service Board carried out an energy regulatory partnership. Five exchanges occurred over the three year project during which both sides explored topics such as tariff design and rate setting; regional markets and cross-border trade; energy efficiency; service quality; customer protection and low-income programs; licensing and monitoring, and others. Several top management officials in Macedonia and Vermont have seen the bilateral program evolve into many sustainable regulatory relationships and personal friendships.

Communal Services Reform Roll-out Project

www.mdi.org.ua/eng/index.html

The purpose of this project in Ukraine is to help municipalities, through training and other technical assistance, improve the delivery of communal services to the population and local industries through market oriented reforms in the communal services sector.

Assisted municipalities will significantly improve the financial, commercial and technical viability of controlled water, wastewater, and heating communal enterprises and thus, the quality of communal services delivered to the population and local industries.

Participating municipalities will implement low-cost energy efficiency/service improvement projects to reduce technical and commercial losses of participating communal enterprises by at least 20% over several years. Approximately 70 other cities will be aware of the best practices in reforming communal services.

(g) Transfer of Environmentally Sound Technologies;

Methane to Markets (M2M) Partnership

www.methanetomarkets.org

www.epa.gov/methanetomarkets

In Russia, Poland, and Ukraine, the United States provides technical assistance and training to promote cost-effective, near-term methane recovery and use as a clean energy source under this international initiative. Activities have ranged from workshops and conferences to actual pre-feasibility studies for potential methane reduction projects. The Partnership currently focuses on four sources of methane emissions, three of which are targeted in these countries: coal mines, landfills, and oil and gas systems.

In the Coal sector, the United States is working in all three countries to try to encourage them to put forward potential coal projects at the M2M Beijing Partnership Expo to be held October 30-November 1, 2007. In Russia, the United States is also providing consulting support for Uglemetan to build institutional capacity and work with partners to evaluate technical needs and barriers to coal mine methane (CMM) projects. Further to that work in Russia, the United States is providing specific technical information (case studies, lessons learned) to coal mines to address technology barriers to coal mine methane project development and, with the UN Economic Commission for Europe, is attempting to help mines with project development by educating them about financial

investment strategies. In Ukraine, the United States is conducting a drilling demonstration/pilot program at an underground mine. Related training and workshops for coal mine officials on the cost-effective utilization of recovered methane have been organized. The United States is also working with state-owned coal companies such as Makeyvugol to develop at least one project template for the Expo. In Poland, the United States is working with the Central Mining Institute to develop several CMM templates for the Expo. In addition, the United States will be sharing its experiences at the Polish Mining Congress in Krakow in September 2007.

In the Landfill Sector, the United States is assisting in the collection of baseline data at top Russian landfills with a plan to conduct pre-feasibility studies at identified landfills. The United States recently sponsored an M2M Landfill Workshop in Moscow in May 2007 and landfill site visits in the Moscow region. In Ukraine, the United States has made technical presentations at conferences and conducted a one-day landfill methane use workshop associated with the 3rd International Biomass Conference in Kyiv (Sept/Oct 2006). This one-day workshop provided a basic “how-to” session on landfill methane capture and use, as well as financing mechanisms. In addition, a suitable landfill was recently identified in Ukraine and a pre-feasibility study will be launched as well as up to three additional desk-top landfill assessment studies in three cities. The United States supported the participation of experts from both countries in the International Solid Waste Association (ISWA) two-day landfill gas capacity building workshop in Istanbul, Turkey in June 2007.

In the Oil and Gas Sector, the United States is providing support over five years to the Russian Academy of Sciences to identify oil and gas sector methane emissions reduction project opportunities. In Ukraine, the United States plans to similarly support over multiple years the identification and implementation of methane emissions reduction projects in the Ukrainian gas transmission and distribution sectors.

Energy Efficiency/Heating/Renewable Energy

In Croatia, Romania and Russia, the United States supports the promotion of regional approaches to financing energy efficiency by leveraging commercial and international financial institution (IFI) financing for municipal projects (including heating systems). The activity addresses investment needs and savings associated with the following: regional energy demand planning; affordability; and social safety net approaches associated with utility services through residential energy efficiency; and heating system reform and potential for increased use of natural gas.

Development of Renewable Energy Projects in Bulgaria

<http://bulgaria.usaid.gov>

The United States is working in Bulgaria to help with the establishment of a public-private partnership for the preparation and implementation of a wind power project of between five and ten megawatts in Bulgaria. The proposed project structure involves an equipment finance lease for wind turbines and towers, and commercial debt financing from a local commercial bank for installation, balance of plant components and working capital for wind farm operation. The structure requires the establishment of a public-

private partnership with a municipality and private energy services company in Bulgaria, that will be responsible for operation and maintenance of the wind farm, where the municipality will secure the finance, lease and debt financing using municipal assets, to be repaid from the project revenue stream via electricity sales.

Energy Regulatory Development Project Bulgaria

<http://bulgaria.usaid.gov>

The main objective of this project is to support the Bulgarian energy sector reform, including privatization, and the establishment of competitive energy market in Bulgaria. The project provides assistance to the State Energy and Water Regulatory Commission (SEWRC) and the Ministry of Energy and Energy Resources (MEER) in the development of energy sector legal and regulatory framework, modern tariffs for electricity, gas and heat supply sectors, regulatory accounting standards, reporting requirements and uniform system of accounts for the energy sector companies, as well as assistance in building SEWRC capacity. These activities are critical for encouraging energy sector investments that will provide access to modern and affordable energy services. By developing energy sector key legislation and a regulatory framework, the project creates conditions and incentives for use of clean and efficient energy technologies thus mitigating future negative environmental impacts. The United States has supported this project by helping the SEWRC build their capacity to act as an independent regulatory body that effectively balances the investors' competing interests with the need to protect consumers. Various training sessions were held with SEWRC experts on various subjects, including several workshops on green energy trading practices in the U.S., experiences of Western European countries in establishing a green energy market, including green certificate programs, relevant financial support programs by the EU countries, etc. The finalization of key secondary legislation and regulations that will have direct impact on the utilization of clean energy resources. The United States continued supporting the energy sector tariff reform and working closely with the SEWRC, finalized the tariff methodologies and the regulatory Chart of Accounts for the electricity, heating and natural gas sectors. Another focus of U.S. efforts during 2005 was the restructuring of the energy sector in Bulgaria. After the successful privatization of the electricity distribution companies in the country in 2004, the United States supported the successful privatization of three major electricity generation companies by developing the regulatory framework for electricity generation.

(h) National Communications and National Climate Action Plans;

Energy Sector Restructuring in Croatia

<http://www.energy-community.org>

The electricity and gas sectors in South East European countries have a reform framework based on the Energy Community Treaty, which is a legally binding document committing the countries to meet European Union requirements contained in the energy, environment and energy efficiency directives. Among other steps, the Treaty requires them to implement national legislation creating electricity regulators and transmission system operators and to open the market for all non-domestic consumers by certain time dates. The United States has been assisting with institutional capacity building of the Croatian

regulator (HERA), laws and policies (a package of energy laws), technical assistance provided to the national electricity utility on issues of restructuring, tariff reform and market design.

(i) National Systems for Estimation of GHG Emissions.

Privatization, Investment, and Development of Energy Program (PRIDE) in Romania

This activity, supported by the U.S. government, focused on the energy sector reform in Romania, included the liberalization of the electricity and gas markets, the strengthening of independent regulatory commissions, and promotion of energy efficiency projects. The activity also supported the privatization of Turceni energy complex. The United States also facilitated efforts to implement energy reform, improved the sector's regulation and promoted energy efficiency. Technical assistance was provided through this activity and institutions created through the activity will operate and be viable after the project ends. Also, the Turceni privatization strategy will be the basis for the actual privatization, resulting in increased investment and competitiveness and mitigation of greenhouse gases.

PAPER NO. 3: WORLD BANK INSTITUTE

Information submitted by
World Bank Institute, CF-Assist Program
regarding
‘Capacity-building under the Kyoto Protocol’

At its 2nd session, the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol decided to invite relevant multilateral and bilateral agencies and the private sector to provide reports on their support of the implementation of the framework undertaken pursuant to decision 29/CMP.1 (*‘Capacity-building relating to the implementation of the Kyoto Protocol in developing countries’*), and requested the Secretariat to produce a synthesis report drawing upon inter alia information provided by relevant multilateral and bilateral agencies (decision 6/CMP.2).

In response to this invitation, the World Bank Institute would like to submit the enclosed information on its multi-year program CF-Assist (*Annual Report 06-07, May 2007*). CF-Assist implements capacity-building and knowledge sharing activities aiming at enhancing the ability of developing countries to participate effectively in project activities under the CDM, including those priority areas listed under decision 29/CMP.1, para 2, (a)-(f).

It should be highlighted that the information that is herewith provided does not intend to cover the whole range of programs and activities of the World Bank Group regarding knowledge generation and sharing and capacity-building to support the implementation of the Kyoto Protocol in developing countries.

Carbon Finance Assist

Annual Report

May 2006 – April 2007

**Washington DC
April 2007**

I. TABLE OF CONTENTS

Acronyms

Program Highlights 2006-07

1.0 Introduction

- 1.1 Carbon Finance Program at the World Bank
- 1.2 Capacity Building in Carbon Finance

2.0 CF-Assist Program

- 2.1 Program Objectives
- 2.2 Management Structure
- 2.3 Funding Sources
- 2.4 Implementation Strategy
- 2.5 Work Components
 - i) Capacity Building at Country/Regional Level
 - ii) Market Development Facilitation
 - iii) Market Assessment and Outreach
- 2.6 Impact Indicators

3.0 Activity Report 2006-07

- 3.1 Capacity Building Activities: CF-Assist Country Programs
 - 3.1.1 Africa Region
 - 3.1.2 Middle East & North Africa (MNA)
 - 3.1.3 South Asia (SAR)
 - 3.1.4 East Asia & the Pacific (EAP)
 - 3.1.5 Europe & Central Asia (ECA)
 - 3.1.6 Latin America & the Caribbean (LAC)
- 3.2 Market Development Facilitation
 - 3.2.1 Global Carbon Expo 2006
 - 3.2.2 Regional Carbon Forums
 - 3.2.3 Sector Assessment Studies
- 3.3 Knowledge Management and Outreach
 - 3.3.1 State of the Carbon Market
 - 3.3.2 Validation, Verification and Monitoring (VVM) Manual
 - 3.3.3 Host Country Committee Meetings
 - 3.3.4 Donor Meeting
 - 3.3.5 Outreach
- 3.4 Impact Analysis
 - 3.4.1 Stakeholder Participation
 - 3.4.2 Institutional Support and Project Development
- 3.5 Lessons from CF-Assist Experience

4.0 Work Program 2007-09

- 4.1 Proposed Work Plan

Annex 1. Carbon Funds at the World Bank..

Annex 2. CF-Assistance Partners

Annex 3. Calendar of CF-Assist Events 2006-07

Annex 4. Matrix of Events 2007-08

Acronyms

ACF	Argentine Carbon Fund	IETA	International Emissions Trading Association
ADB	Asian Development Bank	IPO	Investment Promotion Office
AFD	Agence Francaise de Developpement	JBIC	Japan Bank for International Cooperation
AFR	Africa (WB)		
BM&F	Brazilian Mercantile & Futures Exchange	JI	Joint Implementation
BOAD	Banque Ouest Africaine de Développement	LAC	Latin America and the Caribbean
CER	Certified Emissions Reduction	LFG	Landfill gas
CEFEB	Centre d'études financiers, économiques et bancaires		
CCDA	Comisión Centroamericana de Desarrollo y Ambiente	METAP	Mediterranean Environmental Technical Assistance Program
CDCF	Community Development Carbon Fund	MNA/MENA	Middle East and North Africa (region of World Bank)
CDM	Clean Development Mechanism	NEPAD	New Partnership for Africa's Development
CEFEB	Centre d'études financières, économiques et bancaires	NDRC	National Development and Reform Commission / China
CF	Carbon Finance	N₂O	Nitrous Oxide
CFU/ENVCF	Carbon Finance Unit (WB)	ODA	Official Development Assistance
CF-SEA	Sustainable Energy Services in Africa	OLADE	Latin American Energy Organization
CMM	Centro Mario Molina (Mexico)	PDD	Project Design Document
COP/MOP	Conference of Parties/Meeting of Parties to the Kyoto Protocol	PHRD	Policy and Human Resource Development
CORDELIM	Corporación de Promoción MDL / Ecuador CDM Promotion Office	PIN	Project Idea Note
		RP	Regional Program
CWP	Country Work Plan	SAR	South Asia (region of World Bank)
DNA	Designated National Authority	TA	Technical Assistance
DNV	Det Norske Veritas	UNDP	United Nations Development Programme
DOE	Designated Operational Entity	UNEP	United Nations Environment Programme
EAP	East Asia and the Pacific (WB)	UNFCCC	United Nations Framework Convention on Climate Change
		VVM	Validation-Verification-Monitoring
ECA	Europe and Central Asia (WB)	WB	World Bank
ERPA	Emissions Reduction Purchase Agreement		
EU	European Union	WBI	World Bank Institute
FOMECAR	Fondo Mexicano del Carbono / Mexican Carbon Facility	WPA	Work Program Agreement
FONAM	Fondo Ambiental Nacional / Peru CDM Promotion Office		
GHG	Greenhouse Gas		
GIS	Green Investment Scheme		
HCC	Host Country Committee		
HFC	Hydrofluorocarbons		

Program Highlights 2006-07

- √ With over \$13 million in contributions and leverage of an additional \$8 million from existing resources within the World Bank, CF-Assist has become an established vehicle to enable developing countries and economies in transition to fully participate in the carbon market
- √ During its two years of operations, CF-Assist has effectively responded to the needs of host countries, and established presence in 45 countries, with 17 new countries being added in 2006-07 alone. This included the launching of 'Africa Assist' component.
- √ CF-Assist has successfully leveraged the experience of the World Bank as a buyer of carbon into its various activities including training modules, technical assistance dedicated to the design of effective DNAs, to the creation of carbon assets, and has built a dedicated team of experts from across the Bank regions.
- √ During this year, CF-Assist signed work program agreements (WPAs) with the six operational regions of WB, which enables the process of mainstreaming carbon finance TA activities with the rest of Bank operations.
- √ CF-Assist facilitated the participation of over 30 host countries to Carbon Expo 2006, to provide a unique platform where they could learn about the latest developments in the market, and the buyers, sellers and service providers could interact in a trade fair setting.
- √ In regional markets, CF-Assist has delivered a number of successful greenhouse gas forums, notably Carbon Expo Asia in Beijing, Carbon Finance Day in Nairobi and North Africa Carbon Forum in Rabat.
- √ Over 5200 people benefited from training and exposure provided by CF-Assist events including training programs, global and regional events.
- √ Capacity building activities by CF-Assist helped strengthen over 10 DNAs, and develop several scores of carbon finance projects.
- √ CF-Assist has opened up CF opportunities in recently active countries such as Albania, Macedonia, Kyrgyzstan, Uzbekistan, Belarus, Botswana and Rwanda.
- √ CF-Assist has promoted innovative market instruments such as CDM Fund in China, Sellers Funds in Argentina and Mexico, and carbon auctioning platform in Brazil.
- √ CF-Assist has begun to address some of the emerging issues such as Programmatic CDM and the post-2012 carbon market; as well as opened up under-represented sectors such as transport and biofuels.
- √ CF-Assist, along with CFU, represents the World Bank in implementing the 'Nairobi Framework'.

1.0 Introduction

1.1 Carbon Finance Program at the World Bank

The flexible mechanisms under Kyoto Protocol (CDM, JI and IET) facilitate the use of carbon market as an effective instrument in achieving mitigation of GHG emissions. The World Bank has been an early leader since late 1990s in promoting the carbon market. From the first fund – Prototype Carbon Fund -- set up in the carbon market with contributions from national governments and public and private sector organizations of the Annex I countries, the Bank's carbon finance portfolio has grown substantially .to reach over \$2 billion spread over ten Carbon Funds for the purchase of emission reductions (Annex 1). In clean project terms this represents over \$10 billion of capital investment. By April 2007, the World Bank has concluded emission reduction purchase agreements worth nearly \$1.42 billion from a range of renewable energy, waste management and industrial gas projects.

1.2 Capacity Building in Carbon Finance

One of the key challenges in expanding the carbon market is to ensure developing countries would have adequate capacity that allows their active participation. So far, only large developing countries such as China and India have been able to benefit from the market, while a vast majority of countries have had only a marginal presence. Lack of technical and institutional capacity has been the key barrier in this regard. Thus, assisting developing countries to move towards a carbon resilient development through capacity building and technical assistance has become an important objective for the World Bank. The Carbon Finance Assist (CF-Assist) is the principal program of the World Bank to address the capacity issues and provide technical assistance to the developing countries and the economies in transition. This report provides a description of various activities implemented during 2006-07, and the work plan for the next two years.

2.0 CF-Assist Program

2.1 Program Objectives

CF-Assist is a multi-donor trust fund set up as a capacity building and technical assistance program proposed in 2004, which formally opened for subscription at the end of March 2005, and received its first contribution in July 2005. CF-Assist also administers the former PCF *plus* program, which was funded by the interest income of four PCF participants that paid their contribution to that fund upfront. CF-Assist has its own donor constituency and work plan, and complements the World Bank's Carbon Finance business.

The basic objective of CF-Assist is *to ensure that developing countries and the economies in transition are able to fully participate in the flexible mechanisms defined under the Kyoto Protocol*. In order to achieve this objective, CF-Assist would work with countries to

- Build their human and infrastructural capacity;
- Facilitate sustainable development gains associated with carbon mitigation projects;
- Help create and manage carbon assets in the form of mitigation projects; and
- Help reduce costs of participation in the carbon market

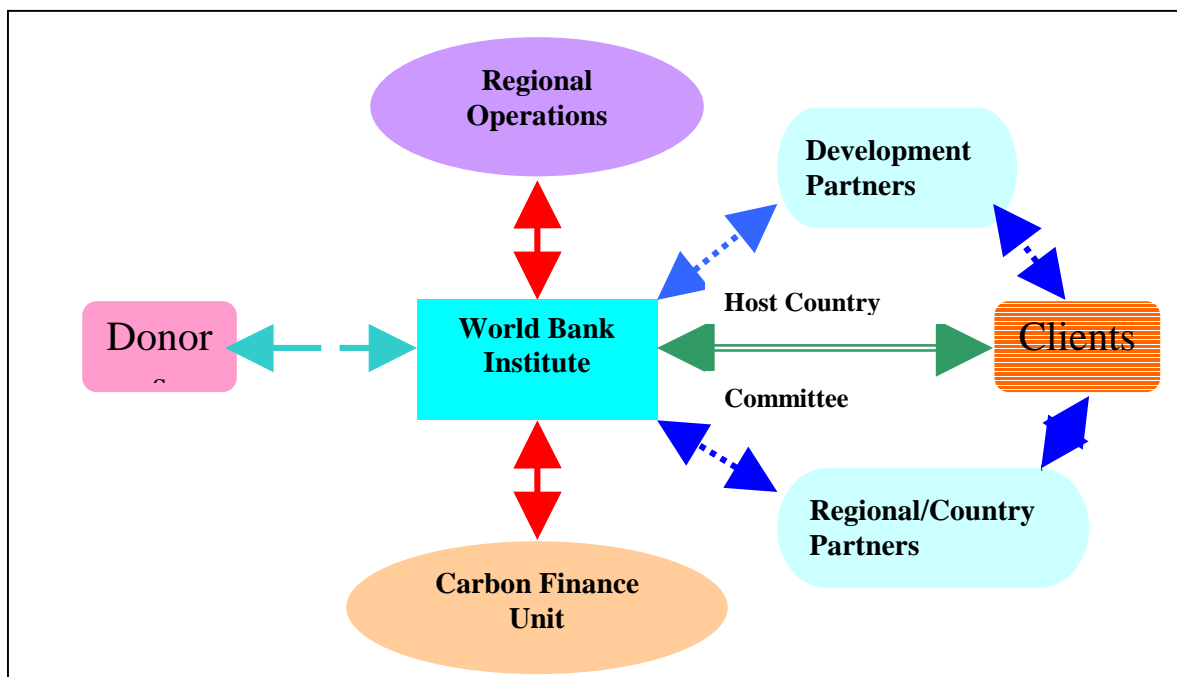
CF-Assist seeks to meet its goals by creating an enabling environment whereby local institutions have the capacity to prepare and review projects for approval, the private sector has procedures in place to identify opportunities and bring them to market, and the lending sector uses carbon finance as a means to reduce project risks. It responds to a high demand from Bank client countries to build capacity at national and local levels, disseminate lessons learned from carbon business operations, and build a broad pipeline of projects that will address country's sustainable development objectives as part of international CDM/JI activities.

2.2 Management Structure

Within the World Bank, CF-Assist is anchored in the Sustainable Development division of the World Bank Institute (WBI) (Chart 2). The Sector Manager of SD division provides strategic guidance and operational oversight. CF-Assist comprises a five-member team (Team Leader, three senior professional staff and one program support staff, including one French Government-seconded professional), which liaises closely with the Carbon Finance Unit (CFU) responsible for business, and the Regional carbon finance teams.

In 2006-07, CF-Assist has entered work program agreements (WPA) with all the six regions to implement the CF-Assist country programs, with the anchor team providing technical inputs and monitoring. Within the regional teams, which supervise the implementation of country programs, a task team leader is responsible for each country program.

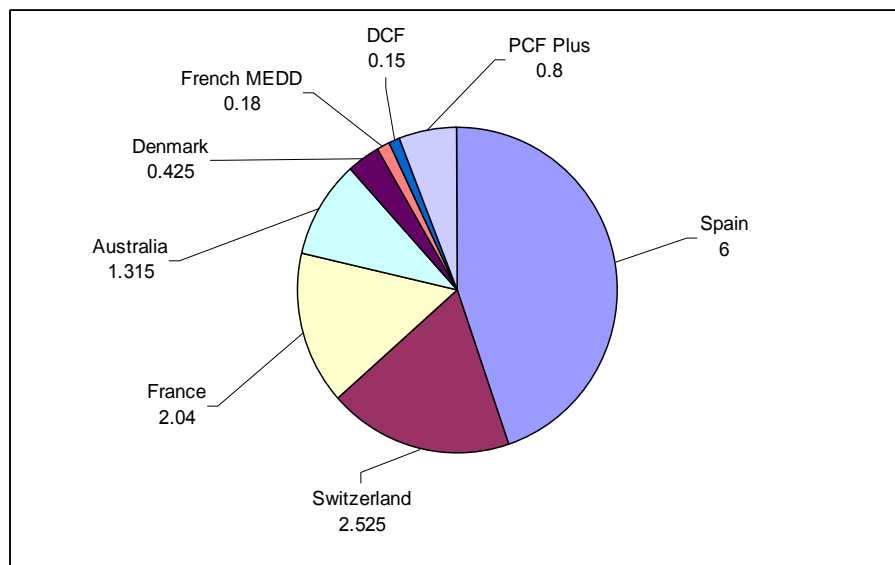
Chart 2. Management Structure of CF-Assist



2.3 Funding Sources

The CF-Assist resource envelop includes contributions from multiple sources (Chart 3) – direct donor funds, income from WB’s carbon fund management (including the former PCF *plus* program), and contributions from partners to specific activities. At the end of 2007 fiscal year, CF-Assist has a resource envelop of over \$13.4m, which included a new contribution of \$1.8m from the government of Switzerland. In addition, CF-Assist has leveraged resources of about \$6m from PHRD (Policy and Human Resource Development) – a World Bank internal program financed by Japan to implement specific country capacity building activities. Annex 5 provides details on distribution of CF-Assist funds.

Chart 3. CF-Assist Resource Envelope (Million US\$)



2.4 Implementation Strategy

CF-Assist represents an important thrust of the long term carbon finance business strategy for the World Bank as the market grows with its focus on both short term and long term capacity needs of the countries. It is structured in a way that enables capacity building on issues that may emerge as critical for a post-2012 climate mitigation regime.

Phased Approach. The CF-Assist program is designed to be modular in its delivery approach, and typically requires participating countries to complete three phases (although many may have completed phase one by the time they apply for assistance), with measurable indicators to trigger the undertaking of the subsequent phase. As work progresses, and countries become progressively strengthened, the grants increasingly become recipient-executed, with oversight and expert staff support from the Bank from the respective regions.

Objective Facilitation. As the carbon business grows internationally, the Bank continues to play an objective role to enable the full engagement of developing countries and economies in transition in the carbon market, and to assist in comprehensive upstream assistance to strengthen the carbon market liquidity in the long term and broaden its scale and impact in the developing world.

In this regard, CF-Assist pursues a conscious strategy to enable country participation in the broad carbon market, and not promote or develop CDM projects for just the Bank's carbon business. The projects that are developed as a result of the technical assistance provided under CF-Assist, are thus offered to the market, and the World Bank will become a 'buyer of last resort' only when the projects fail to find other buyers. As well, CF-Assist enhances capacity by working with experts at the national level, rather than relying solely on international experts.

Further, in order to ensure that the beneficiaries of the capacity building have access to the developments in the market and views of the different stakeholders, CF-Assist training programs follow a balanced approach by involving resource persons from across the Bank that are not directly responsible for purchasing emission reductions. For larger, regional events, CF-Assist training programs seek to involve

a cross-section of stakeholders – national representatives, private sector carbon buyers, representatives of sellers such as project developers and consultants – in addition to members of WB's carbon finance team.

Strategic Partnerships. In order to ensure effective implementation of the various components of its work program, CF-Assist develops partnerships with various global, regional and national organizations, both public and private. These partners provide a variety of inputs and services including joint organization of market forums, participation in capacity building, logistical support for in-country events, and implementation of technical assistance activities as local players. Annex 2 of the report provides a list of CF-Assist partners as of May 2007.

Country Selection: CF-Assist is a multi-donor single purpose trust fund, in which contributions are pooled and are not targeted by donors at specific countries or activities, and cannot be limited to specific firms or consultants. These multi-donor programmatic instruments were designed to increase the scope and impact of the Bank's operational activities, and are consistent with international trends to promote selectivity, harmonization and development effectiveness. However, CF Assist seeks to acknowledge donor areas of interest while ensuring that adequate funds are available for global operations, taking into account the probability that volumes of high quality assets can be delivered to the carbon market.

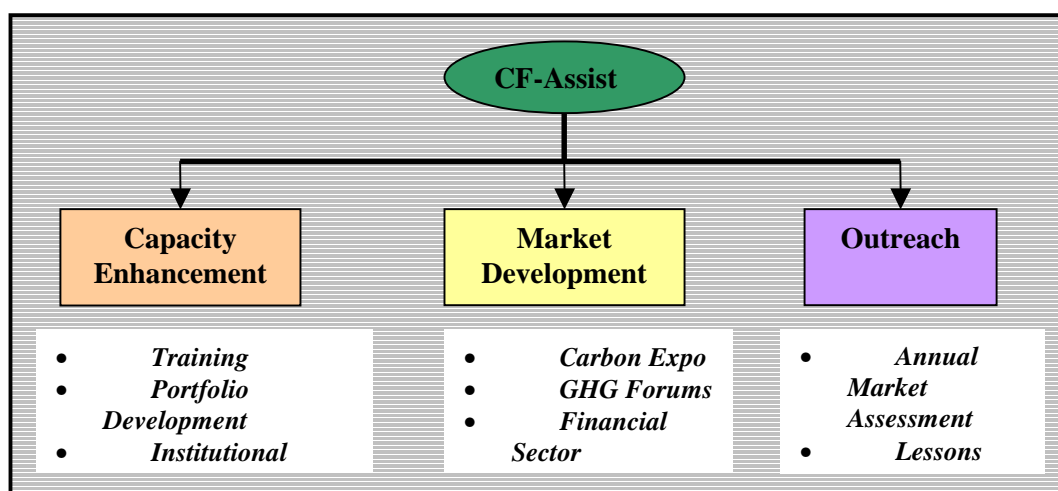
Host countries that are interested in participating in CF-Assist would endorse their request to the Program Manager, who has the responsibility for assessing the capacity building needs of a specific country in consultation with Bank regional staff, and to determine if sufficient funds are available to initiate a program. Countries are considered for support according to the following criteria: the country has ratified the Kyoto Protocol; the government has demonstrated support to participate in the carbon market; there is a willingness to devote some resources to the participation of the carbon market including contributions in kind; it is a borrowing World Bank member country; the Bank has a comparative advantage to undertake the proposed activities, and, the country is likely to deliver a relatively important volume of high quality assets to the carbon market.

The Program Manager will consult with donors on the type of technical assistance activities to be undertaken, the countries where these activities could be undertaken, and the technology focus. The work program to be prepared by management will take into account the outcome of these consultations. Funds contributed by the donors will be deployed as required by the Program Manager to undertake the technical assistance activities in the work program.

2.5 Work Components

CF-Assist's work program includes three main components (Chart 4):

Chart 4. Work Components



i) ***Capacity Building at Country/Regional Level***

The work under CF-Assist focuses mainly on three activities: portfolio development, training and assistance with institutional governance.

Under portfolio development, CF-Assist works with local intermediaries or partners to identify potential carbon finance projects, in particular to open up specific sectors to the opportunity of carbon finance. Depending on the previous level of activity in a country, this work may entail the development of national market assessment studies, analytical work to determine whether the rules of programmatic CDM can be applied in a specific sector, and the development of case studies that will enhance knowledge of carbon finance in the participating country. These activities are conducted with the help of national experts in order to promote the retention of capacity once the program in a specific country has been completed.

With regards to training, CF-Assist offers four basic modules in the training covering various aspects of climate change and carbon finance:

- Establishing effective designated national authorities
- Carbon finance project formulation
- Baseline and monitoring methodologies
- Negotiating fair and equitable emission reductions purchase agreements

These basic modules are tailored to the needs and requirements of specific countries based on their existing capacity levels. As mentioned earlier, these programs are conducted in a phased manner beginning with training in basic issues around climate change, and progressing to detailed technical and financial aspects of CF projects leading to actual preparation of projects.

In order to make these training programs current and relevant to the clients, CF-Assist team constantly updates the information and case study examples, and for this purpose, closely interacts with the Carbon Finance team in the Bank, and key external stakeholders.

An important outcome of these training programs is identification of actual carbon finance projects, which are converted into PINs and PDDs by project developers.

In addition to the country level workshops, CF-Assist has a provision to conduct regional workshops (e.g. Francophone Africa, Southern Africa, Latin America, etc.) to bring together stakeholders from different countries to exchange experiences and best practices in carbon market development.

Under institutional assistance activity, CF-Assist program works with country governments, and other national institutions to enhance their capacity including establishing and strengthening DNAs, developing procedures for project approvals and monitoring, promoting clear rules for the transfer of certified emission reductions, assisting local groups and consultants to become trainers, etc.

In developing capacity building programs at the national level, CF-Assist seeks to be responsive to needs of host countries. For economies-in-transition, for example, CF-Assist will assist the design of green investment schemes, that will enable host countries that have surplus assigned amount units to green them, i.e. ensuring that revenues lead to investments that promote sustainable development and lead to real emission reductions.

ii) ***Market Development Facilitation***

CF-Assist also targets a number of activities to facilitate development of the carbon market, such as regional learning events, analytical work to identify and remove barriers (for example in the transportation sector), and the increased participation of the financial sector in carbon finance.

As one of the leading players in the carbon market, the World Bank organizes a number of events that bring together key market stakeholders (public and private sector buyers, project developers, consultants, donors, etc.) not only to facilitate exchange on latest market developments, but promote actual project transactions. These events include Global Carbon Expo, Regional Carbon Expo, and Regional Greenhouse Gas Forums usually delivered in partnership with others such as the International Emissions Trading Association.

At the international level, some CF-Assist activities have targeted at identifying and removing entry barriers for specific asset classes. The first such activity has focused on the transportation sector, which contributes a significant portion of greenhouse gases in the atmosphere, but has been under-represented in the early carbon market. This ongoing sectoral initiative would identify market barriers for the development of carbon finance projects in this sector, conduct a global dialogue to understand and resolve key issues, and develop a number of project methodologies.

With regard to the financial sector, activities are targeted at promoting means to monetize emission reduction purchase agreements, disseminating information about how carbon finance reduces investment risks, and developing and disseminating tools to promote the increased participation of the traditional financial sector in the carbon market. It is under this set of activities for example that CF-Assist has promoted the development and implementation of sellers' carbon funds in Argentina and Mexico.

iii) ***Market Assessment and Outreach***

CF-Assist brings out an annual State of the Carbon Market report (released at the Carbon Expo every year) that provides latest information on status, outlook and trends in the carbon market. In addition, it will document lessons learnt from the Bank's experience as a buyer of emission reductions, and integrate them in its activities such as training modules and case studies.

Progress in these different activities during 2006-07 is discussed in Section 3.

2.6 Impact Indicators

CF-Assist envisages a 1-3 year engagement in the selected countries implementing programs in a phased manner. In each phase, the achievements are reviewed based on the indicators (Chart 4), before the next phase activities are taken up. The entry phase in programs would vary from country to country depending on the existing capacity.

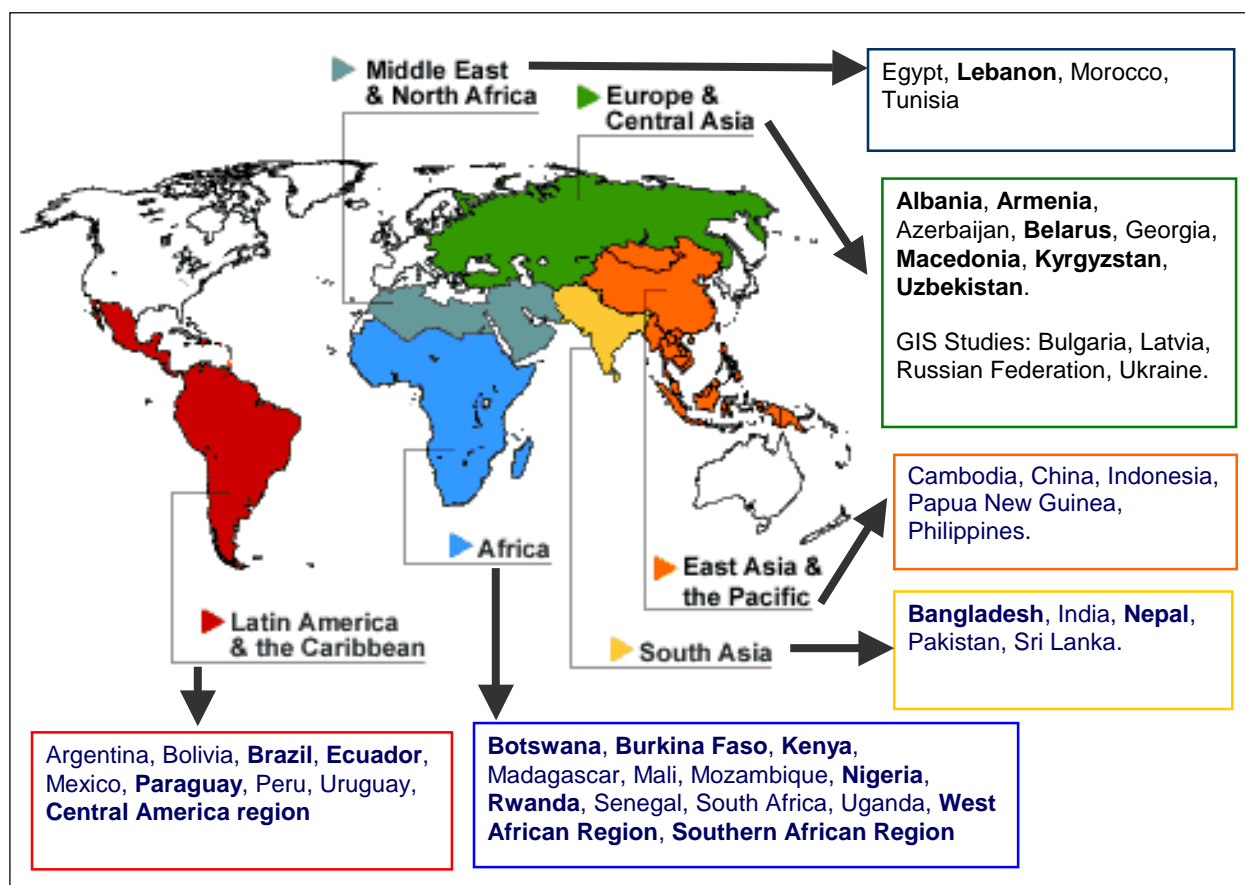
Chart 4. Impact Indicators		
<i>Phase I (1 year)</i>	<i>Phase II (1 year)</i>	<i>Phase III (2-3 years)</i>
Theme 1 : CDM/JI Governance		
✓ DNA/Focal Point w/criteria and procedures established	✓ Supportive regulatory framework developed ✓ Efficient procedures for project review and approval established	✓ Proactive development and marketing of national portfolio ✓ DNA established sustainable financing plan
Theme 2: Financial/Industry Engagement		
✓ Key financial experts trained	✓ Financial industry understands 'Rules of the Game' and instruments to hedge risks	✓ CF integrated into commercial investments and in concessional lending planning/decisions
Theme 3: Project Deal Flow		
✓ Key players in sector fully aware of CF, and some have established systems to assess potential project ✓ At least one PDD completed ✓ Stakeholders have identified and quantified assets in key sectors.	✓ At least one industry association or intermediary is engaged in carbon finance ✓ Potential projects continue to be identified autonomously ✓ At least one PDD validated, marketed, and ERPA negotiated ✓ Participation at Carbon Expo	✓ At least two projects annually producing ERs ✓ Self-sustaining deal flow ✓ Intermediaries engaged in CF on sustainable basis ✓ Ongoing Carbon Expo participation with partial or no subsidy
Theme 4: Knowledge Management		
✓ CDM/JI information, approval procedures, and project opportunities widely disseminated ✓ Key local experts trained to design and market projects with/to international experts	✓ At least one national workshop covering all CF topics in depth, including 'hands on' case studies and PIN development ✓ Knowledge sustained by web or long-distance learning ✓ National and regional networks established	✓ Local and regional experts are transferring knowledge to other countries/regions ✓ Durable mechanisms for knowledge management (e.g. certification, accredited DOE, etc.).

3.0 Activity Report 2006-07

3.1 Capacity Building Activities: CF-Assist Country Programs

The selection of countries supported by CF-Assist is based on a number of factors: formal requests by client countries, suggestions from the World Bank's Host Country Committee¹, and advice from the Donors Committee. A number of criteria are applied when selecting the countries: identification of specific capacity needs, estimated potential in a country for developing a project portfolio, commitment of a country to build capacity and develop the carbon market, etc. After two years of operations, capacity building programs exist in 45 countries, including 17 countries where programs have been launched during 2006-07 (Chart 5). CF-Assist activities are in different phases in different countries, with some still in planning. This section describes specific programs implemented and initiated in different regions during 2006-07

Chart 5: CF-Assist Country/Regional Programs²



¹ Host Country Committee (HCC) is an advisory body of 54 developing countries and economies in transition, which provides structured advice on World Bank's CF business and CF-Assist.

² In the chart, countries shown in bold are those where capacity programs have been initiated during 2006-07.

3.1.1 Africa Region (AFR)

CF-Assist launched a sub-program under its umbrella, known as *Africa Assist*, in order to address the serious lack of capacity in climate change area and the relatively less attention received till now by the African continent. By April 2007, country work programs had been negotiated and agreed with the carbon finance focal points in Madagascar and Senegal, where the activities are implemented under a collaborative arrangement between CF-Assist and the Japanese-funded PHRD (Planning and Human Resource Development) grant program. In addition, negotiations are well under way for terms of reference for another four country programs (Mali, Botswana, Burkina Faso, Kenya) and two regional programs focusing on the banking and financing sectors in Southern African region and Western African region.

Principal Tasks	Key output / Status
CF-Assist TA (Africa Assist)	
Madagascar	
1- Strengthening of DNA capacity and support to the development of a legal structure regarding CER ownership	In order to strengthen the national capacities, an international expert assisted a local legal expert to conduct the following activities: <ul style="list-style-type: none">To elaborate a study, October 2006, on legal aspects regarding the right of ownership, transfer and use of Emission Reduction with regard to CDM forestry projects.To animate a pre-negotiation workshop organized on 3-4 October 2006 on legal and contractual aspects of CDM projects.
2- CDM project Portfolio development	<ul style="list-style-type: none">Ongoing consultation on development of CDM project portfolio in three sectors: Energy, forestry, waste management. 6 PINs are under development by an international consulting group involving also a local consultant. The portfolio will be presented at Carbon Expo 2007.
3-Improvement of CDM knowledge	<ul style="list-style-type: none">Two workshops held in 2006 on CDM awareness among various stakeholders.A training workshop was held on 28 February to 2 March 2007 in Antisarbe. This first technical training is related to the assessment of CDM potential and development of a project portfolio in Madagascar. The workshop provided an opportunity to identify and stimulate new project ideas that could be included in the portfolio.
Botswana	
1- Strengthening of the newly established DNA including finalization of the national procedures for project evaluation and approval	<ul style="list-style-type: none">National procedures for project approvalLegal document establishing the DNA to be submitted at the national parliament.Overall presentation and preparatory workshops were held in Feb 2007 in Gaborone

Principal Tasks	Key output / Status
2- CDM project Portfolio development 3- Improvement of CDM knowledge 4- Promotion of CDM at national and global level	<ul style="list-style-type: none"> • Ongoing consultation on development of CDM project portfolio in three sectors: Energy, biomass and renewables. • Two workshops planned for FY 2007 to strengthen CDM awareness among various stakeholders. • Elaboration of a national strategy to promote CDM activities based on the examples of successful Host Countries (Brazil and/or India)
Kenya	
1- Strengthening of DNA including finalization of the national procedures for project evaluation and approval using a participatory approach. 2- Improvement of CDM knowledge	<ul style="list-style-type: none"> • National procedures for project approval <ul style="list-style-type: none"> ▪ Legal document establishing the DNA to be approved by the Minister of Environment and “gazetted”. ▪ Two workshops planned for FY 2007 to support the discussion and the finalization of the DNA’s strengthening procedures
CF-SEA Partnership	
Mali	
Support to CF-SEA Partnership	<ul style="list-style-type: none"> • Organization in collaboration with UNEP-RISO and CDCF+ of the third and final national workshop in Mali on Promoting Sustainable Energy Services through Carbon Finance. October 2006. 10PINs were presented at this workshop. • Continued institutional support to DNA
PHRD Grants	
Senegal	
The implementation of PHRD grant (2005-07)	<ul style="list-style-type: none"> • Training workshop on implementation of CDM held in 31 August and 1 September 2006 in Dakar. • Training workshop was held 21-22 February 2007 in Saly Portudal. The workshop was organized jointly with CEFEB/AFD and focused on methodological and technical aspects of CDM projects in two sectors: Forestry and Energy. The workshop provided an opportunity to finalize the CDM project portfolio (17 PINs) in presence of project developers and local consultants in order to bring these projects to CarbonExpo2007
Mozambique : To start right after the signing ceremony planned second quarter 2007	
1- Support for DNA to set up a portfolio of carbon offset projects through provision of technical advisory services and	<ul style="list-style-type: none"> • Institutional framework developed • Legal guidelines • Project approval procedures

Principal Tasks		Key output / Status
workshops		
2- Capacity and partnership building (private business and investors, local communities, civil society and public institutions)		<ul style="list-style-type: none"> • Focus and tailored workshops and training programs
3- Development of a CDM project portfolio and associated documents (baseline methodologies)		<ul style="list-style-type: none"> • CDM projects developed in the most promising sectors
Uganda		
1-	Support DNA for developing a portfolio of carbon offsets projects	<ul style="list-style-type: none"> • Set of procedures for CDM project selection and approval • Theme-based workshops and guidelines to build understanding of the requirements and issues for carbon finance project development • Targeted Technical Assistance to DNA
2-	Partnership building with private sector and communities	<ul style="list-style-type: none"> • Under finalization
3-	Project development through support of up stream project preparation	<ul style="list-style-type: none"> • Under finalization
Regional programs		
Southern Africa	Mainstreaming Carbon Finance through targeted capacity building among banking and financial sectors at the regional level	<ul style="list-style-type: none"> • Co-sponsor of the regional training event Carbon Finance Investment Forum-African Bankers in partnership with UNEP Risoe May 2007, Johannesburg • Regional workshop planned for DNAs of the Southern African Development Community (SADC) in Gaborone in partnership with the Development Bank of Southern Africa.
Western Africa		<ul style="list-style-type: none"> • In house capacity building program for senior staff from BOAD on the Kyoto Protocol and CDM opportunities – in collaboration with the AFR and CF Unit at the World Bank (4 people trained in 2006-2007). Main sector of interest is energy.

Regional Highlights

- **Carbon Finance Day Event at COP/MOP2:** CF-Assist and World Bank team, in collaboration with IETA, organized a two-day parallel event at COP/MOP2 in Nairobi on 13-14 November with special focus on Africa. The event, which was designed as a platform for African countries to showcase the CDM potential, included a conference and exhibition. The event attracted over 440 registered participants, and several international experts as resource persons. Around 20 African DNAs and project developers displayed potential projects and conducted business negotiations with European buyers.
- **Special focus on forestry sector:** CF-Assist provided legal assistance (in the form of international and national experts) to the Government of Madagascar on the preparation of the negotiations for an ERPA recently signed for acquisition of carbon credits generated by the Andasibe-Mantadia Biodiversity Corridor Reforestation and Conservation Carbon Project (5,000 hectares), which falls under the umbrella of the Third Environment Program of the Republic of Madagascar. The ultimate goal was to ensure that the ownership rights (carbon credits) are well secured on both sides (the local landholders/communities and the project management entity), prior to entering ERPA negotiations.
- **Collaboration with CEFEB:** CF-Assist has entered into a memorandum of understanding with CEFEB, under the aegis of AFD, to implement Africa Assist. CEFEB will contribute financial and technical resources to implement specific capacity building programs in select countries.
- **Growing interest in carbon market:** CF-Assist received several formal requests for capacity building support from African countries. Preliminary exchanges have started regarding the type of assistance required including the preparation of project portfolios. There is interest from private sector also, with some developers approaching for possible capacity building support in negotiation of CDM contracts and other due diligence to be performed. Efforts are on to address these requirements.

3.1.2 Middle East & North Africa (MNA)

Three country work programs had been negotiated and agreed with the carbon finance focal points in: Morocco, Lebanon and Tunisia. In addition, negotiations are under way to develop terms of reference for Egypt and Yemen.

Principal Tasks	Key output / Status
CF-Assist TA (Africa Assist)	
Morocco	
1- Strengthening national capacities and improvement of CDM knowledge 2- CDM Project Portfolio development.	<ul style="list-style-type: none"> ■ CDM Workshop organized in November 2006 in collaboration with METAP. ■ Training organized on “Forestry sector and CDM” on March 5, 2007 in Rabat to reinforce capacities of the targeted group on the technical elements of afforestation/reforestation processes under CDM. ■ Development of a new financial scheme for Moroccan Municipalities (with FEC) is under discussion. ■ Several Project Ideas Notes (PIN) under development
Tunisia	
1- CDM Project Portfolio development. 2- Strengthening national capacities and improvement of CDM knowledge.	<ul style="list-style-type: none"> ■ CDM Workshop organized in November 2006 in collaboration with METAP. ■ Training organized on “Forestry sector and CDM” on February 25, 2007 to reinforce capacities of the targeted group on technical elements of the afforestation/reforestation processes under CDM. ■ Consultants recruited to develop CDM projects in three sectors: energy, forestry, transport. 3 PINs delivered and 2 new PINs underway
Egypt	
Work program under discussion with the DNA.	<ul style="list-style-type: none"> ■ CDM Workshop organized in November 2006 in collaboration with METAP.
Lebanon	
National program agreed on recently and includes two components: 1-DNA support & capacity building 2-Identification of projects	Details to be finalized in May 2007
Yemen	
A preliminary capacity assessment has been initiated.	<ul style="list-style-type: none"> ● In collaboration with the Ministry of Water and Environment, a workshop is planned on 25 May in Sana’a.

Regional Highlights

- **Raising awareness for CDM policy makers:** CF-Assist collaborated with the Mediterranean Environmental Technical Assistance Program (METAP) of the World Bank to organize two successful CDM workshops in Morocco and Tunisia in November 2006. The aim was to enable the key governmental institutions such as ministries of Finance, Planning, Economy, Electricity and Energy and Industry, representatives of the Designated National Authorities (DNAs) as well as key municipalities involved in the CDM process to understand the opportunities and the economic benefits of participating in the CDM regime.
- **Regional CDM Forum.** The first MNA Regional Carbon Forum held in Rabat on 4-5 April 2007 has been a big success with 86 participants, half of them from buyers in Europe and Japan.
- New target countries are Jordan and Algeria.

3.1.3 South Asia (SAR)

By November 2006, a country work program was implemented in Sri Lanka, and preliminary capacity assessment activities have been completed in Nepal and Bangladesh. In Pakistan, a PHRD project is under implementation with support from CF-Assist. In India, work has been initiated to launch a multi-sector portfolio development for CDM projects, with active involvement of the public and private sectors.

Principal Tasks	Key outputs/Status
CF-Assist TA	
Bangladesh	
Awareness Creation and Identification of CF potential in different sectors.	<ul style="list-style-type: none"> Two training workshops – one each for private sector and public sector – held in August 2006 Project opportunities identified in the sectors of biomass waste, brick industry and energy
India	
Identification of CDM potential in large public sector industries.	<ul style="list-style-type: none"> Private industry delegation sponsored to Carbon Expo, May 2006; Joint public-private sector delegation sponsored to Carbon Expo Asia, October 2006. Introduced CF module in WBI national capacity building program in waste management sector. October 2006 Agreement reached to support Indian Renewable Energy Development Agency to build capacity as a CF intermediary Negotiations under way to develop public sector CDM projects in transport, power, energy efficiency, waste management and railways
Nepal	
1- Identification of CDM potential in specific sectors	<ul style="list-style-type: none"> Training workshop held, August 2006
2- Capacity assistance to DNA	<ul style="list-style-type: none"> Capacity requirements discussed with DNA; formal request for support awaited
Pakistan	
1- Institutional capacity building	<ul style="list-style-type: none"> PHRD project under implementation; one training workshop held.
2- Identification of CDM portfolio	<ul style="list-style-type: none"> Potential identified in power sector.
Sri Lanka	
1- Development of a national carbon finance market strategy.	<ul style="list-style-type: none"> A national strategy document is under development. First draft has been widely circulated among all the key stakeholders. The final document is expected in

Principal Tasks	Key outputs/Status
2- Strengthening of DNA	<p>May 2007.</p> <ul style="list-style-type: none"> To pilot a CF operation using the programmatic approach Local consultants assisting DNA in development of approval/monitoring procedures, designing appropriate DNA structure. The institutional review is ongoing, the gaps and capacity building requirements are being identified. Two steering committee meetings held in July 2006 and January 2007 where the strategy was presented.
3- Training program for private sector stakeholders	<ul style="list-style-type: none"> A training workshop on implementation of CDM in Sri Lanka held in September 25, 2006. Several public sector officials trained and procedures for their involvement in CDM process streamlined.
4- Training program for private sector stakeholders	<ul style="list-style-type: none"> Workshop on carbon finance market development held on August 4-5, 2006. A workshop on PIN development held on February 16, 2007. At least 20 PINs and 5 PDDs generated as a direct output of these trainings.

Regional Highlights

- **Sri Lanka** is a strong example of a strategic approach for development CDM potential in the country with active involvement of all the relevant stakeholders.
- In **India**, which has so far led the CDM market in small scale projects from the private sector, the key challenge is to unlock the huge potential in large public sector industries such as transport, power, railways and waste. A project development initiative is launched in all these sectors.
- In **Nepal** and **Bangladesh**, the emphasis is on utilizing the CDM potential of small-scale projects through bundling approach.

3.1.4 East Asia & the Pacific (EAP)

Country programs in East Asia are amongst the earliest launched under CF-Assist with actively ongoing programs in Cambodia, China, Indonesia and the Philippines. In Papua New Guinea, the program is currently awaiting country clearance.

Principal Tasks	Key outputs/Status
CF-Assist TA	
Cambodia	
1- Identify CDM capacity, and establish DNA 2- To establish a Cambodian Carbon Facility	<ul style="list-style-type: none"> • Consultant working with DNA in institutional strengthening and development of approval/ monitoring procedures • A proposal made to create a Cambodia Carbon Facility with focus on enabling equitable and transparent access to carbon finance for projects addressing climate change mitigation with high sustainable development attributes. • A guide was developed by GERES Cambodia to help commercialized stove project developers obtain carbon finance. The guide streamlines methodology and monitoring plan and provides guidance on the information that is required for successful validation of fixed stove project activities.
China	
1. Project development in priority sectors 2. CDM knowledge management	<ul style="list-style-type: none"> • Methodologies developed on energy efficiency and chemical industries • Strategic business plan under preparation for use of CDM Sustainable Development Fund • Promotion of clean energy and industrial development projects in poorer parts of the country
Indonesia	
1- Multi stakeholder capacity building in CDM. 2- Awareness raising activities.	<ul style="list-style-type: none"> • To share information and lessons learned on the CDM, two workshops held: <ul style="list-style-type: none"> ➢ Workshop on renewable energy/energy efficiency and the CDM, September 2006, co-sponsored by NEDO. ➢ Public Forum on climate change and Indonesia. (Nicholas Stern as the main resource person) • A press conference on the first CDM payment is planned for the second quarter of 2007. • A report on Indonesia and climate change is under development in two languages: English and Bahasa.
Philippines	

Principal Tasks	Key outputs/Status
<p>Technical Assistance program is based on two complementary strategies :</p> <ul style="list-style-type: none"> • Explore potential CDM sectors • Explore umbrella projects in partnership with traditional WB intermediaries. 	<ul style="list-style-type: none"> • Sector studies undertaken to identify the untapped potential and specific project opportunities in the biofuels, industrial and urban waste management sectors. • Advisory support provided to intermediaries focusing on those groups the WB traditionally works with.
Papua New Guinea	
Identify CDM potential and capacity, and establish DNA	<ul style="list-style-type: none"> • Program awaiting government clearance.

Regional Highlights

- Focus in **China** on creation of decentralized capacity to support CDM development given the vast and wide-spread potential for CDM projects.
- CDM Fund in **China** is an innovative mechanism that utilizes carbon income from industrial gas projects (HFC23, N₂O) to support sustainable development projects in clean energy.
- Key target in **China** in 2007-08 will be to help CDM development in the large potential sector of IGCC power generation technologies.
- New target countries are Vietnam and Mongolia.

3.1.5 Europe & Central Asia (ECA)

CF-Assist worked with WB's Europe and Central Asia Region (ECA) on a jointly funded Regional Work Program, to help build practical capacity and project development activities in ECA countries during FY 2007. The regional work program has taken into account the incipient development of carbon market in many ECA countries, and thus focuses in (i) catalyzation of domestic CDM policy dialogue, (ii) strengthening key CDM institutional arrangements, (iii) fostering development of CDM project pipeline.

Principal Tasks	Key outputs/ Status
<i>South Caucasus : Armenia, Azerbaijan, Georgia</i>	
1- Facilitation of carbon policy dialogue 2- Strengthening of DNA 3- CDM Project Portfolio development	<ul style="list-style-type: none"> • Preliminary workshop held in Georgia and Azerbaijan. • Set of national workshops on the role of "Designated National Authority" and "Small scale project development under CDM" were held: <ul style="list-style-type: none"> ➤ Armenia: 11 December, 2006. ➤ Georgia: 13-14 December, 2006. ➤ Azerbaijan: 15 December, 2006. • CF website with all materials from ECA outreach developed. • Bilateral meetings were held with developers, governments and donors to discuss targeting of workshops.
<i>South East Europe : Albania, Macedonia</i>	
1- Facilitation of carbon policy dialogue. 2- CDM Project Portfolio development	<ul style="list-style-type: none"> • A workshop on accessing carbon finance as well as a round table for the media university students and NGOs were held: <ul style="list-style-type: none"> ➤ February 28 – March 01, 2007 in Albania ➤ March 5-7, 2007 in Macedonia. • In parallel with these workshops, a clinic for project developers across all sectors to brainstorm project ideas and integration of carbon finance were held. Several projects with immediate potential identified
<i>Central Asia : Kyrgyz Republic, Uzbekistan</i>	
1- Facilitation of carbon policy dialogue. 2- CDM Project Portfolio development	<ul style="list-style-type: none"> • A workshop on accessing carbon finance and the Role of Designated National Authority as well as a round table for the media and NGOs were held : <ul style="list-style-type: none"> ➤ February-5-7, 2007 in Kyrgyz Republic ➤ January 30 – February 01, 2007 in Uzbekistan • In parallel with these workshops, a clinic for project developers crossing all sectors in parallel with workshop to brainstorm project ideas and integration of carbon finance: 31 projects ideas

Principal Tasks	Key outputs/ Status
	<p>discussed and 8 found to have potential to develop immediately.</p> <ul style="list-style-type: none"> • MOU signed with Uzbek government .to support them in project identification for energy, oil and gas and municipal sectors.
<i>CIS : Belarus</i>	
<p>1- Capacity building 2- DNA strengthening</p>	<ul style="list-style-type: none"> • Capacity building workshop held on March 5-7, 2007

Regional Highlights

- The primary focus in the region is on strengthening local institutions (DNAs) and identifying project portfolios. In Central Asia, where countries have just entered Kyoto regime or yet to do so, the support will be for establishing and strengthening DNAs.
- Next target countries are Kazakhstan, Croatia and Moldova

3.1.6 Latin America & the Caribbean (LAC)

By April 2007, country work programs had been negotiated and agreed with the carbon finance focal points in six partner countries: Argentina, Bolivia, Brazil, Mexico, Peru and Uruguay. Of these, two country programs, namely Brazil and Bolivia are a blend between a PHRD grant and a CF-Assist program. In addition, negotiations are well under way for terms of reference for another two country programs (Ecuador, Paraguay) and a regional program in Central America.

Country WP	Main expected outcomes	Status / key outputs
1. Country Work Programs (CWP)		
CF-Assist Technical Assistance		
Argentina	<ul style="list-style-type: none"> Design of Carbon Facility in Argentina. Strengthening of DNA capacity for project evaluation and approval. Expansion of CDM Project Portfolio in priority sectors Development of ACF marketing strategy. 	<ul style="list-style-type: none"> MOU signed with Argentine DNA (Secretary of Environment) Argentine Carbon Fund (ACF) design assessment carried out. Ongoing stakeholder consultation for final design. ACF side event during Expo 07
Mexico		<ul style="list-style-type: none"> Work Programs agreed with Bancomext, Mexican DNA (Secretary for Environment) and CMM. MoUs signed. Mexican Carbon Fund (FOMECAR) design assessment carried out. FOMECAR's technical assistance branch already launched.
(i) Bancomext	<ul style="list-style-type: none"> Design of Carbon Facility in Mexico. 	
(ii) Centro Mario Molina (CMM)	<ul style="list-style-type: none"> Development of CDM methodologies and project portfolio. 	
(iii) Other	<ul style="list-style-type: none"> Technical assistance for CDM project origination and development 	
Uruguay	<ul style="list-style-type: none"> Revision of domestic legal framework related to carbon transactions. CDM Project Portfolio development (incl. pCDM) Capacity building of Local Governments Improvement of CDM knowledge management. 	<ul style="list-style-type: none"> CWP agreed with DNA (Secretary for Environment). Local consultants appointed to support DNA for (i) project assessment and approval procedures, and (ii) CDM portfolio development and marketing.
PHRD Grants		
Bolivia	<p>"Support Carbon Finance Transactions in Bolivia":</p> <ul style="list-style-type: none"> CDM Project Portfolio development in Energy and Forestry sectors. Training program for local project developers. 	<ul style="list-style-type: none"> PHRD grant under implementation since August 2006. Local consultants appointed to support CDM Office in portfolio identification, development and marketing.

Country WP	Main expected outcomes	Status / key outputs
2. CWPs with local partners		
CF-Assist Technical Assistance		
Regional: Central America	<ul style="list-style-type: none"> Strengthening of DNA capacities in Central America (4-6 countries). Development of sector-scoped baselines and project portfolio 	<ul style="list-style-type: none"> Regional Work Program with regional partner CCAD (Comision Centroamericana de Ambiente and Desarrollo). Agreement to be signed in May 2007
Ecuador	<ul style="list-style-type: none"> Awareness raising and capacity building of domestic financial sector. CDM Project Portfolio expansion: waste, agro-industries, oil and gas sector. Support to domestic CDM knowledge management and international promotion. 	<ul style="list-style-type: none"> CWP agreed with CDM Office (CORDELIM) and DNA (Ministry for Environment). MOU to be signed before June 2007.
Paraguay	<ul style="list-style-type: none"> Strengthening of DNA capacity Pilot CDM Project Portfolio, plus marketing strategy. Technical workshops on project development 	<ul style="list-style-type: none"> CWP agreed with DNA (Secretary for Environment). MOU to be signed before June 2007.
Peru	<ul style="list-style-type: none"> Development of sector-scoped baselines & CDM Portfolio expansion: Energy, LFG, Forestry. Support to domestic CDM knowledge management and international promotion. 	<ul style="list-style-type: none"> CWP agreed with Peruvian CDM Office (FONAM). MoU to be signed before June 2007..
PHRD Grants		
Brazil	<p>PHRD grant “Strengthening Brazilian Carbon Market institutions”:</p> <ul style="list-style-type: none"> Development of Brazilian Carbon Facility (incl. Auction Platform). Participation of national financial intermediaries in carbon market. 	<ul style="list-style-type: none"> Work plan agreed with Brazilian Mercantile & Futures Exchange (BM&F). Activities initiated in January 2007.

Regional Highlights

- **Development of new CF vehicles:** CF-Assist is supporting the design and establishment of Carbon Facilities in Argentina (Secretary of Environment and Sustainable Development) and Mexico (Bancomext). These innovative vehicles, managed by the host countries, will comprehensively address key domestic barriers (including limited access to project finance) for ER generation and delivery and hence will provide a substantial contribution for an increased participation in the carbon market. The technical advisory and promotional branch of FOMECAR - the Mexican Carbon Fund - , was already launched in November 2006, while ongoing negotiations with fund participants will determine the launch of the financial branch early 2007. Other countries in the region (e.g. Brazil, Peru) have expressed interest to explore similar domestic facilities in the framework of country work plans. Similarly, the work in Brazil focuses on developing an Auctioning Platform for CDM projects.
- **Regional forum to foster carbon business development:** CF-Assist has now joined IETA, UNEP and OLADE (Latin American Energy Organization) in the Latin American Carbon Forum partnership. The next LAC Carbon Forum will take place in Peru in September 2007.
- **Critical support for networking & promotion at global level:** An increased number of Latin American CDM entities (DNAs, CDM Promotion Offices, IPOs) have benefited from CF-Assist support for project portfolio/host country promotion and marketing activities. In particular, CF-Assist enabled participation *as exhibitors* of 15 countries from LAC region during Carbon Expo 2006. Assistance has been also provided for other tasks such as technical consolidation of PIN/PDD portfolios and production of promotion materials for outreach in other carbon forums.

3.2 Market Development Facilitation

3.2.1 Global Carbon Expo 2006

The Carbon Expo – third in the annual series -- a unique business platform for bringing together buyers and sellers, and other stakeholders in the emerging carbon market, was held in Cologne, Germany, from May 11-13, 2006, in cooperation with IETA and Koelnmesse. Building on the previous year's success, and dramatically growing scale and experience in the marketplace, the Expo attracted 2035 participants (including over 150 journalists) from 92 countries. There were 185 exhibitors (a 168% increase from the previous year) from 50 countries presenting their work modalities, methods and technologies for reducing carbon emissions and promoting trading in emissions rights and certificates, accompanied by 29 high level representatives from the countries that offered these assets. Over 100 business deals for the purchase of carbon emissions reductions from the developing countries and economies in transition were reached and/or advanced during the event. Carbon Expo remains a key activity for CF Assist, and provides a broad venue for developing country participants to market their projects to the maximum number of buyers while learning more details about project types and new information in the evolving carbon market. CF-Assist has a legal commitment to deliver annual Carbon Expos to be held in Cologne, organized in partnership with IETA and Koelnmesse through 2008.

3.2.2 Regional Carbon Forums

(i) Carbon Finance Forum in the Middle East & North Africa region, 4-5 April 2007

The First carbon forum for the Middle East North Africa region took place in Rabat on April 4-5, 2007 and gathered 46 participants from Algeria, Egypt, Morocco, Tunisia and 40 carbon buyers and

consultants, in addition to representatives from Development Organizations : UNDP, GTZ, UNEP RISO, UNIDO. The Forum was hosted by the Moroccan Ministry for Territory, Water and Environment.

The main objectives of this Forum were to: (i) create a knowledge platform to inform and update project developers, sellers, and other stakeholders in this region of the latest status and trends of the carbon market as well as to exchange lessons learned; (ii) help beneficiary countries in marketing their carbon assets and to promote their CDM projects portfolio; (iii) create opportunities for buyers to directly negotiate transactions with a range of project developers, and (iv) allow participants to showcase GHG emissions mitigation solutions and specialized services offered. The Forum offered an exhibition space for 15 carbon buyers and sellers to display their products. Several project ideas were presented the Forum, and barriers to promote carbon market in the region were identified and possible solutions discussed.

(ii) Carbon Finance Forum in Africa, 13-14 November 2006

At the request of the African delegation of the Host Country Committee, CF-Assist, in collaboration with IETA, organized a parallel event on carbon finance at the Conference of Parties (COP/MOP2) in Nairobi on 13-14 November. The objective of the event was to facilitate the showcasing of CDM potential in Africa. The event included a two-day conference and exhibition. Over 440 registered participants attended the event, including 30 exhibitors comprising African DNAs, private developers and European carbon buyers. Several international experts participated as resource persons in this successful event.

(iii) Carbon Expo Asia, 26-27 October 2006

CF-Assist and World Bank collaborated with the IETA and Koelnmesse to organize the first regional Carbon Expo for Asia on 26-27 October in Beijing, China. The event was co-sponsored by the Government of Italy, Asian Development Bank (ADB), Japan Bank for International Cooperation (JBIC) and the European Union (EU). The Government of China acted as the local host through the Ministry of Finance, Ministry of Science and Technology and National Development and Reform Commission (NDRC). The event was an outstanding success with 1062 registered participants from 44 countries and 107 exhibitors.

Nairobi Framework

CF-Assist, along with CDCF+ of the Carbon Finance Unit (CFU), represents the World Bank in implementing the Nairobi Framework, announced at COP/MOP 2 in November 2006. This initiative – with UNFCCC, UNDP, UNEP and AfDB as other partners – focuses on capacity enhancement in Africa for CDM market development. As part of the initial activities under the Framework, WB is carrying out an Africa-wide assessment of CDM potential in different sectors.

3.2.3 Sector Assessment Studies

In order to identify potential and promote CDM project activities in specific sectors, CF-Assist has been supporting sectoral assessment at global, regional and national level. Currently, a global assessment is under way for transportation sector, and two regional assessments are planned under Africa Assist.

i) Transportation Sector

The objective of this study is to bring transport sector projects to the carbon market. In addressing some of the current bottle-necks and difficulties with CDM projects in this sector, the study has the following objectives:

- to enhance opportunities for transport sector projects by developing a diversified portfolio of applicable methodologies for transport projects so that future projects may benefit by applying these new methodologies;
- to document lessons learnt, including barriers encountered related to the baseline, additionality, data collection, leakage, institutional capacity; and means by which barriers were overcome; and
- to disseminate the lessons learnt and facilitate dialogue amongst experts to discuss opportunities and constraints for the application of different CDM methodologies in the transport sector

Through a multi-step solicitation and evaluation process, an international firm -- Grutter Consulting -- was selected, and started working on the assessment and development of CDM Methodologies for the Transport Sector.

A call for PINs of transport projects which require the development of a new methodology was launched in early 2007. This is an 18-month study at the end of which at least 2-3 new project methodologies will have been developed.

ii) Cement Sector in Africa

The main objective of this assessment is to identify the barriers encountered by project developers in the cement industry and develop recommendations for addressing them. The study will look at all existing project proposals and identify new opportunities in four main areas for CO₂ reduction: energy substitution with renewable energy sources, fuel switch with biomass, energy efficiency, and clinker substitution. Consultation with cement industries and other stakeholders is currently under way, and the study is planned to be launched in the second quarter of 2007.

iii) Bio-fuels Sector in Africa

Bio-fuels sector – ethanol, bio-diesel, cogeneration – is an emerging sector in Africa with vast potential. This sectoral assessment will look at both eligible CDM projects in the production of bio-fuel from esters and production of ethanol from sugar-based products. Apart from making an estimate of the overall potential, the study will make recommendations to overcome the technical and methodological barriers. The study is expected to commence in the second quarter of 2007.

3.3 Knowledge Management and Outreach

3.3.1 *State of the Carbon Market*

CF-Assist has supported the preparation of an annual market report entitled “State and Trends of the Carbon Market”. This report – compiled by an internal expert team of the World Bank -- outlines the latest market information on pricing and volumes as well as market trends, and is integrated in training modules regarding price determination. The 2006 market report was released at Carbon Expo, Cologne in May, and a six-month update of market information was disseminated at the Asian Carbon Expo in Beijing in October 2006. The next report will be released at the Carbon Expo in May 2007.

3.3.2 *Validation, Verification and Monitoring (VVM) Manual*

CF-Assist supported a study, to be undertaken by Det Norske Veritas Certification (DNV), a leading DOE, to update the current VVM manual. This update will:

- (a) Solicit input from other DOEs, coordinate input from this to the new VVM version, assess the current validity of the present version of the VVM and perform editorial work needed for the consolidated and updated version
- (b) Conduct and participate in two capacity building courses aiming to promote and build capacity among applicant entities and other DOEs when a new version of the manual is completed, by qualified tutors from DNV, and
- (c) Prepare and present presentations of agreed courses, with technical support from World Bank Institute.

The contract for his study was issued in November 2006, and the work has commenced. The first workshop to discuss the results is scheduled for the second quarter of 2007 in Malaysia, and another workshop is planned in Europe for the second half of 2007.

3.3.3 *Host Country Committee Meetings*

CF-Assist sponsors an annual meeting of the Host Country Committee, comprising members of non-Annex I countries, which provides advice to the World Bank on its carbon finance program. This meeting not only serves as a mechanism to receive feedback and advice on CF-Assist activities, but also as a knowledge-sharing event, where lessons learnt are discussed. The 2006 Annual HCC meeting was held at Cologne, Germany on May 8-9, in conjunction with the Carbon Expo, with 45 participants, where a progress report of CF-Assist was presented and its work program discussed. Another HCC meeting was held on 12 November, 2006 at Nairobi where 20 host countries were represented. Among the topics discussed at the meeting were some of the emerging issues such as post-2012 regime, carbon capture and storage, and non-renewable biomass. The next annual HCC meeting is planned on 01 May, 2007 at Carbon Expo Cologne and over 75 participants are expected to attend.

3.3.4 *Donor Meeting*

The donors to CF-Assist meet on a yearly basis to discuss progress made and provide advice on the work program. The donors meeting in FY06 was held on May 9 in Cologne, prior to the Carbon Expo. Valuable suggestions were received at this meeting, including the recommendation to increase the frequency of interaction with donors. Accordingly, meetings and discussions were held on a bilateral basis with CF-Assist donors, and a mid-term progress report was submitted to act as the basis for these discussions. CF-Assist continues to benefit from focused advice from various donors.

3.3.5 *Outreach*

During 2006-07, CF-Assist launched its own website (www.worldbank.org/wbi/cfassist), which carries all the relevant information (including upcoming events), contacts, and important documents related to the program (see the picture below). Journalist training programs were held at Carbon Expo in Cologne and Expo Asia in Beijing, where over 200 journalists got exposure to carbon market issues. Two pamphlets – one of CF-Assist and another for Africa Assist – were produced, and distributed at various events.

The World Bank

Home • Site Map • Index • FAQs • Contact Us

About
Countries
Data & Research
Learning
News
Projects & Operations
Publications
Topics

Carbon Finance Assist

Search

Home > Learning > WBI Learning Programs > Environment and Natu... > Carbon Finance Assist

Email
Print

English
Español
Français

About Us
News & Announcements
Events
Training/Learning
People/Community
Resources/Links

Site Tools
Contact Us
FAQs
Home

Carbon Finance Assist

The primary developmental objective of CF-Assist is to ensure that developing countries and economies in transition are able to fully participate in the flexible mechanisms defined under the Kyoto Protocol, and benefit from the sustainable development gains associated with such projects.

Through its multiple activities, CF-Assist helps developing countries and economies-in-transition to facilitate creation and management of carbon assets, reduce the costs of participation, and help client countries achieve their sustainable development goals while contributing to global environmental benefits. The objectives of CF-Assist as such are consistent with Bank priorities and sectoral strategies, and also with the Millennium Development Goals (MDGs).

To address these challenges, the CF-Assist Program is organized according to the topics listed in the Shortcuts section at the right.

Capacity Building at Country & Regional Level: The CB work under CF-Assist focuses mainly on three activities: portfolio development, training programs and assistance with institutional governance [More...](#)

Market Assessment and Outreach: CF-Assist brings out an annual market assessment report (released at the Carbon Expo every year) that provides latest information on status, outlook and trends in the carbon market [More...](#)

Market Development Facilitation: CF-Assist targets a number of activities to facilitate development of the carbon market, such as regional learning events, analytical work to identify and remove barriers and the increased participation of the financial sector in carbon finance [More...](#)

Feature Activities

- [Africa Assist](#)
- [Transport Study](#)
- [Host Country Committee](#)
- [HCC](#)

Carbon Market State

- [Featured Publications](#)

Related Links

- World Bank Carbon Finance Unit Website
- World Bank Environment Website
- United Nations Framework

3.4 Impact Analysis

3.4.1 Stakeholder Participation

During 2005-06, CF-Assist conducted a number of events, as described above, attended by different categories of professionals (public sector officials, project developers, consultants, financial institutions, etc.). Over 4100 people participated in the CF-Assist events including Carbon Expo, GHG Forums and country/regional training programs (Chart 6). Further, more than 2000 professionals directly benefited from various training programs conducted under CF-Assist (Chart 7 provides a regional distribution of trainees). Annex 3 provides a list of countries where the training programs took place.

Chart 6. Event Participation (5295 people)

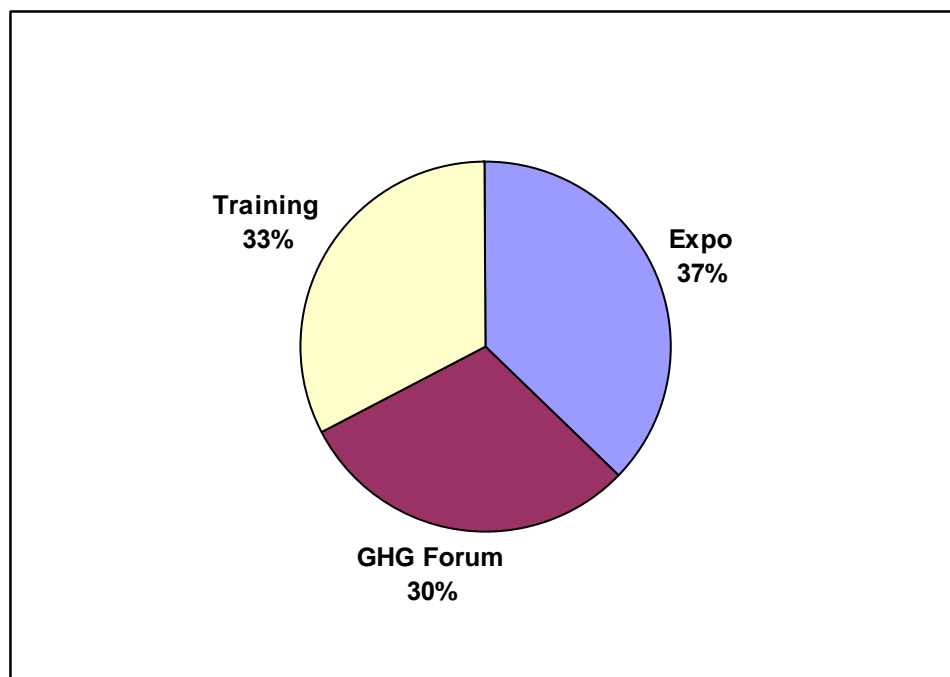
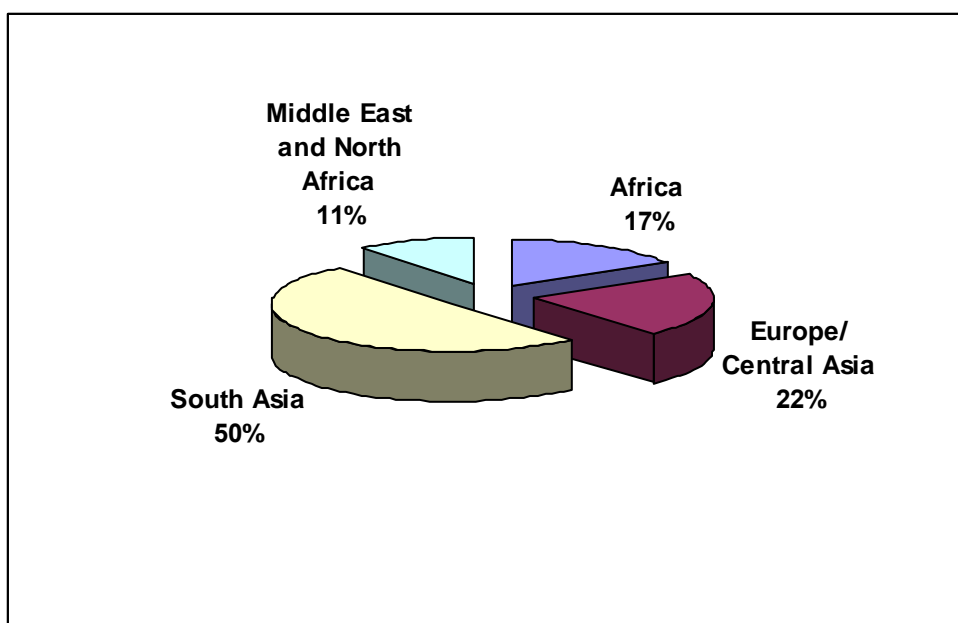


Chart 7. Regional Distribution of Training (1673 people)



3.4.2 Institutional Support and Project Development

During 2006-07, CF-Assist supported several DNAs and other institutions, and helped develop a number of projects, which are now in various stages of development (Chart 8).

Chart 8. CF-Assist Achievements		
<i>Country</i>	<i>Institutional Support</i>	<i>Project Portfolio Development</i>
Argentina	Design of Carbon Facility assisted including a marketing strategy	
Bolivia	Consultant support to DNA for portfolio development	
Botswana	DNA established; assisting legal and institutional framework	
Brazil	Developing auctioning platform through PHRD grant	
Cambodia	Consultant provided to DNA to help with project development	Several concepts developed
China	Decentralization of CDM institutions (provincial level)	2 project methodologies
India		10 projects under development
Kenya	DNA procedures	
Mali	CDM Publicity materials for DNA	10 PINs developed
Madagascar		6 projects under development
Mexico	Carbon Facility partially launched	
Mozambique	DNA procedures	
Senegal		17 PINs developed
Sri Lanka	DNA approval procedures; institutional structure; national CDM strategy,	20 PINs and 5 PDDs developed
Tunisia		5 projects under development
Uganda	DNA procedures	Portfolio under development
Uruguay	Consultant support to DNA for portfolio development	
Central Asia	International best practice on DNA shared	31 projects identified in Kyrgyzstan and Uzbekistan
South East Europe	International best practice on DNA shared	10 projects identified in Albania and Macedonia
CF-SEA Program		45 PINs developed in Cameroon, Ghana, Mali, Mozambique and Zambia

3.5 Lessons from CF-Assist Experience

Based on the capacity building experience under CF-Assist, a number of key lessons can be drawn as the program goes forward in the next few years:

Targeted capacity building

In spite of the fact that carbon market is over two years old since the Kyoto Protocol coming into force, several non-Annex I countries are still in a preliminary stage of development as far as CDM is concerned. However, with less than one year to go for the commencement of the first commitment period in 2008, it is imperative that countries look to develop project portfolios as quickly as possible. Otherwise, the projects, especially those with long gestation periods, will not be able to take adequate advantage of the carbon revenues. Therefore, one key recommendation that has emerged is that the countries should focus on 'project development based capacity building' rather than dealing with general aspects of CDM and carbon market. Based on this feedback, CF-Assist has added a 'project clinic' component to its training programs where project developers interact with technical experts on actual project ideas, provide specific information on various aspects (baseline, additionality, project cycle, contracting, etc.) so that the projects could be put in the pipeline quickly.

Need for fast project approvals

One of the barriers for accelerated development of carbon market in developing countries is the time taken to receive approvals from DNA, a mandatory requirement before submitting them to CDM Board. In many countries, however, it takes considerable time to accord these approvals, depending on the regulatory framework. This has an obviously detrimental impact on project progress, and potentially reduces the carbon revenue. Considering that the approval should primarily consist of broad confirmation of emission reduction potential and sustainable development benefits, there is no case for taking several months for approval. Thus, this is an issue CF-Assist programs have consistently addressed by attempting to create awareness among the DNAs.

Access to investment finance

Many projects identified and eligible under CDM have difficulty in making financial closure, a trend that is particularly pronounced in the lesser developed countries. In most countries, financial institutions are yet to recognize carbon finance as a valid source of revenue, perceive projects as risky and are therefore apprehensive to lend to them. There is strong need to work with financial institutions to orient them and provide information on how carbon finance can benefit the projects. CF-Assist would make special efforts to reach this important stakeholder group, especially in Africa.

Knowledge Management

In developing and delivering capacity building and technical assistance, there is a need to adapt the modules to the changing landscape of the market in terms of volatile carbon prices, varying quality of different carbon assets, factors influencing the long term sustainability of the market (e.g. contours of a post-2012 regime), etc. so as to ensure relevance of these programs to the developing countries and economies-in-transition. As some of the key issues are emerging for a post-2012 market (e.g. carbon capture and storage, etc.) CF-Assist is geared to addressing them in the training programs.

4.0 Work Program 2007-09

4.1 Proposed Work Plan

CF-Assist will continue to play a major role in further developing the carbon market, using the Bank's comparative advantage to develop and design successful carbon finance transactions as a means to develop capacity in a learning-by-doing approach. The summary of existing commitments and proposed new activities are described in Chart 9. A matrix of events planned and scheduled so far is provided in Annex 4.

Chart 9. Work Program Matrix for 2007-09

<i>Program</i>	<i>Ongoing</i>	<i>New Implementation</i>	<i>Proposals</i>
Sub-Saharan Africa	Botswana, Madagascar, Mali, Mozambique, Senegal, Uganda	Burkina Faso, Kenya, Nigeria, Rwanda, Southern Africa, Western Africa.	Benin, The Gambia, Niger
Middle East and North Africa	Egypt, Morocco, Tunisia	Lebanon	Algeria, Jordan, Yemen
South Asia	India, Pakistan, Sri Lanka	Nepal	
East Asia and Pacific	Cambodia, China, Indonesia, Papua New Guinea, Philippines		Mongolia, Vietnam, Pacific Islands
Latin America and Caribbean	Argentina, Bolivia, Brazil, Mexico, Peru, Uruguay	Central America, Ecuador, Paraguay	Columbia, Central America II
Europe and Central Asia	Azerbaijan, Georgia, Russian Federation, Uzbekistan		Croatia, Kazakhstan, Moldova
Global Program	Transportation Study		
Market Facilitation	Carbon Expo 2008; Nairobi Framework	Latin America Carbon Forum	North America Carbon Forum; Asia Carbon Expo
Knowledge Management and Outreach	State of Carbon Report	E-Training Tools and Modules	

In order to achieve its overall goals, CF-Assist will focus on the following themes during the next two years:

(i) *Equitable Geographical Distribution*

All market studies conducted so far indicate that CDM projects are not distributed evenly across all geographic regions. CF-Assist will continue to strive for a more even distribution of CDM activities in a competitive market environment by focusing on underdeveloped regions. Hence, national CF-Assist programs will be developed in countries that have yet to significantly benefit from carbon finance (e.g. Middle East and Sub-Saharan Africa), to address emerging issues in more mature carbon markets, such as the delivery of a new asset class in economies-in-transition through GIS, or to open up new sectors to carbon finance, such as the energy sector in Mexico or infrastructural sectors in India.

(ii) *Participation of Sub-Saharan and Northern Africa*

Most sub-Saharan African countries (except South Africa) have limited fossil fuel-related GHG emissions, while their traditional (rural) economies are largely based on biomass. This translates into a disadvantage in terms of access to a significant pipeline of CDM projects that mitigate fossil fuel related emissions. With some exception, such as oil production in Nigeria, in many African countries, viable CDM projects are premised on GHG reductions from biomass usage, including waste management, energy efficiency measures at the level of house holds or small production facilities, and land use and forestry projects.

Carbon finance transactions in North Africa and countries in the Middle East have proved to be sensitive to the recently rapid upward trend in carbon prices and the non-availability of transparent market data, including data on prices, risks, project types, volumes and so forth.

In this background, CF-Assist will implement a targeted effort to enable Sub-Saharan and Northern Africa to fully participate in the carbon market. This effort will include exploring synergies between the lending portfolios of multilateral and bilateral institutions, and other operational activities and carbon finance operations. Further, CF-Assist would try to promote more clean energy choices, including the ability and the ease of use of the CDM as a tool to:

- bring more clean generation to the grid, e.g. regional hydroelectric and/or gas projects;
- encourage distributed and off-grid energy access; and
- promote cleaner and modern biomass resources.

(iii) *Innovative Tools to Bring CF Transactions to Market*

It takes considerable time and effort to bring local financial intermediaries into the carbon business because of the lack of knowledge of the underlying financial mechanisms that could be developed to take full advantage of the carbon market, particularly in middle-income countries. The CF-Assist program will work in such countries to build the institutional capacity to identify and develop carbon finance transactions, implement instruments that will enable a continuous deal flow, and help create a “critical mass” of people and CDM expertise in host countries.

(iv) *Looking Beyond 2012*

In addition to pushing opportunities to develop CF projects in the short timeframe of the first commitment period, CF-Assist will actively engage in emerging issues that are relevant to medium and long term scenarios to maintain and expand the mitigation regime. Thus, CF-Assist will promote capacity building activities in areas such as biofuels, carbon capture and storage, and programmatic CDM activities including energy efficiency.

Expected deliverables for the next two years, are identified in Chart 10 below. These deliverables will be monitored to serve as indicators for the bi-annual progress reports. The financial commitments for various programs and activities are provided in Annex 5.

Chart 10. Expected Deliverables for CF-Assist (2007-09)

<i>Outcomes of the CF-Assist Program</i>	<i>Expected Deliverables by June 2008</i>	<i>Expected Deliverables by June 2009</i>
1. Funding is secured to ensure all expected outcomes of CF-Assist program are met	Funding is secured for all the priorities identified in section 4.1	
2. Extending coverage of CF-Assist programs within all regions including ECA, LAC, Asia and MENA	10-15 countries will have fully completed Phase II of CF-Assist program; CF-Assist programs initiated in additional 5-10 countries	30 countries will have completed Phase II of CF-Assist; Phase III initiated in a majority of them
3. Enabling Africa to fully participate in the carbon market	Regional/ sectoral assessment of CF opportunities completed for African continent; 5 African countries have completed Phase II of CF-Assist; carbon buyers found for projects in these countries	10 countries in Africa will have completed phase II of CF-Assist; at least three financial intermediaries are fully involved in carbon finance
4. Pioneering tools to enable developing countries and economies-in-transition to bring a portfolio of projects to market	Country Funds launched in two countries (Argentina and Mexico); Green Investment Scheme launched in two economies-in-transition (Bulgaria and Ukraine); portfolio of projects resulting from CF-Assist capacity building activities are offered to the market	Experts from developing countries and economies in transition have tools in hand to deliver a portfolio of projects, including Country Funds, auctioning, and other instruments that monetize and secure ERPAs
5. Expanding CF to sectors that have yet to contribute a significant quantity of emission reductions, but have a high potential (e.g.. Transportation sector, EE at household level, measures to replace biomass from non-sustainable resources, LULUCF.	Background study on methodological issues in the transportation sector completed; at least three Project Design Documents completed in the transportation sector and offered to the market	Implementation of action plan to remove barriers for a significant contribution by the various potential sectors to the carbon market in consultation with key stakeholders.
6. CF-Assist contributes to the development of capacity at the national level to engage in the carbon market	CF-Assist works with institutions and national experts to deliver on all activities; CF-Assist also partners with key market players to coordinate efforts; partnerships are initiated and maintained with at least 3 financial intermediaries	Increasingly, national programs are recipient-executed, thus indicating that host countries have developed capacity to manage their own programs
7. CF-Assist disseminates lessons learned on the carbon market through regional and national training events	Two Carbon Expos are organized and delivered; at least two GHG Forums are held in mature carbon markets to disseminate lessons learned; training modules are developed and maintained to capture lessons learned from the Bank CF experience	CF-Assist reduces its role in Carbon Expo after 2008 (expected to be a fully commercial event by then)
8. HCC advises the Bank on its	One full meeting of the Host Country Committee will be held	

capacity building programs concerning carbon finance, and its role in the market, including any role concerning market continuity beyond 2012	
9. CF-Assist donor committee fully engaged in providing guidance for an effective CF-Assist program	One annual meeting for donors to review progress and work program, close cooperation with donor offices regarding status, guidance and donor feedback; progress reports submitted twice a year

Annex 1. Carbon Funds at the World Bank

Total funds pledged = US\$ 2.02 billion (16 governments, 64 firms)



- **Prototype Carbon Fund.** \$180 million (closed). Multi-shareholder. Multi-purpose.
- **Netherlands Clean Development Mechanism Facility.** \$268.3 million (closed). Netherlands Ministry of Environment. CDM energy, infrastructure and industry projects.
- **Community Development Carbon Fund.** \$128.6 million (closed). Multi-shareholder. Small-scale CDM energy projects.
- **BioCarbon Fund.** \$77.4 million (Tranche One closed totaling \$53.8 million). Multi-shareholder. CDM and JI LULUCF projects.
- **Italian Carbon Fund.** \$155.6 million (closed). Multi-shareholder (from Italy only). Multipurpose.
- **Netherlands European Carbon Facility.** \$56.6 million (closed). Netherlands Ministry of Economic affairs. JI projects.
- **Spanish Carbon Fund.** \$282.4 million (closed). Multi-shareholder (from Spain only). Multipurpose.
- **Danish Carbon Fund.** \$69.4 million (closed). Multi-shareholder (from Denmark only). Multipurpose.
- **Umbrella Carbon Facility.** \$737.6 million (Tranche One closed). 2 HFC-23 projects in China.

Annex 2. CF-Assistance Partners

Partner	Country/ Region	Program/Event	Comments
Center Mario Molina	Mexico	Executing Agency for Mexican CF-Assist	Fully operational
IETA	Worldwide	Carbon Expo	Yearly event until 2008
Koelnmesse	Worldwide	Carbon Expo	Yearly event until 2008
CEFEB	AFR	CF Training Programs in Africa	MOU to be signed in May 2007
AFD	AFR / MNA	Africa Assist	Provided a Seconded for CF-Assist
UNDP	Worldwide	UNDP Project Development Facility	CF-A trains UNDP staff
UNEP-Risoe Center	Africa	CF-SEA and CD4CDM	Joint activities in Mali and Southern Africa
Argentine Secretary of Environment	Argentina	Argentine Carbon Facility	CF-Assist support in designing the Fund
METAP	MNA	METAP Carbon Finance Initiative	Capacity building in North Africa
Regional Energy Association	El Salvador, Guatemala and Nicaragua	Central America CF-Assist program	Recipient-executed grant
OLADE	LAC	LA Carbon Forum	Scheduled for September 2007

Annex 3. Calendar of CF-Assist Events 2006-07

Month / Year	Event	City, Country	Participants	Training Days	Participant Days
May 06	Global Carbon Expo 2006	Cologne, Germany	1969	2.5	4923
May 06	Annual HCC Workshop & Meeting	Cologne, Germany	45	1.5	68
July 06	Training Workshop on Carbon Finance: Senegal	Dakar, Senegal	71	2	142
August 06	Training Program for Carbon Finance Stakeholders	Katmandu, Nepal	104	1	104
August 06	Carbon Finance Training for Private Sector Participants	Colombo, Sri Lanka	61	2	122
August 06	Carbon Finance Training Program for Private Sector	Dhaka, Bangladesh	37	1	37
August 06	Carbon Finance Market Development	Dhaka, Bangladesh	51	1	51
Sept. 06	National Training Workshop for the CF-SEA Partnership	Bamako, Mali	29	2	58
Sept. 06	CDM Project Training for Public Sector Officials	Colombo, Sri Lanka	51	1	51
Sept. 06	Renewable energy/energy efficiency and CDM	Indonesia	354	2	708
Oct. 06	Pre-negotiation workshop on ERPA	Tananarive, Madagascar	44	2	88
Oct. 06	Carbon Expo Asia	Beijing, China	1062	2	2124
Nov 06	HCC Workshop CoP/MoP-2	Nairobi, Kenya	22	0.5	11
Nov 06	Carbon Finance Day	Nairobi, Kenya	440	2	880
Nov 06	CDM workshop in collaboration with METAP	Rabat, Morocco	40	2	80
Nov 06	CDM workshop in collaboration with METAP	Tunis, Tunisia	55	2	110
Nov 06	CDM workshop in collaboration with METAP	Cairo, Egypt	50	2	100
Dec 06	DNA Workshops (2): Georgia	Tbilisi, Georgia	18	2	36
Dec 06	DNA Workshop: Azerbaijan	Baku, Azerbaijan	15	1	15
Dec 06	DNA Training: Armenia	Yerevan, Armenia	21	1	21
Jan.07	Accessing carbon finance and responsibilities of DNA	Uzbekistan	115	2	230

Jan.07	Accessing carbon finance	Kyrgyz Republic	59	3	177
Feb. 07	CDM technical issues: Forestry and Energy projects	Sally Portudal, Senegal	53	2	106
Feb. 07	Preparatory workshop	Gaborone, Botswana	28	2	56
Feb. 07	Forestry sector and CDM	Tunis, Tunisia	16	1	16
Feb.07	Workshop on PIN development	Sri Lanka	54	1	54
Feb.07	Accessing carbon finance	Albania	64	2	128
March 07	Public Forum on climate change and Indonesia	Indonesia	143	1	143
March 07	Accessing carbon finance	Macedonia	69	3	207
March 07	Forestry sector and CDM	Rabat, Morocco	17	1	17
March 07	Training workshop on CDM	Antisarbe, Madagascar	54	3	162
Apr. 07	Middle East North Africa Carbon Forum	Rabat, Morocco	84	2	168
Period May 06 – Apr. 07		Total	5295	55.5	11193

Annex 4. Matrix of Events 2007-08

(Proposed so far)

Event	Country/Region	Timing	Partner
Southern Africa Carbon Investment Forum	Johannesburg, South Africa	May 2007	UNEP-RISO
VVM Workshop	Europe	June 2007	DNV
Latin America Carbon Forum	Lima, Peru	September 2007	OLADE, IETA, UNEP-RISO
JI Forum	Moscow, Russia	September 2007	
Carbon Investment Forum	New Delhi, India	November 2007	IDBI
Global Carbon Expo	Cologne, Germany	October 2008	IETA, KM

In addition, a number of national level training workshops are planned in the following countries, the schedules of which will be worked out with the respective focal points:

- Kenya
- Burkina Faso
- Madagascar
- Rwanda
- Lebanon
- Yemen
- Honduras
- Paraguay
- Botswana
- Papua New Guinea
