



ENERGY, CLIMATE AND SUSTAINABLE DEVELOPMENT

A Newsletter of
UNEP Risøe Centre (URC)
and UNEP
November 2005

Special Issue

Capacity Development and Project Preparation for CDM Implementation in Host Countries

The United Nations Environment Programme (UNEP) is through its Risøe Centre on Energy, Climate and Sustainable Development (URC) currently assisting 15 developing countries in becoming active participants in the Clean Development Mechanism (CDM). This is done by supporting the establishment of an enabling business & regulatory environment for CDM investment in the countries, and specifically by:

- Developing institutional capability in selected public & private entities to participate in CDM project design, implementation, monitoring, etc.
- Supporting the establishment of Designated National Authorities (DNAs).
- Establishing a National CDM Project Approval Procedure.
- Assisting in creation of Sustainable Development Criteria.
- Creating a pipeline of CDM projects i.e. Project Information Notes (PINs) & Project Design Documents (PDDs).

This special issue of E+ presents some of the national experiences from activities over the last three years in preparing a portfolio of CDM projects and creating a CDM friendly environment in the target countries.

Implementation has included several elements like organizing capacity building workshops, preparing market analyses of the global CDM project portfolio, producing CDM guidebooks, supporting select countries to participate in international carbon market and climate change events, to the design of national CDM web sites for the participating countries.

The activities are implemented either directly by UNEP, through URC, or via collaboration with other partners such as the World Bank's Community Development Carbon Fund (CDCF), and several regional energy and environment centres in developing countries.

The core activities have been funded through the project: *Capacity Development for CDM* (www.cd4cdm.org), which is a \$10 million, Dutch-funded, technical assistance program. The project has supported CDM project

and capacity development in twelve developing countries, with the ultimate objective of enabling the target countries to actively participate in the global carbon market and through this achieve both local and global environmental improvements.

The project is being implemented in selected countries from the four regions of Latin America, Asia, and North & Sub-Saharan Africa. Project implementation in the regions is coordinated by regional coordinators based at URC.

In addition, UNEP/URC in 2005 started the project *Carbon Finance for Sustainable Energy in Africa (CF-SEA)* in a joint effort with the World Bank's Community Development Carbon Fund (CDCF). The project has the overall objective of assisting select Sub-Saharan African countries to fully engage in the global carbon market through providing institutional and project development support to specific public and private entities in the project countries.



CD4CDM Project Countries:

- **Asia: Cambodia, Philippines, Viet Nam.**
- **Latin America: Bolivia, Ecuador, Guatemala.**
- **North Africa: Egypt, Morocco.**
- **Sub-Saharan Africa: Côte d'Ivoire, Ghana, Mozambique, Uganda.**

CF – SEA Project countries:

- **Cameroon,**
- **Ghana,**
- **Mali,**
- **Mozambique, and**
- **Zambia.**

Capacity Development is Key

A key factor in the implementation of the CD4CDM project activities in the host countries has been to put emphasis on practical, hands-on training of the local stakeholders. For example, in the formulation of the national portfolio of CDM projects, all the PINs and PDDs in a portfolio are developed by local experts and workshop participants.

In order to secure the effectiveness of training workshops, a detailed, structured approach was implemented in each country where a training needs assessment was conducted prior to the organization of the national workshops. It is evidently key that the right people are trained on the relevant subjects, which involves a process of identification of local stakeholders who will be the target of the workshops. These stakeholders are selected based on their job descriptions and the institutional mandate of their organizations. The key element in their selection process is that they are expected to play a role in the national portion of the CDM project cycle, including CDM project identification, design, approval, implementation and financing.

Four broad types of groups for capacity building activities in each country have been targeted:

- Policy makers in CDM-related line-ministries such as ministries of environment, energy, transportation, forestry, agriculture, etc.
- DNA staff members and members of the CDM project approval committee.
- Technical experts such as local consultants, academics, and engineers from the line-ministries and government agencies such as the rural electrification authority, and the renewable energy agency.
- Members of the local financial and banking sector interested as potential sources for underlying project financing.

The design of the project addresses the fact that these groups have different capacity building needs given the different roles they'll play in the CDM process in their



country. Tailor-made capacity development workshops have been designed for each group, while maintaining some common sessions attended by all four groups. Such an approach contributes to the effectiveness of capacity development by ensuring that each individual receives the knowledge most relevant to his/her job responsibilities while ensuring a common underlying understanding. Experience has shown that the workshops are a prime forum for the national teams involved in the project to share experiences and lessons learned.

Although the overall project has a generic work plan, detailed country plans have been developed by the national teams with assistance from regional centres and URC. By focusing on specific national circumstances it is avoided to impose a one-size-fits-all approach to project implementation at the country level. This makes the overall implementation challenging but has proven to give good results.

URC and the Netherlands Government are currently planning an expansion of the CD4CDM project with the aim of offering support to an additional 5 countries in the coming years.

The following sections present some of the CD4CDM project activities and experiences in each of the four regions:

Latin America

The three participating countries in Latin America are Bolivia, Ecuador, and Guatemala. The CD4CDM has played a key role in making CDM operational in these countries through the development of both human and institutional capacities. As a result, the project countries have not only a high qualified staff in the CDM offices but also CDM knowledgeable government officials and policy makers, and a pool of CDM project developers with expertise in PIN/PDD preparation.

In Bolivia, the CD4CDM in-country partner, the Office for Clean Development (ODL), acts as an agency for the technical evaluation and approval of the sustainable development component of CDM projects. ODL has in cooperation with the CD4CDM team designed the guidelines for Bolivia's CDM project approval procedure. CD4CDM has also helped elaborate Bolivia's National CDM Strategy, which has recently been approved by the government and legislation has been passed stating CDM projects as priority and stressing the need for sectoral baselines development. The project team has produced a document identifying the legal barriers to CDM investment in both forest and energy sectors and the actions to remove them are being taken. Among the activities for human capacity building, ODL has conducted more than twenty CDM national workshops.

All documents and presentations made by the country team can be downloaded from the web site at www.odl.gov.bo Currently; the portfolio includes 18 projects at different stages of development. One project has already been registered by the CDM Executive Board (The Santa Cruz Landfill Gas Combustion Project) and two are under validation.

As technical support agency to the DNA and to the National Climate Change Program, the ODL has facilitated the creation of a trans-sectoral coordination mechanism so that other public institutions may include climate change in development planning and the private sector participates in the most effective way.

In Ecuador, the project has supported the establishment of the CDM institutional structure which consists of a two-level arrangement: one regulatory and one promotional. The regulatory unit is the Designated National Authority, which is the Ministry for Environment. The promotion unit is CORDELIM, also based at the Ministry for Environment. CD4CDM's in-country counterpart is CORDELIM. The rules and procedures for national approval of CDM project proposals in Ecuador were put in place in April 2003 see www.ambiente.gov.ec.

The country team in Ecuador is also involved in the process of developing of a national CDM project portfolio of PINs and PDDs. The design and formulation of this portfolio was done as part of the hands-on, practical training sessions. Information on the national project portfolio, PDD submission guidance and other CDM-related information can be viewed at www.cordelim.net

An example of a project identified and designed through one of the workshops is the Animal Waste Management System (AWMS) project at Pronaca, the largest producer of meat, aquaculture and food products in Ecuador. The project reduces GHG emissions through the use of an extensive solid manure management system. The project uses rice-husk to absorb the manure and create a relatively dry compost-like material. Projects of this nature lead to reductions in GHG emissions, mitigation of on-site offensive odors, elimination of the use of water to clean the facilities; elimination of the use of oxidation lagoons; and, provision of a more comfortable and healthy environment to the animals.

In Guatemala, project activities have been postponed during 2004 and parts of 2005 due to internal institutional changes, but are now fully operational and it is expected that the project will be completed by mid-2006 with similar results as described for the two other countries.

At the regional level, the Fundación Bariloche in Argentina has been assisting URC in its activities in the three countries. Fundación Bariloche provides support in the form of technical support to in-country national teams, monitoring and reporting developments of the project, and most importantly helps organize CDM regional workshops. At the international level, country teams have participated in several events including the 2005 Carbon Expo.

Miriam Hinojosa is the Latin American Coordinator
[miriam.hinojosa@risoe.dk]

Activities in North Africa

The CD4CDM is being implemented in Egypt and Morocco with good results. In Egypt, the Government ratified the Kyoto Protocol in December 2004. The decision to ratify was supported and endorsed by policy makers who had earlier attended targeted CD4CDM workshops in the country.

In Egypt, the planning and design of activities is carried out as a joint effort between the national project team in Cairo and the URC. Four key national workshops have been held for policy makers, local experts, DNA staff members and other stakeholders. In addition, a host of smaller, targeted activities have been organized targeting institutions such as the national investment authority, the federation of Egyptian industries, select law firms and commercial banks and industries to build their capacities in specific CDM topics. Most recently, a workshop was organized for thirty credit officers at Egypt's largest commercial bank, the Commercial International Bank (CIB). Participation included twenty owners of private sector industrial enterprises who are corporate clients of CIB. The purpose of combining the bankers and the potential project developers was to facilitate a discussion of specific CDM project ideas that have better chances for securing underlying financing through the participating bank.

As in other CD4CDM countries, capacity building work in Egypt is accompanied by the production of several CDM guidebooks, some of which are in Arabic. In addition, an analytical survey was conducted by the project to assess the CDM potential in a group of local large and medium industries including ceramic and fertilizer industries. The documents produced by the project are available on the DNA web site (<http://cdmegypt.org/>).

In Morocco, the CDM progress has been impressive, primarily due to political commitment from the government which is determined to make Morocco the leading CDM country in North Africa. This is evident by the fact that Morocco is so far the only North African country with two registered CDM projects.

The CD4CDM implementation strategy in Morocco adopts an approach that addresses specific local needs in the area of CDM as well implementing the standardized package of national CDM workshops. A good share of the activities has been directed towards supporting the operation of the DNA, which is today reflected in the DNA adopting a simple and smooth project approval procedure.

Training of several local consultants on CDM project design and preparation has been effective and is now con-



tributing to the fact that several local project consultants there are currently actively developing CDM projects in cooperation with international project developers.

Both Egypt and Morocco have actively participated in the 2005 Carbon Expo in Germany. Each country's delegation was led by the head of the DNA accompanied by two or three local CDM consultants. Special CDM country brochures were prepared for this event by the national project teams in each country. The event offered an opportunity for the delegations to market the portfolio of CDM projects in their respective countries and engage in project promotion discussions with various carbon market players.

Experience from the North Africa region has shown that it is not necessarily sufficient for a host country to establish a DNA and ratify the Kyoto Protocol to become an attractive CDM destination. Carbon procurement programs interested in the region expect to see indications of specific CDM project potential and clear and transparent institutional arrangements. Therefore, CD4CDM's support of the production of a CDM project portfolio for Egypt and Morocco has played a major role in enabling both countries to actively participate in the global carbon market.

Sami Kamel, is both the overall CDM coordinator at URC and has specific responsibility for the activities in North Africa
[sami.kamel@risoe.dk]



CDM Project CDM Case Study:

North Africa

A new 80 MW grid-connected wind energy project in Gulf of Suez is being developed as a CDM project through support from the Danish International Development Agency (Danida), and the New & Renewable Energy Agency (NREA) in Cairo. CERs from the project will be procured by the Danish Carbon Fund. The NREA team that is conducting the negotiation of the project's emission reduction purchase agreement was the target of some of the CD4CDM workshops organized in Cairo.

Activities in Sub-Saharan Africa

In Sub-Saharan Africa, the CD4CDM project has been implemented for three years in Cote d'Ivoire, Mozambique, and Uganda and in 2005 a more limited activity was initiated in Ghana linked with other donor funded activities. Project implementation in these partner countries is through the national climate change focal points: the National Environment Agency (ANDE) in Cote d'Ivoire; the Ministry for Coordination of Environmental Affairs (MICOA) in Mozambique, the Environment Protection Agency in Ghana; and the Ministry of Water, Lands and Environment (MoWLE's) in Uganda.

The Energy Research Centre (ERC) at the University of Cape Town and Environment et Développement du Tiers Monde (ENDA-TM) in Senegal are assisting URC in implementing the project in the region.

Activities initially focused strongly on CDM awareness and institutional development since all the Sub-Saharan African governments needed to establish CDM institutional frameworks and, in some cases, to ratify the Kyoto Protocol. As a result all of the four Sub-Saharan Africa countries participating in CD4CDM are today fully committed and engaged in the whole CDM process.

In Cote d'Ivoire, the project team assisted the government in the establishment of a DNA at ANDE, and was responsible for substantial awareness raising leading to the October 2005 ratification of the Kyoto Protocol by the Parliament. The Mozambique and Uganda teams have provided substantial inputs into Executive Decrees establishing DNAs at the MICOA National Directorate for Environmental Quality in Mozambique and at MoWLE's Department of Meteorology in Uganda. Moreover, the project teams in each country developed the initial DNA structure and CDM project approval process.

The capacity building strategies pursued by CD4CDM country teams have gradually evolved since its inception, from information campaign, awareness-raising and institutional creation to sector-specific trainings and developing project identification notes and project design documents (PINs and PDDs) for specific projects.

At present, a number of CDM projects are being developed in Cote d'Ivoire, Mozambique and Uganda. For example, in Cote d'Ivoire, three projects are being developed as a starting point of the project portfolio: Decentralized rural electrification by photovoltaic (PV) technology; Landfill gas recovery with electricity generation; Energy efficiency improvement in buildings. Draft PDDs on the first two projects are ready and were discussed at a recent Sub-Saharan Africa Regional Workshop in Kampala, Uganda.

In Mozambique, several CDM project PINs and PDDs are in preparation, while in Uganda, the CD4CDM team has on invitation by the Uganda Investment Authority, DMET and the World Bank, prepared 10 PINs, which were presented at the 2005 Carbon Expo.

Ghana is as mentioned a recent addition to the CD4CDM list of project countries. Project activities in the country started September 2005 and are expected to be completed by end of 2006. Ghana will receive a similar array of technical and institutional support services from the project. CD4CDM's local team in Ghana, the Kumasi Institute for Technology and Environment (KITE), will conduct a need assessment for the Ghanaian DNA to advise URC on the type of support the DNA will require to become opera-

tional. Four national workshops and a number of small targeted workshops will be organized during the project life in the country. CD4CDM will, via KITE and SouthSouth North (a regional centre for Ghana), formulate a national CDM project portfolio of PINs and PDDs and assist Ghana in the promotion of its portfolio.

Wilson S. K. Wasike is the CDM coordinator for Sub-Saharan Africa [wilson.wasike@risoe.dk]

Activities in Asia

In Asia, the CD4CDM project countries are Cambodia, the Philippines and Vietnam and are being implemented through the national climate change focal points: the Ministry of Environment in Cambodia, the Inter-Agency Committee on Climate Change in the Philippines, and the Ministry of Natural Resources and Environment in Vietnam.

The Asian Institute of Technology is assisting URC in implementing the project in the region. The CD4CDM project activities are in the areas of institutional framework creation, awareness raising, capacity building and CDM project pipeline development.

Besides playing an important role in the establishment of CDM legal frameworks in partner countries the CD4CDM teams in the three countries are actively involved in the design and formulation of the structures, processes, modalities and procedures for the operation of the DNAs. For example, the project team in Cambodia developed the draft structure of the DNA, identified the roles and responsibilities of each player and the human and technical capacity needs, and formulated the sustainable development criteria and CDM project approval process. In the Philippines, the team provided technical inputs in the formulation of the country's CDM operational framework. Vietnam's CD4CDM team developed the guidelines on identification, formulation, and approval of CDM projects in the country. The country teams also conducted round-table discussions, public briefings, consultation workshops

with various government agencies and stakeholders related to the establishment of DNA, project approval processes and procedures, etc.

The capacity building strategies pursued by CD4CDM country teams have, as in the other regions, gradually evolved since the project's inception, from information campaign and awareness raising to sector-specific training. Technical workshops on renewable energy, forestry, and waste management were conducted in all three countries.

As part of broader national awareness raising, the team in the Philippines has published articles in national newspapers and magazines related to issues, opportunities and developments of the Kyoto Protocol and CDM. The Philippine team also developed and introduced a 'Carbon Trading Game' in various training sessions. The team in Cambodia, in collaboration with the Department of Environmental Education, prepared a climate change radio talk for national radio broadcasting and produced a version in local language a video on the greenhouse effect for national TV broadcasting. In Vietnam, the project team also worked in partnership with the broadcast media, the Vietnam Television and the Voice of Vietnam, to cover news and information related to the Kyoto Protocol, CDM, and sectors with high potential for CDM project development.

At present, a number of CDM projects are under development. In Cambodia, 8 projects are at an advanced stage of development. A project design document (PDD) of one of these projects is already posted at the UNFCCC website for public comments while the Ministry of Environment has issued a letter of no-objection in the other. These 2 projects will contribute to an annual reduction of 132 thousand tons of CO₂ equivalent.

In the Philippines, proponents of 18 projects have either participated in the PDD development tutorial course conducted by the CD4CDM team or received inputs and technical assistance such as project cycle analysis, baseline and monitoring methodologies, Additionality analysis, etc.

Romeo Pacudan is the Asia Coordinator [romeo.pacudan@risoe.dk]





Using Carbon Finance for Sustainable Energy in Africa *(CF-SEA) Project*

The CF-SEA project was only initiated mid-2005 and builds on the experiences with the CD4CDM project. Key project activities in each of the five project countries include the organization of up to four national workshops, design of a proposed project approval process for the Designated National Authority (DNA), advise on contents of a national CDM web site, and production of a portfolio of CDM project PINs and PDDs.

The key project implementation strategy is to use capacity building as a tool for CDM project identification and development. In order to build capacities of local consultants in the project countries, UNEP and World Bank's Community Development Carbon Fund (CDCF) have requested the contracted firms implementing the project in the five countries to include in their teams a local institution or consultancy firm as a partner. At the same time, a performance-based fee has been adopted in the implementation of this project in order to link consultants' project identification results with paid fees. It is expected as these local partners will be fully engaged in the implementation of the project activities in the respective countries; they will eventually be able to engage in the CDM market on their own following CF-SEA project completion. At the same time, CDM projects designed and formulated by these local partners will be considered by CDCF for potential procurement of emissions reductions.

In spite of constraints (e.g., high perceived risk) that still need to be overcome before many Sub-Saharan Africa economies can fully participate in the CDM, projects originating from Sub-Saharan Africa have some unique commercial and developmental advantages over those from larger industrial economies already undertaking project activities. These include: (a) Large development dividend due to high poverty levels in region, (b) Provision of support to shift the Sub-Saharan Africa development paradigm from aid to trade, (c) Sub-Saharan Africa projects provide investors with an opportunity for geographical portfolio diversification thereby offsetting some investment risk, (d) Several 'virgin' projects in a few existing industrial complexes especially in HFC and methane abatement, (e) Potential for a high willingness to accept low Certified Emission Reduction (CER) price offers, and (f) Reduced currency risk to investments in Sub-Saharan Africa due to the stability of carbon credit exchanges vis-a-vis non-carbon investments.

For questions on CF-SEA project,
contact: Sami Kamel, [sami.kamel@risoe.dk]

The efficiency of the CDM project cycle is improving

An essential part of URC's role in the development of capacities in the CDM area is to conduct leading analytical work that covers CDM market and project development issues. The main objective of this analytical work is to assist developing countries participating in the global carbon market to better understand the market dynamics and how they could maximize their benefit from the market.

URC, as part of its services, has engaged in a continuous, up-to-date analysis of the global CDM project portfolio, which is available on the CD4CDM website. The information and analysis provided here has been widely recognized as an important tool for CDM project developers, CDM regulatory bodies (i.e. the CDM Executive Board) and various other stakeholders both in developed and developing countries.

Around 475 CDM projects have been submitted for validation at present (November 2005). The speed of CDM projects reaching the end of the public comment period at the validation state has increased exponentially from

10 projects in April to 100 projects in November, to 70 projects by mid December (see Figure 1 below) and providing up-to-date information has become more challenging but also of increased importance.

Table 1 shows that 35 projects have now been registered by the CDM Executive Board, and are beginning to generate/issue CERs. The UNFCCC website also reveals that an additional 22 projects have asked to be registered. The projects "at validation" include both projects that are open for comments and validated projects that have not yet requested to be registered. Three projects have now passed through the total project cycle and got CER's issued.

The sectoral distribution of the CDM projects in terms of project technology is also changing and Table 2 shows the distribution of the current 468 projects in the pipeline.

It is important not only to look at the number of projects but also the size in terms of generated CERs. While the number of projects is distributed on a large number of

Figure 1

Number of CDM projects ending the public comments period each month, the number of them that have requested registration, and the timelag between these two events.

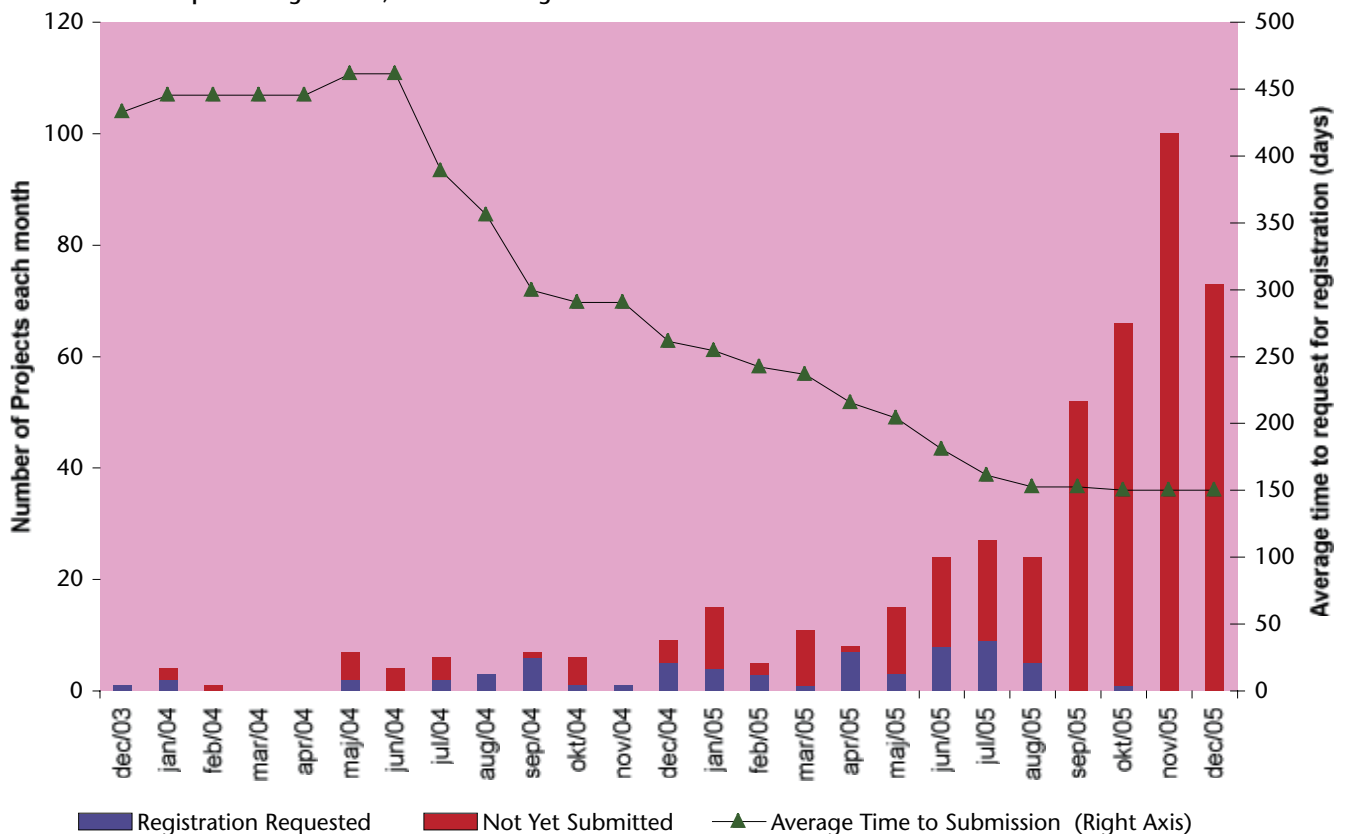


Table 1

Project status 16. November 2005	Number
At validation (public comments for for 30 days; LULUCF 45 days):	408
Request for registration (normal 8 weeks, small-scale 4 weeks):	22
Request for review	0
Withdrawn	1
Under review (final<=2nd EB meeting after decision):	2
Rejected by EB:	0
Registered:	32
Request for CERs:	0
CER issuance review (final <30 days):	0
CER issued (<15 days after the receipt of request for issuance):	3
Total number of projects:	468

Table 2: Sectoral distribution of the projects

Type	number		CERs/yr (000)	
Biomass energy	111	24%	5257	6%
Hydro	76	16%	3954	5%
Agriculture	55	12%	3948	5%
EE Industry	56	12%	3161	4%
Wind	53	11%	4124	5%
Landfill gas	39	8%	10194	12%
Fossil fuel switch	18	4%	1007	1%
Biogas	20	4%	1028	1%
Cement	14	3%	2064	2%
HFCs	6	1%	28281	34%
Geothermal	4	1%	853	1%
EE Households	3	1%	42	0%
Solar	3	1%	44	0%
N2O	2	0%	15112	18%
Fugitive	4	1%	3532	4%
Tidal	1	0%	311	0%
EE Service	1	0%	3	0%
Transport	1	0%	7	0%
Energy distrib.	1	0%	15	0%
Total	468	100%	82936	100%
Renewables	268	57%	15571	19%
Energy efficiency	62	13%	3227	4%
Fuel switch	18	4%	1007	1%
CH4 reduction & Cement	112	24%	19738	24%
HFC & N2O reduction	8	2%	43394	52%

technologies the generation of CERs is still concentrated on a limited number of projects. Table 2 shows that 8 HFC & N₂O projects gain 52% of the all the current CERs or more CERs than the other 460 CDM projects together. The poverty alleviation or sustainability content of these projects is a highly contentious issue.

Many renewable energy projects have entered the pipeline recently; most of these are biomass projects (111), and run-of-river hydropower projects (76). Wind is catching up with 53 projects. Even a tidal wave energy project has also been submitted.

The 94 CH₄ reduction projects include 39 landfill gas projects, 55 manure management projects, and 4 projects reducing fugitive CH₄ emissions.

The number of projects related to energy efficiency and transport is still quite limited. Only significant type is efficiency projects covering energy savings mostly at large industrial facilities (56) and there are no transport or Afforestation/Reforestation projects in the pipeline.

The small-scale CDM “window” is proving its justification with 47% of the projects in the pipeline being small-scale.

The smallest so far is the “E7 Bhutan 70 kW micro hydro power project” reducing only 524 tons of CO₂ annually.

The total annual number of CER's created by the 468 projects is 83 MtCO₂. The total number of CERs expected to be generated by these projects from the start of their crediting periods until the end of 2012 is 605 MtCO₂.

Looking at the geographic distribution of CDM among developing countries, the picture is not so promising. The vast majority of CDM projects are being implemented in only two countries: India (182 projects) and Brazil (92 projects). There are only 17 projects from China in the pipeline at present. Countries like Chile, Honduras, Mexico and the Philippines have reached the level of about 10-20 projects. Africa and the Middle – East/North Africa are still only having a very limited number of projects.

The above analysis is updated on a regular basis by URC and can be downloaded for free from the CD4CDM web site (www.cd4cdm.org).

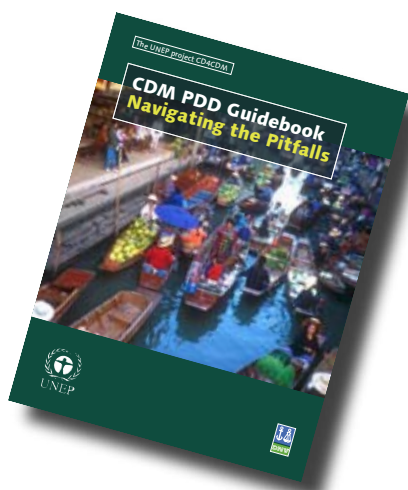
By Jorgen Fenhann, Senior Energy Scientist, URC
[j.fenhann@risoe.dk]



Guidebooks & Training Manuals

The URC has produced a series of CDM training manuals and guidebooks that have been widely used in capacity building workshops organized under the different project activities. URC has also made these manuals available for free downloads from the CD4CDM website and has distributed them during the COP meetings and other international climate change events. They have been used extensively by other programmes and in national projects.

The following is a description of the key CDM guidebooks produced by URC.



UNEP-DNV PDD Preparation Guidebook: Navigating the Pitfalls - NEW for COP 11

URC has collaborated with Det Norske Veritas (DNV), a leading Norwegian Designated Operational Entity (DOE), to produce this guidebook. By October 2005, up to 325 CDM projects have been submitted for validation. A wealth of experience and knowledge has been gained by the different DOEs through the process of validating the submitted projects, specifically with regard to common mistakes and pitfalls that the CDM project proponents fall into when preparing a CDM Project Design Documents (PDDs). The guidebook was produced through collaboration between CD4CDM project and DNV. It identifies the 20 most common pitfalls observed by DNV through its validation of more than 100 CDM projects. The guidebook provides a step-by-step guidance on how to fill a PDD as well as how to avoid these pitfalls. By producing this guidebook, CD4CDM is aiming to contribute to the reduction of transaction costs associated with CDM projects through assisting CDM project developers in developing countries submit better quality PDDs when validating their CDM projects.

Guidebook on Risks & Chances of Combined Forestry & Biomass Projects under the Clean Development Mechanism. – NEW for COP 11

The Guide assesses the realistic potential and the major constraints of combining carbon sink and bio-energy use projects in the CDM. The Hamburg Institute of International Economics (HWWA) has undertaken the study for URC. The report provides an overview of the current state of biomass use in developing countries. In developing countries bio-fuels are still largely viewed as a traditional practice, CDM could help change this, and the report shows the technological options. The Guide suggests a close integration of the Afforestation/Reforestation and Biomass use methodology work under the CDM, also with the possibility to bundle these two kinds of project activities. The Guide uses the new Climate, Community and Biodiversity (CCB) Project Design Standard to evaluate a matrix of four examples of combined Forestry & Bio-energy projects: Small-scale/large-scale Forestry combined with Small-scale/large scale Bio-energy.



Guidebook on CDM Baseline Methodologies – NEW for COP 11

This guidebook assists project developers in establishing baselines for CDM projects following the decisions at the Conference of Parties (COP) and by the CDM Executive Board. The guidebook takes the reader through the basic concepts, the key baseline elements, and the processes of developing baseline and baseline methodology, and approval of new baseline methodologies. It gives a detailed description of the Additionality tool. All the small-scale CDM methodologies are presented using examples. The steps in full-scale CDM methodologies are shown using landfill gas and steel plant waste gas examples. Furthermore, it describes the process of developing baseline for land use and land use change (LULUCF) CDM projects. Data from a hypothetical agroforestry project is used as an example. An annex contains short descriptions of the following models often used to create baselines at the sectoral and national levels: Markal, ENPEP, LEAP, CO2FIX and COMAP.



Wind power the CDM

This guidebook is aimed specifically at project developers in developing countries interested in developing wind energy projects under the CDM. The guidebook presents step-by-step guidance on how to design a wind energy project while benefiting from the carbon finance element through structuring the project as a CDM project. Information on the different types of wind energy technologies and systems is also presented. The guidebook is the result of collaboration between URC and the Wind Energy Department at Risoe National Laboratory.



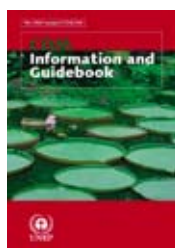
Legal Issues Guidebook to the CDM

This guidebook targets policy makers and CDM project proponents in developing countries. It provides an in-depth analysis of the various types of risks associated with the different stages of the CDM project cycle and possible legal and contractual approaches to mitigate these risks. The guidebook also presents two formats for emission reductions purchase transactions that could be used by developing country project proponents.



Institutional Strategy to Promote CDM In Peru

This guidebook presents the experience from Peru and how policy makers there have designed an institutional strategy to promote CDM projects in the country. Also presented are the approaches adopted by the Peruvian DNA to set up a national CDM project committee that is responsive and proactive in order to adjust to the changing market needs. The guidebook will provide policy makers in other developing countries with pointers on how to establish a DNA and critical issues pertaining to its operationalization.



CDM General Information Guidebook

This guidebook offers a comprehensive overview of the CDM, its Modalities and Procedures (M&P), project cycle and related issues such as linkage with sustainable development goals, financing and market intelligence. The appendices present frequently asked questions and answers, a short overview of existing guidelines, and a list of project categories which may be eligible for the CDM in the future.



Sustainable Development Impacts Guidebook

This guidebook provides an introduction for policy makers to how CDM projects can be developed and designed to promote sustainable development. It presents an operational approach to sustainable development impacts and how these impacts could be measured in relation to CDM, including proposed sustainable development criteria and indicators, & linkages to national development activities. It also includes a case study analysis illustrating the potential for exploiting synergies between development and climate change objectives.

E+ provides information on the activities at URC and UNEP. The views expressed here do not necessarily represent those of UNEP, Risø National Laboratory or Danida. Back issues can be found at www.uneprisoe.org/newsletters.htm. To receive an electronic or printed copy of **E+**, please register on our website www.uneprisoe.org or contact Maria Andreasen (maria.andreasen@risoe.dk) at the URC number below. For all other information or comment, please contact the editor, Stine Skipper (stine.skipper@risoe.dk).

UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Risø National Laboratory, PO Box 49, DK 4000 Roskilde, Denmark Tel: +45 4632 2288, Fax +45 4632 1999, www.uneprisoe.org

UNEP Energy Programme, Division of Industry, Technology and Economics, Tour Mirabeau 39-43 Quai Andre Citroen, 75739 Paris Cedex 15, France Tel: +33 (0) 1 4437 1429, Fax: +33 (0) 1 4437 1474, www.uneptie.org/energy

E+ is printed on 100% recycled, chlorine-free paper. Layout by Finn Hagen Madsen (finn@studio8.dk)