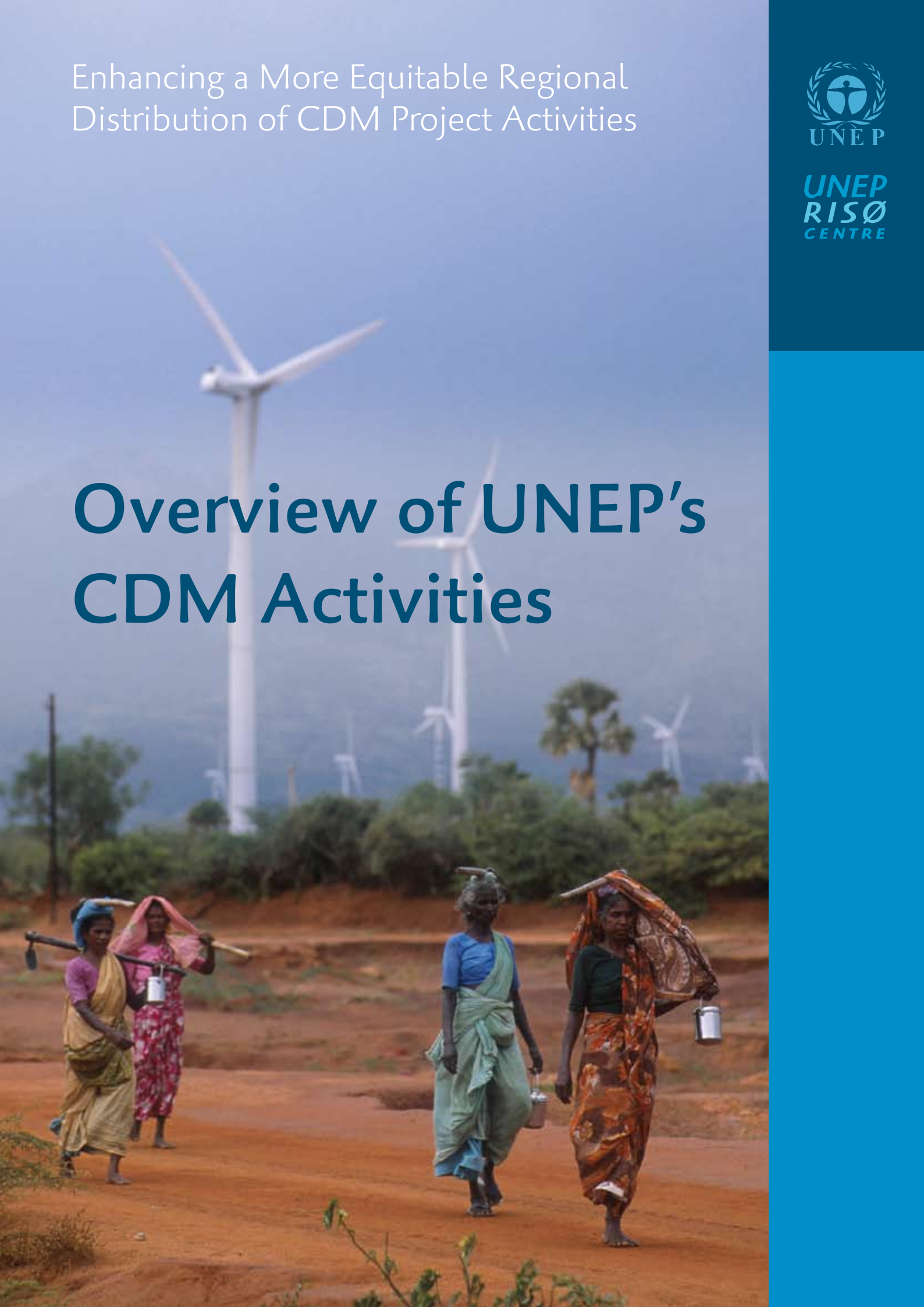


Enhancing a More Equitable Regional  
Distribution of CDM Project Activities



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# Overview of UNEP's CDM Activities



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**‘Climate Change will no longer be a primarily environmental concern. It has become a matter of strategic consequence, a core political issue for every government on Earth’**

Ban Ki-Moon, Secretary-General of the United Nations.

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## CDM Technical Assistance: Project Activities & Knowledge Management Tools

More than thirty months after the entry into force of the Kyoto Protocol, CDM transactions continue to gain momentum. By November 2007, 2,647 CDM projects are in the CDM Pipeline<sup>1</sup>. Of these, 827 are registered projects, and a further 154 are in the registration process. The CDM Executive Board (CDM EB) has issued more than 82 million Certified Emissions Reductions (CER). In terms of number of projects by type of technology, renewables CDM projects are the leading type with 62% of the Pipeline. However, N<sub>2</sub>O, HFC and PFC projects have the biggest share (34%) of CERs expected to be generated by end of first commitment period. At the same time, more and more renewables and other non-industrial gases projects are going into the Pipeline increasing their share of emissions reductions to be achieved.

Geographically, the distribution of CDM projects has so far not been very equitable. A limited number of countries including China, India, Brazil and Mexico have captured the largest share of the global CDM project portfolio. Specific regions in the developing world, namely Sub-Saharan Africa, have been largely bypassed by the CDM market and are struggling to attract a decent number of CDM projects. In fact, of the total 2,647 projects, only 33 projects are in Sub-Saharan Africa where 21 of these are actually in South Africa, making the distribution even more skewed.

One of the key challenges facing developing countries interested in participating in the CDM market is the complexity of modalities and procedures of CDM. This has resulted in some CDM stakeholders in developing countries presenting poorly designed CDM projects that eventually get rejected. Additionally, some developing countries have not been able to participate in the CDM primarily due to lack of national-CDM expertise and/or the appropriate institutional setup necessary for the assessment and approval of CDM projects.

Access to finance is an additional barrier facing CDM project developers in many countries, partially due to lack of CDM knowledge among developing country financial intermediaries. Consequently, there is a clear need for human and institutional capacity building within the area of CDM in many developing countries.

UNEP, and its UNEP RISOE Centre in Denmark, has been on the forefront among development agencies implementing an array of CDM capacity and project development technical assistance activities. These technical assistance activities have been accompanied by the production of a number of CDM knowledge management tools.

Fundamentally, the approach used by UNEP to design its global intervention strategy for provision of technical assistance in carbon finance is based on a continuous process of barrier analysis that UNEP conducts. This ensures that UNEP’s CDM technical assistance interventions are responsive to the ever-evolving carbon market. Methodologically, UNEP’s barrier analysis is based on analyzing the obstacles preventing the successful completion of each step of the CDM project cycle in host countries. Once these barriers are identified, UNEP designs and delivers customized solutions aiming at the removal or minimization of the identified barrier(s).

The ultimate objective of UNEP’s role in the CDM market is to contribute to the creation of an investment climate in the host countries that is conducive for identification, development, approval and financing of CDM projects. UNEP’s efforts are specifically aimed at increasing the equitable regional distribution of CDM projects.

This brochure presents an overview of UNEP’s CDM technical assistance and capacity building activities implemented during 2007 and a glimpse at what is planned for 2008.

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<sup>1</sup> CDM Pipeline, UNEP RISOE Centre, Novembre 2007.

## Technical Assistance Projects

### Nairobi Framework

As part of UNEP's support to the Nairobi Framework process, a joint project proposal has been prepared by the World Bank, UNEP and UNDP for the provision of CDM capacity and project development support in a number of Sub-Saharan African countries. The preparation of the proposal builds on an initial needs assessment process conducted by the three implementing agencies with relevant stakeholders during the Carbonexpo in 2007 and the UNFCCC's recent DNA Forum in Addis Ababa, Ethiopia.

The overall objective of the Nairobi Framework is to improve the regional distribution of CDM among developing countries through coordinating the efforts by the development agencies providing technical assistance for CDM in Africa and to initiate new activities in the region.

Among the activities to be implemented under the new joint proposal are provision of support toward the establishment & operationalization of several African Designated National Authorities (national CDM offices), organization of numerous hands-on, CDM capacity development workshops for national consultants and civil servants, preparation of national portfolios of CDM projects (feasibility studies), preparation of national CDM investors' guides for host countries, and supporting African countries participate in the annual Carbonexpo.

Contact: Sami Kamel, Ph: +45 4677 5181,  
email: sami.kamel@risoe.dk

Box 1:

**UNEP/Risoe brings value to the Carbon Market, including:**

- Unbiased advisory services & research products trusted by both buyers & sellers;
- In-country CDM capacity building activities in more than 25 countries, including an intimate knowledge of host countries' situation, access to valuable field information, and help overcoming institutional, financial & market barriers to participating in the CDM;
- Investing in activities unattractive to the private sector, including research products such as the CDM Pipeline database;

### Carbon Finance for Agriculture, Silviculture, Conservation, and Action against Deforestation (CASCADe)

With deforestation accounting for almost a quarter of global greenhouse gas emissions, a new UNEP project to promote CDM in the agricultural and forestry sectors in Sub-Saharan Africa will start at the end of 2007. The \$5 million project is funded by the French Global Environment Facility and implemented in partnership with CIRAD – the French Agricultural Research Centre for International Development and the French National Forestry Office. Participating countries include Benin, Cameroon, DRC, Gabon, Madagascar, Mali and Senegal.

The Project's objectives include:

- Building and promoting a network for technical cooperation between stakeholders in Sub-Saharan Africa to stimulate forestry and bioenergy projects;
- Enhancing the expertise of Francophone African experts in the forestry sector to manage carbon emissions and CDM projects;
- Identifying and implementing pilot projects and case studies in potential asset classes such as plantation forestry, community agroforestry and biofuels to create opportunities for African participation in the carbon market; and
- Contributing to policy development in a post-2012 climate regime to create eligibility of avoided deforestation and land degradation projects in CDM-type initiatives.

Collaboration between carbon buyers and other investors such as the World Bank's BioCarbon Fund will be also be advanced through the project's activities.

Contact: Glenn S Hodes, Ph: +45 46775168,  
email: glenn.hodes@risoe.dk

## Capacity Development for CDM (CD4CDM) Project

[www.cd4cdm.org](http://www.cd4cdm.org)

Through funding from the Netherlands' Ministry of Foreign Affairs, the CD4CDM project is a major effort to help develop the institutional and human capacity necessary to formulate, approve and implement actual CDM projects. The first phase from 2002 - 2006 supported CDM implementation in Mozambique, Uganda, Cote d'Ivoire, Ghana, Bolivia, Ecuador, Guatemala, Egypt, Morocco, Philippines, Cambodia and Vietnam. In the second phase (2007 - 2009), the project is implemented in Nicaragua, Peru, Suriname, Algeria, Tanzania, Mauritius and Bangladesh following additional funding from the Government of the Netherlands.

### Nicaragua, Peru and Surinam

Nicaragua, Peru and Surinam are part of the second phase and potential country partners, as well as the countries' potential for CDM projects have been identified. The national country partners for the CD4CDM are the Ministry of the Environment and Natural Resources (MARENA) in Nicaragua; the National Environmental Council in Peru and the Ministry of Labor, Technology and Environment in Surinam.

Project activities have started in both Peru and Nicaragua. These countries have already created capacities for the CDM before and CD4CDM specific activities have started early this year while in Surinam the CDM is a completely new issue and project activities will start only in December 2007. Country counterparts in both Peru and Nicaragua have organized national workshops and training sessions, including a special training session for the energy sector in Nicaragua. However in Peru these events were focused on high level government officials intending to upgrade the political profile of the CDM and on the financial sector in order to promote the CDM as business opportunities for local banks and other financial entities.

In Nicaragua, operational project approval procedures have been developed, including sustainable development criteria for CDM projects. A portfolio of eight CDM project PINs and two PDDs will be developed as part of the deliverables of the project.

In Peru, documents and technical papers have been completed on stakeholder involvement in CDM promotion, taxation to strengthen the CDM as an incentive for investment, GHG emission scenarios and projections to evaluate the impact of CDM programs and projects, and operational project approval procedure including sustainable development criteria for CDM projects.

A portfolio of eight CDM project PINs and two PDDs for programmatic and/or bundling projects will be developed.

Contact: Miriam L. Hinostroza, Ph: +45 4677 5180,  
email: [miriam.hinostroza@risoe.dk](mailto:miriam.hinostroza@risoe.dk)

### Tanzania and Mauritius

In Tanzania, planning and implementation of activities are carried out jointly by the Environmental Protection and Management Services (EPMS), an environmental consulting firm, and the Centre for Energy, Environment, Science and Technology (CEEST) Foundation, a non-governmental organization working in the fields of energy, environment, water, sanitation and natural resource management.

With the support of the South South North (SSN) institution and URC, CEEST offers technical assistance and advice to establish the institutional framework, including approval procedures and promotion of CDM projects in Tanzania. A series of national and sector workshops are being held targeting a broad range of public, private and financial sector players to develop a national pipeline of CDM projects covering a range of project types such as biomass co-generation, agro-processing, landfill gas, and forestry, and hydro power.

During 2008, the third and final National Workshop will be held focusing on PDD development and another two sector-workshops will be held targeting engineers and other energy/environmental professionals as well as development partners such as the Danish Embassy. Key deliverables of the project are a well functioning and transparent DNA and a national pipeline of CDM projects consisting of 10 PINs and 2 PDDs.

In Mauritius, the Project's objectives are to support the DNA to efficiently approve CDM projects consistent with the country's sustainable development priorities, build the capacity of local experts to identify, design, implement and finance CDM projects, promote Mauritius as a CDM investment destination, and support the development of actual CDM projects to be promoted at the Carbon Expo 2008.

Activities in 2008 will include a focus on development of 8 PINs and 2 PDDs through a series of three national workshops as well as two targeted mini-workshops on priority sectors. Also, CDM project approval procedures will be drafted with support from SSN for approval by the Mauritius Government. Key deliverables of the project are operational



guidelines for approval of CDM projects including sustainable development criteria posted on the DNA website as well as development of a national portfolio of CDM projects.

Contact: Karen Olsen, Ph: +45 4677 5135,  
email: karen.olsen@risoe.dk

### **Bangladesh**

URC is now in the process of finalizing the contracts for the two project implementers and expects to commence activities by December 2007. Bangladesh is one of the nine countries chosen in the second round of the CD4CDM project. In July 2007 a mission to Bangladesh was undertaken. The primary objective of the mission was to meet and discuss the project with the key stakeholders in the Government organizations, NGOs, national consultants, financial institutions, the civil societies and academicians.

The mission had comprehensive discussions on the project with the Member Secretary of the country's DNA under the Ministry of Environment and Forest. The mission had an extensive discussion with the local World Bank's specialist on climate change on the Bank's past and present initiatives on CDM in Bangladesh and how the CD4CDM project may have synergies in future activities of the Bank in the area of CDM. Waste Concern and Bangladesh Centre for Advanced Studies (BCAS) have recently been selected as implementing agencies.

Contact: Moinul Sharif, Ph: +45 4677 5189,  
email: moinul.sharif@risoe.dk

### Box 2: UNEP's success indicators for CDM capacity building:

- Key contribution is reduction in projects' transaction costs:
- Number of days DNA review / approve a CDM project.
- Local consultants capable of preparing good quality PIN / PDD.
- Local financial institutions have good understanding of CDM, possibly willing provide underlying project financing.
- Validation / Verification processes conducted in a timely manner.
- Number of signed Emission Reduction Purchase Agreements (ERPAs).

## Algeria

After completing a needs assessment mission and contracting a project implementation partner, in the Algerian Ministry of Environment, project activities will be implemented during the coming 18 months and will include the preparation of a number of PINs and PDDs by national consultants contracted by the project.

This national portfolio of projects will be presented in the Carbonexpo in Germany. Algeria's participation will be supported by the CD4CDM project. Additionally, three national workshops will be organized as well as three sectorally-focused, technical workshops. URC is currently seeking to contract a regional centre of excellence to provide technical support to the DNA in Algeria under the CD4CDM project. The work in Algeria by the CD4CDM is also being coordinated with the World Bank that has similar CDM technical assistance in the country.

Contact: Sami Kamel, Ph: +45 4677 5181,  
email: sami.kamel@risoe.dk

## Exploring Potential for Programmatic CDM in China

China is one of the main countries participating in the CDM, and unlocking the full CDM potential can help the country in its drive towards sustainable development. URC is collaborating with the Chinese Academy of Social Sciences, Tsinghua University, and the AGET Consulting Company. The project analyzing the potential for programmatic CDM in China will investigate how to fully unlock the immense potential of CDM in China in a systematic way.

The one-year effort to running till April 2008, funded by the Danish Ministry of Foreign Affairs, includes four International workshops and site visits, the preparation of three Project Information Notes (PINs), three sets of documents for three Programmatic CDM projects, and three case studies. Outputs will in addition include a guidebook on the International Rules to implement Programmatic CDM projects, and a policy report on the potential, feasibility, and impacts of implementing programmatic CDM in China.

Contact: Xianli Zhu, Ph: +45 4677 5170,  
email: xianli.zhu@risoe.dk

## China Biomass CDM Capacity Building Project

This 18-month project running till December 2008 will help to build the capacity of Chinese institutions to implement biomass CDM projects, particularly in the provinces of Guizhou, Hunan, and Xinjiang. With assistance from the Danish International Development Agency (Danida), the project includes a biomass resource survey, assessment of capacity building needs, and a survey of relevant biomass technologies in Denmark.

URC is providing technical support related to the CDM and biomass CDM methodologies. Other organisations participating in the implementation of this project include the Energy Research Institute under the Chinese Development and Reform Commission, 3 Chinese provinces, the Danish Technological Institute, and the Consulting Company COWI.

After finishing the surveys, the first national workshop will be held in Beijing in Nov 2007. Based on the training material developed and the outcome of the training in Beijing, further training workshops will be adapted and organized in the 3 provinces. Outputs include four Project Development Documents (PDDs) and at least 20 PINs.

Contact: Xianli Zhu, Ph: +45 4677 5170,  
email: xianli.zhu@risoe.dk

## CDM in the Energy Policy for the Republic of Mauritius

URC and a group of EU Consultants are helping to develop a new energy policy for Mauritius up to year 2025. The Mauritian government's objective is to make the nation globally competitive, which includes upgrading its entire energy infrastructure and developing a coherent energy strategy that addresses fossil fuel vulnerability, secure and affordable energy for households and industry, environmental impacts, and promotion of economic growth and job creation. The policy outline's environmental dimensions include renewable energy options, green taxes, energy efficiency, and environmental impacts of energy use on the local and global environments.

With more than \$100,000 funding from the EU and UNDP Mauritius, URC is working on renewable energy, electricity supply (in partnership with consultants Ea Energianalyse, Denmark), and examining carbon finance for various en-

ergy supply options, include renewable energy and clean fossil fuel technologies. URC will also establish a framework for including CDM options in new generating capacity and estimate the possible level of greenhouse gas (GHG) reductions on both the supply and demand side. URC will also suggest new post-Kyoto market mechanisms for utilities to reduce emissions, and possible CDM projects for the transport sector.

URC will complete this work by the end of 2007.

Contact: Jyoti Painuly, Ph: +45 4677 5167,  
email: j.p.painuly@risoe.dk

## Energy Sector CDM Capacity Development for Francophone Africa

The *Energy Sector CDM Capacity Development for Francophone Africa* is part of the German Technical Cooperation Agency's (GTZ) Climate Protection Programme targeting Benin, Senegal, Mali, Rwanda and Burkina Faso. The overall objective is to help build national & institutional capacities to identify, design, approve, finance and implement CDM projects within the energy sector. URC has been contracted to implement the €180,000 Project, focusing on three regional technical assistance and capacity building workshops that will be held during 2008. The workshops will focus on "hands on" training through the development of promising project concept documents for actual CDM projects.

Contact: Glenn Hodes, Ph:+45 4677 5168,  
email: glenn.hodes@risoe.dk

## Regional CDM Capacity Building Project for Sub-Saharan Africa

With funding from Sweden, Spain and Finland, this UNDP led CDM capacity building project focuses on the seven countries in Eastern and Southern Africa - the Democratic Republic of Congo, Ethiopia, Kenya, Mauritius, Mozambique, Tanzania and Zambia.

The objective of the project that will run until the end of 2008 is to enhance the capacity of the private sector to access carbon finance, as well as overcoming barriers to the carbon market in Sub-Saharan Africa. The project will review existing institutional frameworks and identify gaps both in the public and private sectors to attract commercial

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**'Across the world countries , companies , cities and citizen are rising to the challenge of climate change and at a scale and pace which is truly unprecedented'**

Achim Steiner, UN Under-Secretary General  
and Executiv Director of the United Nations  
Environment Programme (UNEP)

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Box 3:

**List of countries where UNEP has completed, currently has, or will soon start CDM technical assistance activities:**

<b>Latin America:</b>	Benin
Nicaragua	Gabon
Peru	Madagascar
Bolivia	Congo
Ecuador	Senegal
Guatemala	
Suriname	<b>North Africa:</b>
Caribbean Islands Region	Algeria
	Egypt
<b>Sub Saharan Africa:</b>	Morocco
Ghana	
Cameroun	<b>South and South East</b>
Mali	<b>Asia:</b>
Uganda	Cambodia
Cote D'Ivoire	Bangladesh
Zambia	Sri Lanka
Mozambique	Philippines
Mauritius	Vietnam
Tanzania	Pacific Islands Region

carbon finance under the CDM or voluntary carbon markets. A major feature of the regionally-structured approach is the facilitation of cost-effective delivery of capacity development services and the promotion of South-South technical cooperation between project participating countries. The UNDP's Millennium Development Goals Carbon Facility will play an important role to help develop a viable project pipeline in sub Saharan Africa.

This project forms part of the *UNEP/UNDP Partnership on Climate Change* launched to optimize and unify CDM capacity building and climate change adaptation activities of both organizations. This project also forms part of the UNDP and UNEP contribution to the Nairobi Framework.

Contact: Todd Ngara, Ph: +45 4677 5191,  
email: todd.ngara@risoe.dk

## Developing Capacity for Multilateral Environmental Agreements

The European Commission is currently jointly with UNEP developing a major programme on *Capacity Building for Multilateral Environmental Agreements (MEA) in African, Caribbean and Pacific (ACP) Countries*. UNEP will under this very ambitious project help develop capacity in ACP countries to implement a number of MEAs. One component will focus on CDM and UNEP will here help targeted ACP countries fully participate in the global carbon market. It is expected that the project will start in the first quarter of 2008 with Euro 4.3 million support from the EU for the CDM component. UNEP will work with selected ACP countries to identify, design, approve, finance, implement and monitor CDM projects that address their national sustainable development priorities.

Special emphasis will be placed on the development of a national CDM portfolio of projects for presentation at international carbon events such as the Carbonexpo, as well as posted on each country's Designated National Authority (DNA) web site. Targeted capacity building workshops will be an essential element in the project activities, targeting both policymakers and practitioners.

For the Caribbean and the Pacific islands, a regional approach will be adopted while in sub Saharan African countries, the implementation strategy will be on a country-by-country basis. At the inception of the project, URC will conduct a needs assessment analysis for a list of ACP countries.

Contact: Sami Kamel, Ph: +45 4677 5181,  
email: sami.kamel@risoe.dk

## Bioenergy Projects under the Clean Development Mechanism

Despite growing interest to promote a rapid uptake of modern bioenergy for sustainable development and the Clean Development Mechanism (CDM) to help finance this goal, the current CDM pipeline has few projects in the bioenergy portfolio. Although bioenergy projects are numerous as a whole, there still is an almost complete absence of CDM projects involving liquid biofuels in the transport sector, or the displacement of fossil or non-renewable biomass energy in favour of renewable biofuels in the household sector.

URC and the UN Conference on Trade and Development (UNCTAD) are working with Climate Focus and Joanneum Research Institute to address the main challenges of developing biofuel CDM projects, promote a more equitable

geographical distribution of CDM projects, and increase opportunities for least developed countries to participate in the global carbon market.

This study presents an overview of the key issues in biofuel economics, and tools to conduct feasibility studies for potential bioethanol and biodiesel projects. In addition to financial constraints, a number of challenges associated with the development and approval of methodologies for biofuels are identified with recommendations to overcome them.

Finally, the study provides a road map to advance long-term investments in bioenergy CDM projects, such as adjusting methodologies for compliance, developing viable business models for selected pilot projects and protocols for biofuel trade, as well as special monitoring requirements for increasing cross-border consumption. The results of the study will be published during the first quarter of 2008.

Contact: Julia Schmid, Ph: +45 4677 4766,  
email: julia.schmid@risoe.dk

## Energy Efficiency in the Building Sector CDM Review Study

URC has conducted a review of building sector CDM projects during 2007 under the private-sector partnership program of UNEP's *Sustainable Building and Construction Initiative (SBCI)*. The main objectives of this research were to analyse building-related CDM projects in the pipeline, identify barriers to energy efficiency in buildings, and measures to overcoming them.

The project team from URC investigated four CDM projects in the pipeline: Kuyasa, Cape Town, South Africa; ITC Sonar Hotel, Kolkata, India; Technopolis IT building, Kolkata India; and Pão de Açúcar supermarkets in Brazil.

The study proposed a number of recommendations on baseline issues and rule changes to facilitate building sector CDM projects. The studied also identified key stakeholders to facilitate an improved eligibility of the building sector under the Kyoto and post-Kyoto flexible mechanisms.

The result of this research will support the SBCI Climate Change Think Tank to propose a set of recommendations for the Kyoto and post-Kyoto agreements dealing with the building sector.

Contact: Chia-Chin Cheng, Ph: +45 4677 5116,  
email: Chia-Chin.Cheng@risoe.dk



# Knowledge Management Events

## Latin American Carbon Forum

[www.latincarbon.com](http://www.latincarbon.com)

The Latin American Carbon Forum is a partnership between URC, the Latin American Energy Organization (OLADE), the International Emissions Trading Association (IETA), and the World Bank Institute (WBI). Building on the success of the first Latin American Forum in 2006 (held in Quito), more than 600 local, regional and international participants from the private and public sectors attended the 2nd Latin American Carbon Forum.

The Forum is a unique regional platform for all active agents in the carbon market, including project owners and developers, National CDM Offices and Investment Promotion Agencies, and CDM governance bodies. In addition to business opportunities and networking, the Forum provides updates on crucial issues of climate change, the CDM, and the carbon market.

Contact: Miriam L. Hinostroza, Ph: +45 4677 5180,  
email: [miriam.hinostroza@risoe.dk](mailto:miriam.hinostroza@risoe.dk)

## African Bankers Carbon Finance Investment Forum

[www.carbonforum.co.za](http://www.carbonforum.co.za)

In a booming carbon market, many CDM projects are stalled by the lack of finance, this situation is especially hampering project implementation in Africa. The African Bankers Carbon Finance Investment Forum has been designed to bridge this gap by supporting African bankers and project developers to better participate in the global carbon market. This innovative event was hosted in May 2007 by UNEP and URC in partnership with the Development Bank of Southern Africa (DBSA). In total, 173 delegates from throughout Africa participated in the Johannesburg event.

The Forum brought together banking CEOs and other key actors in the African financial community for the first time to discuss opportunities and access barriers for using carbon finance as a means to advance sustainable development in Africa. Carbon entrepreneurs from across Africa had the opportunity to promote more than 30 projects to buyers and

financiers, with a number of deals advanced or concluded at the Forum.

The event demonstrated the effectiveness of multi-donor cooperation and private-public partnerships to address the low number of carbon finance deals in Africa. The Forum was made possible by co-financing from Germany, Norway, Italy, and the World Bank; and strong support from private sector and co-financing by the Development Bank of South Africa and BNP Paribas

Commercial finance organizations plan to replicate the event format in Africa and other regions. UNEP will also be co-sponsoring an event in Dakar during February 2008 tailored to the Francophone African banking community and modeled on the Forum. The World Bank Institute will manage this event.

Contact: Glenn Hodes, Ph: +45 4677 5168,  
email: [glenn.hodes@risoe.dk](mailto:glenn.hodes@risoe.dk)

## Collaboration with the China Standard Certification Center (CSC)

URC has initiated collaboration with the CSC on CDM and energy efficiency. Although still in the formative stage, the cooperation may include CDM capacity development and technical assistance for CSC; CDM and Programmatic CDM coordination, financing, implementation models and projects; CDM related research and development, and information dissemination activities. Possible collaboration areas that have been identified include:

- a. Improving energy efficiency in existing buildings and industrial equipment;
- b. Promoting CSC-certified energy efficient appliances; and an Energy Management System in industrial sectors.

This collaboration has potential to help improve energy efficiency in the building and industrial sectors in China, and strengthen CSC's technical capacity and its unique semi-governmental position to implement energy efficiency and the CDM in China.

Contact: Chia-Chin Cheng, Ph: +45 4677 5116,  
email: [Chia-Chin.Cheng@risoe.dk](mailto:Chia-Chin.Cheng@risoe.dk)

# Knowledge Management Tools

## CDM Bazaar

[www.cdm-bazaar.net](http://www.cdm-bazaar.net)

The UNFCCC CDM Bazaar is a free-of-charge platform for CDM market participants, including emissions reductions buyers and sellers, and technology / service providers.. Launched by URC and the Secretariat for the United Nations Framework Convention on Climate Change (UNFCCC), the “virtual” CDM Bazaar acts as a market place for CDM project participants allowing them to exchange information on CDM investment opportunities, emission reductions purchase programs as well as services provided to market stakeholders. The UNFCCC CDM Bazaar currently has over 600 registered users from 40 different countries.

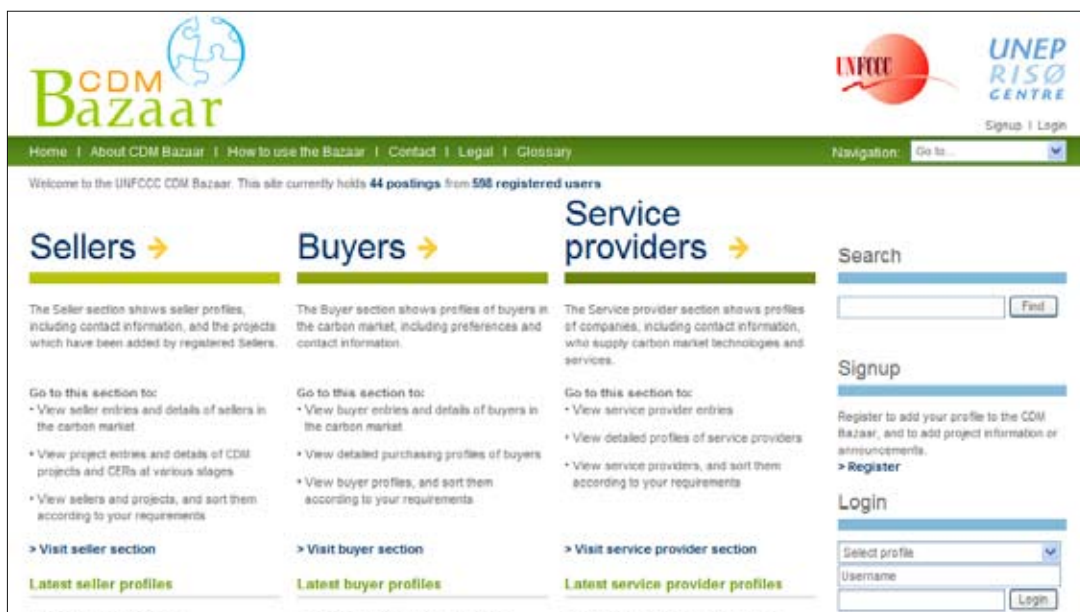
The UNFCCC CDM Bazaar allows registered users to upload information to the website that can facilitate emission reductions market transactions. For example, a project developer in Mauritius, Paraguay or India can upload a CDM Project Idea with the objective of receiving, for example, offers from Certified Emissions Reductions buyers and /or technology providers. Similarly, an emission reductions purchase program seeking to procure emissions reductions from potential project developers can post information about terms and conditions of the program.

The user-driven UNFCCC CDM Bazaar has sections for:

- Sellers, and their CDM projects at all stages of development, targeting buyers, financial assistance or technology and services.
- Buyers, and their requirements/interests in particular project types or needed Certified Emissions Reductions.
- Service providers, and details of the services or technologies they bring to the market.
- Announcements, with information on employment opportunities, events and publications related to the carbon market.

New services soon to be added include automatic email updates, a modified website design for better visibility of CDM projects, an enhanced search facility, and a carbon market news section with news-feeds.

Contact: Adrian Lema, Ph: +45 4677 5152,  
email: [adrian.lema@risoe.dk](mailto:adrian.lema@risoe.dk)



## CDM/JI Pipeline

[www.cdmpipeline.org](http://www.cdmpipeline.org)

The CDM/JI Pipeline Analysis and Database contains the most comprehensive international collection of information on the rapidly developing carbon market, including

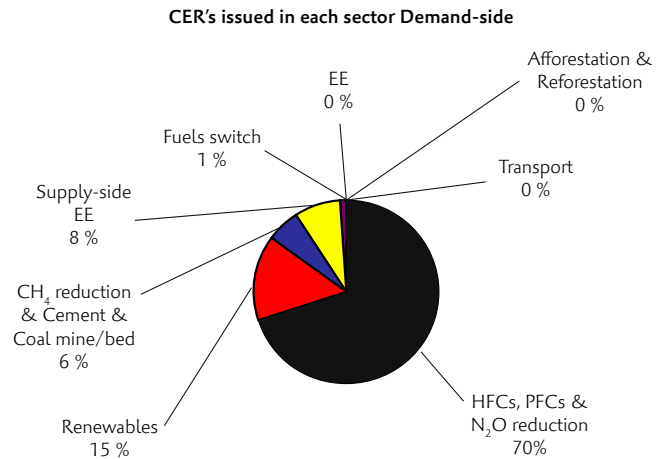
- All CDM/JI projects sent for validation,
- Information on baseline & monitoring methodologies,
- A list of Designated Operational Entities, and
- A comprehensive analysis of the state and trends of CDM/JI markets.

In November 2007, the CDM Pipeline consisted of 2647 CDM projects, including 827 successfully registered. A total of 85.9 million Certified Emissions Reductions (CERs) have been issued, a success rate of 90% from registered projects.

Recent improvements to the CDM Pipeline include:

- Projects with issued CERs/ERUs until 2012, and expected CERs to 2030;
- Projects according to size and successfully issued CERs;
- Buying countries and buying entities;
- A new project category on energy efficiency.

Contact: Joergen Fenhann, Ph: +45 4677 5105,  
email: [j.fenhann@risoe.dk](mailto:j.fenhann@risoe.dk)



**UNEP RISO CENTRE**  
ENERGY, CLIMATE AND SUSTAINABLE DEVELOPMENT

**CD4CDM**  
CAPACITY DEVELOPMENT FOR THE CLEAN DEVELOPMENT MECHANISM

Category	Percentage	Count	Percentage	Count
Biogas	5%	1294	5%	25
Cement	5%	1469	1%	5
EE Households	3%	328	1%	10
Agriculture	0%	1793	7%	10
Afforestation & Reforestation	0%	218	1%	5

Last updated:  
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**CDM Bazaar**

**Welcome to the UNEP Risoe CDM/JI Pipeline Analysis and Database**

The CDM/JI Pipeline Analysis and Database contains all CDM/JI projects that have been sent for validation/determination. It also contains the baseline & monitoring methodologies, a list of DOE's and several analyses. Almost all information is from [cdm.unfccc.int](http://cdm.unfccc.int) and [ji.unfccc.int](http://ji.unfccc.int).

This monthly newsletter shows a sample of the analysis in the Pipeline. If you want more information, then look into the left column and click on the links to sub-pages or click on the download for the full Pipeline, which contain tables with a line of key information for all CDM and JI projects. You can also download a rather old guidance document to the Pipeline.

» [Go to overview page](#)

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**Contact**

If you have comments or questions please contact:

- » **Joergen Fenhann**  
+ 45 46 77 51 05  
[j.fenhann@risoe.dk](mailto:j.fenhann@risoe.dk)
- » **Lars Rosendahl**  
[lars.rosendahl@risoe.dk](mailto:lars.rosendahl@risoe.dk)
- » **Adrian Lema**  
[adrian.lema@risoe.dk](mailto:adrian.lema@risoe.dk)

**Downloads**

- » [CDM Pipeline overview](#)
- » [JI Pipeline overview](#)
- » [Guidance document](#)

## Assessment Tool for Sustainable Development Impacts of Carbon Offset Projects

UNEP Risoe Centre, UN Development Programme (UNDP) and the International Institute on Sustainable Development (IISD) are jointly developing the *Carbon Offsets with Sustainable Development Impacts Framework* (COSI) as a voluntary, international standard and guidelines for sustainability assessments of carbon offset projects.

Based on existing assessment frameworks, the rationale is to develop a unified standard to distinguish high quality 'gourmet offsets' rather than a multitude of similar, competing ones. Different users will adapt the COSI Framework for specific purposes such as a Millennium Development Goal (MDG) assessment for the MDG Carbon Facility, and possibly by the CDM Gold Standard.

Responding to an increased demand to distinguish and label any kind of carbon offset with sustainable development impacts in both the compliance and voluntary carbon markets, IISD and URC are developing a Development Dividend Index (DDI) compliant with the COSI Framework. The DDI will measure and score the development dividend to ensure that impacts promised at an early stage of project implementation are actually realized. A stakeholder involvement process will be launched to involve potential users of the index.

Country credit buyers will be able to use the index to screen purchases or aim for a particular score, while project developers can use the index to negotiate a better price for CERs or VERs with a high dividend. Voluntary market brokers will be able to verify that their projects have attained a certain score, while DNAs can use the index as a basis for monitoring and verifying that national sustainable development criteria are actually realized.

Contact: Karen Olsen, Ph: +45 4677 5135,  
email: karen.olsen@risoe.dk

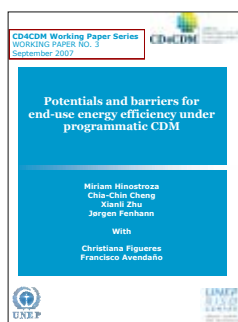
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**'Climate Change offers the change to transform the way we do business on this planet. All that is really required now is the political commitment of governments to unleash human ingenuity'**

Achim Steiner, UN Under-Secretary General and Executive Director of the United Nations Environment Programme (UNEP)

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## Publications



### Potential and Barriers for End-use Energy Efficiency under Programmatic CDM

This working paper on the potential and barriers for end-use energy efficiency under programmatic CDM is a contribution to furthering the application of programmatic CDM. The working paper analyzes the decision taken at the first Meeting of the Parties to the Kyoto Protocol (COP/MOP 1) to include programs in the CDM, and the June 2007 guidance provided by the Executive Board (EB) of the CDM. The paper identifies the potential and the niche for end-use energy efficiency projects under the new programmatic approach of the CDM.

The paper further presents the basic understanding of the potential for energy efficiency to reduce emissions, and gives insights into dealing with the dispersed nature of most energy efficiency efforts. The paper then reviews the CDM portfolio, highlighting projects and baseline methodologies with programmatic characteristics and the challenges inherent to the programmatic approach. Finally, a case study applying the recent guidance by the CDM's Executive Board for programmatic CDM shows the methodological issues in designing and registering energy efficiency programs, while providing initial guidance to policy makers and project proponents for the identification and design of CDM programs of activities (PoAs).

This working paper is one of many analytical activities under the CD4CDM project implemented for UNEP by URC under funding by the Dutch government. This study was developed by the URC in collaboration with Francisco Avendaño from A2G Consultants in Peru, and Christiana Figueres, independent consultant and a member of the EB.

Contact: Miriam L. Hinojosa, Ph: +45 4677 5180,  
email: miriam.hinojosa@risoe.dk



### CD4CDM Perspectives Series 2007

*Equal Exchange: Determining a Fair Price for Carbon*

In September 2007, the CD4CDM project launched a new publication series to showcase the views of visionaries and leading actors in the carbon market on a topic of pivotal importance to developing countries. The first annual feature focuses on the how market actors can make fair transactions under the CDM based on an understanding of the dynamics of the global carbon market price and project specific risks.

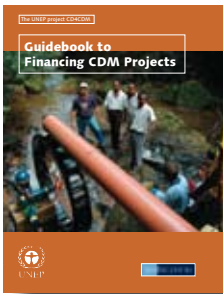
URC launched the publication to help CDM project proponents in developing countries 'level the playing field' between the buyers and sellers of carbon credits to negotiate better carbon deals.

The publication provides unique insights and in-depth analysis from traders, DNAs, legal advisers, investors, and CDM developers. In total, sixteen authors from different corners of the market make up this publication with essays that include:

- Dynamics of the global carbon price;
- CDM project risks and how these translate into price premiums;
- Importance of time factors and delivery guarantees in CER pricing;
- Impact of regulatory drivers;
- Post-Kyoto outlooks;
- Region-specific outlooks on fair pricing; and
- Strategies, contractual models, and new approaches to CERs.

*Determining a Fair Price for Carbon* guide is essential for understanding the complex issues in determining equitable prices in CDM deals.

Contact: Glenn Hodes, Ph: +45 4677 5168,  
email: glenn.hodes@risoe.dk



## CDM Finance Guidebook

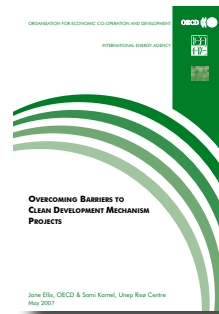
The limited ability of CDM proponents to secure financing, particularly in the least developed countries, is often due to limited or no knowledge of the CDM procedures and rules by project proponents and intermediaries. Moreover, approaches, tools and skills to appraise CDM projects are often lacking, which means developing country financial institutions are unable to properly evaluate the risks and rewards associated with investing or lending to developers undertaking CDM projects.

To address these and other barriers, UNEP collaborated with EcoSecurities during 2007 to produce the Guidebook to Financing CDM Projects. The guidebook provides information, helps CDM project developers locate financing, and demonstrates typical approaches and methods for appraising the viability of CDM projects and integrating carbon revenue into overall project financing.

The target audience is primarily CDM project proponents in developing countries, including utilities, private and public sector entities, municipalities, and other specialized consultancies and intermediaries; and credit officers and other decision-makers within banking institutions and financial intermediaries in developing countries.

The guidebook can be downloaded from [www.cd4cdm.org](http://www.cd4cdm.org)

Contact: Sami Kamel, Ph: +45 4677 5181,  
email: [sami.kamel@risoe.dk](mailto:sami.kamel@risoe.dk)



## Overcoming barriers to CDM Projects

Responding to a request by the Annex-I Expert Group on Climate Change, the OECD and URC recently produced a joint study on barriers facing CDM projects and ways to overcome them. The study focused on barriers that can be potentially removed to developing CDM projects at the national and international level. Four key groups of barriers were identified, including:

- National-level barriers, such as electricity regulations not related specifically to the CDM but constrain projects;
- National-level barriers related to the CDM, such as institutional capability or lack of awareness about the CDM potential that can dampen interest in CDM projects.
- Project-related issues, including availability of underlying project finance, or other country or project-related risks that render the performance of the project uncertain; and
- International barriers, such as constraints on project eligibility, such as restricted land use, and available guidance and decisions, such as the inclusion of carbon capture and storage projects.

The paper concluded that barriers to CDM development could arise at different stages of the CDM project cycle. The relative importance of particular barriers varies between countries as well as over time. A combination of factors is needed to drive growth in a country's CDM activity. This includes the presence of attractive CDM opportunities, a positive investment climate, and an enabling policy and legislative framework.

The study can be downloaded from [www.cd4cdm.org](http://www.cd4cdm.org), or [www.oecd.org](http://www.oecd.org)

Contact: Sami Kamel, Ph: +45 4677 5181,  
email: [sami.kamel@risoe.dk](mailto:sami.kamel@risoe.dk)

This folder provides information on the activities at UNEP Risø Centre. Views published here do not represent the policies or view of the partner organizations or Governments. To receive an electronic copy of this, please contact Mette Annelie Rasmussen, Information and Outreach Officer (mette.annelie.rasmussen@risoe.dk). For questions related to this folder, please contact Sami Kamel, Carbon Finance Coordinator, URC (sami.kamel@risoe.dk)

UNEP Risø Centre on Energy, Climate and Sustainable Development (URC), Risø National Laboratory – DTU, PO Box 49, DK-4000 Roskilde, Denmark  
Ph: + 45 4632 2288,  
[www.uneprisoe.org](http://www.uneprisoe.org) ,  
[www.cd4cdm.org](http://www.cd4cdm.org)

Layout by Finn Hagen Madsen  
([finn@studio8.dk](mailto:finn@studio8.dk))



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