



ENERGY, CLIMATE
AND SUSTAINABLE
DEVELOPMENT

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CDM *Activities Expand*

During the first quarter of 2006, CDM activities have witnessed considerable progress. Progress is most evident in the significant increase in the number of projects entering the validation and registration pipelines. The latest analysis of the CDM project pipeline done by UNEP RISOE Centre, shows that by the end of the first quarter of 2006, 690 projects have entered the pipeline of CDM projects. This increase in the CDM market dynamics is reflected in the increased diversity and scope of carbon finance-related activities to be implemented during 2006 by the UNEP and the RISOE Centre (URC).

At the project implementation level, the Capacity Development for CDM project (CD4CDM) is initiating a second project phase through which

nine new host countries are in the process of being selected as new project partners. The selection process is based on strong stated national interests from many countries and a set of criteria that includes ratification of the Kyoto Protocol, access to project finance, number of CDM projects currently in the pipeline, and other critical factors. Achieving balanced regional representation is an additional element in the selection of the new CD4CDM countries, which currently are expected to include Cuba, Peru, Nicaragua, Algeria, Yemen, Tanzania, Mauritius, Bangladesh and Sri Lanka. Project activities in the original twelve project countries have been completed in four countries, while the remaining eight countries will complete activities during 2006.

Speaking with one voice

New Forum for African Ministers of Energy Established

The first important steps in establishing a Forum for African Ministers of Energy (FEMA) were taken at a meeting in Entebbe in August 2005, where a number of representatives for African Ministers of Energy signed a Memorandum of Understanding and established a preliminary work programme. FEMA is chaired by the Ugandan Minister of Energy, Hon Syda Mbumba, who is also one of the champions in establishing the Forum. The interim secretariat is hosted by the Ugandan Ministry of Energy.

FEMA is modelled on the successes of other ministerial forums like the African Ministerial Conference on the Environment, (AMCEN) which have been operational since 1985 and the African Ministerial Council on Water (AMCOW) launched in April 2002.

Key objectives of FEMA are:

- Raising the profile of the energy sector in national and regional planning to reflect its central role in achieving the Millennium Development Goals.

- Developing a coherent energy strategy for Africa, including re-strategizing in order to increase modern energy supply and access.
- Promoting a common approach expressed through specific, national and regional projects of benefit to African countries.
- Speaking with a common voice and collectively advocating for the financing of regional projects.
- Promoting interconnectivity, and developing common technical standards and codes of conduct.

FEMA has been very positively received by many development partners as a needed Forum to voice African energy concerns. Several development institutions operating within the African Energy sector have agreed to support the new Forum with more than words. ESMAP is contributing funding for a senior advisor to be posted in the secretariat in Kampala. The German Development Cooperation (GTZ) has supported the establishment of the new Secretariat office.

The UNEP Risø Centre, Danida, UN-Africa, AFREPREN and UNEP's Regional Office for Africa provides technical and analytical support which help facilitate a process enabling FEMA to present regional policy issues at the upcoming CSD-14 and the CSD-15 in 2007. One of the tangible outcomes of the support is a set of policy recommendations from FEMA, which were elaborated and discussed at a technical meeting by representatives of African Ministers of Energy during a meeting hosted by the African Union in Addis Ababa in March this year. These recommendations will be presented by the chairperson of FEMA at a Side Event in upcoming CSD-14 in New York in May 2006.

Contact Ivan Nygaard, UNEP, Risoe Centre, ivan.nygaard@risoe.dk

Analytical and Guideline publications

URC will continue to contribute to the knowledge base of carbon finance with special focus on addressing needs of CDM host countries in terms of training and capacity building tools. A new Working Paper Series has been initiated with the first working paper recently released and now available on the cd4cdm site www.cd4cdm.org. Efforts are now taking place to conceptualize and produce a number of additional working papers for this year, covering a variety of critical topics including CDM project financing, bio-energy in CDM, & programmatic CDM. CDM guidebooks – UNEP-DNV's PDD Pitfalls Guidebook will soon be released in French, Spanish and Chinese versions. A conceptually similar document on CDM project monitoring and verification is also under preparation with a targeted release date of fourth quarter.

Finally, Jorgen Fenhann's database of CDM pipeline projects will continue to be updated and released on a regular basis. New elements have been added to the database including information on the new installed generation capacity expected to be added as an energy source in relevant CDM projects.

Contact Sami Kamel, Carbon Finance Coordinator, UNEP RISOE Centre, sami.kamel@risoe.dk





The First Latin American Carbon Forum

The UNEP Centre is, as part of the capacity development activities for CDM, facilitating and organizing CDM investment forums for participating countries to promote their national CDM project portfolios. After the CDM Investor Forums in the Middle East and North Africa (Jerba, Tunisia) and in Asia (Manila, The Philippines) in 2004, a Latin American and the Caribbean Carbon Forum (<http://www.latincarbon.com>) was organized in Quito (Ecuador) on 22-24 March in collaboration with The Latin American Energy Organisation (OLADE) and the International Emissions Trading Association (IETA) sponsored by the Dutch CD for CDM project and the Canadian Government.

The Latin American Carbon Forum was designed for participants to have the opportunity (i) to share experiences and lessons learned from capacity development activities and CDM project design, (ii) to discuss the networks created under the capacity development activities as a critical factor for CDM success, (iii) to know programs and initiatives from the demand and the supply sides of CERs, and (iv) to interact in bilateral meetings with project owners, CERs buyers and experts on PDD preparation.

The Forum attracted 322 participants including actors from the regulation entities, the demand and the supply sides on carbon projects or credits, as well as the agencies developing CDM capacities and general targeted public institutions (ministries of energy, representatives from the financial sector, academia, etc). Apart from the fact that 28 CERs purchasing companies (public and private programs from Europe and Canada, banks and intermediaries) made

commercial contacts with 16 Latin American countries presenting their CDM project portfolios, participants were updated in relation to the current carbon market dynamics and strengthened the required networks to improve the carbon market and national CDM strategies.

The Forum demonstrated that the grounds have already been laid for a developing carbon market. The novelty in the region is that innovative initiatives aiming to boost the regional carbon supply are being implemented in countries like Argentina, Brazil, Chile, Ecuador, and Panama. Although capacities, both institutional and human, exist here is still a need to concentrate institutional capacity development efforts in small countries and in specific sectors where. In spite of potential for CDM projects, CDM activities are not given priority by sector specific authorities, mainly due to lack of knowledge and lack of resources.

Due to the success of the Forum, the organizers, through its Steering Committee (UNEP Risø Centre, OLADE and IETA) decided to institutionalize the event. From 2007, the Forum will be held annually in a selected Latin American country. The World Bank has already agreed to join the organizing group and the next event will be a "topical forum" in Argentina in October. The next regular Forum will in October 2007 in one of the four country candidates (Chile, Costa Rica, Ecuador and Peru).

Contact Miriam Hinostroza, Senior Economist, UNEP, Risø Centre miriam.hinostroza@risoe.dk

Policy and SME development in AREED Countries¹:

A new dawn?

In spite of their large numbers, SMEs have played a limited role in the development of African economies, comparatively much less than that witnessed in Asia. However, it is now evident that there is greater awareness among institutions in the AREED countries to create a more conducive environment for the development of SMEs. These are clear signals that governments are looking at the private sector and SMEs with renewed hope and intend to reduce the current hurdles that impede their development. This institutional awareness has been translated into the formulation of policies that are specifically geared towards SMEs and separate ministries have been created that would provide business development services and reduce the bureaucratic red tape that was hitherto associated with SME creation, development and expansion.

Energy is an important input in all the productive sectors. With high energy prices on the international market it is important to find viable energy alternatives that can cater for the wide gamut of energy needs on the African continent and, in particular, in AREED countries. This study reveals that there is no distinction between energy and non-energy SMEs. Institutionally, the state does not appear to have afforded much preferential treatment to SMEs in the energy sector. This lack of distinction suggests that energy is not necessarily considered a key priority sector in the same manner as agriculture or tourism. The energy market is a market that is still in transition and gradually

developing. The private sector is gradually emerging within a liberalized economic context. However, the state still is in many countries the monopolistic provider of energy services, and a knowledge deficit is inhibiting entrepreneurs from coming forward and playing a larger role.

AREED has come a long way in improving the image of energy SMEs and knowledge sharing. However, efforts are needed to level the playing field. It is not about creating incentives because government is doing that – it is about ensuring that incentives created meet the needs of SMEs rather than the big companies that are in a position to take advantage of these incentives. For instance, governments can remove taxes but only entrepreneurs that are well conversant with the system can take advantage of these tax breaks. Often, SMEs are not well organised and there are few verifiable indicators to determine whether they are gaining from government policies and how they can also use their organisation to lobby the system and seek support.

By promoting SME growth and energy service development AREED seems to be targeting the right formula for both the reduction of poverty and the enactment of economic growth. What is lacking is an environment that is sufficiently conducive to spur development and sustainability and a legislative, legal and financial environment that would help give SMEs a new lease on life. Effective policies would

help create a strong foundation for an enabling regulatory framework and environment. A friendly and favourable business and policy environment would allow SMEs to compete, take advantage of loans and financial opportunities in order to extend their services and market base. Translating the potential of energy SMEs into reality would necessitate making structural changes at the production level but also initiating a number of institutional remedies.



1) Ghana, Mali, Senegal, Tanzania and Zambia



TURKEY. - Children dancing around wood pile which will be turned into charcoal.

9th Special Session of the Governing Council/Global Ministerial Environment Forum

Delegates from over 170 countries along with a number of intergovernmental and non-governmental organisations met in February in Dubai for the 9th Special Session of the UNEP Governing Council/Global Ministerial Forum. One of the key topics was Energy and Environment for Development where ministers spent a full day discussing options for achieving a more sustainable energy development path. As background for the discussions the URC together with staff in the Energy Branch had prepared a paper highlighting the major challenges facing global energy development and outlining possible approaches and political action.

Ministers and delegates in their discussions recommended rapid and global improvements in the energy efficiency of buildings, factories and cars to overcome the world's over-dependency on fossil fuels.

Energy savings at home, at work and on the world's highways offer the "the greatest immediate scope for reducing the anticipated growth in energy demand challenging the economies of the developed and the developing world, they said.

Saving energy and using it more efficiently also carries direct benefits in terms of fighting climate change and reducing health hazardous emissions in cities and in homes. Energy efficiency codes and standards have been widely and successfully applied and offer significant opportunity for wider application in relation to buildings, electrical appliances, cars and agricultural machinery, ministers concluded. Among the recommendations was also that governments should set the example by focusing their purchasing power on buying energy efficient goods, equipment and services.

Governments also recognized the great potential of renewables such as wind and solar power and said that real progress in this field had been made since the World Summit on Sustainable Development in 2002.

Klaus Toepfer, UNEP's Executive Director, said: "Ministers meeting in the United Arab Emirates have gone to the heart of the most pressing problem facing the planet. And that is energy. The rising demand for energy and the climbing price of fossil fuels has implications for economic growth, for fighting poverty and for the local and global environment. This was firmly reflected in our discussions and will, I sincerely hope, trigger real international action."

Transfer of clean energy technologies and more creative financial measures that reflect the full costs of the production, consumption and use of different energies formed an important part of the discussions. Some delegates added that "to attract finance, it is critical to have a long-term and stable national policy framework combined with specific short-term actions to show commitment."

The conclusions from the discussion are contained in a Chairman's summary which will be presented to the 14th session of the Commission on Sustainable Development to be held in New York in May.

GNESD Update

GNESD's third Network Assembly was held on November 9, 2005 in Beijing, China. The delegates included the Steering Committee member and Centre representatives, Network partners, Representatives of other Type II partnerships, Donors and NGOs. The work programme for 2005-2007 was approved, and a new steering committee was approved, O. Davidson, Sierra Leone and T. B. Johansson, Sweden were re-elected as Co-Chairs. Further, GNESD has formalized its ties with GVEB and REEEP and have signed memorandum of understanding with both.



Energy, Climate Change and Sustainable Development: ***Discussions must go hand in hand***

In mid January UNEP Risø Centre hosted a seminar addressing the global energy challenges during a one day seminar in Copenhagen. The overriding message which came out of the meeting was that there is no quick fix, when trying to overcome the major challenges in providing energy to meet the future needs of the industrialised countries and the growing needs of the developing countries in particular.

During the one day seminar leading international experts, who are all engaged in the Scientific Advisory Panel for the URC, sat together with over 150 participants to discuss: energy security, energy and development, and energy and climate change with the results of COP 11 in Montreal fresh in memory. The need to focus intensively on linkages and discuss energy security and climate change within a broader development context was advocated from several participants. It is expected that extreme events will be stronger and more frequent and that extreme weather events will continue to occur and that the impacts of climate change will get worse. Dean at the Sierra Leone University and Co-chair of IPCC's 4th assessment report to be launched in 2007, Ogunlade R. Davidson, said "All changes are telling us that this is not just an environmental issue. In fact, it is becoming a development issue."

Director of URC, John Christensen, supported the need to link energy and climate change to sustainable development "We cannot focus on climate alone. It has to come into a discussion about development as well. In the same way we cannot just focus on electricity supply. We have to look at more efficient ways of using energy and find more modern ways of providing it to people currently unserved," he said.

The seminar was opened by the Danish Minister for Development Cooperation. In her speech the Minister underlined that the international community is facing a difficult task when trying to come up with solutions as to how we together can develop a global response to the energy challenges vis-à-vis the achievement of the Mil-

lennium Development Goals "Reaching the MDG will be extremely difficult for many reasons, and it will not be possible without urgent and adequate global responses to the new energy challenges," the Minister said.

REN21 to Follow-up Bonn

The International Renewable Energy Policy Network for the 21st Century or in brief REN21 (www.ren21.net), has been charged with following up the 200 renewable energy commitments made as part of the International Action Programme arising from the Bonn Conference for Renewable Energies in 2004. Countries and institutions making commitments have been asked by the two conveners of that conference, the German Ministers for Environment and Development, to respond to REN21.

"It's a major focus for us," says Paul Suding, head of the REN21 Secretariat, adding that such monitoring of international commitments is "very rarely done." In the next few months, he says, REN21 will monitor the commitments to determine progress of commitments as well as benefits and impacts.

"Until now, governments have not been able to agree globally on objectives for renewable energy development. Thus, the commitments are voluntary and very diverse in nature," says Suding. By monitoring and following up the committed actions, REN21 hopes to showcase successful policy and project examples and identify gaps that prevent actions from being implemented.

REN21 will present its first preliminary findings during the upcoming 14th session of the United Nations Commission for Sustainable Development (CSD) in New York. Such pioneering work is important, he adds, because there are several sets of

New CDM Capacity Development Activities Projects

A French-funded carbon finance technical assistance project is a new initiative to be jointly implemented by URC and UNEP-DTIE. The project will be implemented in up to five Francophone African countries, on a demand-driven basis, including Benin, Cameroon, Democratic Republic of the Congo, Gabon, Mali, Madagascar, and Senegal. CIRAD and the Office National des Forêts – International division are among the key implementation partners in this project. In addition, collaboration will be developed with carbon market buyers such as the World Bank BioCarbon Fund and regional forestry organizations, such as CILSS and COMIFAC. The project will focus primarily on the forestry and bioenergy sectors in these countries, while aiming at achieving the following broad objectives:



RE2004 Commitments

commitments from the Johannesburg summit, for which reporting is being prepared, and the 15th session of the CSD may be focused on them. REN21 is collaborating with other initiatives.

REN21 will also be hosting a CSD side event to support renewable energy and energy efficiency partnerships jointly with Renewable Energy and Energy Efficiency Partnership (REEEP). The event will be attended by government ministers from Germany and the UK and include a panel discussion on Wednesday, May 10th, on renewable energy and energy efficiency as joint options for future development.

The expansion of the REN21 work follows the recent release of three key reports on renewable energy, including the latest report, *Changing Climates*, on renewable energy and climate change with URC's John Christensen acting as the lead author.

REN21 has also recently established its Secretariat offices in Paris, which are jointly operated by GTZ and UNEP. Suding says the move was made over other cities for logistical reasons as Paris is home to the International Energy Agency, which supports the Secretariat, and a range of globally oriented development and environmental organizations.

Contact: REN21 Secretariat, Ph: +33 (0)1 4437 5094, Email: secretariat@ren21.net

- Build and promote a network for technical cooperation between stakeholders in Latin America and Sub-Saharan Africa to stimulate LULUCF and bio-energy projects.
- Enhance the expertise of Francophone African experts in the forestry sector on carbon management and CDM project design and implementation.
- Identification and implementation of pilot projects and case studies in various potential asset classes (e.g. plantation forestry, forest management, community agro-forestry, 'renewable' charcoal, bio-fuels) with a view toward opening up opportunities for African participation in the carbon market.
- Contribute to the policy evolution and debate on the role of forestry sector projects in a post-2012 Kyoto regime.

Raising the awareness of policy makers in Thailand on the potential benefits of carbon finance projects, and building the capacities of local Thai experts in CDM project design and implementation are the objectives of another new project URC will be implementing during 2006, with funding from Danida. The Asian Institute of Technology has been identified as the local implementation partner. Through this project, a series of high level, executive meetings will be organized for senior government officials. One or more study tours to progressive DNAs in the region will also be organized for Thai policy makers.

During 2006, the URC, UNEP-DTIE, and the World Bank will continue the joint implementation of the Using Carbon Finance to Support Sustainable Energy in Africa (CF-SEA) project, which is expected to be completed during this year. The project is funded by the UN Foundation and the World Bank and aims at developing capacities and projects in the area of carbon finance in five countries in Sub-Saharan Africa. The project has so far identified a portfolio of potential CDM projects in the host countries where several Project Idea Notes (PINs) have been developed by local experts. Emissions reductions from some of the identified projects are expected to be procured by World Bank's Carbon Finance Business.

Exchanging Lessons Learnt

– Strengthening the South-South cooperation on Biofuels

The Brazilian Government (Ministry of Mines and Energy) and the Latin-American Energy Organization (OLADE) hosted an International Seminar on Bio-fuels in Brasilia on 23-26 April 2006, with the support of UNDP, Petrobrás, and Electrobrás. The objective of the seminar was to share ideas among experts and regulators in the region based on the Brazilian experience in pioneering bio-fuels. Among the high-level government, industry, and academic specialists who participated in the event was Glenn Hodes, who represented the UNEP Risø Centre. Hodes' presentation focused on the lessons learned from Brazil's long history of energy technology 'leapfrogging', and its implications for future South-South cooperation on biofuels. He sketched out opportunities for expanding biofuel trade and technological cooperation between Brazil and Africa. In addition, he summarized the key drivers of biofuel market development in Africa. Hodes concluded that the techno-economic potential for biofuel expansion in Africa is significant, but effective policy frameworks and enabling environments for technology transfer are still lacking. African countries could strongly benefit from Brazilian technology and know-how, and these innovations could contribute materially toward the Continent's broader sustainable development agenda.

Contact Glenn Hodes, Energy Economist, UNEP Risø Centre, glenn.hodes@risoe.dk

New Staff at GNESD Secretariat



Dr. Moinul Islam Sharif has recently joined GNESD as Program Officer. Sharif comes from a position as Senior Fellow at the Bangladesh Center for Advanced Studies. Major interests in the past few years have been in areas of Energy (commercial and renewable,) Climate Change (mitigation and CDM issues). Sharif has led a number of energy and climate studies in Bangladesh.



Mette Annelie Rasmussen has joined GNESD as Outreach and Information Officer. She holds a Masters degree in Communication Studies and History from Roskilde University Centre. She brings with her international development communications experience from Zambia and Georgia respectively, where she has worked as a project manager and communications consultant.

For further information on GNESD activities please see www.GNESD.org or contact The GNESD Secretariat at +45 4677 5189

New Staff at URC



Glenn Stuart Hodes, Energy Economist

Hodes comes to the URC from the World Bank. He holds a Masters in International Development, Energy & Environmental Policy from Princeton University, US. At URC, Hodes is assigned to the Capacity Development for the CDM (CD4CDM) project and Carbon Finance to Promote Sustainable Energy Using in Africa (CF-SEA) project. Hodes is also researching ways to grow the market and applications for modern bio-energy technologies.

Contact Glenn S Hodes at UNEP Risø centre: glenn.hodes@risoe.dk



Sara Lærke Meltofte Trærup, Research Assistant

Sara L. M. Trærup is a newly graduated agricultural economist, specialized in development and environmental economics, from the Royal Veterinary and Agricultural University (KVL), Denmark. Her work at URC mainly concentrates on mainstreaming of adaptation and climate vulnerability into development planning.

Contact Sara L. M. Trærup, at UNEP Risø Centre sara.traerup@risoe.dk



Rasmus Vincentz, Research Assistant

Rasmus Vincentz has recently joined the URC. Vincentz recently graduated and holds a Masters in Environmental Business and Public Administration from Roskilde University Centre, Denmark. At URC, he mostly focuses on assisting in the development of the CDM Pipeline database and researches private sector participation in the CDM market and programmatic CDM.

Contact Rasmus Vincentz, at UNEP Risø Centre rasmus.vincentz@risoe.dk

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.unepriose.org/newsletters.htm. To receive an electronic or printed copy of **E+**, please register on our website www.unepriose.org or contact Maria Andreasen (maria.andreasen@risoe.dk) at the URC number below. For all other information or comment, please contact the editor, Mette Annelie Rasmussen (mette.annelie.rasmussen@risoe.dk).

UNEP Risø 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.unepriose.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

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