



ENERGY +  
SUSTAINABLE  
DEVELOPMENT

A Newsletter of  
UCCEE and UNEP  
March 2003



## *Sustainable Development & Climate Change*

### *Country Studies Underway*

The Development and Climate Project has now moved into a new phase with all contracts signed to prepare country studies by participating research centres in Brazil, South Africa, West Africa, Bangladesh, India and China.

"We are now doing the practical work to identify case studies of development policies and projects that also produce benefits on climate change politics" says UCCEE's Project Coordinator, Kirsten Halsnaes.

A number of good case studies already exist, she says, citing an air pollution control programme in New Delhi where the introduction of compressed natural gas for taxis and other transport vehicles resulted in a substantial reduction in the cost of transport and the emission of particulates, oxides, and greenhouse gases. The lower levels of pollution also produced increased health benefits.

The national studies will target specific local issues. For example, the Indian study will address the impact of climate change policies on:

- The nation's coal industry;
- Infrastructure, the food industry and adaptation measures;
- The competitiveness of regional industry in global markets, food security and energy security.

These will be explored through targeted case studies, including studies on the impact of climate change of the Konkan Railway and air quality management in Urban India.

By contrast, the Brazil country study will focus on land use changes (including agroforestry and agriculture in the Amazon region), and energy

production and use. The study will particularly analyse the use of renewable energy to improve energy access in rural areas and the use of industrial energy efficiency measures.

All participating countries will hold their first national workshops to advance their national studies during March and April.

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*Dr. Amit Garg (to the left and at the picture above) from the Indian country team visits air pollution control station in New Delhi. Air pollution control policies in urban areas are expected to render large joint benefits in terms of fuel cost savings, improved health, reduced GHG emissions, as well as income generation because better transport facilities improves urban mobility.*

*Examples of already implemented policies in New Delhi are introduction of CNG taxis and buses and the New Delhi Metro.*



## Indian Solar Financing Project Officially Launched



UNEP's major new initiative to help 18,000 southern Indian households finance clean and reliable electricity from solar power was officially launched on March 4<sup>th</sup> in Bangalore, India. The initiative includes a partnership between two of India's largest banking groups – the Syndicate Bank and Canara Bank – to offer new loans in which UNEP 'buys down' the financing cost of photovoltaic solar home systems.

The UNEP programme, supported by the United Nations Foundation (UNF) and Shell Foundation, means that Indian households will be able to purchase systems at an interest rate of approximately 5 percent compared to the normal consumer lending rates of 11-12 percent. Almost US\$ 8 million will be available for the programme, which may be expanded later to other parts of India.

"This initiative helps to overcome a barrier to increasing the use of renewable energy- risk perceptions by financial institutions that limit access to finance. By providing access, the project not only helps development efforts, but also provides environmental benefits," says UCCEE's Jyoti Painuly.

The combination of two banks and a number of UNEP-qualified solar home system vendors demonstrates how a market-driven approach can stimulate competition among vendors and ensure quality products, competitive pricing and reliable after-sales service.

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UCCEE's Jyoti Painuly (foreground) helps to inaugurate the solar financing programme by lighting a lamp in a traditional Indian ceremony. With him are (from left) Mr M. Gokuldas, General Manager, Canara Bank, Bangalore; Mr Y. S. C. Bose, Chairman, Karnataka Renewable Energy Development Limited (KREDEL), Bangalore; and Mr R.V. Shastri, Chairman & Managing Director, Canara Bank, Bangalore.

## Upcoming 2003 UNEP and UNEP-Risø Sponsored Events

March 26-27, Phnom Penh, Cambodia:  
**First National Workshop of the Capacity Development for the CDM Project.**  
Contact: Myung-Kyoon Lee, mk.lee@risoe.dk

March 27-28, San Salvador, El Salvador:  
**How to develop CDM projects in Central America: A practical exchange of lessons, opportunities and barriers.**  
Contact: Marcela Jager, cmjc@correo.co.cr

April 7-11, Nairobi Kenya:  
**East Africa Geothermal Week**  
The event features the 2<sup>nd</sup> KenGen Geothermal Conference, a site visit to the largest and longest running geothermal plan in Africa at Olkaria and the East African Geothermal Market Acceleration Conference.  
Contact: Tom Hamlin, tom.hamlin@unep.fr

May 28-29, Dakar, Senegal:  
**NEPAD Energy Experts Workshop.**  
Contact: Njeri Wamukonya, njeri.wamukonya@risoe.dk

## Information – the Critical Resource

UCCEE and UNEP have dedicated substantial resources to ensure the information and experiences of our programmes and projects are effectively communicated to our wide range of stakeholders. In addition to the E+ newsletter, you can find information about projects and reports on our main web pages, [www.uccee.org](http://www.uccee.org) and [www.unep.org/energy](http://www.unep.org/energy). Both sites contain links to each other as well as a number of links to other projects that have developed their own web presence. These include:

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

The Capacity Development for the Clean Development Mechanism website contains materials and presentations from workshops as well as links to other projects.

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[www.ared.org](http://www.ared.org), [www.b-reed.org](http://www.b-reed.org)

These sites encompass the different rural energy enterprise development (REED) initiatives in Africa (AREED), Brazil (B-REED) and China (CREED).

Contact: Eric Usher, eric.usher@unep.fr

[www.swera.unep.net](http://www.swera.unep.net)

This website contains information about the Solar and Wind Energy Survey Assessment project.

Contact: Tom Hamlin, tom.hamlin@unep.fr

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

This is the website of the AirImpacts project.

Contact: Jorge Rogat, jorge.rogat@risoe.dk

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

This is the website of the Sustainable Development and Climate Change project.

Contact: Kirsten Halsnæs, kirsten.halsnaes@risoe.dk

[www.gnesd.org](http://www.gnesd.org) or [www.e4sd.net](http://www.e4sd.net)

These are new websites of the Global Network on Energy for Sustainable Development.

Contact: Per Kolbeck, per.kolbeck@risoe.dk

[www.greener-driving.net](http://www.greener-driving.net)

This website contains animated driving tips to reduce energy consumption and environmental impacts.

Contact: Martina Otto, martina.otto@unep.fr

UCCEE and UNEP reports can also be obtained from EarthPrint ([www.earthprint.com](http://www.earthprint.com)).

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EarthPrint, P.O. Box 119  
Stevenage, Hertfordshire  
SG1 4TP, England

Telephone: +44 1438 748 111, Fax: +44 1438 748 844

Email: [customerservices@earthprint.com](mailto:customerservices@earthprint.com)



## CD4CDM *First Phase Nears Completion*

The first phase of the Capacity Development for the Clean Development Mechanism Project (CD4CDM.org) is nearly complete with the drafting of national work plans that will guide the implementation of the second phase over the next three years. Seven of twelve countries in the Project have finished their plans, with the remainder due for completion in the next few months.

To efficiently use resources in this area, UCCEE is also collaborating with other organizations doing similar work, including a close communication and coordination with the World Bank. In Morocco, the project will be merged with a similar UNDP local project and conducted from the Climate Change Unit in the Secretariat of State for Environment. Merging the UNEP and UNDP projects will avoid overlaps and ensure resources are used efficiently.

Regional workshops were held in all four regions. The main objective was to assist the finalization of national work plans by sharing information and experiences and developing more concrete ideas. The participants also worked together to establish cross-country links between the project implementation by:

- (a) understanding the commonalities on approaching CDM issues;
- (b) identifying shared needs on technical assistance and support; and (3) sharing training activities, methods and materials to be developed in the project context.



### UNEP Releases *Greenhouse Gas Indicator*

A new UNEP information tool can help businesses and organizations estimate and report their greenhouse gas (GHG) emissions. *The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations* provides a step-by-step method for equating readily obtainable information on fuel and energy use to emissions of greenhouse gases. Emissions from different operations and activities - such as manufacturing and transport - are combined to yield a single GHG Indicator, an estimate of the organisation's overall contribution to climate change. The method is useful for companies of all sizes, government agencies, non-governmental organisations (NGOs) and other groups.

The GHG Indicator was developed in collaboration with experts from manufacturing companies, accountants, academics, environmentalists, financial institutions, government agencies and NGOs. Conversion factors used in the guidelines are consistent with those recommended by the Intergovernmental Panel on Climate Change and identical to those adopted by many governments to calculate national GHG emissions.

The GHG Indicator is available in several text formats (Microsoft Word and PDF) and in a software version (Microsoft Excel workbook with associated help menus) that aids data entry, simplifies calculations, and allows for different presentations of results. All versions can be downloaded at no charge from <http://www.uneptie.org/energy/act/ef/GHGin/index.htm>

To assist more efficient implementation of the Project, analytical materials are under development in the following areas for training and information dissemination:

1. A popular guide to the CDM (including detailed explanation of CDM project cycle, sample cases, and CDM project design document;
2. Sustainable development Impacts;
3. Baseline methodologies;
4. Legal and institutional framework for the CDM;
5. Financial aspect of CDM project.

The first draft will be ready this year and further elaborated as the project makes a progress.

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### NEPAD Workshop

#### *Highlights Climate Change Issues*

Within the framework of the New Partnership for African Development (NEPAD, [www.nepad.org](http://www.nepad.org)), a workshop organised by UNEP was held in Rabat, Morocco on the 26<sup>th</sup> of February to formulate plans of action within NEPAD's environment theme of climate change. UCCEE's representative to the meeting, Njeri Wamukonya, said twenty climate change experts discussed projects on climate change adaptation and greenhouse gas mitigation, particularly energy and renewable energy issues.

A key outcome of the workshop was a clear plan to finalise the climate change work plan, which is part of the environment action plan. The environment work plan is expected to be presented to the African Ministerial Conference on Environment (AMCEN) before being adopted by the heads of state implementation committee.

The workshop was part of efforts to help NEPAD achieve their specific objectives for the energy sector, which include:

- Increasing the percentage of people with access to reliable and affordable commercial energy supply from 10 to 35 per cent or more within 20 years;
- Improving the reliability and lowering the cost of energy supply for productive activities to attain economic growth of 6 per cent per annum;
- Developing the abundant solar resources;
- Reversing environmental degradation associated with the use of traditional fuels in rural areas;

Another expert workshop planned for May (see Upcoming Events) will develop strategies on how NEPAD and its partners can implement the Energy initiative. The workshop will also explore the role of development agencies, educational and R&D institutions and non-governmental organizations (NGOs) in the implementation of the NEPAD Energy Action Plan.

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# SWERA Adds the Maldives and Sets Targets

As part of a Memorandum of Understanding (MOU) between UNEP and the U.S. National Renewable Energy Laboratory (NREL), the Solar and Wind Energy Survey Assessment (SWERA) project (<http://swera.unep.net>) will include the Maldives and expand its assessment in Bangladesh. SWERA uses remote sensing (satellite) and other on-the-ground data to produce highly detailed maps of 14 countries that will show the best areas of wind and solar energy potential.

UNEP SWERA Project Manager, Tom Hamlin, said the inclusion of the Maldives into SWERA will help overcome uncertainties about the size and intensity of the country's solar and wind energy resources. This in turn can also help potential investors gain greater confidence that an acceptable return can be secured from an investment in solar or wind power.

The Maldives joins the SWERA pilot countries of Bangladesh, Brazil, China, Cuba, El Salvador, Ethiopia, Ghana, Guatemala, Honduras, Kenya, Nepal, Nicaragua, and Sri Lanka. The partnership with NREL will enhance these efforts by adding similar services for Maldives and allow an expansion of the Bangladesh and Sri Lanka assessments.

In another change to the programme, SWERA national partners will now focus on developing renewable energy targets following WSSD and discussions with SWERA country members. "Developing renewable energy targets will assist global assessments of renewable energy potential as well as defining national policy and attracting investment," says Hamlin. Previously planned energy work will be able to address the issue of renewable energy targets without a significant change to the activities, he says.

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## PUBLICATIONS

### ***A Guide to Emission Trading*** *UNEP, UCCEE, UNCTAD, 2002*

This guide explores the central issues related to emissions trading. Written in non-technical language and compiled on recent work by the UN Conference on Trade and Development (UNCTAD), UNEP and UCCEE, the guide is a response to a number of initiatives in many countries to use market-based instruments for environmental protections.

### ***"Wind power projects in the CDM: Methodologies and tools for baselines, carbon financing and sustainability analysis"***, Risø, Dec 2002.

This report is a guide for project developers, investors, lenders, and CDM host countries involved in CDM wind power projects. The publication reports on tests, comparisons and recommended methodologies for baseline development.

## New Staff

**Molly Hellmuth** recently joined UCCEE she is a PhD scientist working on agriculture and sustainable development in Africa, particularly related to the impacts of climate change on water resource management. At UCCEE Molly is going to work with the adaptation sub-programme.

**Sami Kamel** holds a PhD in Mineral Economics from the Colorado School of Mines in the US. Before joining UCCEE, Sami was an analyst at the US Department of Energy's National Renewable Energy Laboratory and was involved in analysing the economics of hybrid power systems in Egypt. At UCCEE, Sami is working with CDM capacity development in the Middle East and North Africa, and with the innovative financing initiative for clean energy in the Mediterranean region.

**Wilson Wasike** joined UCCEE from Kenya where he worked as a policy analyst in the Infrastructure and Economic Services Division at the Kenya Institute for Public Policy Research and Analysis (KIPPR) in Nairobi. Wilson holds a PhD in Environmental Economics from the University of Stirling in Scotland. He is working on policy studies on infrastructure-poverty-environment interactions, energy economics and planning, evaluation of energy access studies in developing countries, and research into transport sustainability indicators in Africa.

**E+** provides information on the activities at UCCEE 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.uccee.org/newsletters.htm](http://www.uccee.org/newsletters.htm). To receive an electronic or printed copy of E+, please register on our website [www.uccee.org](http://www.uccee.org) or contact Maria Andreasen ([maria.andreasen@risoe.dk](mailto:maria.andreasen@risoe.dk)) at the UCCEE number below. For all other information or comment, please contact Anne Marie Jensen ([amj.jensen@risoe.dk](mailto:amj.jensen@risoe.dk)).

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