

June

2001

# UCCEE news

News from the UNEP Collaborating Centre  
on Energy and Environment

## 10 year anniversary of UCCEE



The occasion of the 10-year anniversary of the establishment of UCCEE was recently marked by a seminar on "Energy for Sustainable Development" held at Risø National Laboratory in Roskilde. The keynote speakers at the seminar included UNEP's Executive Director, Klaus Töpfer, the Danish Minister for Development Co-operation Anita Bay-Bundgaard and the Director of Risø National Laboratory, Jørgen Kjems. In addition, the Head of UCCEE, Dr. John Christensen, spoke about the Centre's past accomplishments in the areas of sustainable energy development and climate change and its vision for the future.

The audience was composed primarily of representatives from Danish Ministries, institutions and companies. UNEP was also represented by Ms. Jacqueline Aloisi de Larderel, Director of the Technol-

ogy, Industry and Economics Division, who has been the UNEP representative on the Centre Management Committee since 1995.

All of the keynote speakers pointed to the accomplishments of the Centre over the last ten years. During this period UCCEE has developed from small support unit of 4 people to a Centre with 20 international staff members, a large portfolio of projects in a number of developing countries, and continuing collaboration with a number of international organisations.

At the meeting, the Danish development minister used the opportunity to announce the ministry's expanded financial support to UNEP and continued support for the work of the Centre.

## Workshop on *Baseline Methodologies for CDM and JI Projects*

On 7-9 May, the UCCEE at Risø organised jointly with the OECD and the IEA an expert workshop entitled "Identifying feasible baseline methodologies for CDM and JI projects". The workshop brought together participants from Annex I and non-Annex I countries with the aim of building consensus on initial recommendations for baseline construction. Around 100 participants were in attendance, with 25 from Non-Annex I countries and 11 from Economies in Transition. The audience for this workshop was comprised of both government officials and technical experts responsible for JI / CDM and sectoral experts. The meeting was chaired by Kok Kee Chow, who was also the chairman of the Kyoto Mechanisms group during the UNFCCC negotiations on climate change.

The background for the workshop is that Joint Implementation and the CDM are project based market mechanisms for greenhouse gas mitigation, as outlined in the Kyoto Protocol. They are intended to help achieve greenhouse gas emissions reductions in host countries, by providing incentives for investment in clean technology and improving the performance of on-going investment in energy and other projects that might otherwise lead to higher emissions.

In order to be eligible, both Joint Implementation and CDM activities have to

show that they are "additional" to any that would occur in the absence of the certified project activity. Baselines can be used to measure whether and to what extent projects are environmentally additional. Environmentally sound emission baselines are a prerequisite for the measurement of emission reductions from Joint Implementation and CDM projects.

Four breakout groups discussed energy supply, energy demand, heavy industry and transport. They were facilitated by Ogunlade Davidson (South Africa), Einar Telnes (Norway), Tamas Pálvölgyi (Hungary) and Jyoti Parikh (India). All four break out groups developed recommendations for environmentally sound and feasible standardised emission baselines for joint implementation and CDM projects. At the end participants emphasised the need to meet again in sectoral groups for further work.

A chairman's report of the meeting is being prepared and will serve as input for the UNFCCC negotiations in July and November this year. Information and documentation from the workshop is available on the UCCEE website under [www.uccee.org](http://www.uccee.org) or from Fanny Missfeldt at [fanny.missfeldt@risoe.dk](mailto:fanny.missfeldt@risoe.dk). You may also contact Jane Ellis from the OECD at [jane.ellis@oecd.org](mailto:jane.ellis@oecd.org).





## UNEP and IEA Sponsor *Energy Subsidy Reform* *in Four Regional Workshops*

Recognising the importance of energy subsidy reform to achieve sustainable development, UNEP and the International Energy Agency (IEA) have jointly conducted a series of regional workshops in the period from November 2000 to March 2001. Each of the workshops had a specific emphasis on the region's needs and challenges (OECD countries and Economies in Transition, Africa, Asia and Latin America) and involved about 50 experts from energy, environment and finance ministries, research institutes, NGOs and industry from the respective regions. UCCEE supported the workshops through research papers and presentations of case studies for Africa, Asia and Latin America at all of the workshops. UCCEE acted also as the liaison between UNEP, the IEA and some of the regional institutions hosting the workshops.

The workshops followed a similar general structure: A broad variety of subsidy experts looked at "subsidies - today's situation", "rationale and goals for energy subsidies", and "challenges of reforming subsidies", with a special focus on raising awareness on the linkages between energy subsidies and their environmental, social and economic impacts. Discussions were based on presentations showing positive and negative practical examples. In order to allow for inter-regional exchange and provide for continuity, participants from other regions were invited to the respective workshops.

Some of the issues raised at all workshops were:

- Conventional energy subsidies artificially reduce energy prices, and often create disincentives for investing in energy efficiency, renewable energy and other electricity infrastructure.
- Conventional energy subsidies often fail to achieve their underlying objectives, such as social and economic development, and ensuring energy security.
- Nevertheless, energy subsidies can be beneficial under certain conditions: Subsidies for R&D and to infant industries, for example, were generally found to be beneficial as long as they are eliminated as soon as the technology became competitive.
- Social concerns as well as insufficient access to energy, more pressing in developing countries, shift the focus to the social component of sustainable development.
- Reform instead of removal of energy subsidy systems, as subsidies were seen as important for getting energy services to the poor and to rural populations. Energy subsidy reform should be part of the overall energy policy reform.
- Need for better defining and measuring subsidies (including data collection) and for more analytical work on the environmental, social and economic impacts of energy subsidies and their reform, taking an integrated approach.
- Need to help make policy-makers better comprehend the benefits of subsidy reform for sustainable development, taking into account the specific circumstances of their country.
- Need for awareness raising amongst citizens.

- Focus on renewable energy technology, which can be an efficient and competitive alternative to traditional energy sources, especially in rural or remote areas.

For each workshop a compilation of key issues and policy options and recommendations have been prepared. As well, an overall synthesis of the main outcomes and recommendations of the workshop series and associated analytical work has been prepared and submitted to the Ninth Session of the UN Commission on Sustainable Development. At CSD-9, a side-event was held to further disseminate outcomes of the workshop series and discuss issues and possible solutions.

The publication of analytical work and selected case studies as a follow-up action is being prepared by UNEP and the IEA.

For more information, please contact Martina Otto from UNEP at [martina.otto@unep.fr](mailto:martina.otto@unep.fr) or Jorge Rogat from UCCEE at [jorge.rogat@risoe.dk](mailto:jorge.rogat@risoe.dk).



## UCCEE and IGES *Sponsor Workshop on Kyoto Mechanisms*

UCCEE and IGES (Institute for Global Environmental Strategies) of Japan co-sponsored a workshop on the Kyoto Mechanisms on 15 and 16 March 2001 in Beijing, China under the title of "Socio-economic Assessment for the CDM and Other Mechanisms". The Energy Research Institute (ERI) of China organised the participation of Chinese institutions and experts.

About 50 experts from various Chinese institutions and IGES and three experts from UCCEE participated in the workshop. In the first and second sessions, nine speakers presented papers focusing on various aspects of the Kyoto Mechanisms and on policies & measures to implement and enforce these mechanisms. Designated panelists and participants from the floor discussed the papers. Following two presentations on Chinese perspectives on climate change and energy issues in the last panel session, the discussion was opened up to all the participants.

Since both IGES of Japan and ERI China are governmental institutions, this forum provided an excellent opportunity for UNEP collaboration with Asian countries and for enhancing mutual understanding on climate change issues. A noticeable shift in Chinese policy was observed at the workshop. Until recently, the Chinese have avoided all references to the CDM. However, in this workshop, the Chinese experts seemed more enthusiastic, pointing to possible options to reduce CO<sub>2</sub> emissions in China through CDM projects in the areas of industry, building-material, and renewable energy. The Chinese experts strongly objected to the inclusion of sinks in the CDM.

Plans are underway to hold additional policy dialogues with Asian countries through IGES and UNEP/UCCEE. The next venues for workshops are planned to be Korea, India and Thailand. Ultimately, a side event at COP7 is planned presenting the results of this workshop series in several Asian countries. For additional information contact Myung-Kyoong Lee at [mk.lee@risoe.dk](mailto:mk.lee@risoe.dk).

## SEAF in Action

Supported by the Danish Ministry for Foreign Affairs, the Sustainable Energy Advisory Facility (SEAF) was initiated in April 2000 and has been fully operational since October 2000. SEAF has been designed to provide swift and flexible support on very specific needs regarding a broad range of sustainable energy topics, and to do so in manner that draws on other work and catalyses other resources. The facility aims to demonstrate that small and targeted interventions at just the right time can make significant contributions to further implementation of specific policies and projects that spur the development and application of sustainable energy strategies and technologies.

A new programme has been prepared to expand the successful SEAF activities. The programme aims at undertaking future interventions in close collaboration with a group of regional 'centres of excellence' already active in the area where energy, environment, and development intersect. A structured but flexible network mechanism involving five or six energy centres located in developing countries will be established to provide targeted advisory services to governments and the private sector. Moreover, the network mechanism will strengthen institutional capacity for analysis and implementation of sustainable energy activities and contribute to the practical knowledge base through a number of collaborative research efforts on sustainable energy and climate change issues. Contact Arturo Villavicencio at [arturo.villavicencio@risoe.dk](mailto:arturo.villavicencio@risoe.dk) for

additional information. A brief summary of ongoing SEAF interventions by UNEP/UCCEE is provided below.

**Botswana:** Botswana's National Photovoltaic Programme (NPVP) combines a credit facility to household or small business for the purchase of PV systems with a quality control and maintenance service. High financial costs of credit management and a passive role of the private sector are major difficulties detected in the execution of the NPVP. SEAF is providing management support to the NPVP by re-organising its structure to incorporate innovative financial mechanisms and leverage to greater private sector investments in rural energy services.

**Ghana:** experiences from several pilot projects in the country show that current rural electrification policies are rapidly eroding potential markets for solar PV services. Highly subsidised rates of grid electricity create competitive pressures against the solar PV option at the community level. SEAF is assisting Ghana's ministry of Energy/Public Utilities regulatory Commission (PURC) to develop a subsidy reform package and an energy-service concession structure to secure stable markets for renewable energy service providers.

**Jamaica:** within the context of the Caribbean Energy Action programme (CEAP), partially supported by the UCCEE and the Latin American Energy Organisation (OLADE) Jamaica seeks to formulate a long-term energy policy strategy. SEAF has responded to a direct re-

quest of the government to assist the Ministry of Energy and Mines to complete the task of formulating and implementing the strategy in a sustainable energy policy framework.

**Mali:** a number of jatropha oil powered multi-functional platforms have been installed in Mali. Low levels of organisation combined with poor management practices and limited technical capabilities have resulted in a low performance of the platforms. SEAF is supporting efforts by the National Directorate of Energy to revamp, and expand coverage of community-based energy services based on Jatropha-Oil Multifunctional Platforms.

**Namibia:** the government is committed to increasing access to electricity through levelling the playing field between grid and off-grid electrification. The Electricity Act however focuses on grid electrification. SEAF is providing technical support to the Ministry of Mines and Energy/Electricity Commission Board to develop a regulatory framework for integrating sustainable off-grid power sources into the electrification programme.

**Uganda:** despite the importance of biomass in the national energy balance (94% of total consumption), there is no a comprehensive biomass strategy. Needless to say the biomass resource is being depleted at a higher rate than production. SEAF is supporting the Ministry of Energy on designing a plan for developing the national biomass energy strategy and establishing a framework for effective co-ordination among key government agencies.

### Sustainable electrification in Namibia

*Dr Detlef von Oertzen, Namibian consultant, on behalf of the Ministry of Mines and Energy*

In January 2001, the Namibian Ministry of Mines and Energy, supported by UNEP's Sustainable Energy Advisory Facility, commissioned a project entitled "Developing implementation guidelines for off-grid policies for sustainable electrification in Namibia". The Rural Electrification Distribution Master Plan (REDMP) was recently completed in Namibia. The plan identifies areas that will stay beyond the reach of the national electricity grid for the foreseeable future, and where, in order to assure a continued equitable electrification, off-grid technologies will have to be employed. The government's goal is to raise the number of rural beneficiaries of electrification to at least 25% by 2020.

As part of the project, a national workshop was held in March 2001 to discuss international off-grid experiences and approaches, and the corresponding possibilities for Namibia. A main topic of discussion was the involvement of stakeholders early in the implementation process, so as to contribute to planning and be fully informed of ongoing progress. It was agreed on that the Ministry of Mines and Energy should continue to provide the vision and required finance for off-grid electrification, while the newly established Electricity Control Board would focus on devising and implementing the required framework. This Board would ultimately regulate the off-grid industry in a light-handed but equitable manner.

### Commission on Sustainable Development: Energy for Sustainable Development

The ninth session of the Commission on Sustainable Development (CSD 9) took place in New York from 16 to 27 April. One of the two major topics was energy for sustainable development. UNEP and the UCCEE have been involved in the preparation process for the CSD 9 for almost two years, and followed the meeting closely.

As part of the preparations the UCCEE, jointly with UNEP and UN-DESA (Department of Economic and Social Affairs), organised an African high-level meeting early in January 2001, where the ministers agreed on the African regional statement for CSD 9. Preparations have also included the Centre's participation in the regular meetings of the inter-agency task force meetings. The Centre also acted as an observer to the informal intergovernmental expert group negotiating the text for CSD 9.

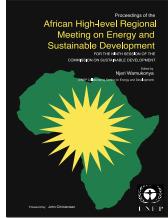
As an adjunct to the regular CSD meeting UNEP organised a side event on "Energy for Sustainable Development – a regional approach". At this meeting UNEP's Executive Director, Klaus Töpfer, chaired a panel of ministers and high level experts including the Ugandan minister of Energy and Mineral Development, Hon Syda Bbumba, the Danish Minister for Development Cooperation Anita Bay-Bundgaard and Mr. Reza Salamat, the co-chair of the expert group. The event was extremely well attended and concluded that more emphasis needed to be

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put on regional approaches including strengthening regional centres of excellence. Specifically Dr. Töpfer outlined UNEP's goal

to link existing regional centres under a new expended SEAF project, an approach that was strongly supported by the other speakers. For additional information contact John Christensen, Head of UCCEE at [john.christensen@risoe.dk](mailto:john.christensen@risoe.dk).



## African High-level Regional Meeting on Energy and Sustainable Development

Nairobi, 10-13 January 2001

African ministers and energy experts met in Nairobi in January 2001 in a meeting organised by UNEP, UNDESA and the Kenyan government. The objective of this meeting was to give African energy ministers the opportunity to contribute directly to the ninth session process of the Commission on Sustainable Development (CSD). The meeting was structured into two segments. The first was a technical segment where energy experts discussed the key energy issues in Africa. The second was a ministerial segment that adopted a ministerial declaration on Energy and Sustainable Development of African Governments. This declaration articulated regional perspectives on the basis of a consensus on regional issues as well as strategies for action and ways of strengthening regional cooperation in the areas of energy and sustainable development. The Kenyan Energy Minister, Hon. Y. Masakharia presented this statement at the ninth session of the CSD9 held in April 2001 in New York. UCCEE staff organised the technical segment of the meeting and provided a number of papers. UCCEE has consequently prepared the proceedings from the workshop, which are available from UCCEE's website.

The major themes reflected areas identified as important to the CSD process; access to energy within which power reform was also addressed, renewable energy prospects and limits, rural energy and regional cooperation opportunities and challenges. The following key recommendations emerged. It was emphasised that increasing access to clean modern energy is necessary for sustainable development. As power reform unfolds, Africa needs to structure its reform to meet its development objectives and hence should research on the socio-economic and environmental implications of various reform paths before adopting them. It would thus be beneficial to have dialogue and information on the experiences from countries that have undertaken power reform. UNEP and UCCEE aim to facilitate accessibility to this information through a workshop planned for the last quarter of the year. The Nairobi meeting noted the importance of increased regional cooperation as a strategy to improve the energy situation and foster sustainable development in the continent. For additional information contact Njeri Wamukonya at [njeri.wamukonya@risoe.dk](mailto:njeri.wamukonya@risoe.dk).

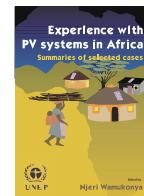
## New Staff

### Ph.D. project on rural electrification in Burkina Faso

A new Ph.D. project will start at the UNEP Centre in August this year. The Ph.D. study is part of a new program "SEREIN-2000" funded by the Danish Research Council for Development. Several Danish institutes collaborate in "SEREIN-2000" under the topic "Global and regional natural resource management in the Sudano-Sahelian Region". The Ph.D. project will be undertaken in collaboration with the Department of Geography and International Development Studies at Roskilde University Centre. The main research question for the Ph.D. student will be the strategy of rural electrification in Burkina Faso, which is based on active participation of local consumer groups in planning, execution, ownership and management of mini-grid systems.

### Ph.D. programme on development impacts of environmental projects

A Ph.D. project in environmental and development economics will start at UCCEE late summer 2001 as part of a larger portfolio of Risø Ph.D. projects. The aim of the project is to develop and test a methodological framework that can be used for an integrated assessment of development aspects and global and regional environmental policies. The project will assess a number of energy sector and transportation sector projects, and will consider how institutional aspects and market performance can be addressed in a formalised analytical framework.



## Experience with PV systems in Africa

UCCEE has recently published summaries of selected PV cases from 13 African countries in a booklet entitled 'Experience with PV systems in Africa'. Each of the cases is authored by persons who have been involved in the project. Notable are some commonalities and differences in implementation approach and its implications on the success of a project. Nearly all the projects have had some donor funding. This publication is available at the UCCEE website. In an upcoming publication the details of projects will be presented with more conclusive recommendations.

UCCEE News provides regular information on the activities at UCCEE and UNEP Energy. The views expressed here do not necessarily represent those of UNEP, Risø National Laboratory or Danida. The newsletter and back issues are available on the Internet at <http://www.uccee.org/newsletters.htm>. If you would like to receive a printed copy of UCCEE news or a text-only, register on our website or contact Maria Andreassen at [maria.andreasen@risoe.dk](mailto:maria.andreasen@risoe.dk) or fax: +45 46 32 19 99 or phone +45 46 32 22 88. For all other information contact the editors.

Editors: John M. Callaway ([mac.callaway@risoe.dk](mailto:mac.callaway@risoe.dk)) and Jorge Rogat ([jorge.rogat@risoe.dk](mailto:jorge.rogat@risoe.dk))

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

UNEP Collaborating Centre on Energy and Environment (UCCEE)  
Risø National Laboratory  
P.O. Box 49  
DK 4000 Roskilde  
Denmark

UCCEE News is printed on 100% recycled and chlorine bleach free paper.

UCCEE at Risø National Laboratory, Denmark, supports the United Nations Environment Programme (UNEP) in pursuing its aim of incorporating environmental aspects into energy planning and policy world-wide, with special emphasis on developing countries. UCCEE works catalytically, encouraging, promoting and supporting research by local research institutions, coordinating projects and disseminating information, as well as carrying out a full in-house research programme in close collaboration with colleagues at Risø National Laboratory - the main public scientific research institute in Denmark.