

Dear Readers,

It is our pleasure to present to you the January issue of the GTZ Energy Newsletter. There is no doubt that 2009 has been an eventful year for renewable energy. It was encouraging to see the membership of the newly founded International Renewable Energy Agency (IRENA) grow to 138 states and the European Union. The new year will start with the third World Future Energy Summit in Abu Dhabi, followed by high profile events such as the International Renewable Energy Conference at New Delhi (DIREC), the fourth in a series, following conferences at Washington in 2008, Beijing in 2005 and Bonn in 2004.

A sustainable energy solution is the pivotal element of our efforts to tackle challenges such as poverty alleviation and climate change. This newsletter provides information on GTZ's work on energy with updates on selected ongoing projects, events and publications. We appreciate your feedback. Feel free to forward this newsletter to interested friends and colleagues! If you have any questions about the projects and events highlighted in this newsletter or GTZ's work on energy in general, please feel free to contact us via email: energy@gtz.de.

The editorial team

Technology transfer for renewable energy

Workshop on sustainable market development for renewable energy in East Africa



East Africa is a promising market for renewable energy: Growing population and economy lead to a sharp rise in energy demand and there is an urgent need for rural electrification. Some renewable energy market segments are already well developed such as the

market for solar home systems. But besides these "donor driven" markets other off grid market potentials are growing rapidly as well. Examples are the booming telecommunication sector, back-up applications and the tourism sector which are quickly picking up the idea of renewable alternatives, such as PV, already cost competitive compared to diesel-based off-grid electricity generation. Furthermore with the demand outstripping energy supply in grid-connected areas, the mid- to long-term perspectives clearly show the huge potential for grid-peripheral and grid-connected electricity generation.

These are promising prospects for the local private sector as well as for international players. "Thus, it is not anymore the question if East Africa is a viable market for state-of-the-art renewable energy solutions, but rather the question when and how to enter the evolving markets", experts and business people claimed on a recently held workshop in Berlin. One of the key

In this issue

Technology transfer for renewable energy – Workshop on sustainable market development for renewable energy in East Africa

Sustainable Energy in Mexico – Study reveals Mexico's large photovoltaic potential

GTZ Wind Energy Programme TERNA – Wind Energy and Development Dialogue 2009

HERA – Household energy for sustainable development – Expert talk on carbon market and cook stove projects - practitioners guide launched

EnDev - Energising Development – Battery charging stations - lessons learnt from Mali

European Union – Second ACP-EU Energy Facility established

GTZ – Establishment of Sector Network Energy sub-Saharan Africa

New publications

GTZ wind energy programme TERNA

Energy policy Framework Conditions for Electricity Markets and Renewable Energies – 16 Country Analyses

[Download PDF 2.76 MB \(English version\)](#)

Sustainable Energy in Mexico

Nichos de Mercado para Sistemas Fotovoltaicos en Conexión a la Red Eléctrica en México

[Download PDF 3.76 MB \(English with Spanish Executive Summary\)](#)

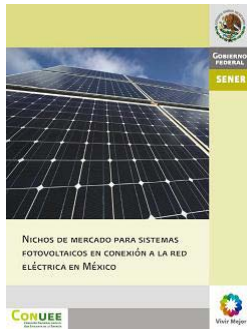
outcomes of the workshop was that private sector driven business development for renewable energy in East Africa can be the main driver for a sustainable approach to technology transfer. This is where the “Renewable Energy Project Development Programme” comes in: The programme aims at establishing business partnerships between the East African and the German renewable energy private sector. Its approach offers technology specific support through tailor-made instruments and activities.

The “Renewable Energy Project Development Programme” is implemented by the German Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit GmbH, GTZ) on behalf of the German Federal Ministry for Economics and Technology (BMWi).

A business and study trip to Ethiopia, Kenya and Tanzania for German solar manufacturers, project developers, investors and operators is scheduled for February/March 2010. For further information on the programme’s activities see www.gtz.de/projektentwicklungsprogramm.

Sustainable Energy in Mexico

Study reveals Mexico’s large photovoltaic potential



Grid-connected photovoltaic applications hardly have a market so far in sun-rich Mexico. As the government pours substantial subsidies into residential electricity tariffs, tariffs are low and so are opportunities for investors. But this picture is changing. On behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), GTZ’s Programme for Sustainable Energy in cooperation with the National Energy Efficiency Commission (CONUEE) recently published a study analyzing market niches for grid-connected photovoltaic systems in Mexico. The study focuses

on the residential, industrial and service sectors in 29 cities. The financial feasibility of the photovoltaic systems is evaluated from the perspective of an investor by comparing the total costs for electricity in a case with and without a photovoltaic system. The study reveals that due to rising electricity costs and declining photovoltaic system costs there exist fast growing market niches for grid-connected photovoltaics in Mexico. In the residential sector for example, the financially feasible niches amount to 700 MWp equivalent to a market volume of 5.2 billion US dollars. So far Latin America’s second biggest economy has installed only about 20 MWp in photovoltaic applications. This study is the first publication providing detailed information on the economic situation of grid-connected photovoltaics in Mexico underlining the hope to reach grid parity in the near future.

Website of the Sustainable Energy in Mexico Programme

www.gtz.de/en/praxis/27816.htm

[Nichos de Mercado para Sistemas Fotovoltaicos en Conexión a la Red Eléctrica en México \(English with Spanish Executive Summary\) \(PDF: 3.76 MB\)](#)

GTZ Wind Energy Programme TERNA
Wind Energy and Development Dialogue 2009

HERA – Household energy for sustainable development

Carbon Markets for Improved Cooking Stoves

[Download PDF 0.89 MB \(English version\)](#)

Upcoming events

17 January 2010

Abu Dhabi, United Arab Emirates

[Third Session of the Preparatory Commission for the International Renewable Energy Agency \(IRENA\)](#)

18-21 January 2010

Abu Dhabi, United Arab Emirates

[World Future Energy Summit](#)

22-26 March 2010

Brussels, Belgium

[European Union Sustainable Energy Week](#)

27-29 October 2010

New Delhi, India

[DIREC2010 - Delhi International Renewable Energy Conference 2010](#)

Recommended newsletters

REN21 - Renewable Energy Policy Network for the 21st Century

[REN21 newsletter](#)

European Union Energy Initiative Partnership Dialogue Facility (EUEI-PDF)

[EUEI-PDF newsletter](#)

Back issues

[Click here](#) to browse back issues of GTZ’s energy newsletter.



The TERNA Wind Energy Programme of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, the German Engineering Federation VDMA Power Systems (VDMA PS) and the German Wind Energy Association (BWE) held

the annual Wind Energy and Development Dialogue for the fourth time (9-10 November, Berlin). A total of more than 150 German and international guests, with participants from politics, industry and international organisations, had the opportunity to engage in an intensive exchange of ideas and experience.

The first day focused on Technology Transfer as an Element of Market Development for Wind Energy in Developing Countries and Emerging Economies. The role of technology transfer in the expansion of wind energy was examined in an international context. Reports on the experiences of system manufacturers supplemented this analysis. The second half of the day was allocated to representatives from eight countries in Africa, Asia and Latin America. They described the market development for wind energy in their countries and presented their expectations of technology transfer. International and local manufacturers then discussed opportunities and challenges, taking specific examples from the regions. The closing discussion provided a platform for bringing together the developing and emerging countries expectations of successful technology transfer on the one hand and the German wind sector's requirements for such a transfer to take place on the other.

The second day of the event spotlighted the Effect of the International Climate Regime on the Expansion of Wind Energy Utilisation in Developing Countries and Emerging Economies. In the synoptic introductory talk, German and international political and industry representatives took stock of the effect of existing instruments and formulated their expectations regarding a post-2012 climate regime. In the second part of the event, private sector representatives discussed the Clean Development Mechanism's contribution to the financing of projects in developing countries and emerging economies.

Both events were part of a one-week workshop on integrating wind energy into the grid organised by GTZ's TERNA Wind Energy Programme on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ).

Documentation of TERNA's "Windenergie- und Entwicklungsdialog 2009" can be downloaded [here](#).

HERA – Household energy for sustainable development

Expert talk on carbon market and cooking stove projects – practitioners guide launched

Carbon finance could be a key mechanism to enhance the dissemination of improved cooking stoves in developing countries and to increase the supply of clean cooking energy. Nevertheless, due to many obstacles given in this sector, only a small number of project activities have so far been successful on the carbon market. Since the promising approval of two CDM-Methodologies eligible to cooking stove projects in February 2008, the cooking stove community has been observing a wide range of regime inherent difficulties to overcome. With the objective to create a platform for an in-depth discussion GTZ's programme for poverty-oriented basic energy

services (HERA) on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) hosted an expert talk on emission trading and cooking stove projects on 28 October 2009 at the GTZ headquarter, Eschborn. About 20 participants from various German and Swiss organisations, including carbon project developers, exchanged experiences to improve the situation of cooking stove projects on the carbon market.

HERA has launched a comprehensive guide on carbon markets and improved cooking stove projects. The guide offers an overview of the various steps to take when developing a cooking stove CDM-project, as well as a collection of lessons learnt and answers to frequently asked questions. The guide is available for download [here](#).

EnDev – Energising Development

Battery charging stations - lessons learnt from Mali

In rural areas of developing countries many households do not have access to electricity and power their radios with dry cell batteries or use candles and kerosene lamps for domestic lighting. Some employ car batteries for lighting and recharge them for a fee at the nearest battery charging station. Battery charging stations usually aren't the first choice for rural electrification but they can be a temporary solution until other energy resources are available. As a part of the German-Dutch "Energising Development" (EnDev) initiative, photovoltaic battery charging stations were installed in seven rural municipalities in Mali. A new publication presents experiences and lessons learnt in Mali. As a main result, we can conclude that even though solar-powered battery charging stations have comparably high initial investment costs, they can make good economic sense in remote areas, where no alternatives exist and the population's income is too low to invest in other solutions such as solar home systems.

For further information please feel free to contact Mr. Roman Gruener roman.gruener@gtz.de.

European Union

Second ACP-EU Energy Facility established

A second Energy Facility (EFII), with a total budget of €200 million, has been established under the 10th European Development Fund for the period 2009-2013.

EFII will be implemented through two calls of proposals. The first €100 million call was launched on 30 November 2009. This new Facility will also include new co-financing instruments namely a financial support to energy governance through the EUEI-Partnership Dialogue Facility (EUEI-PDF) and a pooling mechanism which involves European financing institutions and the private sector.

The Energy Facility is a co-financing instrument established in 2005 in order to support projects on increasing access to sustainable and affordable energy services for the poor living in rural and peri-urban areas in African, Caribbean and Pacific (ACP) countries. Almost seven million people are expected to benefit from 74 projects co-financed by the first Energy Facility with a total budget of €220 million.

Further information see <http://ec.europa.eu/europeaid/...>

GTZ

Establishment of Sector Network Energy sub-Saharan Africa



The "Sector Network Energy sub-Saharan Africa" was established in November 2009 in Kampala, Uganda. David Otieno, a national expert based in Uganda, was elected spokesman by 50 delegates from various

energy related projects. The sector network aims to facilitate and improve professional exchange and sectoral cooperation in the field of energy in the sub-Saharan region. It focuses on market development and the use of renewable energy. The next general meeting is planned for November 2010 in South-Africa.

The following working groups have been established so far:

- Market development / cross cutting issues (including regional approaches, regulation, policies, funding, carbon financing, private sector advancement)
- Small and medium hydropower plants
- Biomass / Bioenergy (modern wood energy, biogas)
- Photovoltaics

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