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Deutsche Gesellschaft für
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Household Energy Programme (HEP)

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News from Headquarters

International Conference for Renewable Energies – Bonn 2004

Introduction

In June 2004, Bonn played host to 3600 participants attending the International Conference for Renewable Energies – *renewables 2004,* invited by the German Government. The intergovernmental conference, which was organized by GTZ, was attended by delegations from 154 countries, including 121 ministers responsible for energy, the environment and development, alongside many representatives from the United Nations and other international organisations, non-governmental organisations, civil society, the private sector and other stakeholder groups.

Two central issues were addressed:

- How can the proportion of renewable energies used in industrialised and developing countries be substantially increased?
- How can the markets for renewable energies be better developed?

Political declaration on renewable energies

The outcome of these discussions lead to a Political Declaration that signals a worldwide turning point, according to the international press. The Political Declaration embodies a new consensus: that renewable energies are the energies of the future and thatenergy efficiency, is of key importance. The declaration reaffirms the Millennium Development Goal to halve poverty by 2015.

Commitment to action

The International Action Programme consists of almost 200 voluntary commitments and actions. Reaffirming the Millennium Development Goals means that efficient, affordable and clean energy technologies have to be made available to the poor. In terms of action this means:

- Making primary schooling accessible for all children, boys and girls alike
- Reducing child mortality by two thirds
- Halving the proportion of people without access to safe water,
- Improving the lives of at least 100 million slum dwellers.

All this needs one thing: access to energy.

Developing countries need to expand energy services massively to reach these goals, and for this they need international co-operation. Through expansion, the poor could gain direct access to modern energy services for cooking, lighting, and productive activities that generate an income. With additional energy, they could build and operate schools allowing all boys and girls to receive basic education; they could run hospitals that will help reduce child mortality; they could pump and convey water to those who are presently denied access.

Voluntary pledges

Among the voluntary pledges compiled are ambitious national targets for the expansion of renewable energy by more than 20 countries, financial commitments by governments and financing institutions, commitments in the area of research and development and initiatives for increased cooperation with developing countries in the field of renewable energy. The implementation of the International Action Programme will save more than 1.2 billion tonnes of CO_2 per year by 2015. Also by 2015, it will have provided about one billion extra people with access to modern energy. The success of *renewables 2004* was based on its new approach of building a bridge between multilateralism, bilateral cooperation and the more unilateral approach. In contrast to many previous international meetings, *renewables 2004* did not aim to achieve uniform commitments for all countries. Instead, the outcome of *renewables 2004* combines voluntary actions with Policy Recommendations and a Declaration containing a review clause.

While participants could decide freely on their own input to the International Action Programme, they accepted that measurable steps should be reported to the UN Commission on Sustainable Development and that progress should be reviewed. All key players will pave the way towards a sustainable energy future. In the follow-up of the conference, the task remains to ensure that the conference outcomes are put into practice worldwide. Only if this is achieved can we truly speak of *renewables 2004* being successful.

Policy recommendations for renewable energies

The document 'Policy Recommendations for Renewable Energies' is one

of the key conference outcomes. Ministers and Government Representatives reached agreement in the following key areas:

1. To build upon the results and agreements reached at the major Global Summits, reaffirming their commitment to substantially increase with a sense of urgency the global share of renewable energy in the total energy supply.
2. To reaffirm their commitment to achieving the United Nations' Millennium Development Goals. It is estimated that up to one billion people can be given access to energy services from renewable sources, provided that market development and financing arrangements can be enhanced as intended through the Conference's 'International Action Programme'.
3. To endorse the need for coherent regulatory and policy frameworks that support the development of thriving markets for renewable energy technologies and recognise the important role of the private sector. They noted with appreciation the 'Policy Recommendations for Renewable Energies', which provide a menu of options to decision-makers.
4. To enhance international cooperation for capacity building and technology transfer, effective institutional arrangements at all levels, corporate responsibility, microfinance, public-private partnerships, and advanced policies by Export Credit Agencies as crucial to expanding finance for renewable energies.
5. To support strengthening of human and institutional capacities for renewable energies through building capacity for policy analysis and technology assessment, strengthening education, gender mainstreaming, raising awareness of government decision-makers and financiers, promoting consumer demand, supporting development of marketing, main-tenance, and other service capacities, and strengthening regional and international collaboration and stakeholder participation.
6. To increase targeted research and development, especially by developed countries, emphasizing particularly affordability and cost reduction, innovative business and financing models and cost-effective, consumer-friendly cost-recovery models.
7. To work toward these objectives, individually and jointly, by undertaking the actions they have submitted for inclusion in the 'International Action Programme' and through other voluntary measures
8. To work together within a 'global policy network' with representatives from parliaments, local and regional authorities, academia, the private sector, international institutions, international industry associations, consumers, civil society, women's groups, and relevant partnerships worldwide.
9. To achieve tangible progress, as well as substantive follow-up and therefore to continue the high-level political dialogue begun in Bonn.

The representatives complimented the Government of Germany and the German people for organising the Conference and for the opportunity it represented to stress the importance for advancing in the implementation of the commitments of Johannesburg on renewable energies to reach sustainable development worldwide.

We have reported on the outcomes of this conference fairly extensively in the hope that this will motivate development agencies, civil society and the private sector worldwide to join in the task of monitoring the implementation of the International Action Program agreed upon at the conference. If you want more information on the commitments of your government, the national target is available from the relevant energy ministry of your country.

Latest ProBec news

Marlis Kees – www.probec.org

renewables 2004

ProBEC was actively present at the Bonn Conference engaging in three different activities: Mr Freddie Motlhatlhedi, Coordinator SADC, Energy Programmes presented ProBEC under best practices at the Plenary Session. The presentation 'Biomass energy – fulfilling energy needs for today and tomorrow?' caught the grip of the audience from all over the world. His contribution can be seen on www.renewables 2004.de under 'contributions of participants'. ProBEC staged a side event on the Day of Biomass. It was titled 'Getting Biomass Energy fit for the Future!' and had a short scenic introduction and a panel discussion. Last but not least, ProBEC also manned a stall and exhibits for interested visitors.

European Union Energy Initiative (EUEI)

has adopted ProBEC under para 8 as part of its action plan (www.renewables.de). Marlis Kees and Mr Freddie Motlhatlhedi from SADC had a meeting in Bonn with EUEI representatives. A proposal has been submitted for upscaling BEC activities in 5 countries namely Namibia, Botswana, Lesotho, Mozambique and Zimbabwe.

Launch of ProBEC SADC-North

The Ministry of Foreign Affairs of the Netherlands (DGIS) has signed the contract with GTZ-ProBEC on the expansion of ProBEC activities into Tanzania, Zambia and Malawi. The duration of the program will be from 01.07.2004–31.12.2006. The regional office of ProBEC SADC-North shall be

in Lusaka, Zambia. The first planning workshop for ProBEC SADC-North was held from 12–13 August 2004 in Lusaka. The first national planning workshop for Tanzania is taking place from 10–11 Nov. in Dar-es-Salaam.

UNDP/GEF proposal on barrier removal

A planning workshop for finalising the UNDP-GEF proposal on removing barriers to BEC in SME and institutions in 5 ProBEC-South countries ((Nam, Les, RSA, Moz, Zim) shall be held in South Africa in January 2004. In order to prepare for these planning workshops, impact assessment has been the focus of the regional office.

The Rocket Stove is rocketing!

The Rocket Stove technology for large scale cooking has been developed to a point where widespread dissemination can start. It has been tested in schools in Lesotho with promising results on efficiency and ease of handling. It has also been adapted to cooking situations in Malawi and Mozambique. Now we can proudly state that:

- WFP (World Food Programme) has ordered more than 100 stoves in Lesotho and Malawi,
- Prisons in Malawi will improve their kitchens with the Rocket stoves and
- Teacher Training Colleges in Malawi have expressed an interest to do the same.
- Various stoves have been displayed at the 'Blantyre Trade Fair 2004' in Malawi and have attracted many visitors. The stand won the Silver Prize for the industrial/manufacturing category!

Our congratulations to the VESTO!

The VESTO Stove developed and produced by New Dawn Engineering has won a prestigious award. The Design Institute of South Africa Award 2004 for Design Excellence has been bestowed on the VESTO Stove. The judging criteria included: innovation, cost/value relationship, performance, environmental impact, ease of maintenance and installation, manufacture and assembly.

Energy-efficient stoves in developing countries

A Master's thesis with the above named title has been completed by Andreas Michel at the RE studies program at the University of Oldennburg, Germany, where you can find a detailed description and evaluation of the Rocket and VESTO stoves, among others. You can find this at the ProBEC website.

GTZ

Experience exchange on low-cost clay and ceramic stoves

Mrs Joyline T.M Tawha, ProBEC National Co-ordinator, Zimbabwe

Workshop participation

A nine-day GTZ-Programme for Biomass Energy Conservation (ProBEC) experience exchange workshop on low cost clay and ceramic stoves was held in Mulanje, Malawi from 28 June to 08 July 2004. Participants included stove promoters and builders, field facilitators and extension officers from governmental and non-governmental organisations from some of the ProBEC partner countries including Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe. Although not one of the ProBEC partner countries, Kenya was included, due to the country's wide experience on sustainable dissemination of clay and ceramic stoves.

The workshop offered the opportunity for promoters of various fuel-efficient household stoves to:

- Share production, marketing and dissemination experiences
- Enhance their capacities to control the quality of stoves produced.
- Discuss and exchange experiences on predominant issues relating to energy work such as food security, HIV /AIDS, indoor air pollution (IAP), and kitchen management.

Training in manufacturing

Some of the major components of the training included

- Discussions ranged around heat transfer principles governing efficient combustion, modes of heat transfer and finally how to improve on the combustion and heat transfer efficiency of the cooking system (including stove technology, pot, fuel, and fire management).
- Insights into the experiences from different countries, included information on the type(s) of stoves being promoted, dissemination strategies, numbers disseminated, results of efficiency tests, promotional methods, and challenges faced.
- Quality control issues explained that improved stove technologies need to be of sufficient quality for users to realise the benefits of saving energy, money and time:
  - Clays with the right properties have to be selected and prepared
  - Correct dimensions have to be maintained for critical components: fire chamber height , pot rests**,** door openings and stove wall thickness
  - Fixed stoves have to be correctly positioned in a well-ventilated kitchen to allow for good air circulation and smoke removal (Figure 1)
  - The drying and firing process have to be well monitored
  - The user needs to maintain the stove and apply improved kitchen and firewood management techniques (cutting, splitting and using dry firewood, extinguishing firewood when cooking is finished, maintaining a small hot fire directly under the pot, soaking dry food, cutting food small,

Figure 1: Stove installed in kitchen

having all necessary ingredients within reach etc).

Participants were given practical field experience in addressing quality control issues in stove production (Figure 2) , installation and use, packing, firing and off-loading of an improved kiln and on the production and use of a retained heat cooker – commonly referred to as a fireless cooker.

Training in marketing

An introduction to marketing defined it as 'the process that is aimed at improving on the quantities of the products sold and profit accrued by concentrating on satisfying customers' needs'. The marketing concept thus entails determining the customers' needs/wants and adapting and supplying these in a more efficient and effective manner than competitors.

The four major steps involve identifying and understanding customer needs, (4Ps of marketing) were discussed and participants agreed on key issues to be considered for each component. These components comprise:

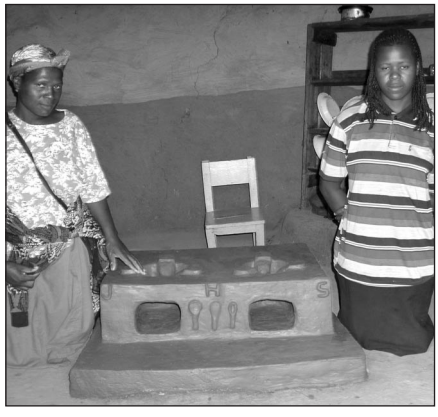

Figure 2 Newly constructed stove

- **Product** – item on sale
- **Price** – setting price to make a profit
- **Place** – finding the best way to get the product to the customer
- **Promotion:** creating ways to persuade customers to buy your product

Pricing

More time was allocated to the pricing aspect in response to participants' request for a pricing formula. Since clay and mud are normally collected and not bought, the pricing for mud and clay stoves involves costing the time spent collecting the clay, firing and distribution costs + losses for clay stoves, promotional costs and profit margin. In general, the prices the promoters were charging were lower than the ones they calculated at the workshop, mainly because of some time cost elements that they were taking for granted. The promoters agreed on the need for constant review of prices to keep in line with prevailing conditions but still considering their customers' ability to pay.

Monitoring

An introduction to monitoring defined it as a process involving the collection and analysis of data to ensure that the programme meets the objectives and needs of the users. The participants were introduced to participatory impact monitoring – monitoring by different players including; users, promoters, installers, facilitators, extension staff, project management team, and the donor at different impact levels. Participants agreed that to facilitate the monitoring process survey should include: numbers produced and/or installed, dates produced and/or installed, sales figures and problems encountered and the solutions that had been found.

Workshop outcomes

- An introduction to impact assessment: this gave participants an opportunity to assess the effectiveness of the work they are doing. This helped them to identify strengths and possibilities for improvement.
- **Commercialisation**: participants agreed that for sustainability of stove projects, efficient stove technologies and techniques should be introduced through a commercial or semi commercial approach. For mud stoves, commercialisation is mostly through the provision of installation services while ceramic stoves can be commercialised through both selling and installing in houses. The group identified key stakeholders for support in such an approach including producers, artisans, stockists, promoters and users. Governments and the donor community are essential in training and awareness raising.
- **HIV/AIDs:** this session raised the awareness of participants on prevention, Voluntary testing and counselling (VTC), home based care and nutritional needs of patients and how stove projects can alleviate the effect of HIV/AIDs including a better cooking environment (reduced exposure to smoke and excessive heat), well cooked food, boiled water and less money or time spent in acquiring firewood.
- **Monitoring systems**: At the end of this session a recommendation was passed by the participants, that it would be desirable to come up with a more comprehensive monitoring system, which involves the different players themselves in the monitoring process (after appropriate training), as it is through this process that they get a better understanding of the interlinkages that exist between them, which all contribute to a successful dissemination. It was further suggested that ProBEC should take up the development of such a system as soon as possible.