IINCO Specific Support Action

Final Report
(01.01.2004 - 30.06.2005)
September 2005

PARTNERS FOR AFRICA

Renewable Energy Partnerships for Poverty Eradication and Sustainable Development in Africa

Project Co-ordinator:

WIP, Sylvensteinstrasse 2, 81369 Munich, Germany

Project Partners:

ITDG – Intermediate Technology Development Group, The Schumacher Centre for Technology & Development, Bourton-on-Dunsmore, Rugby, CV23 9QZ, United Kingdom

SEI – Stockholm Environment Institute, Box 2142, SE-103 14 Stockholm, Sweden

Illovo Sugar Limited, PO Box 194, Durban, South Africa

ENDA Tiers Monde, B.P. 3370, Dakar, Sénégal

CEEEZ – Centre for Energy, Environment and Engineering Zambia, Private Bag E721, Lusaka, Zambia

---

INCO Specific Support Action - Contract No. INCO-CT-2003-502257

CONTENTS

This document presents results of the work performed by the consortium in the full project period from 01.01.2004 - 30.06.2005.

This work has been conducted in the framework of the project PARTNERS FOR AFRICA, co-funded by the European Commission in the 6th Framework Programme – Specific Measures in Support of International Cooperation (Contract No. INCO-CT- 2003-502257).

Annexes describing specific tasks performed in the framework of the PARTNERS FOR AFRICA project have been submitted together with the Periodic Activity Report (Mid-term Report), December 2004, and the Second Periodic Activity Report, September 2005.

Editing and Reporting: PARTNERS FOR AFRICA - FINAL REPORT

Dr. Rainer Janssen
WIP – Renewable Energies
Sylvensteinstr. 2
81369 Munich, GERMANY
Tel.: +49 89 72012743
E-mail: rainer.janssen@wip-munich.de

1. ABSTRACT

The project PARTNERS FOR AFRICA demonstrates and promotes the role of renewable energy in poverty eradication and policy-making activities in the areas of sustainable resource management, health and public health, and enterprise development. Specifically, the project succeeded in mobilizing a variety of international and local renewable energy partnerships which provide support for the development of progressive energy policy initiatives and lay the foundations for concrete projects aiming at poverty alleviation and sustainable development in Africa. Project results include a policy dialogue on co-generation and bio-ethanol for Southern Africa in Durban, South Africa, a policy dialogue on biofuels, renewable energies for public health and enterprise development in Lusaka, Zambia, and the elaboration of a policy declaration to the G8 Summit in Gleneagles in July 2005 emphasising that renewable energy systems provide a practical and substantial opportunity for African countries to combat poverty.

2. PROJECT OBJECTIVES

The objective of the project PARTNERS FOR AFRICA is to demonstrate the role of renewable energy in poverty eradication and to offer support to policy making activities in sustainable resource management, health and enterprise development.

Thereby, the action supports and stimulates the activities of the European Energy Initiative for Poverty Eradication and Sustainable Development (EUEI). This initiative was launched at the Johannesburg World Summit for Sustainable Development to help achieve the Millennium Development Goals by creating a focus on better access to sustainable energy services for the more than two billion “energy poor” of our planet.

International and local partnerships have been mobilised to support policy making. The partnerships are of three essential types: Policy Partnerships, Programme Partnerships and Action Partnerships. Policy Partnerships support the development of progressive energy policy initiatives directly through research activities and stakeholder networking. Programme partnerships initiate and support training and capacity building initiatives. Action Partnerships lay the foundations for concrete projects including pilot projects.

3. CONSORTIUM AND NETWORKS

The consortium comprises 6 highly competent actors, active in the renewable energy and international development fields. The 3 European members of the consortium are the WIP-ETA Consortium (Germany/Italy), ITDG (UK) and SEI (Sweden). These players lend particular strength to this action through their experience in the coordination of the global energy and development networks: LAMNET (www.bioenergy-lamnet.org), CARENSA (www.carensa.net) and Sparknet (www.sparknet.info). The African consortium members are experienced and have an established reputation in the fields of renewable energy and development. They are Illovo Sugar (South Africa), ENDA (Senegal) and CEEEZ (Zambia).

4. DISSEMINATION ACTIVITIES

The objective of PARTNERS FOR AFRICA information dissemination is to ensure an enduring positive impact of the activities performed and partnerships created in the framework of this project.

All dissemination activities are targeted at the European Union (and the European Research Area), the European Energy Initiative and Sub-Saharan African countries. The following dissemination activities have been performed:

- Creation of the PARTNERS FOR AFRICA logo
- Creation of a dynamic project website: **www.partners4africa.org**
- Creation of internal information exchange platform: **partners@partners4africa.org**
- Set-up of a contact partner database and publication of a project newsletter
- Project presentation at international conferences and in scientific journals
- Organization of regional policy dialogue workshops (Durban, Lusaka, Dakar)
- Organisation of a Policy Dialogue Synergy Conference in Tanzania
- Elaboration of an information package (policy recommendations) for the EU Energy Initiative

PARTNERS FOR AFRICA project LOGO

4.1. PARTNERS FOR AFRICA Project Website

The internal information exchange platform and dynamic project website was created under the guidance of ITDG by Eco Ltd. in February 2004 and April 2004, respectively. The public web page for Partners for Africa was created for the domain name ***www.partners4africa.org***. The system gives users of the Internet worldwide access to information and latest news from the project through a user-friendly interface. Users can also contact project members directly from the web system. The web page includes information about the project, the composition of the project consortium, information about the process of partnership formation, latest news from the project, information about events, a publication archive, and an extensive list of relevant web links (numbering 264 items as of April 2005).

An email distribution system was set up for internal communication between project partners. The system allows for contacts with project partners through the email address ***partners@partners4africa.org***, and maintains archives of correspondence and discussions.

Ongoing maintenance and promotion of the website has continued since it was created. This has meant that the website has been available to visitors continuously since creation, and that visitors are presented with up to date information from the project when they visit. The website has seen steady growth in users, with on average approximately 6600 site hits per month over the past 12 months. Eco will continue to host the website at own cost for the foreseeable future (at least a further 5 years until 2010).

4.2. PARTNERS FOR AFRICA Contact database

A contact database has been created by Eco Ltd. as a subsystem of the public web site, which is accessible to logged-in users of the system. This is a dynamic system allowing users to add and edit personal and organisation profiles, and view contacts by country or organisation.

In this project database, international, regional and local contact partners for on-going and future activities have been included. This database consists of partners and contacts of the 3 thematic networks LAMNET, CARENSA and Sparknet as well as of contacts established during the PARTNERS FOR AFRICA project. This database was continuously enlarged and up-dated during the course of this project. As of June 2005 the contact database consists of 218 names.

4.3. PARTNERS FOR AFRICA Project Newsletter

The PARTNERS FOR AFRICA Newsletter was prepared and edited by the project partner SEI. The main goal of the newsletters is to create a forum of information for all project partners and relevant world-wide stakeholders about the activities of the PARTNERS FOR AFRICA project and similar networks in the energy arena. Newsletter articles focus on bioenergy achievements, interesting project results and policy issues in the area of Renewable Energy Partnerships for Poverty Eradication and Sustainable Development.

In the framework of the project 4 newsletter issues have been published, printed and distributed via email and on the occasion of high-level international events.

5. MOBILISED PARTNERSHIPS

In the framework of the PARTNERS FOR AFRICA project a variety of partnerships on renewable energy and sustainable resource management, health and enterprise development have been initiated.

5.1. Partnerships: Renewable energy and sustainable resource management

Activities in the PARTNERS FOR AFRICA work package on 'Renewable energy and sustainable resource management (WP1)' are coordinated by the partners WIP and Illovo Sugar and include contributions of all consortium partners.

The main objective of this work package is to mobilise international and national partnerships and to support policy making in the field of 'Renewable energy and sustainable resource management'.

In this work package issues relating to energy resources from biomass, wind, solar and small-scale hydro sources are addressed. The topics which the three types of partnership (i.e. policy, action and programme partnerships) engage are:

- Improving the lives of women
- Relieving water stresses through renewable energy from biomass, wind, photovoltaics or other sources
- The exploitation of residues from sustainable forestry and agricultural activities
- Formulation of sustainable alternatives to unsustainable tree-felling
- Managing the logistics of biomass residue resource chains and improving their efficiency by addressing energy crop yields, resource management and conversion technologies
- Reducing the depletion of biomass and fossil-fuel resources through the sustainable use of renewable energies
- Introducing and improving innovative wood, energy crops and residue fuel processing technology (e.g. pelletising, compaction, drying, production of gelfuels)

In the following, selected policy, action and programme partnerships supported and promoted in the framework of the PARTNERS FOR AFRICA project are briefly summarised. More detailed information on these partnerships is presented in the First and Second Periodic Activity Reports and the corresponding Annexes.

Policy Partnership: Government Policy on Ethanol – South Africa

Responsible partners: Illovo Sugar, WIP

With the exception of Malawi and Zimbabwe, there is no legislation in place to blend ethanol with gasoline or diesel, hence in the SADC (Southern African Development Community) region there is not an established Ethanol industry.

Building upon the opportunity and partnerships created by the Partners for Africa meeting in Durban in June 2004, officials from the South African Department of Mineral and Energy (DME) were exposed to presentations on the Brazilian ethanol experience.

The DME have subsequently commissioned an investigation into the production of bio-ethanol from renewable resources. Preliminary findings have been presented to interested stakeholders and it is agreed upon that bio-ethanol as a domestic fuel to substitute Paraffin (Kerosene) shows practical, social, environmental and economic benefits.

Bio-ethanol as a blend for gasoline has been sidelined by the initial report as requiring substantial Government financial support. However, ethanol blending has by no means been dropped from all agendas and the final report determining Government's short and long term strategies is under preparation.

A significant benefit from these interventions has been the new relationship between the stakeholders and the DME. There is awareness on all sides as to the urgency and importance of renewable energy and the role that it can play towards both development and environmental targets under the Kyoto protocol.

Policy Partnership: Government Policy on Cogeneration – South Africa

Responsible partners: Illovo Sugar, WIP

In certain areas of southern Africa, electricity is both expensive and unreliable, thereby causing for instance severe problems for agricultural operations dependent on regular irrigation. Thus, Government policy needs to recognise the role of renewable energies and legislate or develop the structures necessary to utilise these locally available resources.

Building upon the opportunity and partnerships created by the Partners for Africa meeting in Durban in June 2004, officials from the South African Department of Mineral and Energy (DME) were informed on the Brazilian sugar industry cogeneration initiatives.

The DME issued an open tender for the investigation into the potential for the Sugar and Pulp/Paper Industry to use cogeneration to supply electricity to the national grid. The tender was awarded to the "Sugar Milling and Research Institute" and the preliminary report was issued to all interested stakeholders at the end of November 2004. Findings indicate that the Sugar Industry has a large potential to generate electricity from bagasse. An estimate of 6,000 GWh has been reported as a potential Sugar Industry supply given improved generation efficiencies through high pressure boilers and condensing turbo alternators. This figure represents 60% of Government's overall renewable energy target for 2012.

It is expected that the DME will issue a call for tenders for Independent Power Producers to supply electricity to the grid early in 2005. The national utility and other funding agencies are supportive in financial terms of promoting renewable electricity generation.

Action Partnership: Pelletisation of Sugar Cane Bagasse – South Africa

Responsible partners: Illovo Sugar, WIP

Bagasse is the fibrous residue remaining after the sugar has been extracted from sugar cane. It is predominately used as a fuel for boilers and hence electricity generation. Traditionally, bagasse is seen as a waste product to be burnt thereby removing a potential disposal problem. Given the scarcity of clean energy generation, bagasse is now being viewed as a unique resource which should be maximized in the generation industry. In order to access this potential a means of storing or transporting bagasse in large quantities is required. Bagasse pelletisation at commercial costs is a potential solution.

Pelletisation plants operating with wood bark/sawdust have been visited in the framework of the PARTNERS FOR AFRICA project and show promise towards solving the bagasse problem. Nevertheless, extensive trials and costing exercises need to be undertaken to exploit this opportunity.

Programme Partnership: Bioenergy Clearinghouse for Poverty Alleviation in Sub-Saharan Africa

Responsible partners: WIP, Illovo Sugar, CEEEZ

During the Partners for Africa policy dialogue in Durban in 2004, the participants identified fundamental information deficits that were a barrier to the development of (bio)energy policy in Southern Africa.

African policy makers are increasingly engaged in the modernisation of energy sector policy. This opens significant opportunities for distributed generation and renewable energies. However, policy-makers generally lack the data and background information required to make informed decisions on energy sector planning and the setting of targets. This lack of information is found most strongly in the assessment of total bioenergy potential, potential for energy exports, generation costs, social impact and environmental impact assessments.

The proposed BIOHOUSE initiative will strengthen existing capabilities in developing countries and twin existing energy centres in South Africa, Zambia, Malawi, Tanzania and the EU in order to establish a Bioenergy Clearing House network for Poverty Alleviation in Sub-Saharan Africa. This capacity building activity will aim at an improved specification of sustainable energy requirements and will contribute to the establishment of sustainable energy strategies, policies, programmes, projects and financing arrangements. Additionally, the project aims at linking a large variety of on-going local, national, regional and international activities in the field of bioenergy in Sub-Saharan Africa.

The proposed action includes marketing research, networking and project development research. This will provide the tools required to educate and inform policy-makers, SMEs, entrepreneurs and stakeholders. The tools developed in the clearing house network will be used for capacity building measures amongst entrepreneurs and businesses, as well as for political capacity building work and new policy formulation.

Action Partnership: Kilombero Business Linkage Project - Tanzania

Responsible partner: Illovo Sugar

Alongside its sugar business activities, Illovo operates significant social infrastructure for employees, their families and neighbouring communities. This infrastructure, whilst important for Illovo as a strategic investment in its future workforce and social relations, is not a part of the company's core business. Social Programmes such as the Kilombero Business Linkage Project are therefore in urgent need of external support and co-funding, to allow Illovo to continue and expand its social infrastructure programmes.

Established in 2002 as a joint venture between the International Finance Corporation and the Kilombero Sugar Company Limited, the Kilombero Business Linkage Project (KBLP) exemplifies a win-win public-private partnership, as it delivers economic benefits to both the company and the remote agriculture based community in Kilombero, Tanzania.

By promoting linkages between the company and the outgrower farming community, KBLP is expected to assist up to 7000 subsistence farmers in the impoverished area gain sustainable new sources of income from the sale of sugar cane.

Through innovative financing mechanisms and capacity building programmes, KBLP is allowing new farmers to enter the market and existing farmers to expand and improve their cane farming activities. To further support outgrower development, KBLP is leveraging commercial donor funding to support vital infrastructure development, create an information management system and deliver much needed agriculture and business training to farmers, farm groups and other local entrepreneurs.

In the framework of the Partners for Africa workshop in Tanzania, a technical tour was organised to the Kilombero site. Participants of this tour included, among others, representatives from the World Bank, financing experts and bioenergy specialists.

Action Partnership: Transfer of experience in small-hydro project development in South America, Europe and Africa

Responsible partner: Practical Action

In rural areas of developing countries, where the great majority of people have been neglected from access to modern services, family household needs are generally very low. Research studies show that the average consumption is as much as 30 to 50 kWh monthly. According to the findings of Practical Action, in small isolated villages in Latin America (for example in Peru, Bolivia, Nicaragua), 60 to 70% of rural people hardly consume more than 20 kWh per family monthly.

The strategy of Practical Action to promote small scale decentralised energy schemes for rural isolated communities has been to employ an integrated approach with activities on: technology development and transfer; designing, running and/or facilitating financial schemes in rural areas; designing and promoting management schemes and building the local capacity in the communities. In the field of small hydro, Practical Action has a particular long experience, working in several countries in Latin America, Africa and Asia.

Wherever small hydro resources are present, it is generally an excellent energy option for productive uses and small businesses. Small hydro plants run 24 hours a day and are designed for the peak demands with 25 to 30 years lifespan. Therefore they provide large amounts of energy, which can be systematically used to promote productive uses.

Programme Partnership: Establishment of a Tanzanian Biofuels Task Force

Responsible partner: WIP

The Tanzanian Government is well aware of the variety of benefits offered by the introduction of biofuels for transport applications and it is seriously assessing the different options for the development of policies and strategies for an increased use of biofuels.

Activities towards an implementation of biofuels policies are currently mainly driven by the Tanzanian Ministry of Energy and Minerals (MoE). At an expert workshop in Dar es Salaam, organised in the framework of the study 'Biofuels for Transportation in Tanzania' commissioned by the German GTZ, the representatives of the MoE strongly supported the proposed establishment of a high-level Tanzanian Biofuels Task Force which can provide advice and recommendations for the elaboration of biofuels policies and regulations suitable for the Tanzanian framework conditions.

Among the objectives of this Task Force will be to ensure close co-operation between the different Government Ministries involved in the development of biofuels policies, as well as to provide an information channel between Government and biofuels stakeholders from industry, farmers associations, NGOs and civil society.

Consultations between Government representatives and biofuel stakeholders will for instance help to address several important issues, such as the comparison of economic, environmental and social benefits (e.g. employment generated, rural development, FOREX saved) and costs (e.g. reduces tax revenues) of biofuels programmes in Tanzania, and the potential effects of diverting crops towards biofuels production on other markets (e.g. food markets).

The Biofuels Task Force will be a body independent of, but with strong co-operation links to the Tanzanian Government. The administrative structure will consist of a Task Force Secretariat, the Chairman of the Task Force and the Task Force Members. It is recommended, that the Biofuels Task Force is convened by the Ministry of Energy and Minerals as soon as possible.

Policy Partnership: Government Action to promote increased use of biofuels in Tanzania

Responsible partners: WIP, Illovo Sugar

Just recently, the Tanzanian Government has started to think about alternatives to oil and during discussions with several high-level representatives of Government Ministries it became very clear that Tanzanian policy-makers are well aware of the large variety of benefits offered by displacing gasoline and diesel fuels with liquid biofuels for transport.

In order to quickly proceed with the introduction of biofuels in Tanzania, the Government should take immediate action to enter the learning-by-doing process – and not wait for results and policy advice from the Task Force. The following recommendations were supported by the study 'Biofuels for Transportation in Tanzania' commissioned by the German GTZ.

- Establish biofuels demonstration facilities; 1 large-scale ethanol and 1 large-scale biodiesel (or Pure Vegetable Oil) production facility with scales of more than 10.000 tons per year of biofuel output
- Establish a production/user group for small-scale biodiesel (or Pure Vegetable Oils) production for transport fuel and bio-electricity production

- Encourage the sales of flex-fuel vehicles and companies which modify diesel vehicles to run on Pure Vegetable Oils; investigations may be required on the relative benefits of esterified bio-oils and PVO for mineral diesel replacement
- Investigate the option of using ethanol blends in gasoline as lead replacement in order to comply with Tanzania's obligation to phase-out leaded gasoline by 2005
- Encourage financing options (e.g. capital allowances, tax breaks) and set-up incentives for (local and foreign) investors; consider revenue neutral options including additional taxes on fossil fuels to cover implementation costs of biofuels
- Evaluate quality assurance as a practical method for ensuring the sustainable development and use of biofuels and to quantify the national impact of their use

Policy Partnership: Cooperation and exchange of experience between the Ministries of Energy of South Africa, Zambia, Senegal, Tanzania and Ghana – The Ghana experience with Levies

Responsible partners: WIP, SEI, Practical Action, Illovo Sugar, CEEEZ, ENDA

The governments of sub-Saharan Africa are faced with the need of reforming their energy policy to meet a wide range of new challenges and demands, in particular:

- Economic growth and modernisation, leading to growing domestic energy demand
- High oil imports and high oil prices leading to a growing current trade deficit
- Atmospheric pollution in cities and transit routes leading to health and environmental problems
- Global environmental concerns, leading to a move away from centralised fossil-fuel power plants towards decentralised new and renewable power

An intensified dialogue is required between the Ministries of Energy of sub-Saharan Africa. Many countries have potential for cooperation in the bioenergy sector (e.g. biofuels trade between Zambia and South Africa). Some countries also have significant positive experiences that can be used as models by other countries. One example is "The Ghana Experience in Funding Rural/Renewable Energy through Levies on Fossil Fuels and Electricity" presented by Mr. Wisdom Ahiataku-Togobo at the Partners for Africa workshop in Dar es Salaam.

5.2. Partnerships: Renewable energy and health

Activities in the PARTNERS FOR AFRICA work package on 'Renewable energy and health (WP2)' are coordinated by the partners ITDG and ENDA and include contributions of all consortium partners.

The main objective of this work package is to mobilise international and national partnerships and to support policy making in the field of 'Renewable energy and health'.

Thereby, the consortium has created partnerships that address health-related energy issues in two major thematic areas:

1. Energy supply solutions for essential health-related facilities, such as lighting for hospitals and clinics, and refrigeration for medication and vaccines.
2. Wider, energy related health issues. This will include access to clean drinking water and respiratory problems due to fuel combustion.

Renewable energies are central to solving these problems, especially in rural areas where there is currently limited electricity grid coverage. Solutions to health and public problems can receive the vital impetus from the interdisciplinary approach, including energy issues, offered by the project.

In the following, selected policy, action and programme partnerships supported and promoted in the framework of the PARTNERS FOR AFRICA project are briefly summarised. More detailed information on these partnerships is presented in the First and Second Periodic Activity Reports and the corresponding Annexes.

Programme Partnership: Reduction of Indoor Air Pollution in Poor Households

Responsible partner: ITDG

The problem of smoke is often underestimated. Recent work has shown that indoor air pollution is one of the main sources of health problems in poor rural and urban areas today.

The partnerships created in the framework of the project PARTNERS FOR AFRICA focus on the following key issues to contribute to a reduction of indoor air pollution in poor African households:

- Collate information on previous projects and identify success and failure factors. From this data determine policy recommendations, information gaps and project concepts.
- Develop public awareness campaigns on smoke dangers at community level through meetings, amongst health workers, through child-to-child initiatives, the media etc.
- Evaluate impact on health and quality of life of the introduction of different technologies. Present results to high-level stakeholders and policy-makers.
- Create National Forums to evaluate best practice through dialogue between relevant sectors, particularly energy and health. Target those with influence through policy recommendations from National Forums for addressing constraints to cleaner technologies and fuels.
- Instigate market surveys to design appropriate and locally produced cooking and heating products.

- Lobby governments to implement local, national and international publicity campaigns of knowledge on the health problems created by indoor air pollution.
- Develop a policy proposal paper for Indoor Air Pollution best practice, in collaboration with key authorities, NGOs and government stakeholders.

Action Partnership: Successful trends of fuel switching in Sudan

Responsible partner: ITDG

The high dependence on biomass fuels for household energy in Sudan not only contributes to environmental degradation and desertification, but equally causes serious health problems to women and children below five years.

ITDG-Sudan initiated the first work of its kind in Sudan by monitoring household indoor air pollution levels during 24 hours, using participatory research methods. A sample of thirty voluntary poor households from a semi-urban residential area (Wau Nour, Kassala) participated in the research. Firewood, purchased from the market, was the dominant cooking fuel, taking a considerable share of the daily household expenditure. Cooking with biomass takes place on traditional inefficient three stone stoves.

The monitoring of indoor air pollution revealed high levels of particulate matter and carbon monoxide. During the research phase, and using a revolving fund system, the project enabled 167 households to switch to cooking with LPG. The level of indoor air pollution is reduced by more than 80%. A scaling up strategy was developed based on the Women Development Associations (WDAs) and incorporating project partners and stakeholders. The scaling up phase of the project started in May 2004 and since then great achievements have been realized.

Policy and Action Partnership: Senegalese Country Project – Improved Access to Health through Renewable Energy

Responsible partner: ENDA, ITDG

The Senegal Country Project was presented on the occasion of the PARTNERS FOR AFRICA workshop in Dakar, April 2005. The project stated that the rural electrification rate has hardly reached 7.5% of the households (5.5% in urban areas) and reflects the local situation of poverty. The effects on the access to basic services are direct because electricity may not be available, even if the designed national health policy aims at all infrastructures being supplied with water and energy. The reality is very far from this “wish”, mostly in rural areas. The level of medical care is insufficient to play a significant positive role on mother and children mortality.

Regarding the very low level of rural electrification, alternative solutions such as renewable energies are required. In Senegal, among the various sources of renewable energy, solar energy which has been tested for several decades along experimental projects seems to be suitable for a flexible supply to rural and isolated health units.

Policy and Action Partnership: Benin Country Project – Income generating activities through improved access to renewable energies

Responsible partner: ENDA, ITDG

The general objective of the Benin Country Project, presented on the occasion of the PARTNERS FOR AFRICA workshop in Dakar in April 2005, is to improve the living and working conditions of rural and peri urban population by promoting income generating revenues using renewable energy. Specific objectives are: 1) to improve the community access to renewable energy by providing efficient equipment and training, in order to promote income generating activities that will help people to afford better access to health; 2) to encourage the communities to increase their income, and to reduce poverty.

Policy and Action Partnership: Burkina Faso Country Project – Renewable energy powered water pumping for drinking water and irrigation water supply

Responsible partner: ENDA, ITDG

In spite of good water availability, Burkina Faso faces increasing difficulties to access this precious resource. 95% of the taps are merely equipped with manual pumps which do not allow an optimal exploitation of the hydraulic infrastructures.

The general objective of the project, presented on the occasion of the PARTNERS FOR AFRICA workshop in Dakar in April 2005, is to improve drinking water supply for the population and to intensify agricultural production, allowing food security and basic conditions for a social development in rural areas. The specific objectives are to equip 700 hydraulic infrastructures with photovoltaic solar systems for water pumping at 20 provinces in Burkina Faso.

Action Partnership: Water and Sanitation Through Sustainable 'Eco-San' Energy and Water Systems

Responsible partners: Illovo Sugar, WIP

Poor or non-existent sanitation and potable water supply infrastructure poses a significant public health risk. This not only creates direct health problems for local citizens, but also indirect economic and health problems for businesses close to these populations. Cholera and other water-borne diseases threaten people and increase the risks of doing business in such areas. Businesses, local residents and the government have a joint interest in solving this untenable sanitation and water supply problem. The growing awareness of this problem has created a window of opportunity for joint action. In Zambia in particular, this action has already started (technical surveys, basic infrastructure) but requires additional impetus and funds to move forward.

"Ecosan" offers an ideal opportunity to treat energy and sanitation questions in a holistic and sustainable way. "Ecosan" is an increasingly recognized ecological methodology for the creation of a sanitation/water/energy infrastructure that is efficient and cost-effective. Through a mixture of public and private funds from the EU, bi-lateral donors and regional initiatives, additional funding for sustainable water, sanitation and energy projects will be secured. This will allow the alleviation of the increasingly dangerous and unhealthy conditions in population centres near large businesses.

The basis of this activity will be a single region which due to its proximity to a large sugar cane operation, has attracted particular interest. In a second project stage, the concept will then be expanded and replicated in other Zambian communities.

5.3. Partnerships: Renewable energy and enterprise development

Activities in the PARTNERS FOR AFRICA work package on 'Renewable energy and enterprise development (WP3)' are coordinated by the partners SEI and CEEEZ and include contributions of all consortium partners.

The main objective of this work package is to mobilise international and national partnerships and to support policy making in the field of 'Renewable energy and enterprise development'.

Small and medium enterprises are of crucial socio-economic importance in developing countries. The consortium will address through its partnerships, the potential for enterprise development in and as a result of renewable energy applications. This includes providing crucial electricity and energy services to small enterprises, as well as stimulating small renewable energy-oriented businesses. Particular focus will be on enterprises in isolated and/or rural areas. This places a particular emphasis on small and decentralised renewable energy concepts and technologies such as solar, PV, wind, small-scale hydro and biomass. Activity fields include:

- Electricity supply to enterprises
- Water pumping and/or decentralised water purification
- Empowerment of women in and through small businesses
- Low-tech, low capital investment energy services such as batteries, fuels and maintenance services.
- Small, private renewable energy installation operators, including community-run installations.
- Technology and knowledge transfer. Maximising the use of locally produced products in preference to imports.
- Micro-credit schemes

In the following selected policy, action and programme partnerships supported and promoted in the framework of the PARTNERS FOR AFRICA project are briefly summarised. More detailed information on these partnerships is presented in the First and Second Periodic Activity Reports and the corresponding Annexes.

Policy Partnership: Comprehensive RE Policy Methodology for Zambia – Revision of the National Energy Policy

Responsible partners: CEEEZ, SEI

The majority of Zambia's energy policy dates back to over a decade ago. As a result, the written policies are outdated and were drawn up without the necessary expertise and knowledge of the market. A holistic and coherent methodology must be elaborated with special focus on the enterprise development opportunities offered by the increased utilisation of renewable energies in Zambia, in order to reform the entire energy sector and especially the policy framework supporting it.

The field of renewable energy for poverty eradication is often neglected in new policy and poverty reduction strategies. In Zambia, there is now a unique opportunity to contribute to policy making. For this a comprehensive methodology should be developed that addresses all technical, business, social and economic issues relating to the renewable energy sector. This methodology should combine government, businesses, NGOs and consumer groups into a participative policy development process.

The following activities within the PARTNERS FOR AFRICA project support the on-going energy policy revision in Zambia:

- Development of a comprehensive policy methodology in the Zambian context, and its implementation
- Organisation of workshops to develop a formal and informal policy debate in the field of renewable energy for poverty eradication
- Formulation of consultation papers for the Zambian government by renewable energy experts, poverty specialists and economists

Action Partnership: Energy Service Companies (ESCOS) for Rural Electrification in Zambia

Responsible partners: CEEEZ, SEI

A strong partnership showing how renewable energy could propel enterprise development has been built between the SEI and the Department of Energy (DoE) at the Ministry of Water and Energy Development in Zambia.

The DoE in Zambia together with the SEI developed an approach to provide electricity services using Photovoltaic Solar Systems through Energy Service Companies (ESCOS) in the Eastern Province of Zambia.

The background to the idea is that 60% of the Zambian population live in rural areas but only 2% of the rural population currently has access to electricity. A pilot project intended to develop a mechanism for providing electricity services to rural households is currently using Solar Home Systems (SHS), which are managed by rural based Energy Service Companies (ESCOs).

Programme Partnership: Provision of EDS and Seed Capital to Entrepreneurs Working in the Area of Clean and Sustainable Energy Enterprises

Responsible partners: CEEEZ, SEI

It is an established fact that most small scale entrepreneurs do not have the capacity to undertake feasibility studies and develop robust business plans. In addition, they do not have adequate security for collateral demanded by conventional lending institutions and commercial banks. They are also not aware of the availability of renewable energy technologies and options for their business development.

This programme partnership therefore deals with the provision of innovative funding mechanisms to entrepreneurs.

Programme Partnership: Solar Thermal, PV and Wind Energy for Productive Use

Responsible partners: CEEEZ, SEI

Zambia's economic and national priority is agriculture, and related agro-processing activities. To enhance a year round agricultural production base, the country is encouraging irrigation for all categories of farmers, which include large, medium, small and emerging farmers. The country is also in the process of developing an irrigation policy.

However, most of small scale and emerging farmers with areas of up to 5ha are not connected to the national electricity grid. Most will not be connected for a long time to come since the rate of penetration of rural areas currently stands at only 2 %.

The aim of this programme partnership is to promote the use of solar thermal and PV, and wind energy to provide water for irrigation and household use.

Programme Partnership: Building Capacity in Energy in the Health, Education and Water Sectors for Poverty reduction in sub-Saharan Africa - ENABLE

Responsible partners: CEEEZ, SEI

The recently launched Coopener project ENABLE supports the governmental sectors of education, water and health in developing countries by building their capacities regarding the role that renewable energy technologies can play in meeting their sectoral goals.

The project will build capacity to enable staff in ministries to identify appropriate and cost effective ways in which renewable energy technologies can integrate with existing energy generation technologies to contribute towards the Millennium Development Goals (MDGs).

Action Partnership: Energy Cogeneration from sugar cane Bagasse at Nakambala sugar estate, Zambia

Responsible partners: CEEEZ, SEI

Access to energy is almost inexistent in rural Africa. Renewable resources such as biomass are often well-suited to the socio-economic activities and energy needs of rural areas. Biomass systems offer a reliable local supply of products and energy services to small communities while at the same time stimulate regional economic activity. For example, sugarcane plants may provide valuable resources of biomass that can support economic development.

A cogeneration plant could be established at the sugar estate of Nakambala (the only sugar plant in Zambia) to efficiently use the energy produced in the sugarcane process. That includes cogeneration from waste bagasse currently piled in the cane fields. Surplus electricity can be exported to neighbouring areas and can even be sold to the national grid.

5.4. Financing schemes

The activities in the work package on 'financing schemes (WP4)' are coordinated by the partner SEI in collaboration with ETA and include contributions of all consortium partners.

The main objective of this work package is to research and approach sources of financing for the partnerships. Additionally, local financing activities of the partnerships are supported with reports, advice and actions. In these activities all types of potential financing institutions are included, namely:

- International and multilateral lending and grant organisations, including multilateral institutions (such as banks and funds).
- Regional banks, funds and NGOs
- Local financing possibilities, including micro-credit schemes.

Within the PARTNERS FOR AFRICA project two reports have been elaborated, namely:

- 'Financing Acquisition' support brochure for the policy, action and programme partnerships
- Report on funding possibilities for the European Energy Initiative and partnerships

More detailed information on financing schemes is presented in the Periodic Activity Reports and the corresponding Annexes.

6. POLICY DIALOGUE IN SOUTH AFRICA, ZAMBIA, SENEGAL AND TANZANIA

The PARTNERS FOR AFRICA consortium has been deeply engaged in the support of policy making activities in South Africa, Zambia, Senegal and Tanzania. The main project tools in this respect were the successful project policy dialogue workshops in Durban (21-23 June 2004), Lusaka (14-16 December 2004) and Dakar (20-22 April 2005) as well as the final Policy Dialogue Synergy Conference in Dar es Salaam (22-24 June 2005).

Additionally, a policy declaration submitted to the G8 Summit in Gleneagles was elaborated by the PARTNERS FOR AFRICA project consortium in cooperation with the participants of the Policy Dialogue Synergy Conference in Tanzania, June 2005.

6.1. Policy Dialogue on Cogeneration and Bioethanol for Southern Africa

Within the PARTNERS FOR AFRICA project, the high-level policy dialogue on cogeneration and bioethanol for Southern Africa is coordinated by the consortium partners Illovo Sugar (South Africa) and WIP (Germany). The Policy Dialogue Workshop on Co-generation and Bio-ethanol for Southern Africa in Durban, 21-23 June 2004, was organised in close co-operation with the European Energy Initiative (EUEI).

Interested parties at this workshop included international and local experts from the Industrial, Academic and Government sectors engaged in the fields of 'bio-ethanol production and use', 'biomass based co-generation' and 'small-scale bio-energy technologies for household applications'.

Thereby, one of the main aims of this policy dialogue was to discuss successful Brazilian bio-energy experiences in a Southern African context.

At the workshop, South African Government representatives emphasized their support for a coherent bio-energy strategy and outlined the current status and targets as published in the South Africa White Paper on Renewable Energy Policy approved by the South African Cabinet in November 2003. The target of the White Paper is to achieve a contribution of 10,000 GWh to the final energy supply based on renewable energies (mainly from biomass, wind, solar and small-scale hydro) by 2013.

In order to realise this target, the South African Government is committed to cooperate with bio-energy stakeholders and reliable information and data have been requested from involved industries. It was concluded that for the future development of bio-energy in South Africa a pro-active approach and 'leadership' by the private sector as well as a close dialogue between industries and Government are of crucial importance.

As a main outcome of the policy dialogue workshop, the PARTNERS FOR AFRICA project consortium has elaborated several policy recommendations in cooperation with South African Government representatives. These recommendations include the establishment of a South African Bioenergy Association acting as clearinghouse and focal point for the collection and distribution of clear, credible and reliable data and information.

Participants of the Bioenergy Policy Dialogue in Durban

6.2. Policy Dialogue Zambia – Revision of the National Energy Policy

Within the PARTNERS FOR AFRICA project, the high-level policy dialogue on the revision of the National Energy Policy in Zambia is coordinated by the consortium partners CEEEZ (Zambia) and SEI (Sweden). Currently, the Government of Zambia is revising its 1994 National Energy Policy (NEP) through the Energy Regulatory Board (ERB) and the Department of Energy (DoE) under the Ministry of Water and Energy Resources. Bioenergy, and particularly biofuels, are expected to play an important role in the new energy policy aiming at future sustainable development in Zambia. Key drivers for the new energy policy include energy security, rural development, improved access to energy services in rural areas as well as modern bioenergy conversion technologies.

In order to provide support to these policy making activities, the PARTNERS FOR AFRICA consortium has been involved in two national workshops which were held in Lusaka in May 2004. These workshops focused on the preparation of background papers on 'rural and renewable energies' and 'liquid biofuels' for the elaboration of the new National Energy Policy. Both workshops served as preparatory events for the PARTNERS FOR AFRICA policy dialogue workshop in Zambia.

This Policy Dialogue Workshop on Biofuels, Renewable Energies for Public Health and Enterprise development in Lusaka, Zambia, 14-16 December 2004 was a resounding success. This workshop enjoyed the participation of high-level stakeholders from ministries, associations and scientific institutions. It produced valuable input for the review process of the 1994 Zambian National Energy Policy through a dedicated policy dialogue with the Zambian Minister for Science and Technology, the Minister for Agriculture and Cooperatives, the Vice-Minister for Energy, the Minister for Health, and the Minister for Education. Recommendations were elaborated for the following four strategic areas:

- Current political initiatives in the field of renewable energy and their relevance to the current energy sector
- The interaction of health and energy issues, particularly with respect to the areas of indoor air pollution, sanitation and energy supply for health infrastructure
- The development and financing of small renewable energy enterprises, especially in rural areas
- Opportunities for liquid biofuels in Zambia, e.g. bioethanol blending and biodiesel

PARTNERS FOR AFRICA Policy Dialogue Meeting with Zambian Ministers in Lusaka

6.3. Policy Dialogue Synergy Conference – The Role of Renewable Energies for Poverty Eradication and Sustainable Development in Africa

The PARTNERS FOR AFRICA project held its final policy dialogue conference in Tanzania in June 2005. This conference was organised by WIP (Germany) in collaboration with Illovo Sugar (South Africa) and TaTEDO (Tanzania) to contribute to the dialogue between the EU and Africa in the framework of the EUEI. Representatives from several African and European countries, the World Bank, international initiatives (e.g. GNESD, GFSE, GVEP) and national and international energy experts attended the conference.

More than 30 presentations within the three themes of 'Present energy policy initiatives', 'Best practice actions' and 'Financing of sustainable energy services' were introduced. These presentations aimed to raise awareness of the potential for renewable energy to assist in alleviating poverty and improving access to energy services and to provide inspiration and background information for policymakers, investors and service providers.

Session 1 was dedicated to the current and future energy policy framework in the four African countries Tanzania, South Africa, Zambia and Senegal. Representatives from each of the four countries gave presentations on the role that renewable energies could play in achieving the energy goals of their respective nations. Session 2 of the conference provided a review of successful energy projects and activities that have taken place in Africa, and highlighted their potential for replication throughout the continent. Session 3 focussed on identifying successful financial and organisational models for the delivery of energy services from renewable energy resources.

The conference ended with a discussion on 'The Way Forward', which highlighted key issues to be raised in a political statement to decision makers around the globe. Conference participants elaborated a Policy Declaration to G8 emphasising that renewable energy systems provide a practical and substantial opportunity for African countries to combat poverty through wealth creation, developing sustainable energy supplies and working towards meeting the MDGs.

PARTNERS FOR AFRICA Policy Dialogue Conference in Dar es Salaam, Tanzania, June 2005

6.4. Policy Declaration by PARTNERS FOR AFRICA

The following policy declaration was elaborated by the PARTNERS FOR AFRICA project consortium in cooperation with the participants of the Policy Dialogue Synergy Conference in Tanzania, June 2005. This declaration was submitted to the G8 Summit in Gleneagles in July 2005 emphasising that renewable energy systems provide a practical and substantial opportunity for African countries to combat poverty.

1. Energy poverty and the lack of services it can provide for cooking and heating, electricity and transport fuels continues to hamper development, particularly rural areas of African countries.

2. Renewable energy systems provide a practical and substantial opportunity for African countries to combat poverty through wealth creation, developing sustainable energy supplies and working towards meeting the MDGs.

3. The use of renewable energy to provide these critical services that underpin the MDGs must be reflected in national policies and actions such as the Country Strategy Papers (CSPs) and Poverty Reduction Strategy Papers (PRSPs):
    - In many cases renewable energy technologies provide the only realistic option for providing these services, particularly in poor rural areas.
    - Technologies such as wind, solar (PV and thermal) and biomass energy[1] have the economic potential to become self-sustaining but need support to gain sufficient market share.

4. Substantial progress has been made regarding renewable energies. There is now a bank of experience, as highlighted by 'Partners for Africa', with successful renewable energy projects and policies occurring within and between the African countries that must be taken stock of and assessed. This experience must be used to avoid duplication and delay by acting as the basis for a rapid, efficient and significant increase in the provision of energy for development. To this end, it is important that:
    - African countries develop realistic but challenging targets for implementation of renewable energy systems adapted to their socio-economic, cultural, and environmental features.
    - An African mechanism is established to share experience on good practice, policies and successful implementation / projects.
    - Donors assist developing countries to design local and sustainable models for development of the renewable energy sector.

[1] Energy from biomass - such as electricity, heat and transport fuels (bioethanol, biodiesel and biogas) - requires special attention because of the large share of the energy markets that could be supplied, but also the inherent linkages between the production of biomass for energy, land use and rural development. Bioenergy could play a central role in rural poverty alleviation.

5. The potential for international trade is regarded as an opportunity which must be seized urgently to help develop these sectors. This is particularly the case for bioenergy systems where excess value-added biofuels could be produced from under-utilised, marginal or under-invested land. It is important that African countries do not simply sell the raw biomass abroad but develop the industries for converting the biomass into value-added biofuels:

    - The international trade in value-added biofuels will require the development and implementation of internationally recognised standards and regulation systems.

    - International mechanisms for this already exist, e.g. IEA Task 40 and international assurance schemes for fair trade, quality assurance and sustainability assurance (e.g. ISEAL, FSC, etc) and must be exploited for the development of a sustainable bioenergy sector.

6. The agricultural systems of Africa have been heavily dis-invested over the last 3 decades. Renewable energy, led by bioenergy, represents an opportunity to reverse this disastrous trend and turn African agriculture into a dominant sector for driving development. African agriculture can then again be capable of sustainably producing the food and energy to provide the wealth generating activities needed to meet the MDGs for their rural populations:

    - Freed from current constraints, it is estimated by a number of authoritative sources that African agriculture could provide a very significant share of the future world's energy without competing with food production or exploiting land in protected areas.
    - It is believed that the production of energy from the land would diversify agriculture, contribute to income generation and enhance food security.

7. Funds for this new investment in renewable energy technologies and land could be provided from the money freed up through the debt relief process.

8. Linking debt relief to the promotion of renewable energies has win-win potential for both the developing (a clean and viable power sector) and the industrialised (a cleaner global climate) worlds.

PARTNERS FOR AFRICA is a project co-funded by the European Commission (DG RTD) in the 6th Framework Programme – Specific Measures in Support of International Cooperation. (Contract FP6-INCO-DEV-502257), as a contribution to the EU Energy Initiative for Poverty Eradication and Sustainable Development

7. INFORMATION PACKAGE FOR THE EU ENERGY INITIATIVE

The project PARTNERS FOR AFRICA was implemented in close cooperation with the European Energy Initiative for Poverty Eradication and Sustainable Development (EUEI). One of the highlights of this cooperation was the joint organisation of the PARTNERS FOR AFRICA final synergy conference in Tanzania in June 2005. This conference was organised by WIP (Germany) in collaboration with Illovo Sugar (South Africa) and TaTEDO (Tanzania) as a contribution to the dialogue between the EU and Africa in the framework of the EUEI.

Among the main results of the PARTNERS FOR AFRICA project is an information package elaborated to support future activities of the EUEI, especially the creation of renewable energy partnerships. The information package for the EU Energy Initiative is presented in Annex 5.10 of the Second Periodic Activity Report.

The package includes the following documents:

- ***PARTNERS FOR AFRICA – A Success Story***

  6-page summary of the activities and results of the PARTNERS FOR AFRICA project highlighting the success story of this INCO project

- ***PARTNERS FOR AFRICA Project Flyer***

  2-page summary including consortium contact information

- ***PARTNERS FOR AFRICA Refereed Publication***

  Paper published in the Proceedings of the 14th European Biomass Conference and Exhibition – Biomass for Energy, Industry and Climate Protection, October 2005, Paris, France

- ***PARTNERS FOR AFRICA Policy Declaration to G8***

  This policy declaration was elaborated by the participants of the PARTNERS FOR AFRICA final synergy conference 'The Role of Renewable Energy for Poverty Alleviation and Sustainable Development in Africa'. The declaration emphasises the fact that renewable energy systems provide a practical and substantial opportunity for African countries to combat poverty through wealth creation, developing sustainable energy supplies and working towards meeting the MDGs.

- ***PARTNERS FOR AFRICA Policy Dialogue on Cogeneration and Bioethanol for Southern Africa – Recommendations***

  This document was agreed upon by the participants of the policy dialogue workshop in Durban, South Africa, in June 2004. The main recommended activity is the establishment of a South African Bioenergy Association acting as clearinghouse and focal point for the collection and distribution of clear, credible and reliable biomass/bioenergy data and information in order to provide a solid foundation for policy formulation.

- ***Recommendations for the Establishment of a Biofuels Task Force and a Biofuels Producer Association in Tanzania***

  Activities towards an implementation of biofuels policies are currently mainly driven by the Tanzanian Ministry of Energy and Minerals (MoE). Representatives of the MoE strongly support the proposed establishment of a high-level Tanzanian Biofuels Task Force which can provide advice and recommendations for the elaboration of biofuels policies and regulations suitable for the Tanzanian framework conditions.

- ***Renewable Energy as research priority for International Scientific Co-operation with Developing Countries (INCO-DEV) – Recommendations for FP7***

  Based on the experiences of the PARTNERS FOR AFRICA project a 1-page summary was elaborated stating the importance of renewable energy as a research priority for International Scientific Cooperation with Developing Countries (INCO-DEV) under the European Commission's 7th Research Framework Programme.

- ***Policy Brief – Policy Dialogue on Biofuels, Renewable Energy for Productive Use and Enterprise Development***

  Policy brief distributed on the occasion of the PARTNERS FOR AFRICA policy dialogue workshop in Lusaka, Zambia, December 2004. It highlights the importance of developing policies for the successful introduction of liquid biofuels in the Zambian transport sector.

- ***Recommendation - Establishment of an African Training Network for Policy-Makers and Planners – Bioenergy for Poverty Alleviation***

  The recommended establishment of an African Policy Training Network will tackle the information deficit in the African bioenergy sector, which was identified as the most important barrier to modern energy policy development at several PARTNERS FOR AFRICA policy dialogue workshops.

- ***PARTNERS FOR AFRICA Power Point Presentation for the EU Energy Initiative (EUEI)***

  Power Point Presentation elaborated for distribution through the EUEI. This presentation gives an overview of the activities and results of the PARTNERS FOR AFRICA project with emphasis on initiated and recommended policy actions in the fields of renewable energies.

8. DISSEMINATION AND USE

The following overview table presents dissemination activities of the project PARTNERS FOR AFRICA.

Overview table on dissemination activities

	Planned/ actual Dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/ involved
1	Feb. 2004	Internal information exchange platform	Project consortium	D, IT, UK, SE, ZA, ZM, SN	10	ITDG
2	April 2004	Dynamic project website	General public	EU, Africa	4000 per month	ITDG
3	April 2004	Contact partner database	Project consortium	D, IT, UK, SE, ZA, ZM, SN	10	ITDG
4	May 2004/ Oct. 2004	Project newsletter – Issue 1	General public	EU, Africa	2000	SEI
5	Oct. 2004/ May 2005	Project newsletter – Issue 2	General public	EU, Africa	2000	SEI
6	April 2005/ June 2005	Project newsletter – Issue 3	General public	EU, Africa	2000	SEI
6a	June 2005	Project newsletter – Issue 4	General public	EU, Africa	2000	SEI
7	April 2005/ June 2005	Summary report on partnerships	General public	EU, Africa	50	WIP
8	June 2005	Information Package for the EUEI	Policy stakeholders, EUEI	EU, Africa	50	WIP
9	June 2004	Regional workshop in South Africa	Policy stakeholders, EUEI	EU, Africa	100	Illovo, WIP
10	Dec. 2004	Regional workshop in Zambia	Policy stakeholders, EUEI	EU, Africa	100	CEEEZ, SEI
11	April 2005	Regional workshop in Senegal	Policy stakeholders, EUEI	EU, Africa	100	ENDA, ITDG
12	June 2005	Final synergy conference in Tanzania	Policy stakeholders, EUEI	EU, Africa	150	WIP

13	May 2004	Presentation at RPTES workshop in Rome	Policy and research stakeholders	EU, Africa	100	WIP
14	April 2004	Presentation at Stakeholder WS in Zambia	Policy and research stakeholders	EU, Africa	100	CEEEZ
15	May 2004	Presentation at Stakeholder WS in Zambia	Policy and research stakeholders	EU, Africa	100	CEEEZ
16	Sept. 2004	Paper presented at IPCC meeting in Tokyo	Policy and research stakeholders	EU, Africa, Asia	100	CEEEZ
17	March 2005	Presentation at IEA Bioenergy WS in Washington	Policy and research stakeholders	EU, Africa, Asia	50	WIP
18	April 2005	Presentation at WS on Biomass and Int. Trade	Policy and research stakeholders	EU, Africa, Asia	50	SEI
19	Oct. 2005	Presentation at 14th EU Biomass Conf. and Exhib.	Policy and research stakeholders	EU, Africa, Asia	200	WIP
20	Oct. 2005	Paper published in Proc. Of 14th EU Biomass Conf.	Policy and research stakeholders	EU, Africa, Asia	2000	WIP

Short description of dissemination activities

1) and 2) The internal information exchange platform and dynamic project website was created under the guidance of ITDG by Eco Ltd. in February 2004 and April 2004, respectively. The public web page for Partners for Africa was created for the domain name www.partners4africa.org. The system gives users of the Internet worldwide access to information and latest news from the project through a user-friendly interface. Users can also contact project members directly from the web system. An email distribution system was set up for internal communication between project partners. The system allows for contacts with project partners through the email address *partners@partners4africa.org*, and maintains archives of correspondence and discussions. The project partner Eco will continue to host the website at own cost for the foreseeable future (at least a further 5 years until 2010).

3) A contact database has been created by Eco Ltd. as a subsystem of the public web site, which is accessible to logged-in users of the system. This is a dynamic system allowing users to add and edit personal and organisation profiles, and view contacts by country or organisation. This database was continuously enlarged and up-dated during the course of this project. As of June 2005 the contact database consists of 218 names.

4-6a) The PARTNERS FOR AFRICA Newsletter was prepared and edited by the project partner SEI. The main goal of the newsletters is to create a forum of information for all project partners and relevant world-wide stakeholders about the activities of the PARTNERS FOR AFRICA project and similar networks in the energy arena. Newsletter articles focus on bioenergy achievements, interesting project results and policy issues in the area of Renewable Energy Partnerships for Poverty Eradication and Sustainable Development.

7) This report summarises and synthesises the partnership-building activities in the Partners for Africa project. The detailed descriptions of these partnerships can be found in the Annexes 1, 2 and 3 of the Partners for Africa Second Periodic Activity Report.

8) The project PARTNERS FOR AFRICA was implemented in close cooperation with the European Energy Initiative for Poverty Eradication and Sustainable Development (EUEI). Among the main results of the PARTNERS FOR AFRICA project is an information package elaborated to support future activities of the EUEI, especially partnership creation. This information package includes a PfA project summary, a PfA project flyer, a PfA Refereed Publication, the PfA Policy Declaration to G8, policy recommendations on co-generation and bioethanol for Southern Africa, recommendations for the establishment of a Biofuels Task Force in Tanzania, recommendations for FP7 INCO research priorities, a policy brief on biofuels, recommendations for the establishment of an African Policy Training Network, as well as a PfA Power Point Presentation.

9) The Policy Dialogue Workshop on Co-generation and Bio-ethanol for Southern Africa in Durban, 21-23 June 2004, was organised by the consortium partners Illovo Sugar and WIP in close co-operation with the European Energy Initiative (EUEI). Interested parties at this workshop included international and local experts from the Industrial, Academic and Government sectors engaged in the fields of ‘bio-ethanol production and use’, ‘biomass based co-generation’ and ‘small-scale bio-energy technologies for household applications’.

10) The Policy Dialogue Workshop on Biofuels and Renewable Energy for Public Health and Enterprise Development, 14-15 December 2004, Lusaka, Zambia, was organised by the consortium partners CEEEZ and SEI. This workshop contributed to the policy debate on the revision of the National Energy Policy in Zambia. Alongside the workshop, a policy dialogue was held with the Zambian Minister for Science and Technology, the Minister for Agriculture and Cooperatives, the Vice-Minister for Energy, the Minister for Health, and the Minister for Education.

11) The third Partners for Africa Policy Dialogue workshop was held at Hotel Al Afifa in Dakar, Senegal, from 20 to 22 April 2005 and included participants from 9 African and European countries (Benin, Burkina Faso, England, Germany, Italy, Senegal, Sudan, Sweden and Zambia). This workshop, organised by the consortium partners ENDA and ITDG, included the initiation of three renewable energy country projects in Benin, Burkina Faso and Senegal.

12) The PARTNERS FOR AFRICA project held its final policy dialogue conference in Tanzania in June 2005. This conference was organised by WIP (Germany) in collaboration with TaTEDO (Tanzania) to contribute to the dialogue between the EU and Africa in the framework of the EUEI. Representatives from several African and European countries, the World Bank, international initiatives (e.g. GNESD, GFSE, GVEP) and national and international energy experts attended the conference. Conference participants elaborated a Policy Declaration to G8 emphasising that renewable energy systems provide a practical and substantial opportunity for African countries to combat poverty through wealth creation, developing sustainable energy supplies and working towards meeting the MDGs.

13) Presentation ‘PARTNERS FOR AFRICA’, by Dr. Rainer Janssen and Maurice Pigaht , WIP, on the occasion of the World Bank’s Regional Program for the Traditional Energy Sector (RPTES) Workshop in Rome, 13 May 2004.

14) Presentation ‘Review of 1994 National Energy Policy – Gaps and Way Forward’, by Prof. Francis Yamba, CEEEZ, on the occasion of the First Stakeholders Consultative Workshop on the Review of the 1994 Energy Policy in Lusaka, 5-6 April 2004.

15) Presentation ‘Prospects, Challenges and Opportunities in Harnessing Energy for Sustainable Development in Zambia’, by Prof. Francis Yamba, CEEEZ, on the occasion of the PARTNERS FOR AFRICA Stakeholder Meeting at Fringilla, Chisamba, Zambia, 10-11 May 2004.

16) Paper ‘Factors and Barriers Influencing the Transfer and Diffusion of Biofuels Technologies to Southern Africa’ presented by Prof. Francis Yamba, CEEEZ, at the IPCC Expert Meeting on Industrial Technology Development, Transfer and Diffusion in Tokyo, Japan, 21-23 September 2004.

17) Presentation on ‘PARTNERS FOR AFRICA – A Successful Policy Dialogue in South Africa and Zambia’ held by Dr. Rainer Janssen, WIP, at the IEA Bioenergy Task 40 and Task 29 Workshop on International Bioenergy Trade and Development in Washington, 17-18 March 2005, which was organised in the framework of the World Bank Energy Week 2005.

18) Presentation on ‘PARTNERS FOR AFRICA – A Successful Bioenergy Policy Dialogue in Sub-Sahara Africa’ held by Maria Morales, SEI, at the Workshop on Biomass and Sustainable Livelihoods and International Trade in London, April 2005.

19) Presentation on ‘PARTNERS FOR AFRICA – Developing African Renewable Energy Sectors for Poverty Eradication’ held by Dr. Rainer Janssen, WIP, at the 14th European Conference and Exhibition on Biomass for Energy, Industry and Climate Protection, Paris, France, October 2005.

20) Paper ‘PARTNERS FOR AFRICA – Developing African Renewable Energy Sectors for Poverty Eradication’ by Dr. Rainer Janssen, WIP, published in the Proceedings of the 14th European Conference and Exhibition on Biomass for Energy, Industry and Climate Protection, Paris, France, October 2005.

9. CONCLUSION

The project PARTNERS FOR AFRICA succeeded in mobilizing a variety of international and local renewable energy partnerships which provide support for the development of progressive energy policy initiatives and lay the foundations for concrete projects. Project results include an active policy dialogue on the implementation of biomass based cogeneration and bioethanol production in Southern Africa as well as the identification of opportunities for liquid biofuels for the elaboration of a revised national energy policy in Zambia. Finally, the PARTNERS FOR AFRICA consortium elaborated a policy declaration to the G8 emphasising that renewable energy systems provide a substantial opportunity for African countries to combat poverty.

Contacts for further information:

WIP (Project Co-ordinator) – Rainer Janssen, rainer.janssen@wip-munich.de

ETA – Silvia Vivarelli, silvia.vivarelli@etaflorence.it

ITDG (Practical Action) – Teodoro Sanchez, Teodoro.Sanchez@practicalaction.org.uk

ECO Ltd. – Grant Ballard-Tremeer, grant@ecoharmony.com

SEI – Maria Morales, maria.morales@sei.se

ILLOVO SUGAR Ltd. – Denis Tomlinson, dtomlinson@illovo.co.za

ENDA – Salimata Wade, enda.energy@sentoo.sn

CEEEZ – Francis Yamba, Yamba@eng.unza.zm, fdyamba@yahoo.co.uk

PARTNERS FOR AFRICA is co-funded by the European Commission in the 6th Framework Programme – Specific Measures in Support of International Cooperation. (Contract FP6-INCO-DEV-502257)