



Internationale Konferenz  
für Erneuerbare Energien, Bonn  
International Conference  
for Renewable Energies, Bonn

# International Action Programme

**August 30, 2004<sup>1</sup>**

As one of the key outcomes of the International Conference for Renewable Energies, held 1-4 June 2004 in Bonn, this International Action Programme (IAP) consists of concrete actions and commitments by governments and other actors. The participating ministers and governments have welcomed this document in their Political Declaration, thus underlining the close connection between the International Action Programme as a portfolio of actions and the other conference outcomes.

Governments, the United Nations, other international organisations including international financial institutions and stakeholders from civil society, the private sector and other stakeholder groups have contributed to the International Action Programme. All actions and commitments included are of a voluntary nature and are the result of a bottom-up approach. They reflect specific national and regional conditions, capacities of actors, specific sectoral objectives and overall development targets of the contributors.

This document compiles 197 actions and commitments put forward by contributors by 4 June 2004.

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<sup>1</sup> Last minor amendments have been made on January 17, 2005.



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# 1 List of Actions and Commitments sorted by Leading Actors

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<b>World Wide Fund for Nature</b>	WWF Power Switch! Campaign – from Coal to Clean – Pioneers’ Commitments on Renewable Energies	219
<b>World Wind Energy Association</b>	Setting Up Sustainability Guidelines for the Improved Development of Wind Energy Projects	220



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## **2.1 Section A:**

### **Actions and Commitments by Governments**



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## Afghan-French-German Energy Initiative (AFG – Energy Initiative)

<b>Region / country</b>	Asia / Afghanistan
<b>Leading actor(s)</b>	<b>Afghanistan / Ministry of Water and Power; France / Ministry of foreign Affairs; Germany / Federal Ministry for Economic Cooperation and Development (BMZ)</b>
<b>Participating actor(s)</b>	Fonds Français pour l'Environnement Mondial (AFD/FFEM), Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME), Groupe Energies Renouvelables, Environnement et Solidarité (GERES), KfW Bankengruppe, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
<b>Main objective(s)</b>	To improve the energy access for the rural population in Afghanistan through trilaterally coordinated action.
<b>Contents</b>	Implementing the Integrated Power Supply Programme Chak-e-Wardak and initiation of other pilot projects within the long-term policy framework of the Ministry of Water and Power. Project activities include rehabilitation of Chak-e-Wardak mini-hydropower plant, construction of distribution network, promotion of energy efficient buildings and appliances, improvement of non-electric household energy supply, promotion of efficient energy use in income and employment generating activities, synergies with the health and education sector, training of local craftsmen and skilled workers in the respective techniques.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Until end of 2004 an integrated multi-sector sustainable energy concept will be drafted and subsequently implemented. Given the projects financial viability, in 2005 the necessary investment (in particular Chak-hydropower plant rehabilitation as well as construction of the distribution network) will commence.</li> <li>• Clarifying and demonstrating the synergies from using complementary forms of renewable energy, household energy supply and energy efficiency technologies in cold climatic zones in Afghanistan.</li> </ul>
<b>Target area / place</b>	Chak-e-Wardak / Afghanistan as a starting point for further activities
<b>Arrangement(s) for financing</b>	Human resource inputs from all three partners; parallel funding and investment by the French and German governments.
<b>Monitoring process and time frame</b>	Monitoring through a trilateral supervisory group on ministry and embassy level. By Summer 2004, Afghanistan, France and Germany will have established effective coordination and process monitoring arrangements. Preliminary time horizon of the Initiative: 3 to 6 years
<b>Other relevant information</b>	The various partners are at present in the initial phase of the initiative by coordinating planning steps, institutional arrangements as well as commencing the first implementation steps in Kabul and Chak-e-Wardak. By 2006 the replication of the sustainable energy concept under similar conditions elsewhere in Afghanistan will be explored.
<b>Contact person</b>	<b>Dr Ghulam Jelani Jelis</b> , Deputy Minister for Power, Ministry of Water and Power, Kabul, Tel.: +93 0 79 30 23 93, Email: Jelis22000@yahoo.de



## GMI – Global Market Initiative for Concentrating Solar Power

<b>Region / country</b>	Europe / North Africa / Middle East
<b>Leading actor(s)</b>	<b>Governments of Algeria, Egypt, Germany, Israel, Italy, Jordan, Morocco and Spain</b>
<b>Participating actor(s)</b>	KfW Bankengruppe of Germany, United Nations Environment Programme-Global Environment Facility (UNEP-GEF), UN-Economic and Social Commission for Western Asia (UN-ESCWA), IEA SolarPACES Implementing Agreement, European Solar Thermal Industry Association (ESTIA), US Solar Energy Industry Association (SEIA), New Energy of Algeria (NEAL), New and Renewable Energy Authority (NREA) of Egypt, Office National d'Electricité (ONE) of Morocco
<b>Main objective(s)</b>	Support the creation of adequate market conditions conducive to build new CSP plants and to expedite the deployment of 5,000 MW <sub>e</sub> of CSP plants by 2015.
<b>Contents</b>	To account for the differences between countries in the development of CSP-related policy instruments and in the amount of their solar resource, the CSP GMI participants have defined three regions with a different strategy for each. Region I include those countries and states that have already partially implemented the policy measures recommended by the CSP GMI or that will implement such measures in the near-term. Region II includes those countries that are or will soon be connected to Region I countries for transnational power exchange. Region III includes developing countries not interconnected to the grid of Region I countries.
<b>Expected results</b>	Realisation of 5,000 MW <sub>e</sub> of new Concentrated Solar Power plants by 2015
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Funding is sought from the participants and multilateral financing institutions. Initial funding has been provided by the German Ministry for Environment, IEA SolarPACES, UNEP-GEF, KfW Group and numerous industrial sponsors for the preparatory conferences in Berlin, Palm Springs and Bonn
<b>Monitoring process and time frame</b>	Implementation timeframe until 2015 with annual progress monitoring.
<b>Other relevant information</b>	GMI Brochure (download <a href="http://www.solarpaces.org/GMI/GMI_09.pdf">http://www.solarpaces.org/GMI/GMI_09.pdf</a> ) GMI Endorsement Statement of the Renewables2004 Conference
<b>Contact persons</b>	<b>Dr Michael Geyer</b> , IEA SolarPaces; Email: <a href="mailto:exsec@solarpaces.org">exsec@solarpaces.org</a> ; <b>Mr Rainer Aringhoff</b> , ESTIA, Email: <a href="mailto:aringhoff@solarmillennium.de">aringhoff@solarmillennium.de</a> ; <b>Dr Fred Morse</b> , SEIA, Email: <a href="mailto:FredMorse@MorseAssociatesInc.com">FredMorse@MorseAssociatesInc.com</a>
<b>Link</b>	<a href="http://www.solarpaces.org/GMI.HTM">http://www.solarpaces.org/GMI.HTM</a>



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## Study for the Development of a New Wind Park Project at the Red Sea Coast

<b>Region / country</b>	Africa / Egypt
<b>Leading actor(s)</b>	<b>Arab Republic of Egypt / Ministry of Energy and Electricity (MoEE); Germany / Ministry of Economic Cooperation and Development (BMZ)</b>
<b>Participating actor(s)</b>	National Renewable Energy Agency, Arab Republic of Egypt; KfW Bankengruppe, Federal Republic of Germany
<b>Main objective(s)</b>	Support of the policy of the Egyptian National Strategy to increase renewable electricity production and to reduce CO <sub>2</sub> emissions in order to achieve cleaner energy production.
<b>Contents</b>	The energy potential at the Zafarana site already under development will be fully utilised in the foreseeable future. Therefore, a new site with a potential capacity of 4,000 MW will be developed in order to benefit from the extraordinary wind conditions at the Red Sea Coast. For this purpose a study will be conducted.
<b>Expected results</b>	The study will provide a basis for investment decisions for feasible projects for consideration by the Egyptian side and international financing agencies.
<b>Target area / place</b>	New site in Egypt
<b>Arrangement(s) for financing</b>	Contribution to the financing of the study in the framework of bilateral Financial Cooperation between Egypt and Germany.
<b>Monitoring process and time frame</b>	Preparation and implementation of the study will be the responsibility of the National Renewable Energy Agency and KfW.
<b>Contact person</b>	<b>Mr Eng. Hosny El Kholi</b> , NREA Executive Chairman, Abbas El-Akkad extension, Nasr City, Cairo, Egypt, Tel.: + 202 271 3176; Fax: + 202 271 7173, Email: nre@idsc.net.eg; <b>Dr Michael Grewe</b> , BMZ, Friedrich-Ebert-Allee 40, 53113 Bonn, Germany, Tel.: +49 228 535-3427, Fax:+49 228 535-4427, Email: grewe@bmz.bund.de; <b>Mr Wolfgang Abel</b> , KfW, Palmengartenstrasse 5-9, 60325 Frankfurt, Germany; Tel.: +49 69 7431-2269; Fax: +69 7431-3279; Email: wolfgang.abel@kfw.de
<b>Link</b>	<a href="http://www.nrea.gov.eg">www.nrea.gov.eg</a> ; <a href="http://www.kfw.de">www.kfw.de</a> ; <a href="http://www.bmz.de">www.bmz.de</a>





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## Meeting 14% of Egyptian Electricity Demand with Renewables in 2020

<b>Region / country</b>	Africa / Egypt
<b>Leading actor(s)</b>	<b>Arab Republic of Egypt / Ministry of Electricity and Energy; New &amp; Renewable Energy Authority (NREA)</b>
<b>Participating actor(s)</b>	International Organisations: Global Environmental Facility (GEF), World Bank, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), European Union, KfW Bankengruppe, DANIDA, JBIC, European Investment Bank), private investors (domestic & international).
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Meeting 14% of electricity demand with renewable energies (including Hydro power) by 2020, subject to appropriate financing schemes to render renewable energy projects competitive,</li> <li>• Contribution in satisfying the growing electricity demand that is needed for socio/economic development plans, development of rural &amp; remote areas, creation of new job opportunities,</li> <li>• Enhancement of local industrial capabilities in the field of renewables.</li> </ul>
<b>Contents</b>	Addition of new plants in order to increase total installed generating capacities from Hydropower by 135 MW, from Wind power by 2600 MW, and from Solar Thermal Plants by 750 MW.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Reach 3,000 MW total installed Hydro Capacity (generating about 16,000 GWh/a), 2,750 MW total installed Wind Capacity (generating about 11560 GWh/a), 750 MW total installed Solar Thermal Plant Capacity (out of which 150 MW is the solar share, generating about 320 GWh/a);</li> <li>• Increasing Egypt's foreign exchange income by exporting electricity from renewable energies, and benefit from CDM and CERs.</li> </ul>
<b>Target area / place</b>	Egypt
<b>Arrangement(s) for financing</b>	Egyptian Government, ODA, CDM, clean energy trade with Europe at preferential conditioned power purchase agreements.
<b>Monitoring process and time frame</b>	Periodical reports and auditing.
<b>Contact person</b>	<p><b>Mr Hosni H. Elkholy</b>, NREA Executive Chairman;  <b>Dr Ibrahim Abou Elnaga St.</b>, Abbas El-Akkad extension, Nasr City, Cairo, Egypt, Tel.: + 202-2713176 2725891/4,            Fax: + 202 2717173 2717172,            Email: nre@idsc.net.eg</p>



## Promotion of Renewable Energies in Argentina with the Aim of Achieving 8% of Power Consumption from Renewable Energies

<b>Region / country</b>	South America / Republic of Argentina
<b>Leading actor(s)</b>	<b>Government of Argentina / Subsecretaría de Energía Eléctrica</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Reduce fossil fuel dependency, create employment, sustainable development</li> <li>• JREC commitment</li> <li>• Promotion of clean, renewable energies</li> <li>• Rural development</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Small-scale use of HEP; development of small-scale hydroelectric installations in Gobernador Gregores (Sta. Cruz Province); modernisation of small water power facilities and construction of new power stations over existing engineering works</li> <li>• Pilot fuel cell project; fuel cell application in context of renewable energies</li> <li>• Rural electrification based on renewable energies</li> <li>• PERMER Project (Renewable Energies in Rural Markets)</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Target a: Promotion of Wind and Solar Energy Act (25019)</li> <li>• Target b: Development of a regulatory framework for renewable energies in Argentina (8% of power consumption from renewable energies) based on a National Congress Act on the promotion of Renewable Energies for all sources</li> <li>• Target c: Flagship Programme for the Development of Renewable Energies</li> </ul>
<b>Target area / place</b>	Argentina
<b>Arrangement(s) for financing</b>	Funding is secured through the Government of Argentina
<b>Monitoring process and time frame</b>	2000-2005; The monitoring is implemented by the Government of Argentina
<b>Contact person</b>	<b>Ms Alicia María Baragatti</b> , Directora Nacional de Promoción de la Secretaría de Energía, Av. Paseo Colón 171, Capital Federal - CP (C1063ACB), República Argentina, Tel 54-11-4349-8402
<b>Link</b>	<a href="http://energia.mecon.gov.ar">http://energia.mecon.gov.ar</a> ; <a href="http://energia.mecon.gov.ar/permer/investigacion_ydesarrollo/permer/home.asp">http://energia.mecon.gov.ar/permer/investigacion_ydesarrollo/permer/home.asp</a>



## Australian Energy White Paper: Securing Australia's Energy Future

<b>Region / country</b>	Australia
<b>Leading actor(s)</b>	<b>Australia / Government of Australia</b>
<b>Participating actor(s)</b>	Australian industry and other stakeholders
<b>Main objective(s)</b>	To set out a strategic framework for meeting Australia's long-term energy supply needs in a sustainable manner.
<b>Contents</b>	<p>The Australian Government's Energy White Paper, Securing Australia's Energy Future, includes initiatives that provide an additional AUD 700 million to promote low emission technologies, such as renewable energy. This includes:</p> <ul style="list-style-type: none"> <li>• A AUD 500 million Low Emissions Technology Fund to demonstrate new low-emissions technologies, providing support to 2020;</li> <li>• A AUD 75 million Solar Cities trial to demonstrate the economic benefits of solar technologies and demand management in reducing greenhouse gas emissions;</li> <li>• AUD 100 million over 7 years for the Renewable Energy Development Initiative to support the commercial development of renewable energy technologies;</li> <li>• AUD 20 million to support energy storage for intermittent renewable energy technologies, such as wind and solar;</li> <li>• Up to AUD 14 million to develop a wind forecasting capability; and</li> <li>• AUD 17 million over 5 years to encourage firms to identify and report on energy use and energy efficiency opportunities within their business.</li> </ul> <p>Under the 2004-05 Budget, AUD 203 million was committed to continue support for programs such as the Remote Renewable Power Generation Program and the Greenhouse Gas Abatement Program. Another AUD 27 million was committed to the development and uptake of low emission technology.</p>
<b>Expected results</b>	To increase the availability and reduce the costs of low-emission technologies, enhancing Australia's ability to significantly reduce its greenhouse emissions and further developing Australia's renewable energy industry.
<b>Target area / place</b>	Australia
<b>Arrangement(s) for financing</b>	The Australian Government will provide funding through the Australian Greenhouse Office and the Department of Industry, Tourism and Resources.
<b>Monitoring process and time frame</b>	To be announced.
<b>Contact person</b>	<b>Mr Gary James</b> , Manager, Research Section, Energy Futures Branch, Energy and Environment Division, Department of Industry, Tourism and Resources. GPO Box 9839, Canberra ACT 2601, Australia, Tel: 61 2 6213 7987, Fax: 61 2 6213 7902, Email: <a href="mailto:gary.james@industry.gov.au">gary.james@industry.gov.au</a> .
<b>Link</b>	<a href="http://www.pmc.gov.au/energy_future">www.pmc.gov.au/energy_future</a>



## Mandatory Renewable Energy Target

<b>Region / country</b>	Asia Pacific Region / Australia
<b>Leading actor(s)</b>	<b>Australia / Government of Australia</b>
<b>Participating actor(s)</b>	Australian electricity generators and retailers
<b>Main objective(s)</b>	To achieve an additional 9,500 GWh of electricity from renewable energy sources by 2010 and maintain this level to 2020.
<b>Contents</b>	Providing an additional AUD 2,6 million for the continued administration of the Mandatory Renewable Energy Target (MRET) scheme. Following a major review of the scheme, the Australian Government has committed to retain this measure until 2020.
<b>Expected results</b>	To achieve an additional 9,500 GWh per annum of electricity from renewable energy sources by 2010 and maintain this level to 2020.
<b>Target area / place</b>	Australia
<b>Arrangement(s) for financing</b>	The Australian Government provides funding to the Office of the Renewable Energy Regulator (ORER) to administer the MRET scheme.
<b>Monitoring process and time frame</b>	A review of the MRET scheme was undertaken in 2003 and ORER monitors progress each year. The scheme concludes in 2020.
<b>Other relevant information</b>	Moreover it is intended to set out a national renewable energy strategic framework to improve Australia's energy policies and objectives over the long term. Details will be announced in major policy statement in 2nd half of 2004.
<b>Contact person</b>	<b>Mr David Rossiter</b> , Renewable Energy Regulator, Office of the Renewable Energy Regulator, GPO Box 621, Canberra ACT 2601, Australia, Tel.: 61 2 6274 2192, Fax: + 61 2 6274 1725, Email: <a href="mailto:orer@orer.gov.au">orer@orer.gov.au</a>
<b>Link</b>	<a href="http://www.orer.gov.au">www.orer.gov.au</a>



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## Fostering Regional Energy Cooperation in the Asia Pacific Economic Cooperation: Energy for Sustainable Development

<b>Region / country</b>	Asia Pacific Region / Australia
<b>Leading actor(s)</b>	<b>Australia / Government of Australia (APEC Energy Working Group Lead Shepherd and Secretariat)</b>
<b>Participating actor(s)</b>	Governments of APEC member economies: Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States of America, Viet Nam
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To harness all available expertise to strengthen the security and reliability of affordable energy;</li> <li>• Promote clean and efficient technologies and the efficient use of energy;</li> <li>• Achieve environmental improvement of energy production, use and mineral extraction.</li> </ul>
<b>Contents</b>	<p>Comprises short and long-term actions:</p> <ul style="list-style-type: none"> <li>• Encompassing energy security, exploration and development, cross-border interconnection, infrastructure development and the promotion of renewable, clean and efficient technologies;</li> <li>• To address sustainability through practical responses that encompasses burning fuels cleaner, the capture and geological sequestration of carbon dioxide, the use of new and renewable energy technologies, and improving energy efficiency.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• To strengthen the security and reliability of affordable energy;</li> <li>• To increase the promotion of clean and efficient technologies and the efficient use of energy; and</li> <li>• To achieve environmental improvement of energy production, use and mineral extraction.</li> </ul>
<b>Target area / place</b>	Asia Pacific Region
<b>Arrangement(s) for financing</b>	Through the Asia Pacific Economic Corporation (APEC) Energy Working Group (EWG).
<b>Monitoring process and time frame</b>	The APEC EWG and its subgroup, the APEC Expert Group on New and Renewable Energy Technologies (ERNRET) monitor the progress of projects undertaken.
<b>Contact person</b>	<b>Ms Vicki Brown</b> , General Manager, International Energy Branch, Department of Industry, Tourism and Resources; PO Box 9839, Canberra ACT 2601, Australia; Tel.: + 61 2 6213 7830; Fax: +61 2 6213 7900, Email: Vicki.Brown@industry.gov.au
<b>Link</b>	<a href="http://www.apecenergy.org.au">www.apecenergy.org.au</a>



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## **APEC 21<sup>st</sup> Century Renewable Energy Initiative: Development and Implementation of a System for Accrediting Renewable Energy Training**

<b>Region / country</b>	Asia Pacific Region / Australia
<b>Leading actor(s)</b>	<b>Australia / Australian Government; Global Sustainable Energy Solutions Pty Ltd.</b>
<b>Participating actor(s)</b>	APEC member economies: Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States of America, Viet Nam
<b>Main objective(s)</b>	To develop and implement a system for Accrediting Renewable Energy Training in Asia Pacific Economic Cooperation (APEC) member countries.
<b>Contents</b>	<p>Analyse how the available training resources can be tailored to meet the needs identified and to indicate where gaps exist in current programmes by:</p> <ul style="list-style-type: none"> <li>• Identifying and describing high-priority renewable energy training courses and resources within the APEC region currently available;</li> <li>• Developing key competencies across high-priority renewable energy training courses and resources within the APEC region;</li> <li>• And gaining relevant training provider institution agreements to implement accreditation.</li> </ul> <p>This project follows on a previous APEC Energy Working Group project which undertook an analysis of the needs of APEC member economies for renewable energy training and identified what member economies could provide renewable energy training.</p>
<b>Expected results</b>	To develop recommendations for implementing a renewable energy training programme within the APEC region.
<b>Target area / place</b>	APEC region and member countries
<b>Arrangement(s) for financing</b>	Funding for the project was secured through the Australian Government Department of Industry, Tourism and Resources (DITR).
<b>Monitoring process and time frame</b>	The project is overseen by Ms Vicki Brown, Assistant Secretary, International Energy Branch, DITR. The final report is due 30 June 2004
<b>Contact person</b>	<b>Mr Geoff Stapleton</b> , Managing Director, Global Sustainable Energy Solutions Pty Ltd, PO Box 57, Ulladulla NSW 2539, Australia; Tel.: +61 2 4457 3057, Fax: + 61 2 4457 3666, Email: gses@bigpond.com



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## **klima:aktiv**

### **Action Programme for Active Climate Protection**

<b>Region / country</b>	Europe / Austria
<b>Leading actor(s)</b>	<b>Austria / Ministry of Agriculture, Forestry, Environment and Water Management</b>
<b>Participating actor(s)</b>	Austrian Government
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To support the market introduction of climate-friendly technologies, services and activities.</li> <li>• To enhance quality and accelerate introduction of climate change technologies and services, in particular renewable energy technologies and enhanced energy efficiency. The current focus lies on the use of renewable energies for heating.</li> <li>• Renewable Energy Programmes planned for 2004-2007: Solar thermal technologies; biomass for heating; biogas; enhancement of planning and quality of biomass heating systems; increased efficiency in the supply of biogenic resources for heat and electricity with regard to biomass.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Provision of easier access to target groups and increased resources for attaining the commonly set targets.</li> <li>• Introduction of issue-specific and target-group oriented programmes in the areas of construction and housing, mobility, company policies, energy saving and renewable energy sources.</li> <li>• Know-how-Transfer; education and training; information; marketing; enhancement of quality standards.</li> </ul>
<b>Expected results</b>	Technological and organisational solutions able to compete on the market, take care of innovative quality standards and promote education and training of all relevant occupational groups.
<b>Target area / place</b>	Austria
<b>Arrangement(s) for financing</b>	Budget: EUR 3-4 millions p.a. In addition, klima:aktiv invites relevant economy branches and actors to make contributions for actively shaping klima:aktiv programmes.
<b>Monitoring process and time frame</b>	klima:aktiv has been launched in May 2004. Time frame: 2004-2012. Implementation of klima:aktiv programmes must be accomplished within individually set time frames and result in concrete measurable targets.
<b>Contact person</b>	<b>Mr Bernd Vogl</b> , Ministry of Agriculture, Forestry, Environment and Water Management, Division V/10, Stubenbastei 5, 1010 Vienna, Austria, Tel.: +43-1-51522-1322; Fax: +43-1-51522-7325, Email: <a href="mailto:bernd.vogl@bmlfuw.gv.at">bernd.vogl@bmlfuw.gv.at</a>
<b>Link</b>	<a href="http://www.klimaaktiv.at">www.klimaaktiv.at</a>





## Additional Bilateral Actions of the Austrian Development Agency in the Field of Renewable Energy

<b>Region / country</b>	Europe / Austria
<b>Leading actor(s)</b>	<b>Austria / Austrian Development Agency</b>
<b>Participating actor(s)</b>	Austrian Government, ministries and institutions of partner countries
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To increase the capacity in partner country governments and institutions to address energy and poverty issues.</li> <li>• To increase attention from political decision makers and investors to the importance of (renewable) energy in poverty alleviation</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Programming dialog with the governments of Albania, Macedonia and Bhutan to define a broad range of specific actions, including organisations, the private sector and the civil society.</li> <li>• Supporting Bhutanese rural hydroelectric electrification with additional electrification of so far left aside housing developments or villages; Implementing energy efficiency programme in developing adapted and improved rural stoves in rural Bhutan.</li> <li>• Supporting Global Forum on Sustainable Energy (GFSE) Regional Meeting in Paro (Bhutan) on “Access to Energy for Sustainable Development: Policies for Rural Areas”.</li> <li>• Starting a small number of mini hydropower pilot projects in Ethiopia to practically demonstrate the feasibility of such projects to the population and the Government of Ethiopia.</li> </ul>
<b>Expected results</b>	Improved access to affordable, sustainable and renewable energy services for the poor, such as improved use of solar energy for hot water production in Albania, Macedonia and Bhutan
<b>Target area / place</b>	Albania, Macedonia, Bhutan, Ethiopia
<b>Arrangement(s) for financing</b>	Funding for the above mentioned programmes are organised mainly through ODA from Austria, with contributions from the partner governments. Future activities will involve additional resources from International Financial Institutions and the private sector.
<b>Monitoring process and time frame</b>	The programmes are designed for 2 to 5 years commitment. The individual programmes have their own monitoring process and time frame. It is anticipated that the joint inventory and database being under development at the EUEI secretariat, enables the EUEI partners and therefore also ADA to maintain an overview of the related energy and poverty activities and monitor progress. It is intended to report the result of the programmes at the upcoming meetings of the GFSE, where energy for sustainable development is the core theme.
<b>Contact person</b>	<b>Mr Robert Zeiner</b> , Austrian Development Agency, Minoritenplatz 9, 1014 Vienna, Austria, Tel.: + 43 1 90 399 4568, Fax: + 43 0 5 01159 277, Email: robert.zeiner@ada.gv.at





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## Austrian Programme on Technologies for Sustainable Development

<b>Region / country</b>	Europe / Austria
<b>Leading actor(s)</b>	<b>Austria / Federal Ministry of Transport, Innovation and Technology (BMVIT)</b>
<b>Participating actor(s)</b>	<ol style="list-style-type: none"> <li>(1) Austrian Organisation for Environmental Technologies (ÖGUT)</li> <li>(2) Trust Consult GmbH Business Consultancy</li> <li>(3) The Austrian Energy Agency (E.V.A.)</li> </ol>
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Supporting structural change towards an eco-efficient economy through research, development and diffusion strategies</li> <li>• Strengthening the use of renewable energy sources, energy efficiency and renewable raw materials, e.g. to induce changes towards renewable, flexible energy systems or towards highly efficient and solar passive houses</li> <li>• New opportunities for the economy and the industry</li> </ul>
<b>Contents</b>	<ol style="list-style-type: none"> <li>(1) 4 Calls for Tenders of R&amp;D Programme “Building of Tomorrow” (2004-2007) to stimulate and support appropriate types of R&amp;D- and cooperation projects in order to realise and implement demonstration buildings and passive houses: new buildings as well as renovated old buildings (residential and office buildings). They differ from the current building practice in Austria by fulfilling the following criteria: <ul style="list-style-type: none"> <li>• Increased use of renewable energy sources, especially solar energy</li> <li>• Increased use of sustainable raw materials and reduction of energy and material input</li> <li>• Consideration of social and service-related aspects</li> <li>• Costs comparable to conventional building design and high market potential</li> </ul> </li> <li>(2) 4 Calls for Tenders of R&amp;D Programme “Factory of Tomorrow” (2004-2007) To stimulate and support appropriate types of R&amp;D- and cooperation projects in the fields of <ul style="list-style-type: none"> <li>• Renewable raw materials and renewable energy technologies for the industry, e.g. specific solar thermal energy in the industrial sector</li> <li>• Technologies in the manufacturing process and</li> <li>• Sustainable products and services towards demonstration of technologies.</li> </ul> <p>While there will be an increased focus on products and services in 2005 and 2006, the last calls will specifically focus on generating demonstration projects and processes.</p> </li> </ol>



### Contents continued

- (3) R&D Programme “Energy Systems of Tomorrow” (2004-2008):  
The goal of this programme is to develop technologies and concepts for efficient and flexible energy systems based on the use of renewable energy sources which will be able to meet our energy needs over the long term. Building upon Austrian strong points in the areas of research and technological development (solar energy, biomass, etc.), a significant contribution can be made to the attainment and defence of technological leadership. The action supports appropriate types of R&D- and cooperation projects in order to realise and implement model systems and technologies. One accompanying measure is the contest “demonstration energy regions of tomorrow” that starts in June 2004.

### Expected results

- (1) R&D results and finally demonstration of sustainable buildings (high efficient “passive houses” based on renewable energies) with high market potential and considerably increased comfort at comparable costs;
- (2) R&D results and demonstration processes of increased use of renewable raw materials and energy sources in trade and industry as well as in service enterprises. Application of zero-waste and zero-emission technologies and methods of production;
- (3) R&D results aiming at the implementation of energy systems in regions with structural, social and technological innovations - from primary energy sources to energy services.

### Target area / place

Austria

### Arrangement(s) for financing

(1) Budget: EUR 5 millions p.a., (2) Budget: EUR 5 millions p.a., (3) Budget: EUR 5 millions p.a. The Austrian Council for Research and Technology Development makes proposals for this national R&D programme and for the financing of the annual calls for tenders to the ministry. An international jury evaluates and ranks the projects submitted within the scope of the calls for tenders.

### Monitoring process and time frame

- (1) In 2004 the R&D-projects of the 4th call for tenders started. In the years 2005 to 2007 three thematic calls for tenders are planned.
  - (2) In 2004 the R&D-projects of the 3rd call for tenders started. In the years 2005 to 2007 there will be one thematic call each for tenders per year.
  - (3) In 2004 the first R&D-projects of the first call for tenders start. In the years 2005-2008 there will be four further calls for tenders.
- An interim-evaluation report will be ready in October 2004.

### Contact person

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(1) **Ms Elisabeth Huchler**, Email: [elisabeth.huchler@bmvit.gv.at](mailto:elisabeth.huchler@bmvit.gv.at);  
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### Link

(1) [www.HAUSderzukunft.at](http://www.HAUSderzukunft.at), (2) [www.FABRIKderzukunft.at](http://www.FABRIKderzukunft.at), (3) [www.EDZ.at](http://www.EDZ.at) or [www.ENERGIESystemederzukunft.at](http://www.ENERGIESystemederzukunft.at).



## Establishment of a Combined System of Green Certificates with a Guaranteed Minimum Price

<b>Region / country</b>	Europe / Belgium
<b>Leading actor(s)</b>	<b>Belgium / Federal Government and regional governments (Flanders, Wallonia, Brussels)</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	To develop consumption of green electricity in Belgium
<b>Contents</b>	<p>New mechanisms that have replaced the former system of supplementary support, known as the "green franc". Each region, and the federal government, has organised a system of green certificates based on a common principle. In order to gain green certificates, a producer of green electricity must have its production facilities certified. Green certificates are then awarded by the electricity market's regulatory bodies. This further refinement of the green certificate scheme is based on an innovative combination of two mechanisms. Firstly, the regions organise green certificate markets and oblige electricity suppliers to deliver a certain quota of green electricity, to be adjusted every year.</p> <p>At the same time, the federal government has established a minimum tariff for green certificates in case the market should not work properly and also so as to assure investors of a certain minimum return. This minimum tariff is based on a commitment imposed on the electricity grid operator to buy back green certificates from producers who so wish at a set price, fixed according to the type of technology used.</p> <p>In the region of Wallonia, producers of green electricity who so wish can also receive assistance for the depreciation period of the equipment (maximum of 10 years) by passing on their green certificates to the Wallonian energy ministry. In the Flanders region, all producers of green electricity are guaranteed a minimum tariff, if they so wish. These minimum tariffs, which depend on the technology used, are higher than the minimum tariffs offered by the federal government but are also limited to a period of 10 years.</p>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• A rise in the share of total gross energy consumption accounted for by green electricity from 1% in 2000 to 6% in 2010</li> </ul>
<b>Target area / place</b>	Belgium
<b>Arrangement(s) for financing</b>	See above.
<b>Monitoring process and time frame</b>	In the region of Wallonia, it is expected that green production capacity will double in 3 years (310 MW in March 2004). In the Flanders region, green production capacity doubled between 2002 and 2003 (146 MW in May 2004). This trend is expected to continue.
<b>Contact person</b>	<b>Mr Henri Autrique</b> , North Gate III Bld Roi Albert II, 16 à 1000 Bruxelles, Tel.: + 32 2 206 45 05, Fax: + 32 2 206 57 30, Email: <a href="mailto:henri.autrique@mineco.fgov.be">henri.autrique@mineco.fgov.be</a>
<b>Link</b>	<a href="http://www.creg.be">www.creg.be</a> (federal government); <a href="http://www.vreg.be">www.vreg.be</a> (Flanders); <a href="http://www.cwape.be">www.cwape.be</a> (Wallonia); <a href="http://www.ibgebim.be">www.ibgebim.be</a> (Brussels)



## Clean Car Technologies - Programme

<b>Region / country</b>	Europe / Belgium
<b>Leading actor(s)</b>	<b>Belgium / Strategic platform Clean Car Technologies; Federal Government jointly with regional governments</b>
<b>Participating actor(s)</b>	Belgian federal and regional governments, automotive industry, equipment, ICT, robotic industries, fuel industries and refineries, industrial federations (Belgian Petroleum Federation, AGORIA, FEBIAC, FEB, VBO), academic and research institutions (public and private), financing operators, incubators and innovative clusters, consumer associations and civil society
<b>Main objective(s)</b>	To promote the market penetration of renewable energies in road transportation and automotive industries
<b>Contents</b>	Based on the January 2004 ministerial decree, the programme aims at promoting the scientific and industrial development and the market penetration of `clean` (i.e. Renewable material- or energy-based) motors, fuels and equipment technologies for road transportation and non-road automotive industry.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• To replace/upgrade one-third of the Belgian private and public vehicle parks with renewable energy-based technologies by 2010</li> <li>• To create a strong `knowledge-based economy` industrial potential</li> <li>• To reduce by 20% the CO<sub>2</sub> emissions of the transport sector by 2010</li> <li>• To create new jobs and to finance the R&amp;D up to 3% of GDP.</li> </ul>
<b>Target area / place</b>	Belgian and European markets
<b>Arrangement(s) for financing</b>	Co-financing arrangement among all the stakeholders
<b>Monitoring process and time frame</b>	<p>The strategic platform is monitored by a Task Force and operates through thematic working parties. The Task Force reports to the Governments every 6 months:</p> <ul style="list-style-type: none"> <li>• Working party I `Policies &amp; measures` defines and implements short-term fiscal, legal and institutional measures to accelerate the market penetration of clean car technologies.</li> <li>• Working party II `Prospective &amp; strategic options` explores long term options to strengthen the innovative capabilities of the Belgian automotive and equipment industries and create synergies with industrial partners at the European and international level.</li> </ul>
<b>Contact person</b>	<p><b>Mr Rudy Aernoudt</b>, Chair of the Task Force, Director of the Office of the Federal Ministry for Economy and Energy; Tel.: +32-2-2130911, Email: rudy.aernoudt@Kab.Moerman.fed.be;</p> <p><b>Mr Jean-Roger Drèze</b>, Chair of the Working Party "Strategic Options", Climate policy advisor, Office of the Federal Ministry for Economy and Energy, Brussels; Tel.: +32-2-2130943, Email: jean-roger.dreze@Kab.Moerman.fed.be</p>
<b>Link</b>	www.AGORIA.be; www.AIIB.be



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## Improving Living Conditions for Rural Communities by Means of Electrification

<b>Region / country</b>	Africa / Benin
<b>Leading actor(s)</b>	<b>Benin / Ministry of Mining, Energy and Hydropower</b>
<b>Participating actor(s)</b>	Islamic Development Bank, Siemens Group (preparation of an electrification project for 40 rural communities), Iso-Photon Group (preparation of an electrification project for 40 rural communities prior to negotiations with the Spanish government on contributions to the financing)
<b>Main objective(s)</b>	This measure is one component in the implementation of the Government Action Programme (PAG II) and aims to provide electricity to 250 rural communities by 2009 by means of photovoltaic technology.
<b>Contents</b>	Provision of electric power, essentially to satisfy the social needs of communities (public lighting, health centre equipment, schools, leisure centres, pump infrastructure for drinking water, power to satisfy demand for mechanical energy, e.g. from carpenters).
<b>Expected results</b>	Improved living conditions for communities by means of rural electrification
<b>Target area / place</b>	250 rural communities in Benin
<b>Arrangement(s) for financing</b>	For the project to supply power to 24 villages currently being prepared with the IDB at a total cost of about USD 7 million, financing will break down as follows: 10% from the government of Benin; 90% from the Islamic Development Bank
<b>Monitoring process and time frame</b>	Technical coordination for rural electrification programmes in Benin is provided by the Benin Agency for Rural Electrification and Energy Management (ABERME) set up by the Ministry of Mining, Energy and Hydropower. Programme implementation is to be monitored by a national monitoring commission composed of representatives from various Ministries, including those responsible for energy, finance, planning and the environment.
<b>Other relevant information</b>	In addition to the above-mentioned projects already agreed with donors, Benin is seeking further financing (to the tune of USD 45 million) to provide electrification for 150 villages out of the 250 selected.
<b>Contact person</b>	<b>Mr Clément Ahouannou</b> , Director General of the Benin Agency for Rural Electrification and Energy Management, Tel.: + 229 309455, Fax: + 229 306807; <b>Mr Raoufou Badarou</b> , General Director for Energy, 06 BP 2049 Cotonou, Benin, Tel.: + 229 336987 / 048932, Fax: + 229 336987, Email: badaraouf@yahoo.fr



## Project for the provision of energy services

<b>Region / country</b>	Africa / Benin
<b>Leading actor(s)</b>	<b>Benin / Ministry of Mining, Energy and Hydropower (MMEH)</b>
<b>Participating actor(s)</b>	International Development Association, World Bank
<b>Main objective(s)</b>	To streamline and modernise the biomass energy sector and to promote efficient alternatives to substitute lignite fuels for households and SMEs, including endogenous renewable fuels. Rational management of biomass energy and substitute energies.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Develop the local production potential and use of modern forms of biomass energy (production of ethanol and other green fuels such as biogas and briquettes of vegetal waste) as the prime substitute fuel for the energy provided by wood, in order to reduce the import of petroleum products and promote rural development and agro-industry.</li> <li>• Establish sustainable community forestry management systems to build permanent capacity for the sustainable production of firewood in natural forests and to create opportunities for revenue generation in villages on the margins of forested highland.</li> <li>• Promote the use of substitute energies produced locally to help overcome the inadequate supply of sustainable firewood from the forestry sector, estimated to reach 1,200,000 tonnes oil equivalent by 2015.</li> </ul>
<b>Expected results</b>	Partial substitution of firewood consumption by renewable energies, permitting the development of new energy sectors based on local resources.
<b>Target area / place</b>	Benin
<b>Arrangement(s) for financing</b>	The cost of the project negotiated with the World Bank for a six-year period (2005 to 2010) will be USD 12,360,000 and breaks down as follows: Government of Benin – 8%; IDA loan – 92%
<b>Monitoring process and time frame</b>	The General Directorate for Energy at the MMEH will coordinate these activities with the Forestry and Natural Resources Directorate at the Ministry of Agriculture and Fisheries.
<b>Other relevant information</b>	The intention is to create community forestry management schemes for 300,000 ha of land. Benin is seeking additional financing to extend this action to another 700,000 ha and to strengthen national capacity for producing and marketing biofuels up to 2010.
<b>Contact person</b>	<b>Mr Raoufou Badarou</b> , MMEH, Director General for Energy, 06 BP 2049, Cotonou, Benin; Tel.: + 229 336987 048932, Fax: +229 336987, Email: badaraouf@yahoo.fr





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## Promotion of Renewable Energy and Energy Efficiency in the Building Sector

<b>Region / country</b>	Africa / Botswana
<b>Leading actor(s)</b>	<b>Botswana / Department of Energy</b>
<b>Participating actor(s)</b>	Botswana Government, Danish International Development Agency (DANIDA) and Global Environment Facility (GEF)
<b>Main objective(s)</b>	Increased use of renewable energy in rural energy supply and to improve energy efficiency in the building sector in Botswana through institutional capacity building.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Integrate renewable energy into rural electrification plans</li> <li>• Include improved energy efficiency guidelines into building regulations</li> <li>• Incorporate energy efficiency and conservation into training systems</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Solar electrification programme targeting 88 villages over 5 years</li> <li>• Increased public awareness</li> <li>• Removed barriers to widespread adoption of renewable energy</li> <li>• Strengthened renewable energy industry</li> <li>• Improved energy efficiency in the building sector</li> </ul>
<b>Target area / place</b>	Botswana
<b>Arrangement(s) for financing</b>	<ul style="list-style-type: none"> <li>• Renewable Energy: Total project cost is USD 8,693,608 of which USD 3,305,000 is from GEF and the balance from Botswana Government and end-users.</li> <li>• Energy Efficiency and Conservation: Total project cost is DKK 17,3 million of which DKK 15 million is DANIDA's contribution and the balance from Botswana Government</li> </ul>
<b>Monitoring process and time frame</b>	<ul style="list-style-type: none"> <li>• Renewable Energy: Project is to run for 5 years with monitoring and evaluation according to standard UNDP rules for nationally executed projects. An annual reporting cycle will be established</li> <li>• Energy Efficiency and Conservation: Project to run for 3 years and the DANIDA Project Implementation Manual will be followed. Afterwards it is expected that guidelines for building regulations will be followed and training institutions will have incorporated energy efficiency and conservation into training system.</li> </ul>
<b>Contact person</b>	<b>Mr Buti Mogotsi</b> , Department of Energy, Private Bag 00378, Gaborone, Botswana, Tel.: + 267-3914187, Fax: + 267-3914221, Email: bomogotsi@gov.bw



## Brazil's Hydropower Programme

<b>Region / country</b>	South America / Brazil
<b>Leading actor(s)</b>	<b>Brazil / Government of Brazil</b>
<b>Participating actor(s)</b>	Ministry of Mines and Energy, ANEEL – Electrical Energy National Agency, State-owned and private companies, other partnerships
<b>Main objective(s)</b>	Increase the supply of electricity from hydropower; reduce carbon dioxide emissions.
<b>Contents</b>	Regulatory frame is defined in law, approved on March 2004. Implementation of projects depends on public auction in order to guarantee both lower tariffs to the final consumers and smaller environmental impacts. All of them should have a Previous License (environmental) to take part in that auction. Projects will be able to add 2,819 MW to the Brazilian interconnected system. Contracts will be signed among distribution utilities and project developers, selected by the aforementioned auction, and there will be a guaranteed PPA – Power Purchase Agreement of a period of 15-30 years.
<b>Expected results</b>	Increase the supply of electricity from hydropower, reduce carbon dioxide emissions, develop national industries, create new jobs, generate income, among others.
<b>Target area / place</b>	Brazil
<b>Arrangement(s) for financing</b>	Financing facilities could be arranged supported by aforementioned PPA, guaranteed by the distribution companies.
<b>Monitoring process and time frame</b>	All projects will begin operation since 2009. Electrical Sector Monitoring Committee, coordinated by Ministry of Mines and Energy, created under regulatory frame in order to check goals action and to take adequate corrective measures, will monitor the program.
<b>Contact person</b>	<b>Mr Amilcar Guerreiro</b> , Energy Policy and Planning Secretariat, Ministry of Mines and Energy, Tel.: +55 61 319-5019, Email: amilcar.guerreiro@mme.gov.br.





## Alternative Sources of Energy Incentive Programme - PROINFA

<b>Region / country</b>	South America / Brazil
<b>Leading actor(s)</b>	<b>Brazil / Government of Brazil</b>
<b>Participating actor(s)</b>	Ministry of Mines and Energy, Centrais Elétricas Brasileiras – ELETROBRAS (Brazilian Electrical Sector Holding Company), State and Private Companies, other partnerships
<b>Main objective(s)</b>	To diversify the Brazilian energy supply mix by increasing the share of renewable energy sources (wind, small hydro and biomass) and to reduce carbon dioxide emissions.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The Alternative Sources of Energy Incentive Programme (PROINFA) was enacted in law;</li> <li>• Implementation of wind, small hydro and biomass projects with a total power of 3,300 MW, equally shared with 1,100 MW for each alternative source;</li> <li>• Contracts will be signed with ELETROBRAS by the end of June 2004 and will have a guaranteed PPA – Power Purchase Agreement – of a period of 20 years;</li> <li>• Commercial conditions were established in advance.</li> </ul>
<b>Expected results</b>	Diversified energy supply mix; reduced carbon dioxide emissions; development of national industries; creation of new jobs, income generation; technology transfer, local / regional capacity building; social inclusion; among others.
<b>Target area / place</b>	Brazil, all regions of the country.
<b>Arrangement(s) for financing</b>	Private sector and private / public partnerships – supported by the Brazilian Social and Economic Development Bank (BNDES) with adapted conditions focussed on renewables.
<b>Monitoring process and time frame</b>	All projects will begin operation within the period of January 2006 to December 2006 and will be monitored by ELETROBRAS, under the coordination of the Ministry of Mines and Energy.
<b>Contact person</b>	<b>Ms Laura Porto</b> , Division for Renewable Energies, Office for Energy Development, Ministry of Mines and Energy, Tel.: + 55 61 319-5012, Email: lporto@mme.gov.br



## Light for All Programme – “Luz para Todos”

<b>Region / country</b>	South America / Brazil
<b>Leading actor(s)</b>	<b>Brazil / Government of Brazil</b>
<b>Participating actor(s)</b>	Ministry of Mines and Energy, Centrais Elétricas Brasileiras – ELETROBRAS (Brazilian Electrical Sector Holding Company), state and private distribution utilities (63 in total), state and municipal governments, and other partnerships, such as with civil society
<b>Main objective(s)</b>	To eliminate the electrification deficit in Brazil by the year 2008. In order to do so, there is the need for 2,5 million new connections, at an estimated cost of USD 2,6 billion.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The programme was enacted in a Presidential Act. The specific regulatory framework was enacted by law 10.762 in November 2003.</li> <li>• The programme aims at alleviating poverty and promoting local development by means of the electricity supply to poor communities, combined with other social government programmes, in the field of agricultural development, health and education.</li> <li>• As supply alternatives, the programme will use grid extension as well as local renewable energy systems, such as vegetable palm oil, PV for community and domestic use, and micro and small hydro. The rural supply in the Northern Region (the Amazon Region) will mostly rely on vegetable palm oil, as a replacement to the diesel alternative.</li> </ul>
<b>Expected results</b>	100% electrification by the year 2008 and 2,5 million new connections, local development, at least 300,000 new jobs, income generation, technology transfer, local / regional capacity building, social inclusion, among others.
<b>Target area / place</b>	Brazil, all regions of the country.
<b>Arrangement(s) for financing</b>	Financing funds rose from the electricity sector.
<b>Monitoring process and time frame</b>	Monitoring will be performed by ELETROBRAS, together with its five subsidiaries, the regulatory body ANEEL, and by the Ministry of Mines and Energy – MME.
<b>Contact person</b>	<b>Mr Joao Ramis</b> , Director Energy Development, “Electricity for All” Programme, Ministry of Mines and Energy, Tel.: + 55 61 319-5798, Email: joao.ramis@mme.gov.br



## Ethanol Green Fuel Production in Brazil

<b>Region / country</b>	South America / Brazil
<b>Leading actor(s)</b>	<b>Brazil / Government of Brazil</b>
<b>Participating actor(s)</b>	State and private companies, universities, banks and the same in partnership countries.
<b>Main objective(s)</b>	To transfer technology and know how in production, processing, distribution and use of ethanol either by itself or in mixture with gasoline, laying the foundation for international trade in green fuels.
<b>Contents</b>	<p>Identify economical attractive regions for ethanol production and export, insert ethanol in energy mix and constitute the basis for international trade in green fuels.</p> <ul style="list-style-type: none"> <li>▪ Set up agricultural, industrial and market chains;</li> <li>▪ Determine taxation and prices;</li> <li>▪ Adapt the regulatory framework for ethanol uses;</li> <li>▪ Develop special financing options;</li> <li>▪ Evaluate environmental impacts;</li> <li>▪ Set up industrial plants on a commercial scale;</li> <li>▪ Improve technological development in agriculture and industrial areas.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>▪ Diversified fuel options by including a new renewable fuel, environmentally friendly;</li> <li>▪ Creation of new jobs and generation of income;</li> <li>▪ Reduction of petroleum and derivatives uses.</li> </ul>
<b>Target area / place</b>	South America and other interested partners.
<b>Arrangement(s) for financing</b>	Public/private partnerships.
<b>Monitoring process and time frame</b>	Constant interchange of technological information and know how.
<b>Contact person</b>	<b>Mrs Graça Silva Foster</b> , Ministry of Mines and Energy – Secretary of Petroleum, Natural Gas and Renewable Fuels, Tel.: + 55-61-319 5511, Email: spg@mme.gov.br



## Biodiesel Production in Brazil

<b>Region / country</b>	South America/Brazil
<b>Leading actor(s)</b>	<b>Brazilian Government</b>
<b>Participating actor(s)</b>	State and private companies, universities, banks and other partnerships
<b>Main objective(s)</b>	To install a self-sustainable production process for BIODIESEL, taking into account price, quality and guarantee of fuel supply, using several oilseeds, in regions of different economic activities and climates.
<b>Contents</b>	<ul style="list-style-type: none"> <li>▪ Delimitate economical attractive regions for Biodiesel production;</li> <li>▪ Define domestic and external markets through quantitative analysis;</li> <li>▪ Set up agricultural, industrial and market chains;</li> <li>▪ Determine taxation and prices;</li> <li>▪ Adapt the regulatory framework for biodiesel uses;</li> <li>▪ Develop special financing options;</li> <li>▪ Evaluate environmental impacts;</li> <li>▪ Set up industrial plants on a commercial scale;</li> <li>▪ Improve technological development in agriculture and industrial areas;</li> <li>▪ Devising special policies to provide social inclusion and benefits.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>▪ Diversified fuel options by including a new renewable fuel, environmentally friendly;</li> <li>▪ Creation of new jobs and income generation;</li> <li>▪ Reduction of mineral diesel imports.</li> </ul>
<b>Target area / place</b>	Brazil, especially in the northeastern region.
<b>Arrangement(s) for financing</b>	Public/private partnerships.
<b>Monitoring process and time frame</b>	The program will begin by authorizing 2% of biodiesel in mineral diesel in November/2004 and increase the mixture gradually up to 5% or more to 2010.
<b>Contact person</b>	<p><b>Mr Rodrigo Augusto Rodrigues</b>, Civil House of the Presidency, Tel: +55-61-4111265, Email: rrodrigues@planalto.gov.br</p> <p><b>Mrs Graça Silva Foster</b>, Ministry of Mines and Energy – Secretary of Petroleum, Natural Gas and Renewable Fuels, Tel.: + 55-61-319 5511, Email: spg@mme.gov.br</p>



## 1) Wind Power Production Incentive (WPPI) 2) Renewable Energy Deployment Initiative (REDI)

<b>Region / country</b>	North America / Canada
<b>Leading actor(s)</b>	<b>Canada / Department of Natural Resources</b>
<b>Participating actor(s)</b>	Provincial and territorial electric utilities, independent power producers and other stakeholders, government, industry associations and other partners
<b>Main objective(s)</b>	<ol style="list-style-type: none"> <li>1) The Wind Power Production Incentive (WPPI) will provide financial support for the installation of 1,000 MW of new capacity over the next five years.</li> <li>2) To stimulate the demand for renewable energy systems for space and water heating and cooling. Provide an incentive for specific renewable energy systems To encourage the private sector to gain experience with active solar and large biomass combustion systems</li> </ol>
<b>Contents</b>	<ol style="list-style-type: none"> <li>1) Covers approximately half of the current cost of the premium for wind energy in Canada compared to conventional sources.</li> <li>2) Provide an incentive for specific renewable energy systems - businesses are eligible for a refund of 25% of the purchase and installation costs of a qualifying system, up to a maximum refund of CAD 80.000. Similar incentive to federal departments and to public institutions. Incentives are also provided to the residential sector for pilot projects delivered by partners. These systems include active solar hot water and air heating systems; highly efficient and low emitting biomass combustion systems; and ground-source heat pumps - not eligible for an incentive.</li> </ol>
<b>Expected results</b>	<ol style="list-style-type: none"> <li>1) Improved capacity. Installation of 1,000 MW of new capacity over the next five years</li> <li>2) To encourage the private sector to gain experience with active solar and large biomass combustion systems</li> </ol>
<b>Target area / place</b>	Canada
<b>Arrangement(s) for financing</b>	Canadian Government Department of Natural Resources provides funding allocation.
<b>Monitoring process and time frame</b>	<ol style="list-style-type: none"> <li>1) Ongoing, funding available to electricity producers for the first ten years of a project.</li> <li>2) Regular programme review. Dependant upon budget allocation</li> </ol>
<b>Contact person</b>	Natural Resources Canada ( <a href="http://www.nrcan.gc.ca">www.nrcan.gc.ca</a> )
<b>Link</b>	<ol style="list-style-type: none"> <li>1) <a href="http://www.canren.gc.ca/programs/index.asp?CaId=107&amp;PgId=622">www.canren.gc.ca/programs/index.asp?CaId=107&amp;PgId=622</a></li> <li>2) <a href="http://www2.nrcan.gc.ca/es/erb/erb/english/View.asp?x=455">www2.nrcan.gc.ca/es/erb/erb/english/View.asp?x=455</a></li> </ol>



## Research & Development in Bioenergy and Hydroelectric Energy

<b>Region / country</b>	North America / Canada
<b>Leading actor(s)</b>	<b>Canada / Department of Natural Resources</b>
<b>Participating actor(s)</b>	Industry, research and institutes
<b>Main objective(s)</b>	<ol style="list-style-type: none"> <li>1) To build the capacity of the emerging bioenergy industry in Canada</li> <li>2) To increase the number of installations of small-scale hydroelectric facilities, particularly in rural and off-grid regions, in a sustainable and environmental friendly manner</li> </ol>
<b>Contents</b>	<ol style="list-style-type: none"> <li>1) Financial incentives for R&amp;D in the areas of: biomass handling, combustion, biochemical conversion, and thermo chemical conversion</li> <li>2) Support to the development of small hydroelectric facilities in Canada through the following activities: Renewable Energy Technologies (RET) R&amp;D Programme, Remote Community Programme, Renewable Energy Policy and Market Development</li> </ol>
<b>Expected results</b>	<ol style="list-style-type: none"> <li>1) Higher market penetration for bioenergy and improved linkages with indigenous agricultural and forestry inputs</li> <li>2) To increase accessibility and reliability of installations and offset emissions</li> </ol>
<b>Target area / place</b>	Canada
<b>Arrangement(s) for financing</b>	<ol style="list-style-type: none"> <li>1) The Bioenergy Development Programme is funded by the Panel on Energy Research and Development (PERD) and is administered through the CANMET Energy Technology Centre (CETC) of Natural Resources Canada (NRCan).</li> <li>2) Canadian Government Department of Natural Resources provides funding allocation</li> </ol>
<b>Monitoring process and time frame</b>	Regular programme review. Ongoing.
<b>Contact person</b>	Natural Resources Canada ( <a href="http://www.nrcan.gc.ca">www.nrcan.gc.ca</a> )
<b>Link</b>	<a href="http://www.canren.gc.ca/programs/index.asp?CaId=57&amp;PgId=119">www.canren.gc.ca/programs/index.asp?CaId=57&amp;PgId=119</a>



## Green Power Initiative

<b>Region / country</b>	North America / Canada
<b>Leading actor(s)</b>	<b>Canada / Department of Natural Resources, Environment and Public Works &amp; Government Services</b>
<b>Participating actor(s)</b>	Industry, research and institutes
<b>Main objective(s)</b>	Reduce greenhouse gas emissions through <ol style="list-style-type: none"> <li>1) Increased Purchases of electricity from emerging renewable energy sources having low environmental impact for federal government facilities and encourage other levels of government and large enterprises to purchase green power;</li> <li>2) Increase the production of electricity and existing generating capacity of electricity from emerging renewable energy sources in Canada.</li> </ol>
<b>Contents</b>	Purchase agreements for electricity from ERES having low environmental impact for federal facilities; 2) Incentives to help leverage the distributors' marketing efforts to find new customers for emerging renewable energy sources
<b>Expected results</b>	Increased proportion of electricity generated in Canada by emerging and low-impact renewable energy sources.
<b>Target area / place</b>	Canada
<b>Arrangement(s) for financing</b>	Department of Public Works & Government Services Canada provides contract for federal purchases; Department of Natural Resources provide incentives for green power marketers.
<b>Monitoring process and time frame</b>	Regular programme review. Dependant upon budget allocation.
<b>Other relevant information</b>	The Procurement of Electricity from Renewable Resource for Federal Facilities Programme and the Market Incentive Programme are complementary initiatives to help towards an increased proportion of electricity generated in Canada by emerging and low-impact renewable energy sources.
<b>Contact person</b>	Natural Resources Canada ( <a href="http://www.nrcan.gc.ca">www.nrcan.gc.ca</a> )
<b>Link</b>	<a href="http://www2.nrcan.gc.ca/es/erb/erb/english/View.asp?x=464">www2.nrcan.gc.ca/es/erb/erb/english/View.asp?x=464</a>



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## Capacity building through the 1) Clean Energy Decision Support Centre and the 2) Climate Change Technology Promotion Officers

<b>Region / country</b>	North America / Canada / global
<b>Leading actor(s)</b>	Canada / Department of Natural Resources
<b>Participating actor(s)</b>	Industry, research and institutes
<b>Main objective(s)</b>	<ol style="list-style-type: none"> <li>1) To build the capacity of planners, decision-makers and industry in their ability to implement renewable energy and energy efficiency projects.</li> <li>2) Reinforce Canada's international strategy to reduce greenhouse gas emissions through technology transfer. Facilitate business connections and market climate-friendly technologies, products and services. Working with its domestic and international partners to address climate change through a range of measures.</li> </ol>
<b>Contents</b>	<ol style="list-style-type: none"> <li>1) Developing decision-making tools that reduce the cost of pre-feasibility studies; disseminating knowledge to help people make better decisions; training to assist in the improved analysis of technical and financial viability of possible projects.</li> <li>2) Three climate change officers to promote clean energy technologies through Canadian embassies abroad. One officer was assigned to the Canadian High Commission in New Delhi, India, in June 2002. Other officers are working in Mexico City, Mexico, and Warsaw, Poland</li> </ol>
<b>Expected results</b>	Improved decision-making capacity resulting in more effective implementation of renewable energy and energy efficiency projects.
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	<ol style="list-style-type: none"> <li>1) Natural Resources Canada provides funding allocation.</li> <li>2) Natural Resources Canada and the Department of Foreign Affairs and International Trade provide funding allocation.</li> </ol>
<b>Monitoring process and time frame</b>	Regular programme review. Ongoing.
<b>Contact person</b>	Natural Resources Canada ( <a href="http://www.nrcan.gc.ca">www.nrcan.gc.ca</a> )
<b>Link</b>	<a href="http://cetc-vareennes.nrcan.gc.ca/en/retscreen.html">http://cetc-vareennes.nrcan.gc.ca/en/retscreen.html</a> <a href="http://www.infoexport.gc.ca/ie-en/MarketReportsAndServices.jsp">www.infoexport.gc.ca/ie-en/MarketReportsAndServices.jsp</a>





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## CARICOM Regional Energy Initiative

<b>Region / country</b>	South America / Caribbean
<b>Leading actor(s)</b>	<b>Caribbean Community Secretariat (CCS)</b>
<b>Participating actor(s)</b>	Caribbean Renewable Energy Development Programme (CREDP), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), European Delegation in Guyana, CARIFORUM Secretariat
<b>Main objective(s)</b>	To reduce the number of people in poverty through the provision of adequate, affordable, sustainable energy services.
<b>Contents</b>	(1) Develop a legal drafting and advisory capability for energy policy, regulations and legislation at the CCS; (2) Establish an Energy Desk at the CCS to manage the CCS' Regional Energy Initiative (REI); (3) Sponsor an equity (EUR 40 million) and debt (EUR 60 million) fund; (4) Raise equity seed capital of EUR 4 million for 26 CREDP projects, worth USD 414 million; (5) Develop mechanism to leverage existing risk guarantee products provided by multilateral banks; (6) Design 2 customer finance schemes for off-grid technologies; (7) Develop carbon trade process following the Clean Development Mechanism (CDM); (8) Facilitate participation of other CARIFORUM countries (i.e. Dominican Republic) in CARICOM REI; (9) Facilitate the participation of new member states of CARICOM e.g. Haiti in REI; (10) Facilitate capacity building and training of all regional stakeholders; (11) Design and implement a public awareness campaign.
<b>Expected results</b>	(1) Institutional strengthening of the CARICOM Secretariat to implement the REI; (2) Technical assistance to regional governments through the provision of model legislation and regulations, as well as legal advice on legislative and regulatory reform; (3) Technical assistance for renewable energy in leveraging existing international risk guarantee mechanisms; (4) Technical assistance on carbon trade opportunities and processes for projects; (5) Financing of renewable energy projects on a portfolio basis, while minimising transaction costs; (6) Higher market penetration of off-grid technologies e.g. solar water heaters and photovoltaics, through the establishment of customer credit schemes delivered through local central banks, electric utilities and commercial banks; (7) Capacity building of regional stakeholders through attendance at national, regional and international seminars, conferences and meetings.(7).
<b>Target area / place</b>	Caribbean countries
<b>Arrangement(s) for financing</b>	EUR 1,285,000 from EU EI; 8,000,000 from other Donors
<b>Monitoring process and time frame</b>	Programme oversight will be provided by the Programme Committee, comprising of representatives of the GTZ, the EU delegation in Guyana, the CARIFORUM Secretariat, and the Sustainable Development Programme of the CCS, and chaired by the Project Manager, CREDP. A mid-term evaluation will take place early in 2006; a final evaluation will take place at the end of the project implementation
<b>Contact person</b>	<b>Dr Roland Clarke</b> , Project Manager, CREDP, Tel.: + 592 225 0972; 592 226 9280-9 ext. 2631, Fax: + 592 225 7341, Email: rclarke@caricom.org



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## Formulating Renewable Energy Law in China

<b>Region / country</b>	Asia / China
<b>Leading actor(s)</b>	<b>China / Energy Bureau of National Development &amp; Reform Commission</b>
<b>Participating actor(s)</b>	National People's Congress, related government agencies, related enterprises, Centre for Renewable Energy Development (CRED) of Energy Research Institute, China Renewable Energy Industrial Association (CREIA) and others
<b>Main objective(s)</b>	To formulate a Renewable Energy Act (or Law) for China
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Set a national development target for renewable energy development</li> <li>• Set up a set of systems to ensure the achievement of the national target</li> <li>• Development incentives for promoting renewable energy development</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Confirm the important role of renewable energy in China's national energy strategy;</li> <li>• Remove barriers to the development of the renewable energy market;</li> <li>• Create market space for renewable energy;</li> <li>• Set up a financial guarantee system for the development of renewable energy; and</li> <li>• Create a social atmosphere conducive to renewable energy.</li> </ul>
<b>Target area / place</b>	China
<b>Arrangement(s) for financing</b>	No special fund to be arranged. However, some support is available from World Bank, UNDP, Germany, UK Governments
<b>Monitoring process and time frame</b>	2004 to 2006 The action will be monitored by the NPC (National People's Congress)
<b>Other relevant information</b>	The first draft of the act will be available at the end of June 2004.
<b>Contact person</b>	<b>Mr Shi Lishan</b> ; Fax: +86-10-68501262; Email: hydrosls@sohu.com; <b>Mr Li Junfeng</b> ; CRED & CREIA; Fax: +86-10-6390 8465; Email: lijf@public.bta.net.cn
<b>Link</b>	<a href="http://www.creia.net">www.creia.net</a>



## Formulating National Renewable Energy Development Strategy and Plan (NREDSP)

<b>Region / country</b>	Asia / China
<b>Leading actor(s)</b>	<b>China / Energy Bureau of National Development &amp; Reform Commission</b>
<b>Participating actor(s)</b>	Related government agencies, related enterprises, Centre for Renewable Energy Development (CRED) of the Energy Research Institute, China Renewable Energy Industrial Association (CREIA)
<b>Main objective(s)</b>	Development of a national renewable energy strategy.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Set up national development targets</li> <li>• Develop an implementation plan</li> <li>• Make appropriate institutional arrangements</li> <li>• Develop a set of policy instruments</li> <li>• Develop financial scenarios</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• By 2010, the installed capacity of renewable energy will total about 60 GW and account for about 10% of China's total installed power generation capacity; this includes small-scale hydropower (50 GW), wind power (4GW), biomass power generation (6 GW), solar energy (450 MW).</li> <li>• By 2020, the installed capacity for power generated by renewable energy will reach about 121 GW, accounting for about 12% of China's total installed power generation capacity.</li> <li>• At the same time, great emphasis will be put on technologies using renewable energy to supply heat and on liquid biofuels, etc., so that the target of providing, by 2020, 200 million additional tons annually of standard coal equivalent (tce) of renewable energy of all types in the energy mix is reached. This amounts to an additional 8,000 PJ, which would bring China's annual use of renewable energy up to 20,000 PJ and up to a 17% share in China's projected energy consumption in 2020.</li> </ul>
<b>Target area / place</b>	China
<b>Arrangement(s) for financing</b>	CNY 500 billion (about EUR 49 billion) are needed, which will come from different sources, including Government and others.
<b>Monitoring process and time frame</b>	2006 to 2020, National People's Congress will monitor the results.
<b>Other relevant information</b>	The NREDSP will be coordinated with other national development programmes, such as rural electrification programme, west development programme and international assistant programmes
<b>Contact person</b>	<b>Mr Shi Lishan</b> ; Fax: +86-10-68501262; Email: hydrosls@sohu.com; <b>Mr Li Junfeng</b> ; CRED & CREIA; Fax: +86-10-6390 8465; Email: lijf@public.bta.net.cn
<b>Link</b>	<a href="http://www.creia.net">www.creia.net</a>



## Sahel Project to Promote Renewable Energies (PROSPER)

<b>Region / country</b>	Africa / Sahel
<b>Leading actor(s)</b>	<b>Permanent Inter-State Committee on Drought Control in the Sahel (CILSS)</b>
<b>Participating actor(s)</b>	CILSS member states: Burkina Faso, Cape Verde, Chad, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, and Senegal. West African Economic and Monetary Union, the inter-African Network of NGOs to combat desertification (RIOD), the PERACOD project (Senegal), World Health Organisation (WHO)
<b>Main objective(s)</b>	A guaranteed and sustainable energy supply for the rural population, using renewable energies
<b>Contents</b>	Over 90% of all energy used in rural areas is drawn from forest resources. The CILSS will increase the social sustainability of the forest resource management. The CILSS will also promote the rational use of energy (production, conversion and consumption). The CILSS will support the spread of renewable energies.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• An increased proportion of renewable energies in CILSS countries</li> <li>• A contribution to poverty reduction in rural areas</li> <li>• Improved access to basic social services (drinking water, health, education)</li> </ul>
<b>Target area / place</b>	Grass-roots community organisations in the Sahel
<b>Arrangement(s) for financing</b>	<ul style="list-style-type: none"> <li>• European Union through phase two of the regional solar programme (EUR 73 million until the end of 2007)</li> <li>• European Union and Germany through the Regional Programme for the Promotion of Alternative Domestic Energies in the Sahel – PREDAS (EUR 5,4 million from the European Union and EUR 1,5 million from Germany)</li> <li>• Complementary financing has been requested (typha carbonisation project under NEPAD (USD 6,000,000), project to reduce domestic pollution (EUR 1,8 million, Directorate General for International Co-operation, Netherlands)</li> </ul>
<b>Monitoring process and time frame</b>	Regional steering and follow-up committee; external mid-term review Measures currently planned for 2004-2008 with a view to 2015.
<b>Other relevant information</b>	The CILSS has had a technical mandate from its member states and WAEMU for the implementation of the UN Convention to Combat Desertification since 1999. Renewable energies are an important component in the West African sub-regional action programme to combat desertification.
<b>Contact person</b>	<b>Mr Musa Mbenga</b> , Executive Secretary, 03 BP 7049, Ouagadougou, O3, Burkina Faso, Tel.: +226 50 37 41 25/26, Fax: +226 50 37 41 32, Email: cilss.se@cilss.bf
<b>Link</b>	<a href="http://www.cilssnet.org">www.cilssnet.org</a> ; <a href="http://www.cilssnet.org/predas">www.cilssnet.org/predas</a>



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## Support Project for the Formulation of a National Strategy for Rural Electrification

<b>Region / country</b>	Africa / Republic of Congo
<b>Leading actor</b>	<b>Republic of Congo / Ministry of Mines, Energy and Water Resources</b>
<b>Participating actor</b>	Agence Congolaise d'Electrification Rurale
<b>Main objective(s)</b>	To reduce poverty by improving living conditions in isolated village communities through decentralised rural electrification
<b>Contents</b>	Development and preparation of a national Strategy for Rural Electrification 2015, including a financing system
<b>Expected results</b>	<ul style="list-style-type: none"><li>• Opening up of rural zones through decentralised electrification;</li><li>• Support for the formulation of a national strategy for rural electrification;</li><li>• Support for the development of an information database on rural electrification</li></ul>
<b>Target area / place</b>	Republic of Congo
<b>Arrangement(s) for financing</b>	Government budget, sponsorship, Development Aid Programme
<b>Monitoring process and time frame</b>	<ul style="list-style-type: none"><li>• The section 'establishment of a financial plan for the rural electrification programmes' is expected to proceed as follows: 1<sup>st</sup> phase (3 months) – feasibility studies 2<sup>nd</sup> phase (6 months) – establishment of instruments</li><li>• For the section 'formulation of a national strategy for rural electrification 2015', the estimated time frame for this project is 18 months</li></ul>
<b>Contact person</b>	<b>Mr Philippe Mvouo</b> , Minister; BP: 2120, Tel.: + 242 81 -02-90, Fax: + 242 81 -50-77, Email: mmehcab@yahoo.fr



## **CYPRUS Grant Scheme under the Law for the Promotion of Renewable Energy Sources and the Encouragement of Energy Conservation**

<b>Region / country</b>	Europe / Cyprus
<b>Leading actor(s)</b>	<b>Cyprus / Ministry of Commerce, Industry and Tourism</b>
<b>Participating actor(s)</b>	Management Committee of the Special Fund for the Promotion of Renewable Energy Sources and Energy Conservation, Cyprus Institute of Energy
<b>Main objective(s)</b>	To encourage investments in the field of energy conservation and renewable energies and to promote the utilisation of renewable energies and to encourage energy conservation.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Grants and/or subsidies for investments in energy conservation by companies, households and public sector bodies are provided</li> <li>• Grants and/or subsidies for investments in renewable energy systems such as wind, solar thermal, photovoltaic, small hydro, biomass and desalination are provided</li> <li>• The Electricity Authority of Cyprus at a specified price will purchase all electricity produced from renewable energy sources.</li> <li>• The Law for the Promotion of Renewable Energy Sources and the Encouragement of Energy Conservation provides for the creation of a Special Fund whose proceeds will come from a levy of EUR 0,22 cent per kWh on all electricity consumption, donations and government grants.</li> </ul>
<b>Expected results</b>	Considerable increase of energy conservation activities and energy produced from renewable energies through the provision of financial incentives of about EUR 28 million by 2006. Programmes for the promotion of renewable energy sources and energy conservation will be implemented, through which the targets of the Action Plan adopted by the Cyprus Government will be achieved.
<b>Target area / place</b>	Cyprus
<b>Arrangement(s) for financing</b>	The grants and subsidies, which will be provided, will be financed through a Special Fund for the promotion of the action. The Law provides for the financing mechanism for the action.
<b>Monitoring process and time frame</b>	The Programme will be implemented between 2003 and 2006. The Energy Service of the Ministry of Commerce, Industry and Tourism will monitor progress. The Law was approved in 2003. The Energy Service of the Ministry of Commerce, Industry and Tourism monitors its implementation.
<b>Contact person</b>	<b>Ms Olympia Stylianou</b> , Director of Commerce and Industry, Ministry of Commerce, Industry and Tourism, 13-15 A. Araouzou Str., 1421, Lefkosia, Cyprus, Tel.: +357 22 409 303, Fax: +357 22 304 964 Email: <a href="mailto:ostylianou@mcit.gov.cy">ostylianou@mcit.gov.cy</a>
<b>Link</b>	<a href="http://www.cie.org.cy">www.cie.org.cy</a>





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## CYPRUS Action Plan for the Promotion of Renewable Energy Sources, 2002 – 2010

<b>Region / country</b>	Europe / Cyprus
<b>Leading actor(s)</b>	<b>Cyprus / Ministry of Commerce, Industry and Tourism</b>
<b>Participating actor(s)</b>	Management Committee of the Special Fund for the Promotion of Renewable Energy Sources and Energy Conservation, Cyprus Institute of Energy
<b>Main objective(s)</b>	To promote the utilisation of renewable energies in line with European Union policies and directives
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The Action Plan sets targets for the increase of the utilisation / contribution of the main types of renewable energies to the total energy balance and consumption of electricity in Cyprus.</li> <li>• It includes a financing mechanism for programmes to encourage renewable energy sources</li> <li>• It proposes measures to eliminate obstacles.</li> <li>• The Electricity Authority of Cyprus will purchase all electricity produced from renewable energy sources.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased share of energy from renewable sources in the provision of total energy produced from 4,5% to 9% in 2010</li> <li>• Increase of electricity generated from renewable energies from the present zero level to 6% by 2010.</li> <li>• Provision of grants and subsidies of about EUR 70 million by 2010 for the implementation of programmes for renewable energy sources and energy conservation.</li> </ul>
<b>Target area / place</b>	Cyprus
<b>Arrangement(s) for financing</b>	Creation of a Special Fund for the provisions of grants and subsidies for the promotion and development of renewable energies and energy conservation. The money for the Fund comes from a levy imposed on all electricity consumption (currently set at EUR 0,22 cent per kWh), donations and government grants.
<b>Monitoring process and time frame</b>	The Action Plan covers the period 2002 – 2010. The Energy Service of the Ministry of Commerce, Industry and Tourism will monitor progress.
<b>Other relevant information</b>	The Action Plan constitutes a new commitment by the Government of Cyprus. It provides for the first time the creation of a special financing mechanism to promote the use of renewable energy sources and energy conservation. Moreover, the magnitude of the incentives it provides for is much higher than at any time in the past.
<b>Contact person</b>	<b>Ms Olympia Stylianou</b> , Director of Commerce and Industry, Ministry of Commerce, Industry and Tourism, 13-15 A. Araouzou Str., 1421, Lefkosia, Cyprus; Tel.: +357 22 409 303, Fax: +357 22 304 964 Email: <a href="mailto:ostylianou@mcit.gov.cy">ostylianou@mcit.gov.cy</a>
<b>Link</b>	<a href="http://www.cie.org.cy">www.cie.org.cy</a>



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## Renewable Energy Plan for the Czech Republic

<b>Region / country</b>	Europe / Czech Republic
<b>Leading actor(s)</b>	<b>Czech Republic / Ministry of Industry and Trade; Ministry of Environment</b>
<b>Participating actor(s)</b>	State Environmental Fund, Czech Energy Agency, Ministry of Agriculture
<b>Main objective(s)</b>	By 2010, Czech Republic has agreed with EU an indicative target of 8 % of electricity from Renewables on gross energy consumption.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Government of the Czech Republic ratified State Energy Conception (10. 3. 2004) that defines indicative aims in the area of Renewables up to year 2030</li> <li>• Czech Republic has “National Programme for Energy Savings and for using of renewable sources of energy”. The first Programme has been for the period of 2002 – 2005. Currently the National Programme for 2006 – 2009 is being prepared.</li> <li>• The Renewable Energy Law is supposed to come into affect by October 2004. Concept of this law was passed through the Government and now is being discussed by the Parliament.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• By 2005, Czech Republic assumes 5,3% share of electricity from Renewables on electricity production and 5,4% Renewables on Energy balance.</li> <li>• By 2030, Czech Republic will have 16,9% share of electricity from Renewables on electricity production and 15,7% Renewables on Energy balance.</li> </ul>
<b>Target area / place</b>	Czech Republic
<b>Arrangement(s) for financing</b>	Funding is secured by the government of the Czech Republic
<b>Monitoring process and time frame</b>	Estimated goals will be checked through Evaluation of National Programme every two years.
<b>Contact person</b>	<p><b>Mr Jan Pouček</b>, Ministry of Industry and Trade, Na Františku 32, 11015 Prague, Tel: + 420 224 853 288, Email: poucek@mpo.cz;</p> <p><b>Mr Miroslav Hájek</b>, Ministry of Environment Vršovická 65, 10010 Prague, Tel: + 420 267 122 084, Email: Miroslav_Hajek@env.cz</p>
<b>Link</b>	www.env.cz; www.mpo.cz





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## Danish-German Cooperation in Research of Offshore Wind Energy Utilisation

<b>Region / country</b>	Europe / Denmark, Germany
<b>Leading actor(s)</b>	<b>Denmark / Ministry for Economics and Business; Ministry for the Environment; Germany / Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	To enhance cooperation regarding offshore wind energy environmental research and improve knowledge in the field of offshore wind energy's effects on the marine environment.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Interlinking existing results of German in-depth research on offshore wind energy use and investigations at existing offshore wind parks in Denmark, and exploiting synergy effects</li> <li>• Investigating collision risks with birds and scaring away harbour porpoises at the Horns Rev and Nysted offshore wind parks, as a first, concrete initiative for intensified cooperation between German and Danish research</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• To fill the knowledge gaps regarding the effects of offshore wind energy utilisation on the marine environment</li> <li>• In the long term: advance the environmentally sound expansion of offshore wind energy use</li> </ul>
<b>Target area / place</b>	Denmark, Germany
<b>Arrangement(s) for financing</b>	Fully financed by leading partners. Greater cooperation in ecological research shall save research funds on both sides and increase the scientific quality of the finding.
<b>Monitoring process and time frame</b>	Monitoring the possible effects of offshore wind farms is an ongoing process. Related research projects will continue over several years.
<b>Contact person</b>	<p><b>Mr Udo Paschedag</b>, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Department Z III 3 "Hydropower and Wind Energy", 11055 Berlin, Germany, Tel.: + 49 1888 305 3630/3619; Fax: + 49 1888 305 3631/3619; Email: udo.paschedag@bmu.bund.de</p> <p><b>Ms Cornelia Viertl</b> Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Department Z III 3 "Hydropower and Wind Energy", 11055 Berlin, Germany, Tel.: + 49 01888 305 3630/3619; Fax: +49 01888 305 3631/3619; Email: cornelia.viertl@bmu.bund.de</p>
<b>Link</b>	<a href="http://www.bmu.de">www.bmu.de</a> , <a href="http://www.erneuerbare-energien.de">www.erneuerbare-energien.de</a> , <a href="http://www.offshore-wind.de">www.offshore-wind.de</a>



## Increase in Large Wind Turbine Deployment in Denmark

<b>Region / country</b>	Europe / Denmark
<b>Leading actor(s)</b>	<b>Denmark / Danish Energy Authority</b>
<b>Participating actor(s)</b>	Danish Government, regional and local authorities, public and private operators
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To expand the share of wind power in electricity production and consumption,</li> <li>• To secure energy supply based on a diversity of energy sources, and to continue the support of development of wind-energy technology,</li> <li>• To reduce contradictions with landscape, cultural environment and nature assets.</li> </ul>
<b>Contents</b>	<ol style="list-style-type: none"> <li>(1) Building two of the world's largest offshore wind power farms, each 200 MW.</li> <li>(2) Replacing older turbines by new more effective ones, thereby increasing generating capacity and restoring spoiled landscapes.</li> </ol>
<b>Expected results</b>	<ol style="list-style-type: none"> <li>(1) Increased supply of wind energy, corresponding to 4% of Danish electricity consumption (support for 350-400.000 households) through new wind farms</li> <li>(2) Increased wind power capacity by 350 MW through replacements and environmental improvements through restoration.</li> </ol> <p>Together, these two proposals will bring the share of renewable energy in electricity to approximately 25% by 2008.</p>
<b>Target area / place</b>	Denmark
<b>Arrangement(s) for financing</b>	<ol style="list-style-type: none"> <li>(1) The tendering of new wind farms will be in accordance with EU tender procedures. The expenses of the necessary expansion of the grid will be defrayed by the state-owned Transmission System Operator.</li> <li>(2) The replaced turbines electricity will be subsidised at a rate of 12 DKK/kWh (approx. EUR 1,6 cent/kWh) during 12,000 full-load hours for twice the installed effect of the replaced windmill.</li> </ol>
<b>Monitoring process and time frame</b>	<ol style="list-style-type: none"> <li>(1) The contracts will be awarded in December 2004. The procedures of approval shall be in accordance with EU and Danish regulations, including the Environmental Impact Assessment procedure. The wind farms are expected to be connected to the grid in 2007/2008.</li> <li>(2) The regional / local authority approves each replacement of wind turbines.</li> </ol>
<b>Contact person</b>	(1) <b>Mr Steffen R. Nielsen</b> , (2) <b>Mr Henrik Lawaetz</b> ; Danish Energy Authority, Amaliegade 44, 1256 Copenhagen K, Denmark, Email: <a href="mailto:ens@ens.dk">ens@ens.dk</a>
<b>Link</b>	<a href="http://www.ens.dk">www.ens.dk</a>



## Renewable Energy for Sustainable Development in the Dominican Republic

<b>Region / country</b>	Central America / Dominican Republic
<b>Leading actor(s)</b>	<b>Dominican Republic / Comisión Nacional de Energía (CNE); Secretaria de Estado de Industria y Comercio (SEIC)</b>
<b>Participating actor(s)</b>	Private sector; international cooperation agencies: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), US Agency for International Development (USAID)
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To create the conditions and promote actions to develop the potentials of renewable energies in order to revert the country's growing dependency on imported fossil fuels.</li> <li>• To increase the use of local and sustainable energy sources like wind energy, solar energy, hydropower and biomass and</li> <li>• To strengthen the agro-industry for supply of ethanol, biogas, bio-diesel.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Supporting the implementation of new laws and regulations to promote the use of RE and energy efficiency;</li> <li>• Inclusion of perspectives and goals on renewable energies in the annual National Energy Plan (PEN), prepared by the National Energy Commission (CNE).</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• 500 MW wind energy installed by the year 2015.</li> <li>• 10% ethanol blend in gasoline by the year 2010.</li> <li>• Research on bio-fuel potential.</li> <li>• Increased production of ethanol from sugarcane, and increased production of biogas from agricultural and animal waste.</li> <li>• Increased production of biodiesel.</li> </ul>
<b>Target area / place</b>	Dominican Republic
<b>Arrangement(s) for financing</b>	For the promotion of renewable energies and energy efficiency in 2001 a fund (Fondo de interés nacional) was established by the hydrocarbon taxation act (ley 112-00) assigning 5 % of the tax revenues to the fund.
<b>Monitoring process and time frame</b>	Monitoring of the results will be realised annually for the preparation of the National Energy Plan (PEN) by the CNE and SEIC.
<b>Contact person</b>	<p><b>Mr Doroteo Rodríguez</b>, Gerente de Fuentes Alternas y Uso Racional de Energia, CNE, Santo Domingo, Dominican Republic, Tel.: +1 809 732-2000, Fax: + 1 809 547-2073, Email: drodriguez@cne.gov.do;</p> <p><b>Mr Milton Morrison</b>, SEIC, Director Departamento Energías No Convencionales, Tel.: +1 809 227-4006, Fax: + 1 809 548-6510 Email: miltonmorrison@hotmail.com</p>



## Dissemination of Improved Traditional Stoves

<b>Region / country</b>	Africa / Eritrea
<b>Leading actor(s)</b>	<b>Eritrea / Eritrean Ministry of Energy and Mines</b>
<b>Participating actor(s)</b>	Department of Energy (DOE), Energy Research and Training Center (ERTC), local governments and NGOs
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To reduce the consumption of wood fuel</li> <li>• To protect the environment</li> <li>• To improve the health of women and children affected by smoke from traditional stoves (indoor air pollution)</li> <li>• To improve standard of living in rural area</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Training artisans to produce parts of the stove locally: ERTC organised training for women in the selected villages to produce parts of the stove locally and sell their products to ERTC. Every year at an average of 50 women are trained.</li> <li>• Installing 5000 stoves per year: This is a programme set for the next year. So far around 20,000 stoves have been installed.</li> <li>• The Department of Energy has started selling CO<sub>2</sub> emission certificates from the improved stove programme to Europe</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Consumption of fuel wood reduced</li> <li>• CO<sub>2</sub> emissions reduced</li> <li>• Health of women and children improved</li> <li>• Reduction of time to collect wood increases time available e.g. for children to study</li> <li>• CO<sub>2</sub> certificates sold to interested companies</li> </ul>
<b>Target area / place</b>	Rural area of Eritrea where commercial energy is not available
<b>Arrangement(s) for financing</b>	So far 4000 tonnes of CO <sub>2</sub> have been sold, yielding only a small amount in relation to the cost of stove. Though the Government is covering the cost of logistic, the project needs outside help. For the coming five-year programme to install 25,000 stoves, USD 250,000 is needed.
<b>Monitoring process and time frame</b>	The Energy Research and Training Center is taking the responsibility. The programme has started implementing in 1994.
<b>Contact person</b>	<b>Mr Samuel Baire</b> , Director General, Department of Energy, PO Box 5285, Asmara, Eritrea; Tel: + 291-1-121541, Fax: + 291-1-127652, Email: baireog@yahoo.com or samuelb@eol.com.er



## Renewable Energy Development Programme

<b>Region / country</b>	Africa / Ethiopia
<b>Leading actor(s)</b>	<b>Ethiopian Rural Energy Development &amp; Promotion Center and Rural Electrification Secretariat Director</b>
<b>Participating actor(s)</b>	Phase 1 (2003): Ethiopian Electricity Agency, NGOs, ministries of education, Health and Water and Key Stakeholders Phase 2 (End of 2008): Government, Private sector, EEA, REF and Key Stakeholders Phase 3: Secretariat of the Rural Electrification Fund.
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To provide electricity generated by renewable sources for use in rural areas (off-grid) and hence;</li> <li>• To improve quality of life and level of service in health, education and water sector;</li> <li>• To improve productivity and income generating activities as well as private sector and entrepreneurial development.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The Renewable Energy Programme in Ethiopia is raising the awareness on renewable energy sources. Private sector and financial organisations including commercial banks and micro finance organisations are participating in the process.</li> <li>• The programme is providing support for investments in renewable energy activities by providing loan finance and technical support the clients signature has been provided to the REF.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Phase 1: Agenda for Action is prepared</li> <li>• Phase 2: Capacity Building, Business Development and Initial Investment are in full swing with organisational support of governmental agencies</li> <li>• Phase 3: A full commercial process is established.</li> </ul>
<b>Target area / place</b>	Rural Areas / Ethiopia
<b>Arrangement(s) for financing</b>	A USD 20 million RE-fund is secured to support projects. Complementary financing for the investment projects will be raised through private equity commercial and REF debt financing.
<b>Monitoring process and time frame</b>	It will also design monitoring & evaluation for tracking and supporting solar business development. The study will identify and recommend cost reduction opportunities in the delivery of PV systems to consumers.
<b>Other relevant information</b>	Rural Electrification Master plan strategy to develop small hydro power project and solar PV system commercialisation as well as capacity building studies are underway.
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## EU Energy Initiative for Poverty Eradication and Sustainable Development (EUEI)

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>EU / European Commission</b>
<b>Participating actor(s)</b>	EU member states, developing country governments, regional organisations, private sector, civil society
<b>Main objective(s)</b>	The EUEI is a joint EU Commission and Member State initiative to improve access to affordable and sustainable energy services, benefiting the poor. EUEI contributes towards the Millennium Development Goals and the Johannesburg Plan of Implementation, adopted at the 2002 World Summit for Sustainable Development.
<b>Contents</b>	<p>Actions are driven by the needs and priorities of participating Developing Countries. The EUEI seeks to apply a broad menu of technical and institutional options, including rural electrification; decentralised energy systems; increased use of renewable energy; and greater energy efficiency, including better fossil fuel technologies, efficient appliances and efficient use of traditional biomass. The initiative includes renewable energy where it is in a position to address poverty issues and contribute to sustainable development. The following EUEI actions are under implementation or being prepared:</p> <ol style="list-style-type: none"> <li>1) Energy and Environment Partnership with Central America. Partners: Seven Central American countries, Finland, SG-SICA, CCAD, private sector.</li> <li>2) Pacific Island Energy Policies and Strategic Action Planning Project (PIEPSAP); Partners: Fourteen Pacific Island Countries. Denmark. SOPAC, UNDP.</li> <li>3) Renewable energy partnership for poverty eradication and sustainable development in Africa. Partners: Illovo Sugar (South Africa), ENDA (Senegal), CEEEZ (Zambia), WIP-ETA Consortium (Germany / Italy), ITDG (UK) and SEI (Sweden), Commission (DG RTD).</li> <li>4) Training and policy support to countries in Southern and Western Africa, as a follow-up of the EUEI 'Energy for Africa' meeting. Partners: African Governments, Denmark, Commission, other EU Member States, Risoe National Laboratory.</li> <li>5) COOPENER: Several projects aiming at creating the institutional conditions for improved access to energy in Sub-Sahara Africa. Partners: Different consortia of African and European partners. Commission (DG TREN). First round of projects to begin 2004.</li> <li>6) Human Resource Development and Energy Efficiency within Pacific Island Country Power Utilities. Partners: Power utilities in nine Pacific Island Countries, Commission, Pacific Power Association.</li> <li>7) Caribbean Regional Energy Policy and Renewable Energy Development Programme. Partners: CARICOM Member States, Commission, Germany, CARICOM.</li> </ol>



	<p>8) Dissemination of improved biomass energy technologies in five SADC countries. Partners: SADC, Commission, Germany.</p> <p>9) Productive uses of energy for rural development in ECOWAS member states. Partners: ECOWAS, Commission, France.</p> <p>10) Energy Dialogue with the East African Community (EAC). Partners: EAC member states, Germany.</p> <p>11) Partnership and Dialog facility, supporting EUEI capacity building and partnership development in developing countries.</p>
<b>Expected results</b>	<p>In the short to medium term the results will be</p> <ul style="list-style-type: none"> <li>• Increased capacity in developing country governments, enterprises and institutions to address energy and poverty issues,</li> <li>• Increased attention from political decision makers and investors to the importance of energy services to reducing poverty,</li> <li>• Better coherence between energy activities and development outcomes.</li> </ul> <p>The long-term results will be improved access to energy services by the poor, in support of pro-poor growth and social development.</p>
<b>Target area / place</b>	Global, with a focus on Developing Countries
<b>Arrangement(s) for financing</b>	<p>Funding for the EUEI actions is organised mainly through ODA from the EU Commission and Member States, with contributions from partner governments and organisations. At present, the total contribution to the above-mentioned EUEI activities is approximately EUR 25 million. Future actions will involve additional resources, including from International Financial Institutions and the private sector.</p>
<b>Monitoring process and time frame</b>	<p>EUEI represents a continued commitment without a defined time limit. The individual actions have their own monitoring process and time frame. A joint inventory and database is under development at the EUEI secretariat. It is intended to report the progress of the EUEI at the CSD meetings in 2006-07 where energy for sustainable development is one of the thematic clusters.</p>
<b>Contact person</b>	<p><b>Mr Enrico Strampelli</b>, EUEI secretariat, Directorate General for Development, European Commission, G-12 07/97, 1049 Brussels, Belgium, Tel.: + 32 - 2 295 4557, Fax: + 32 - 2 299 0603, Email: dev-eu-initiative@cec.eu.int</p>
<b>Link</b>	<a href="http://www.euei.org">www.euei.org</a>





## A Long-Term Strategy for Renewable Energy Sources – Targets Beyond 2010

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>EU / European Commission</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	<p>The Commission will carry out regular reviews of progress in the development of renewable energy sources. The potential for the development of renewable energy resources should be analysed taking into account the economic dimension including the competitiveness of the EU economy, the security of supply, the environmental dimension as well as its technical feasibility. In the case of the environmental dimension, the required contribution to EU goals on climate change and other environmental priorities will be addressed. This review will be carried out for the first time not later than the end of October 2005 with a view to opening a debate in order to set in 2007 a target for the period after 2010.</p> <p>By starting the process for establishing a longer-term perspective for renewable energy, the European Commission wants to contribute to the continued leadership already shown by some JREC members, including some EU Member States.</p>
<b>Contents</b>	<p>The European Union and its Member States have set up target for the period 2010. Considering in one hand the need of a long term perspective and in the other hand, the need of a deeper analysis of the different studies, the Commission will start a new process for setting a long term perspectives for the development of renewable energy sources.</p>
<b>Expected results</b>	<p>Analysis of the different aspects related to the development of renewable energy sources with a view of establishing a long-term perspective setting up a target for the period after 2010.</p>
<b>Target area / place</b>	EU member states
<b>Arrangement(s) for financing</b>	(Not specified)
<b>Monitoring process and time frame</b>	<p>On-going feasibility studies will end at the end of 2004. Launching of the new studies will be done before the end of 2004. The European Commission will continue current analyses and it will launch different studies related to the scenarios and perspective of renewable energy sources beyond 2010.</p>
<b>Contact person</b>	<p><b>Mr Luc Werring</b>, DG Energy and Transport; European Commission, Rue de Mot 24, 1040 Brussel, Belgium, Tel.: + 32 2-2953970, Fax: + 32 2-2964254; Email: <a href="mailto:Luc.Werring@cec.eu.int">Luc.Werring@cec.eu.int</a></p>





## Global Renewable Energy Fund of Funds (Patient Capital Initiative)

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>EU / European Commission / The Johannesburg Renewable Energy Coalition (JREC) Secretariat</b>
<b>Participating actor(s)</b>	European Commission and other governments, followed by business and international financial institutions
<b>Main objective(s)</b>	The Global Renewable Energy Fund of Funds (GREFF) would address the equity-funding gap for renewable energy identified in developing markets. The GREFF would build on the recommendations of an ongoing feasibility study funded by the European Commission.
<b>Contents</b>	<p>The GREFF “Fund of Funds” structure is fundamentally a “capital formation exercise” at the top, with investment being executed on the ground by locally expert investment managers:</p> <ul style="list-style-type: none"> <li>• The Fund of Funds collects and directs funds from disparate donors and institutions</li> <li>• The Fund of Funds reduces multiple transaction costs and administrative frictions</li> <li>• Co-investment in sub-funds and on the ground would multiply GREFF funds by 4x</li> <li>• The Fund of Funds avoids reliance on government actions or counter guarantees, and</li> <li>• Competitive tender to select local specialists based on their local expertise, track record, co-investment resources, value for money, and support of GREFF policy goals.</li> </ul>
<b>Expected results</b>	<p>The GREFF would offer “Patient Capital” - defined as a type of equity that blends public and private sector investment requirements. The proposed fund would enable equity funding in the expectation of a return, but on a less demanding basis than pure private equity capital. The GREFF’s funding of local businesses and projects would realise the past investment made in the policy arena and in specific technical assistance and project development work, thereby bridging the “time chasm” between investment preparation and funding.</p> <p>The GREFF would differ from usual grant funding in that it would:</p> <ul style="list-style-type: none"> <li>• Blend public and private sector funding in a unique equity investment vehicle</li> <li>• Entail market (rather than technology driven) investment standards, and</li> <li>• Have a strong prospect for a return of funds, enabling recycling and reinvestment</li> </ul>



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#### Target area / place

Global

#### Arrangement(s) for financing

The targeted funding for the GREFF is to raise at first EUR 75 million – of which EUR 10 million would be for technical assistance and EUR 65 million for actual investment, thereby creating a “one-stop shop” for equity related funding assistance. It is envisioned that total commitments would rise eventually to EUR 150 million: In principle, a EUR 150 million investment, if matched 1:1 at the sub-fund level plus 1:1 at the investment company level, could yield as much as EUR 600 million of total investment, of which 75% would be from other than the GREFF.

#### Monitoring process and time frame

The provisional timetable for the GREFF is to have a first closing of EUR 75 million in 2006:

- “Early Bird” investors to come forward with indications of interest at Bonn
- EUR 10 million for technical assistance and operations costs, EUR 65 million for investment
- Competitive tender for local fund managers with co-investment consortia in 2005-2006
- Funds on the ground by the end of 2006

#### Other relevant information

The Global Renewable Energy Fund of Funds (GREFF), also known as the Patient Capital Initiative, is a response to the JREC high level conference held in June 2003

#### Contact person

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## The Johannesburg Renewable Energy Coalition (JREC) Renewable Energy Policies and Measures Database

<b>Region / country</b>	Europe / Belgium
<b>Leading actor(s)</b>	<b>EU / European Commission / The Johannesburg Renewable Energy Coalition (JREC) Secretariat; International Energy Agency (IEA)</b>
<b>Participating actor(s)</b>	The members of the Johannesburg Renewable Energy Coalition (JREC) participate by providing input and reviewing and verifying information in the database.
<b>Main objective(s)</b>	The web-based policies and measures database aims at providing a platform to enhance the transparency and awareness of renewable energy policies and measures globally and across countries and regions. It is intended to assimilate and generate knowledge about renewable energy for sustainable development and builds and strengthens capacity of JREC member countries.
<b>Contents</b>	(not specified)
<b>Expected results</b>	A web-based database to include all JREC countries is expected to bring a number of significant advantages to the countries featured in the database, including increasing the use of renewable energy, capacity building, encouraging policy reform and dissemination of information The database will become the most comprehensive information source on renewable energy policies and measures in place around the world
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	The European Commission and the IEA have co-financed the pilot version of the database for the period extending to December 2004. For the further verification and posting of the new incoming information on the website as well as updating existing information and maintaining the website, the European Commission will start looking for co-funding at the Bonn-Conference
<b>Monitoring process and time frame</b>	As of May 2004, the database contains verified information on policies and measures and targets for 34 JREC countries, and renewables statistical information for 50 JREC Countries. After the launch of the database at the Bonn Conference, the regular maintenance and continuous collection of information will follow
<b>Contact person</b>	<b>Mr Thomas Verheye</b> , JREC Secretariat at the European Commission, Avenue de Beaulieu 9, 1049 Brussel, Belgium. Tel.: + 32 2 29 59639, Fax: + 32 2 29 69970, Email.: Thomas.Verheye@cec.eu.int; <b>Mr Peter Tulej</b> , Renewable Energy Unit at the International Energy Agency, 9, rue de la Fédération, 75739 Paris Cedex 15, France. Tel.: + 33 1 40 57 67 07, Fax: + 33 1 40 57 67 49, Email: Peter.Tulej@iea.org



## Common approach on renewable energy in the EU

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>EU / Council of the European Union</b>
<b>Participating actor(s)</b>	The 25 EU member states
<b>Main objective(s)</b>	To advance the usage of renewable energies and to increase energy efficiency through more sustainable energy policies
<b>Contents</b>	<p>[The Following content represents a selection of actions and commitments presented in the note from the European Council to the EU member states' delegations at the International Conference for Renewable Energies Bonn 2004(1-4 June 2004). Further details as well more actions and commitments are found in the original proposal (9484/3/04), which can be obtained by contacting the General Secretariat of the Council of the European Union or downloaded from their public register.]</p> <ul style="list-style-type: none"> <li>• For Research and Technology Development (RTD) and promotion-related actions the EU has committed more than EUR 1.1 billion in the period 2003-06 in the energy sphere. The Sixth RTD Framework Programme (2002-2006) is the main contributor to the Union's efforts to promote the development of renewable energy technology. It allocates EUR 890 million to research into Sustainable Energy Systems</li> <li>• The EU's Environment Technologies Action Plan (ETAP) is designed to help these technologies to move from the research phase, through the demonstration phase and on to the full market commercialisation stage. Priorities under ETAP include strengthened RTD programmes, establishing technology platforms, reinforced technology networks, and many others. ETAP is also about mobilising finance and developing public-private risk sharing instruments; reviewing environmentally harmful subsidies; enhancing eco-friendly public procurement, and finally raising consumer awareness.</li> <li>• The 2003-2006 programme Intelligent Energy – Europe (IE-E) with a budget of EUR 250 million is aimed at improving energy efficiency; promoting new and renewable energy sources, notably at local and regional level; supporting initiatives on the energy aspects of transport and promoting renewable energy and energy efficiency in developing countries. The IE-E programme focuses on the removal of non-technical barriers to clean energy, the creation of market opportunities and the elaboration of tools for standards, training, planning and monitoring. All in all it will contribute to better informed energy investment decisions aimed at securing sustainable energy supplies within the EU</li> <li>• The EU Emissions Trading Scheme, the world's first multi-national emissions trading scheme. Under this scheme, the Member States are currently issuing allowances as to how much CO<sub>2</sub> regulated companies are allowed to emit. These allowances will be tradable so that those who emit less can sell their excess allowances, and those that emit more can buy them. By introducing a carbon price into the energy market, the scheme could stimulate the use of renewable energy sources</li> </ul>



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<b>Expected results</b>	Increased use of renewable energy sources, as well as improvement in energy efficiency and more sustainable overall use of energy.
<b>Target area / place</b>	EU
<b>Arrangement(s) for financing</b>	Financial arrangements are specified in the content above and in the full version of the communication.
<b>Monitoring process and time frame</b>	EU Directive monitoring process
<b>Other relevant information</b>	<p>For more information on the common approach on renewable energy in the EU, please refer to the full wording on the website, and to the following EU directives:</p> <ol style="list-style-type: none"><li>1) Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources</li><li>2) Directive 2003/30/EC on the promotion of biofuels</li><li>3) Directive 2002/91/EC on energy performance of buildings</li><li>4) Directive 2004/8/EC on the promotion of cogeneration</li><li>5) Decision 2003/1230/EC establishing a multi-annual programme Intelligent Energy – Europe (IE-E)</li><li>6) Regulation 2422/2001/EC on Energy Star labelling for office equipment</li></ol>
<b>Contact person</b>	<p><b>Ms Ulrike Rackow</b>, Directorate II, Directorate-General C, General Secretariat of the Council of the European Union, Rue de la Loi 175, 1048 Bruxelles, Belgium, Tel: + 32 2 285 7504, Fax: +32 2 285 7715, Email: <a href="mailto:ulrike.rackow@consilium.eu.int">ulrike.rackow@consilium.eu.int</a>;</p> <p><b>Mr Luc Werring</b>, DG Energy and Transport, European Commission, Rue de Mot 24, 1024 Bruxelles, Belgium, Tel: + 32 2 29 53970, Fax: + 32 2 29 64254, Email <a href="mailto:Luc.Werring@cec.eu.int">Luc.Werring@cec.eu.int</a></p>
<b>Link</b>	<a href="http://register.consilium.eu.int/pdf/en/04/st09/st09484-re03.en04.pdf">http://register.consilium.eu.int/pdf/en/04/st09/st09484-re03.en04.pdf</a>



## Energy and Environment Partnership with Central America

<b>Region / country</b>	Europe, Central America
<b>Leading actor(s)</b>	<b>Finland / Ministry for Foreign Affairs</b>
<b>Participating actor(s)</b>	Central American System for Integration (SICA), Central American Commission on Environment and Development (CCAD), Finnish and Central American private-sector companies and institutions
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Increasing the share of renewable energy in energy supply of Central American countries</li> <li>• Reducing greenhouse gas emissions</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• PV systems for rural electrification, partners in small hydro plants, feasibility studies for wind, geothermal and hydro plants, and projects related with regulation and better prices for renewable energies.</li> <li>• Strengthening of human and institutional regional resources through capacity building.</li> <li>• Development, dissemination and implementation of sustainable demonstrative pilot projects.</li> <li>• 6 projects under execution and 15 more approved with funds.</li> <li>• Project seed money finance, Partnership Forum</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Strengthened institutional capacities in Central America for identification, design and implementation of renewable energy projects</li> <li>• Removal of legal and institutional barriers for renewable energies at low scale in the region.</li> <li>• Promotion and strengthening of renewable energy development in electricity emerging markets.</li> </ul>
<b>Target area / place</b>	Central America / Guatemala, Honduras, Belize, El Salvador, Nicaragua, Costa Rica, Panama
<b>Arrangement(s) for financing</b>	Present organisational structures financed mainly by the Finnish Government. (EUR 3 million through Ministry for Foreign Affairs). Some funding from partners. Further funding for additional activities is being sought from new partners and stakeholders.
<b>Monitoring process and time frame</b>	The Supervisory Board (political level) and the Steering Committee (technical management) of the Partnership guide and supervise the activities. The programme is originally planned from 2003-2006. According to the positive results it might be extended.
<b>Other relevant information</b>	The Partnership was launched during the United Nations World Summit for Sustainable Development in Johannesburg 2002.
<b>Contact person</b>	<b>Mr Otto Leonel Garcia</b> , Regional Coordinator of SICA, Tel.: +503- 289 6131, Fax: +503- 289 6126, Email: <a href="mailto:alianza_energia@sgsica.org">alianza_energia@sgsica.org</a>
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## International Workshop: Promotion of Energy Efficiency and Renewables by Energy Auditing

<b>Region / country</b>	Europe / Finland
<b>Leading actor(s)</b>	<b>Finland / Ministry of Trade and Industry</b>
<b>Participating actor(s)</b>	Other countries, European Commission, international organisations
<b>Main objective(s)</b>	Promote energy auditing as an effective tool to find out measures to save energy and increase the use of renewable energy in companies and buildings.
<b>Contents</b>	Arrange an International Energy Audit Workshop in 2006. The workshop enables information sharing about experiences and results from energy auditing programmes in EU- and other countries. Also the preparation of an International Energy Auditing Programme, based on the experiences in the EU SAVE-Programme projects, will be discussed.
<b>Expected results</b>	<ul style="list-style-type: none"><li>• Information and know-how exchange about energy auditing to participating countries,</li><li>• Preparation of International Energy Audit Programme (including educational and capacity building),</li><li>• Proposals for National Governments on how to prepare and implement National Energy Auditing Programmes,</li><li>• Proposals for relevant international organisations on how to promote and support National Auditing Programmes.</li></ul>
<b>Target area / place</b>	Companies and buildings in industrialised countries and developing countries
<b>Arrangement(s) for financing</b>	Finnish Ministry of Trade and Industry plans fund allocation. Additional financing is being sought from the Intelligent Energy for Europe Programme (Co opener) and other participating governments.
<b>Monitoring process and time frame</b>	As a part of the preparation a monitoring process is planned. The auditing programme will be prepared after the workshop (autumn 2006) in a 3-year project in 2007-2009.
<b>Contact person</b>	<b>Mr Heikki Väisänen</b> , Ministry of Trade and Industry, Energy Department, PO Box 32, 00023 Government, Finland, Tel.: + 358-9-1606-4834, Fax: + 358-9-1606-3997, Email: heikki.vaisanen@ktm.fi
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## Call for Tenders for Renewable Electricity Plants: Onshore and Offshore Wind Farms, Biomass & Biogas

<b>Region / country</b>	Europe / France
<b>Leading actor(s)</b>	<b>France / Ministère de l'Economie, des Finances et de l'Industrie – Direction Générale de l'Energie et des Matières Premières</b>
<b>Participating actor(s)</b>	French government and electricity regulator
<b>Main objective(s)</b>	Increase the electricity production by renewable energy sources in order to achieve a renewable electricity contribution to the French electric consumption of 21% in 2010.
<b>Contents</b>	Launch of call for tenders for renewable electricity plants: onshore (1000 MW), offshore (500 MW) wind farms, biomass and biogas (250 MW)
<b>Expected results</b>	Realisation of renewable electricity plants before 2007 (1750 MW).
<b>Target area / place</b>	France
<b>Arrangement(s) for financing</b>	Selected generators will sell their production to the local electricity utility at the bid price. This price will be guaranteed for a fixed number of years.
<b>Monitoring process and time frame</b>	List of successful candidates to be decided at the end of 2004 / beginning of 2005.
<b>Other relevant information</b>	The call for tenders completes the feed-in tariff system, which is in place since 2001-2002.
<b>Contact person</b>	<b>Mr Christophe Jurczak</b> , Tel.: + 33 1 44972682, Fax: + 33 1 44970929; Email: <a href="mailto:christophe.jurczak@industrie.gouv.fr">christophe.jurczak@industrie.gouv.fr</a>
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## The New French Energy Law: Targets and Measures for Renewable Energy Development

<b>Region / country</b>	Europe / France
<b>Leading actor(s)</b>	<b>France / Ministry of Economy, Finance and Industry</b>
<b>Participating actor(s)</b>	Other ministries
<b>Main objective(s)</b>	The French Parliament contains these actions in the Energy Law currently in discussion. The Law aims at giving national targets and a framework to accelerate the penetration of renewable energy in the energy mix, particularly the heat mix. Special emphasis is on new measures in favour of the development of renewable energy in buildings.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Targets for renewable energy policy: 21% of electricity consumption by renewable energy in 2010 and increase of the renewable heat contribution by 50% in 2015. In the same time, a target is defined for final energy intensity decrease.</li> <li>• A “white certificates system” for energy savings and renewable heat. Energy suppliers, selected according to their domain of activity and their customers’ number, are required to meet energy saving targets on a yearly basis. They will fulfil their commitment through their own actions (for example distribution of energy saving light bulbs or grants for solar water heating equipments) or by buying “white certificates” on a market.</li> <li>• Increased tax credit for renewable energy equipments in households. The current tax credit for renewable heat equipments covers 15% of eligible expenses. From year 2005 onwards, it will be increased to 40% and its benefit will be enlarged.</li> </ul>
<b>Expected results</b>	Accelerate the increase of the contribution of renewable energy in the French energy mix in order to meet the 2010-2015 targets.
<b>Target area / place</b>	France
<b>Arrangement(s) for financing</b>	White certificates: suppliers may pass on the cost associated to their commitment to their customers. Tax credit: to be determined by law in the field of finance
<b>Monitoring process and time frame</b>	These measures will have to be voted in the Energy Law. Progress will be monitored in the annual renewable energy statistical inventory.
<b>Other relevant information</b>	These measure complement other existing fiscal and reglementary measures. Renewable electricity is promoted through call for tenders and a tariff system.
<b>Contact person</b>	<b>Mr Christophe Jurczak</b> , Tel.: + 33 1 44972682, Fax: + 33 1 44970929; Email: <a href="mailto:christophe.jurczak@industrie.gouv.fr">christophe.jurczak@industrie.gouv.fr</a>
<b>Link</b>	<a href="http://www.industrie.gouv.fr/energie">www.industrie.gouv.fr/energie</a>



## Rural electrification in (1) Morocco (2) Philippines (3) Mali and South Africa

<b>Region / country</b>	Europe / France
<b>Leading actor(s)</b>	<b>France /</b> <b>(1) Agence Française de Développement (AFD)</b> <b>(2) Ministry of Economy, Finance and Industry – Direction des Relations Economiques Extérieures (DREE)</b> <b>(3) Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME)</b>
<b>Participating actor(s)</b>	(1) ONE, French GEF (FFEM) (2) World Bank (3) EDF, FONDEM
<b>Main objective(s)</b>	Provide electricity to rural population, using photovoltaic kits.
<b>Contents</b>	(1) Providing energy to 100,000 households in 20,000 remote villages. (2) Offering energy access to 18,000 housings representing a population of about 100,000 people; 30% will be connected with solar energy. (3) Providing electricity to 300,000 people using the experience of pilot energy services companies.
<b>Expected results</b>	Allow rural population to access electricity.
<b>Target area / place</b>	(1) Morocco, (2) Philippines, (3) Mali, South Africa
<b>Arrangement(s) for financing</b>	(1) The total project cost is EUR 200 million, among which EUR 10 million will be used to fund solar kits. Soft loans and grants are combined: National-Office National d'Electricité du Morocco (ONE): EUR 20 million, Population: EUR 15 million, Multilateral-Islamic Bank of Development and Arabic Fund for Social and Economic Development: EUR 115 million, Bilateral-AFD and FFEM: EUR 50 million (2) Bilateral soft loan: EUR 22,5 million (3) ADEME/EDF 4-year Agreement; additional funds from international and local financing.
<b>Monitoring process and time frame</b>	(1) Implementation: 2005- 2007 (2) Feasibility study: 2004; implementation: 2005-2007 (3) Implementation: 2004-2008
<b>Contact person</b>	(1) <b>Mr Christian de Gromard</b> , Email: degromardc@afd.fr; (2) <b>Mr Laurence Constans</b> , Email: laurence.constans@dree.org; (3) <b>Mr Michel Courillon</b> , Email: michel.courillon@ademe.fr



## Information Campaign on Renewable Energies and Energy Efficiency

<b>Region / country</b>	Europe / France
<b>Leading actor(s)</b>	<b>France / ADEME, Ministry of Economy, Finance and Industry, Ministry of Ecology and Sustainable Development</b>
<b>Participating actor(s)</b>	Multi-stakeholder partnerships
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Awareness campaign and dissemination network: this 3 year's campaign focus on the relevant citizen's actions to reduce human impacts on greenhouse effects. This action is lead as a national master plan with a wide cooperation network (Ministries of Ecology and sustainable development, Research and Industry, NGOs, professional networks, territorial communities, public and private enterprises). All the involved stakeholders are partner in a dedicated club "Winning Earth" in order to conduct concrete wide actions.</li> <li>• The aims of this national campaign are to strengthen the development of individual solar thermal market and the use of hot water on collective installations. The budget for the 2000-2003 period is EUR 6 million. The duration of this action, in association with regional partner, in planned until the 2006 year.</li> <li>• Implementation with the support of local communities of a wide network of 160 dedicated Energy Information Point. The 280 technical counsellors are in charge of providing answers to citizens concerns and to disseminate information and local debate through local events.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Information campaign on energy efficiency and renewable energies to combat greenhouses gas emissions.</li> <li>• National campaign for promoting solar thermal application.</li> <li>• 160 dedicated Energy Information Point for citizens.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• 300 actions planned for 2004: advertising on TV, press, radio, Internet.</li> <li>• Change on behaviour within solar technologies (on the 2000-2003 period an annual increase of 50 % on the market size has been noted).</li> <li>• Change on behaviour on citizens concerns within renewable energies, rational use of energy and climate change.</li> </ul>
<b>Target area / place</b>	All national actors: public bodies, private companies, communities, NGOs, citizens.
<b>Arrangement(s) for financing</b>	All actions are mainly financed on ADEME's funds: on a 3-year basis, the global budget is EUR 10 million. On particular actions as Solar Thermal action plan, the Regions are co-financing through subsidies.
<b>Monitoring process and time frame</b>	All these actions are under permanent evaluation by ADEME and the different stakeholders
<b>Contact person</b>	<b>Mr Patrice Joly</b> , Email: <a href="mailto:patrice.joly@ademe.fr">patrice.joly@ademe.fr</a> ; <b>Mr Patrice Grouzard</b> , Email: <a href="mailto:patrice.grouzard@ademe.fr">patrice.grouzard@ademe.fr</a> ; <b>Ms Daniele Leymarie</b> , Email: <a href="mailto:daniele.leymarie@ademe.fr">daniele.leymarie@ademe.fr</a>
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## French – German Growth Initiative Project on Wind Energy

<b>Region / country</b>	Europe / France; Germany
<b>Leading actor(s)</b>	<b>France / Ministry of Economy, Finance and Industry; Germany / Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)</b>
<b>Participating actor(s)</b>	Industry, research institutes
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To increase the use of wind energy;</li> <li>• To develop wind energy, in particular offshore wind energy, through applied R&amp;D projects, plants realisations with French and German industry consortiums.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Undertaking joint efforts in research and technology development, and in the necessary investments,</li> <li>• Refining the project "Renewable energies: Development of use of wind energy" (launched in 2003 within Franco-German growth initiative),</li> <li>• Promoting joint research efforts of private enterprises with regard to application-oriented technological development, production processes, operation of relevant systems and the environmental impacts of the technology.</li> </ul>
<b>Expected results</b>	French/German projects
<b>Target area / place</b>	Europe, France, Germany
<b>Arrangement(s) for financing</b>	Potential financing via European Investment Bank (EIB) loans, to be examined on a project basis.
<b>Monitoring process and time frame</b>	Time frame: 5-7 years. Monitoring process will be agreed on a case-by-case basis.
<b>Contact person</b>	<p><b>Mr Christophe Jurczak</b>, Email: <a href="mailto:christophe.jurczak@industrie.gouv.fr">christophe.jurczak@industrie.gouv.fr</a>;</p> <p><b>Mr Jean Lamy</b>, Email: <a href="mailto:jean.lamy@industrie.gouv.fr">jean.lamy@industrie.gouv.fr</a>, Ministry of Economy, Finance and Industry, 61, Boulevard Vincent Auriol, 75703 Paris, France, Tel.: +33 1 44 97 – 26820963;</p> <p><b>Mr Udo Paschedag</b>, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Department Z III 3 “Hydropower and Wind Energy”, 11055 Berlin, Germany; Tel.: +49 1888 305 3630/3619; Fax: + 49 1888 305 3631/3619, Email: <a href="mailto:udo.paschedag@bmu.bund.de">udo.paschedag@bmu.bund.de</a>;</p> <p><b>Ms Cornelia Viertl</b>, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Department Z III 3 “Hydropower and Wind Energy”, 11055 Berlin, Germany, Tel.: + 49 1888 305 3630/3619, Fax: + 49 1888 305 3631/3619, Email: <a href="mailto:cornelia.viertl@bmu.bund.de">cornelia.viertl@bmu.bund.de</a></p>
<b>Link</b>	<a href="http://www.bmu.de">www.bmu.de</a> , <a href="http://www.industrie.gouv.fr/energie">www.industrie.gouv.fr/energie</a>



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## French Global Environment Facility

<b>Region / country</b>	Europe / France
<b>Leading actor(s)</b>	<b>French Global Environment Facility (GEF FFEM)</b>
<b>Participating actor(s)</b>	French Government, international organisations, including NGOs, private and / or public companies from developed and developing countries
<b>Main objective(s)</b>	With respect to Climate Change, the main objective is to fund incremental costs (mainly learning costs) of projects which lead to reduction of Greenhouse Gas (GHG) emissions
<b>Contents</b>	The French Global Environment Facility supports small projects, which lead to reduction of GHG emissions. The Fund provides grants. The average level of funding is between EUR 1 to 2 millions by project. For the 5 last years, FFEM committed EUR 1,15 millions per year (excluding energy efficiency) in renewable energy projects, with a leverage effect of about 6 on investment. Total of contributions: EUR 202 millions; Last replenishment: EUR 67 millions for 2003-2006 (EUR 20 millions for Climate Change).
<b>Expected results</b>	To mainstream renewable energy and energy efficiency in development oriented projects. The renewable energies projects are targeted in priority in Africa and Mediterranean countries. Among projects approved for the last years, as examples: Biomasses for EUR 3,7 million in Lithuania, Mauritania, Morocco, Solar Energy: EUR 1,7 million in Morocco.
<b>Target area / place</b>	Developing countries and Central and Eastern European Countries
<b>Arrangement(s) for financing</b>	Funded by French government. Additional funding provided by participating actors.
<b>Monitoring process and time frame</b>	The FFEM is managed by a Steering Committee assisted by a Secretariat, which is in charge of monitoring the projects implementation.
<b>Other relevant information</b>	The International Conference of Renewable Energies in Bonn will be the opportunity for FGEF to understand better the needs and requirements of Developing Countries and initiate and reinforce partnerships.
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## Renewable Energy Action Plan and Implementation

<b>Region / country</b>	Africa / The Gambia
<b>Leading actor(s)</b>	<b>The Gambia / Energy Division (Office of the President – OP)</b>
<b>Participating actor(s)</b>	Department of State (DOS) for Fisheries, Natural Resources and the Environment, DOS for Local Government, Local Governments, Department of State for Finance and Economic Affairs, Department of State for Agriculture, National Water and Electricity Company (NAWEC), National Environment Agency (NEA), Department of Water Resources, Department of Forestry, Gambia Renewable Energy Centre (GREC), Department of Community Development, Multi-Sectoral Utilities Regulatory Agency, Civil Society and Women's Bureau
<b>Main objective(s)</b>	Energy Security; Poverty alleviation; Gender and Youth empowerment; Enhanced Environment; Employment creation especially for women and youths; Economic empowerment through increased Rural Cash Incomes.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Renewable Energy: Renewable Energy Study (ADB funded), Capacity Building, Renewable Energy Research, Development and Promotion</li> <li>• Solar Energy: Solar PV, Solar water pumping, Solar hot water system, solar thermal</li> <li>• Biomass Energy: Promotion of domestic and alternative domestic energy, Biomass electricity generation using MSW, energy crops, agricultural waste and bio-energy, production of bio-energy, Fuelwood substitution with LPG, carbonized briquette, efficient improved stoves, gel/ethanol stove promotion, Wood plantation promotion,</li> <li>• Wind energy: Wind power generation, wind water pumping</li> <li>• Energy Efficiency: promotion of greater use of efficient energy devices such as electric bulbs, fridges, motors, vehicles, etc</li> </ul>
<b>Expected results</b>	Increased access to energy especially in the rural areas; Gender and Youth empowerment; Reduction in imported fuels and reduced balance of payment; Enhanced environment for better standard of living; Economic empowerment especially women and youths.
<b>Target area / place</b>	The Gambia
<b>Arrangement(s) for financing</b>	The Government wills the action. Additional funding is provided by: United Nations Systems, World Bank, African Development Bank, IDB, BADEA, Germany, UK, USA, Kuwaiti Fund, Japan, Regional and SubRegional Organisations and other funding.
<b>Monitoring process and time frame</b>	(not specified)
<b>Contact person</b>	<b>Office of the President</b> , State House, Banjul, The Gambia, Tel.: +220 422 2285, Tel.: + 420 0050, Fax: + 220 422 3718 420 0050, Email: mbury@qanet.gm or predas@gamtel.gm or energy@qanet.gm



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## Public-Private Partnership for Sustainable Energy in Sub-Sahara Africa

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ)</b>
<b>Participating actor(s)</b>	KfW Bankengruppe, E+Co (executing agency) and local partners
<b>Main objective(s)</b>	To advance the appropriate use of renewable energy and to encourage increased energy efficiency in Sub-Saharan Africa by supporting small and medium sized energy firms in the region in supplying their customers with clean and modern energy.
<b>Contents</b>	Establishment of a regional programme on the basis of E+Co's business experience; extension of E+Co's regional networks; promotion of small and medium sized energy firms
<b>Expected results</b>	The expected result is to contribute to the sufficient and reliable power supply considering energy efficiency and renewable energy sources in Sub-Sahara Africa.
<b>Target area / place</b>	Sub-Saharan Africa
<b>Arrangement(s) for financing</b>	The BMZ holds out the prospect of providing funds of up to EUR 8 million for the programme. In a first step EUR 2 million will be granted to develop and test the approach.
<b>Monitoring process and time frame</b>	KfW as the financing agency will monitor the programme. The time frame of the programme is 5 years.
<b>Other relevant information</b>	Over the past 10 years E+Co collected substantial experience in the region, in Latin America and in Asia with the approaches to be applied.
<b>Contact person</b>	<b>Mr Philip Graf von Schwerin</b> , KfW Bankengruppe, Palmengartenstr. 5-9, 60325 Frankfurt, Germany, Tel.: +49 69 7431 2147, Email: Philip.Schwerin@kfw.de
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## Special Facility for Renewable Energies and Energy Efficiency

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ) / KfW Entwicklungsbank</b>
<b>Participating actor(s)</b>	State-owned and partly state-controlled institutions and banks in Developing Countries, private enterprises and project developers
<b>Main objective(s)</b>	Enhance Market Penetration of Renewable Energy Technologies and Energy Efficiency Measures through co-financing of investments at preferred financial conditions
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Special Financing Facility with a volume of up to EUR 500 million. Starting in 2005, over a period of five years, the facility will be used to offer low-interest loans for investments in developing countries to public and partly state-controlled institutions, banks and also private sector organisations.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• With an expected leverage factor of up to two, the facility will initiate investments in Renewable Energies and Energy Efficiency Measures with a volume in the order of magnitude of one billion Euro.</li> </ul>
<b>Target area / place</b>	Developing Countries
<b>Arrangement(s) for financing</b>	KfW will offer low interest loans with the support of funds from German Development Assistance. The financing conditions for each individual project will be adapted to the specific prevailing country and sector conditions with the aim to achieve a maximum leverage effect.
<b>Monitoring process and time frame</b>	Monitoring and evaluation according to sound banking principles applied by Development Banks.
<b>Other relevant information</b>	Will be made available on the web site of KfW Entwicklungsbank
<b>Contact person</b>	<b>Mr Klaus-Peter Pischke</b> , Sector and Policy Division, KfW Entwicklungsbank, Frankfurt am Main, Tel.: +49 69 7431-2841, Email: Klaus-Peter.Pischke@kfw.de
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## Armenia – Programme for the Promotion of Renewable Energies

<b>Region / country</b>	Asia / South Caucasus Region
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ), Armenia / Central Bank of Armenia, Ministry of Energy</b>
<b>Participating actor(s)</b>	Armenian private entrepreneurs active in generating power from small hydro power plants (installed capacity of up to 10 MW), commercial banks that are willing and able to extend longer term loans to the private sector active on the generation of energy from renewable resources
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Contribution of Economic development of Armenia through the sustainable production of power from renewable energy resources</li> <li>• Contribution to the protection of the global climate.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Setting up of a revolving fund for financing of the rehabilitation or expansion of existing small hydro power plants or the construction of new small hydro power plants.</li> <li>• Rendering advice to selected Armenian commercial banks to enable them to extend long-term loans (about 6 to 8 years) to private entrepreneurs for the rehabilitation, expansion or construction of small power plants.</li> <li>• Rendering advice to the entrepreneurs in the preparation of feasibility studies and during the implantation of the programme.</li> <li>• Support the regional exchange among professionals and professional bodies active in the promotion of renewable energies through organised regional conferences.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increase of production from small hydro power plants by at least 50% of the 15 plants that will be considered under the programme.</li> <li>• Cost efficient rehabilitation or new construction: Investment cost are below a threshold of EUR 1,500 per kW installed capacity in case of newly erected plants and of EUR 700 per kW installed capacity in case of rehabilitations.</li> <li>• Financial sustainability: At least 95% of the loans (measured by the loan volume) are being serviced on time.</li> <li>• An annual reduction of CO<sub>2</sub> emissions by some 20,000 tons.</li> </ul>
<b>Target area / place</b>	Republic of Armenia.
<b>Arrangement(s) for financing</b>	The total project volume is estimated to exceed EUR 11 million. The financing of the programme comprises a loan from the bilateral financial co-operation amounting to EUR 6 million, a grant from the bilateral financial co-operation amounting to EUR 1,5 million, own funds of the entrepreneurs in the magnitude of some EU 2,5 million plus funds mobilised by the participating banks up to a tune of EUR 1,5 million.
<b>Monitoring process and time frame</b>	The Project Management Unit based in Yerevan will do the monitoring process; the time frame for the project should not exceed 4 years.
<b>Contact person</b>	<b>Ms Svea Wragge</b> , BMZ, Division 201, Friedrich-Ebert-Allee 40, 53113 Bonn, Germany, Tel.: +49 228 535-3150, Fax: +49 228 535-4150, Email: Svea-Maria.Wragge@bmz.bund.de



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## Local Renewables Model Communities Network

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ); ICLEI – Local Governments for Sustainability</b>
<b>Participating actor(s)</b>	Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), ICLEI local member governments in several countries
<b>Main objective(s)</b>	Selected cities in developing countries become model cities for applying, demonstrating and promoting renewable energy sources and energy efficiency.
<b>Contents</b>	In selected countries, most likely in Asia and Africa, local governments will be supported in establishing and running information centers on renewable energy, which combine the demonstration of technologies with promotion, information and advice. They will thus act as models for many further cities.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• An international network of these communities is established and their access to international expertise, business contacts and finance supported.</li> <li>• Selected model communities in 3 countries will apply and showcase the use of various renewable energy sources within individual project frames.</li> </ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	The German Federal Ministry for Economic Cooperation and Development will finance the project in a first phase with EUR 750,000, with the participating cities being required to provide local resources. The project will seek further financing for investment in technology from public and private finance institutions.
<b>Monitoring process and time frame</b>	ICLEI, as its Cities for Climate Protection Campaign (CCP), is performance-driven. Cities participating in the project will have to make specific commitments to renewables/energy efficiency, which will be continuously monitored by ICLEI.
<b>Contact person</b>	<p><b>Ms Monika Zimmermann</b>, Director ITC, Email: <a href="mailto:monika.zimmermann@iclei.org">monika.zimmermann@iclei.org</a>;</p> <p><b>Mr Bob Price</b>, International Director, CCP Campaign, ICLEI, 15 Shattuck Square, #215, Berkeley, CA 94704, USA, Tel.: +1 510 540 8843, Fax: +1-510-540-4787, Email: <a href="mailto:bprice@iclei.org">bprice@iclei.org</a></p>
<b>Link</b>	<a href="http://www.iclei-europe.org/1036.html">www.iclei-europe.org/1036.html</a>



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## IDB – BMZ Strategic Partnership

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ); Inter-American Development Bank (IDB)</b>
<b>Participating actor(s)</b>	KfW Bankengruppe, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), Latin American Energy Organization (OLADE) and existing networks in the region
<b>Main objective(s)</b>	To advance the appropriate use of renewable energy and to encourage increased energy efficiency in LAC. Such cooperation would provide opportunities for the IDB to strengthen its engagement in renewable energy sources and energy efficiency, in particular through synergies of experiences and knowledge of German and Bank development cooperation in this field.
<b>Contents</b>	Establishment of a joint work programme; strengthening of regional networks
<b>Expected results</b>	The expected results are, in particular, strategic assessments of and dialogue on new opportunities and challenges; institutional strengthening, training and dissemination on RE; project preparation and investment, in particular enlarging IDB's engagement in increasing renewable energy sources.
<b>Target area / place</b>	Developing countries in Latin America and the Caribbean (LAC)
<b>Arrangement(s) for financing</b>	The implementation of the strategic partnership will be supported, inter alia, by a regional German Technical Cooperation Project (Renewable Energy and Energy Efficiency in Latin America) with a volume of EUR 2,6 million. Further funding for the implementation of specific projects/programmes from IDB's and BMZ's resources will be explored.
<b>Monitoring process and time frame</b>	A strategic partnership agreement will be signed on the 3 <sup>rd</sup> of June; in July a more detailed joint work programme will be elaborated; a small joint Germany/IDB steering committee will be established and will meet at least once per year in order to review activities and accomplishments.
<b>Contact person</b>	<b>Mr Heinrich Dehn</b> , BMZ, Division 223, Friedrich Ebert-Allee 40, 53113 Bonn; Germany, Tel.: + 49 228 535 3580; Email: Heinrich.Dehn@bmz.bund.de; <b>Mr Carlos M. Jarque</b> , Manager, Sustainable Development Department, 1300 New York Avenue, NW; Washington DC 20577, USA, Tel.: + 202 623-1000, Email: Carlosj@iadb.org



## ASEAN – German Mini Hydro Programme (AGMHP)

<b>Region / country</b>	Europe / Germany; Asia / ASEAN countries
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ); Association of Southeast Asian Nations (ASEAN)</b>
<b>Participating actor(s)</b>	Organisations, institutions and companies from Germany and ASEAN
<b>Main objective(s)</b>	Speed-up exploitation of the feasible mini hydro potential for local and regional economic development in the ASEAN region, by both the private & public sector.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Promote the application of mini hydropower (MHP) in the ASEAN region through capacity building and technology transfer measures.</li> <li>• Enhance socio-economic development, increase rural incomes and alleviate poverty by creating an important revenue stream from MHP rural electrification.</li> <li>• Reduce greenhouse gas emissions from burning fossil fuels by promoting mini hydropower development to generate electricity.</li> <li>• Facilitate regional co-operation and networking through intra-ASEAN technology transfer measures and the knowledge exchange</li> <li>• Conduct a technology transfer to capitalise on existing experience and know-how in Europe and ASEAN countries to introduce standardised technology packages to MHP manufacturers and engineers. The technology transfer measures will be integrated into the implementation of actual sites projects wherever possible.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Manufacturers of MHP equipment in the ASEAN have access to standardised technology packages for their specific requirements;</li> <li>• MHP project stakeholders are able to acquire the required local expertise for developing MHP projects to full scale operation;</li> <li>• ASEAN countries implement sustainable rural electrification MHP projects supporting economic development of rural areas utilising local expertise;</li> <li>• ASEAN member states implement legislation supporting the development of renewable energy as an integral element of their national energy policies.</li> </ul>
<b>Target area / place</b>	ASEAN countries
<b>Arrangement(s) for financing</b>	BMZ commitment to the project total eligible costs is EUR 2 million.
<b>Monitoring process and time frame</b>	The Project Management Unit based in Jakarta will do the monitoring process and the time frame for project should not exceed 3 years.
<b>Contact person</b>	<b>Mr Franz-B.Marré</b> , BMZ, Friedrich-Ebert-Allee 40, 53113 Bonn, Germany, Tel.: +49 228 535-3404, Fax: + 49-228 535 4404, Email: marre@bmz.bund.de; <b>Dr Weerawat Chantanakome</b> , Email: weerawat@aseanenergy.org; <b>Mr Tjarinto S.</b> , Email: tjarinto@aseanenergy.org, ACE, Tjaroko Jalan H.R. Rasuna Said, Blok X-2, Kav. 07-08, Kuningan, Jakarta 12950, Indonesia, Tel.: + 62-21-5279332, Fax. +62-21-5279350
<b>Link</b>	www.mhpp.org; www.aseanenergy.org



## Geothermal Energy Initiative

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for Economic Cooperation and Development (BMZ)</b>
<b>Participating actor(s)</b>	United Nations Environmental Programme (UNEP), Global Environment Facility (GEF), partner countries, Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), KfW Entwicklungsbank
<b>Main objective(s)</b>	To improve access to energy in developing countries by promoting the adoption of geothermal energy as a clean and economically viable renewable energy source
<b>Contents</b>	<p>The initiative aims at removing barriers for the development of geothermal energy. It comprises two components:</p> <ul style="list-style-type: none"> <li>• BMZ is supporting the African Rift Geothermal Development Facility (ARGeo), which is geared to promote geothermal development in Eastern Africa. KfW will manage and provide co-finance to the Geothermal Risk Guarantee Fund and the Transaction Advice Fund, which are major components of ARGeo geared to reduce the geothermal development risk and to promote private sector participation.</li> <li>• BMZ is significantly expanding the programme Geotherm (BGR), which supports partner countries worldwide in the field of resource evaluation and know how transfer and contributes to the envisaged regional Geothermal Resource Network of ARGeo.</li> </ul>
<b>Expected results</b>	ARGeo shall support the Eastern African countries in reaching their target of an installed power-generation capacity based on geothermal energy of 1,000 MW by the year 2025.
<b>Target area / place</b>	All developing countries with a focus on East Africa.
<b>Arrangement(s) for financing</b>	Support by German Technical and Financial Cooperation Projects (resources of BMZ), manpower input from all partner countries; co-finance through ARGeo by GEF, Italy and other donor countries
<b>Monitoring process and time frame</b>	ARGeo will be monitored through a steering committee. Preliminary time horizon of ARGeo: 10 years
<b>Other relevant information</b>	Geotherm is currently implementing projects in three countries. ARGeo is currently in its preparation phase to be finalised by the beginning of 2005. BMZ has funded through KfW the geothermal power station Olkaria II, Kenya, which is being successfully operated since the end of 2003.
<b>Contact person</b>	<b>Dr Schmidt-Thomé</b> , BGR, Hannover, Tel.: + 49 511 6432351, Email: m.schmidt-thome@bgr.de; <b>Mr Fikre-Mariam</b> , KfW, Frankfurt, Tel.: + 49 69 74312369, Email: andreas.fikre-mariam@kfw.de
<b>Link</b>	www.bgr.de, www.kfw.de



## Implementation of the Strategy of the German Government on the Use of Off-shore Wind Energy

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for the Environment, Nature Conservation and Nuclear Safety</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	Meeting 15% of German electricity consumption by wind energy (compared to 1998 standards).
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Expansion of offshore wind energy must take a phased structure and be environmentally sound, take account of nature-protection needs and be economically viable.</li> <li>• Protected areas are designated in the EEZ and provisions made for locations particularly suited to wind energy facilities and approval processes under the Marine Facilities Ordinance.</li> <li>• Expansion of offshore wind energy must be supported by technical, environmental and nature-specific research (incl. beyond start-up phase).</li> <li>• To ensure application of the precautionary approach, expansion will be subject to phased implementation (initial phase: maximum 80 facilities). Implementation of subsequent phases assumes a positive and reliable outcome in terms of compatibility with the environment and with nature.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• At least 500 MW installed offshore wind capacity in Germany in the initial phase (namely the first construction phase of wind farms) in the areas that are projected to be available by 2006, and in the medium-term, by 2010, even 2000 to 3000 MW power is expected from using offshore wind energy.</li> <li>• In the long-term, i.e. up to 2025 or 2030, profitability will be reached with about 20,000 to 25,000 MW of installed power (in the coastal waters and Exclusive Economic Zone).</li> </ul>
<b>Target area / place</b>	Germany
<b>Arrangement(s) for financing</b>	The implementation of offshore power plants will be financed by private enterprises. Based on the German Renewable Energy Sources Act the producers of offshore-electricity are entitled to feed electricity into the grid and the utilities are obliged to buy for a fixed price.
<b>Monitoring process and time frame</b>	Up to 25 years duration. The German Renewable Energy Sources Act requires a report on the experiences with the market introduction of renewable energies. Project operators are obliged to start a monitoring process about the environmental effects of offshore power plants.
<b>Other relevant information</b>	Up to now, planning permission has been given for four offshore wind farms with a total output of over 800 MW and for some 250 facilities in the North Sea. More project applications are expected in the near future.
<b>Contact person</b>	<b>Mr Udo Paschedag, Ms Cornelia Viertl</b> , Federal Ministry for the Environment, Department Z III 3 "Hydropower and Wind Energy", 11055 Berlin, Germany; Tel.: + 49 1888 305 3630; Fax: + 49 1888 305 3631, Email: udo.paschedag@bmu.bund.de / cornelia.viertl@bmu.bund.de
<b>Link</b>	<a href="http://www.BMU.de">www.BMU.de</a> , <a href="http://www.erneuerbare-energien.de">www.erneuerbare-energien.de</a> , <a href="http://www.offshore-wind.de">www.offshore-wind.de</a>





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## International Feed-in Cooperation

<b>Region / country</b>	Europe / Germany and Spain
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)</b>
<b>Participating actor(s)</b>	Governments of Germany and Spain
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Promoting the exchange of experiences between both countries</li> <li>• Demonstrating the advantages of the feed-in system</li> <li>• Generating a best practice paper, which specifies the criteria for success, including feed-in tariffs, guaranteed and priority grid access for renewable energy installations as well as the priority right to feed in the renewable electricity</li> <li>• Assisting other countries, which want to design and implement a similar system</li> <li>• Showing the possibilities to harmonise diverging national feed-in systems and how these can be combined with the principles of international trade</li> <li>• Providing useful input to the international forum</li> </ul>
<b>Contents</b>	<p>In order to achieve these objectives, we will</p> <ul style="list-style-type: none"> <li>• Create a governmental working group and hold semi-annual workshops. The first one will take place in October 2004 in Germany. Support from stakeholders is welcome</li> <li>• Compile annual progress reports</li> <li>• Complete the best practice paper before the end of 2006</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Further increased efficiency of feed-in system</li> <li>• Increased international knowledge exchange</li> <li>• Annual progress reports</li> <li>• Feed-in best practise paper</li> <li>• Field reports</li> </ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	The necessary costs will be covered by the participating governments
<b>Monitoring process and time frame</b>	<ul style="list-style-type: none"> <li>• Annual progress reports by the cooperation</li> <li>• Finish the feed-in best practice before the end of 2006</li> <li>• Compile field reports in regular intervals of two years</li> </ul>
<b>Contact person</b>	<b>Dr Wolfhart Dürrschmidt</b> , Division Z III 1, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany, Tel.: + 49 1888 305 3610, Fax: + 49 1888 305 3619, Email: <a href="mailto:wolfhart.duerrschmidt@bmu.bund.de">wolfhart.duerrschmidt@bmu.bund.de</a>
<b>Link</b>	<a href="http://www.erneuerbare-energien.de">www.erneuerbare-energien.de</a>



## Memorandum of Understanding between Brazil and Germany on Sustainable Renewable Energy

<b>Region / country</b>	Germany, Brazil
<b>Leading actor(s)</b>	<b>Germany / Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU); Brazil / Ministry of Mines and Energy; Ministry of Environment</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	The establishment of a Mechanism of Consultation to address issues of mutual interest in the fields related to the sustainable production and use of renewable energy sources (RES) and energy efficiency to promote co-operation thereon.
<b>Contents</b>	<p>Consultations will address sustainable production and use of renewable energy and energy efficiency, particularly in the following areas:</p> <ul style="list-style-type: none"> <li>• Hydro power, wind power, solar photovoltaic, solar thermal energy, bio-energy, geothermal energy and hydrogen (power generation, heat and transport), taking into account the circumstances of both countries;</li> <li>• Administrative procedures, legal frameworks, applied policies, measures and instruments – including economic instruments –, and suitable financing models for promoting RES and energy efficiency;</li> <li>• Joint projects in scientific and technological research, education and training and public awareness</li> <li>• General principles regarding the role of RES within sustainable energy supply systems</li> </ul> <p>An adequate and effective protection of intellectual property rights as well as the confidentiality of the information exchanged under this Memorandum will be assured. All sectors of civil society should be encouraged to participate in the implementation of the Memorandum of Understanding.</p>
<b>Expected results</b>	Enhanced exchange of experience and further cooperation
<b>Target area / place</b>	Brazil and Germany
<b>Arrangement(s) for financing</b>	Sponsored by the Leading Actors
<b>Monitoring process and time frame</b>	The activities under the Memorandum of Understanding will be monitored by both the Governments of Brazil and Germany.
<b>Contact person</b>	<p><b>Dr Martin Schöpe</b>, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Berlin, Germany; Tel.: + 49 30 28550 3641; Email: martin.schoepe@bmu.bund.de;</p> <p><b>Mr Mario Augusto Santos</b>, Ministry of Mines and Energy, Brazil; Tel.: +61 3195671; Tel.: +61 922 34429; Fax: + 61 3195627; Email: ms.antos@mme.gov.br;</p> <p><b>Mr Fernando Lyrio Silva</b>, Ministry of Environment (Brazil), International Advisor, Tel.: +613171416, Fax: +61 3228939, Email: fernando.lyrio@mma.gov.br</p>





## Renewable Energy Sources Act (EEG)

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / Government of Germany</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	To raise the share of renewable electricity sources to 12.5% in the year 2010 and to 20% in the year 2020.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Establishing a new target for the following years after 2010</li> <li>• Revising of existing obstacles</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Allowed the exploitation of further potential, particularly in the biomass sector.</li> <li>• Remove existing obstacles and barriers to renewable electricity.</li> <li>• Considerable growth of electricity from renewable energy sources</li> <li>• Foster the development of renewable energy industries and bring down the costs for renewable electricity</li> </ul>
<b>Target area / place</b>	Germany
<b>Arrangement(s) for financing</b>	The relevant provisions of the new Act constitute legal restraints imposed on electricity supply companies. These companies are committed to buying the renewable electricity from independent power producers at the tariffs fixed by law.
<b>Monitoring process and time frame</b>	The new Act will be monitored by a periodical report on the development of the share of renewable electricity and the evolution of the costs per kilowatt hour in order to ensure accelerated growth of renewable energies and cost reduction.
<b>Contact person</b>	<b>Dr Wolfhart Dürrschmidt</b> , Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Division Z III 1, 11055 Berlin, Germany. Tel.: + 49 30 28550 3610, Fax: + 49 30 28550 3619, Email: <a href="mailto:wolfhart.duerrschmidt@bmu.bund.de">wolfhart.duerrschmidt@bmu.bund.de</a>
<b>Link</b>	<a href="http://www.erneuerbare-energien.de">www.erneuerbare-energien.de</a> or <a href="http://www.bmu.de">www.bmu.de</a>



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## KfW Carbon Fund

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Germany / KfW Bankengruppe</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	Main objective of the action is to procure emission-certificates mainly from the flexible project related mechanisms as of the Kyoto-Protocol on a commercial basis for the benefit of German and European enterprises.
<b>Contents</b>	Establishment of a Carbon Fund
<b>Expected results</b>	The expected result is an operational buyers' pool with strong participation of the German and European business community. By purchase of emission certificates application of environmental friendly technology will be fostered. This will include energy efficiency and renewable energy projects.
<b>Target area / place</b>	Developing Countries, industrializing and countries in transition
<b>Arrangement(s) for financing</b>	The envisaged volume of the buyers' of EUR 50 million is expected to originate primarily from German and European enterprises. KfW Bankengruppe will allocate up to EUR 10 million from its own resources. The German government has allocated an amount of EUR 8 million for participation, but especially earmarked for consideration of renewable energy projects.
<b>Monitoring process and time frame</b>	The KfW Carbon Fund is expected to be established by the end of 2004.
<b>Contact person</b>	<b>Mr Bernhard Zander</b> , KfW Bankengruppe, Palmengartenstr. 5-9, 60325 Frankfurt, Germany, Tel.: +49 69 7431 2147, Email: <a href="mailto:Bernhard.zander@kfw.de">Bernhard.zander@kfw.de</a>
<b>Link</b>	<a href="http://www.kfw.de">www.kfw.de</a>



**(A) Information Center for the Development of Renewable Energy Sources in Central American Countries**  
**(B) Design of a Programme to Develop a Market for the Efficient Use of Fuelwood**

<b>Region / country</b>	Central America / Guatemala
<b>Leading actor(s)</b>	<b>Guatemala / Ministerio de Energía y Recursos Naturales; United Nations Economic Commission for Latin America and the Caribbean (UNECLAC)</b>
<b>Participating actor(s)</b>	Central American Energy Ministers or Energy Commissions, UNECLAC Mexican Office
<b>Main objective(s)</b>	(A) To promote the development of renewable energies (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panamá) (B) To develop the market for efficient wood stoves in rural areas in Central American Countries
<b>Contents</b>	The project will support (A) The creation of national and regional markets for renewable energy technologies through public-private alliances and the establishment of national information centers. (B) The evaluation of biomass resources and the current biomass consumption. Based on the results a programme will be developed to promote the creation of markets for efficient wood stoves
<b>Expected Results</b>	(A) 1. Institutional coordination among the participating countries and a public-private alliance for renewable energies has been approved. 2. In each of the countries a national information center for renewable energies has been established. (B) The number of efficient wood stoves in the participating countries has been multiplied by ten within five years (5 thousand wood stoves are approximately installed each year now).
<b>Target area / place</b>	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panamá
<b>Arrangement(s) for financing</b>	Human resources inputs from the energy ministers and from the ECLAC Office in Mexico. External funding from donors is required to implement the projects: (A) USD 120,00; (B) USD 150,000
<b>Monitoring process and time frame</b>	The ECLAC office in Mexico will act as the executing agency. Expected time horizon: 2 years
<b>Contact person</b>	<b>Mr Lic. Roberto González Díaz-Durán</b> , Ministro de Energía y Recursos Naturales; Diagonal 17 No. 29-78, 3er Nivel, Edificio Dirección Superior, Zona 11, Guatemala, <a href="http://www.mem.gob.gt">http://www.mem.gob.gt</a> ; <b>CEPAL – Mr José Luis Machinea</b> , Secretario Ejecutivo; Av. Dag Hammarskjöld s/n – Vitacura – Santiago – CHILE; Tel.: + 56 2 2102553; Fax: + 56 2 2080252; Email: <a href="mailto:jlmachinea@eclac.cl">jlmachinea@eclac.cl</a> ; <b>Ms Rebeca Grynspar</b> , Directora, Subsede regional de la CEPAL en México, Email: <a href="mailto:rgrynspar@un.org.mx">rgrynspar@un.org.mx</a> ; <b>Mr Fernando Cuevas</b> , Jefe, Unidad de Energía y Recursos Naturales, Subsede regional de la CEPAL, Email: <a href="mailto:fcuevas@un.org.mx">fcuevas@un.org.mx</a>



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## Integral Water-Basin Resource Management for Greater Renewable Energy Use

<b>Region / country</b>	Central America / Guatemala
<b>Leading actor(s)</b>	<b>Guatemala / Ministerio de Energía y Recursos Naturales</b>
<b>Participating actor(s)</b>	Energy ministers or commissions of the six Central American Countries, National Directions in charge of the hydro resources; Regional Commission for Hydro Resources (CRRH), Central American Electricity Council (CEAC), UN Economic Commission for Latin American and the Caribbean ECLAC office in Mexico
<b>Main objective(s)</b>	To increase the development of renewable sources by implementing an integrated management of hydro, forest and energy resources in six Central American basins, and one in each country.
<b>Contents</b>	Preparation of an integrated management programme of the six basins in order to have, in three years, an implementation programme to foster the development of energy renewable resources on those basins.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• The Central American Countries have in operation information systems for the management of the main basins.</li> <li>• The Central American Countries have improved the management of the hydraulic resources</li> <li>• The Central American Countries has implemented institutional coordination schemes and conflict negotiations.</li> <li>• D. The Central American Countries have approved and developed evaluation model for the main basins.</li> </ul>
<b>Target area / place</b>	Guatemala
<b>Arrangement(s) for financing</b>	The Energy Ministers or Commissions will provide the local counterpart required for this project. The ECLAC Office in Mexico will also provide human resources to support this project. External donor financing is required to implement the project: USD 165.000
<b>Monitoring process and time frame</b>	The national authorities will supervise and monitor the project. ECLAC office in Mexico will be the executing agency. The duration of the project is three years.
<b>Contact person</b>	<p><b>Mr Lic. Roberto González Díaz-Durán</b>, Ministro de Energía y Recursos Naturales; Diagonal 17 No. 29-78, 3er Nivel, Edificio Dirección Superior, Zona 11, Guatemala, Guatemala; Presidente Protempore Central American Energy Ministers; <b>CEPAL – Mr José Luis Machinea</b>, Secretario Ejecutivo Av. Dag Hammarskjöld s/n – Vitacura – Santiago – CHILE; Tel.: + 56 2 2102553, Fax: +56/2/2080252; Email: jlmachinea@eclac.cl;</p> <p><b>Ms Rebeca Grynspan</b>, Directora, Subsede regional de la CEPAL en México; Email: rgrynspan@un.org.mx;</p> <p><b>Mr Fernando Cuevas</b>, Jefe, Unidad de Energía y Recursos Naturales, Subsede regional de la CEPAL. (fcuevas@un.org.mx )</p>
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## Human Capacity Building in Geothermal Energy in Developing Countries

<b>Region / country</b>	Europe / Iceland
<b>Leading actor(s)</b>	<b>Iceland / Ministry of Industry and Commerce; UN University Geothermal Training Programme (UNU-GTP)</b>
<b>Participating actor(s)</b>	United Nations University, governments of cooperating countries, development agencies
<b>Main objective(s)</b>	Assist developing countries with significant geothermal energy potential in building up or strengthening groups of specialists that cover most aspects of geothermal research and development.
<b>Contents</b>	The commitment is an addition to the activities of the UNU-GTP in Iceland, which has trained 300 geothermal scientists and engineers from 39 developing and transitional countries during 1979-2003. The addition will be in the form of short specialised courses in geothermal development conducted in selected countries in Africa, Asia, and Central America. The courses will be set up in cooperation with the energy agencies/utilities and earth science institutions responsible for the exploration, development and operation of geothermal energy power stations and utilities in the respective countries. The teaching will be in the hands of UNU-GTP graduates in the respective countries/regions and the regular teachers of the UNU-GTP.
<b>Expected results</b>	Geothermal energy specialist groups at selected institutions in participating developing countries. The courses may in the future develop into sustainable regional geothermal training centres.
<b>Target area / place</b>	Africa, Asia and Central America
<b>Arrangement(s) for financing</b>	The Government of Iceland will provide core funding for the Commitment. Additional funding will be sought with international financing institutions, development agencies, cooperating countries, participating energy agencies and other sources.
<b>Monitoring process and time frame</b>	The first course in Africa is planned in Kenya in 2005 with participants from neighbouring countries. The time plans for the first courses in Asia and Central America have tentatively been set for 2006-2008. Monitoring will be in the form of periodical reports and auditing.
<b>Other relevant information</b>	An expanded plan of Icelandic development aid in the field of geothermal energy will be submitted at a later date.
<b>Contact person</b>	<b>Dr Ingvar B. Fridleifsson</b> , UNU-GTP, Orkustofnun, Grensasvegur 9, 108 Reykjavik, Iceland. Tel: + 354 5696000, Fax: + 354-5688896, Email: <a href="mailto:ibf@os.is">ibf@os.is</a> .
<b>Link</b>	<a href="http://www.os.is/unugtp/">www.os.is/unugtp/</a>



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## Developing National Renewable Energy Masterplan

<b>Region / country</b>	Middle East / Islamic Republic of Iran
<b>Leading actor(s)</b>	<b>Iran / Ministry of Energy</b>
<b>Participating actor(s)</b>	Related government agencies, related enterprises including the private sector, renewable energy organisations of Iran
<b>Main objective(s)</b>	Development of renewable energy utilisation and related technology improvements
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Setting up national renewable development strategy and policy</li> <li>• Implementation of renewable energy projects</li> <li>• Making appropriate institutional arrangements</li> <li>• Legislating renewables as part of the ongoing “Energy Efficiency Act”</li> <li>• Mobilising required financial resources</li> <li>• Promoting private sector participation in renewable energy utilisation</li> <li>• Developing “Power Purchase Agreement” to support preferential purchase of renewable based electricity generated</li> </ul>
<b>Expected results</b>	By 2010, total installed capacity of renewable energy will reach 500 MW. This includes small-scale hydro power (80 MW), wind power (250 MW), solar thermal power (17.25 MW), photovoltaic (3 MW), geothermal (100 MW), and solar thermal (50 MWh).
<b>Target area / place</b>	Iran
<b>Arrangement(s) for financing</b>	EUR 350 million be allocated by the Ministry of Energy EUR 100 million is expected to be financed by the private sector, and EUR 300 million to be financed through international organisations, FDI, and other foreign financial sources.
<b>Monitoring process and time frame</b>	The Ministry of Energy (MOE), and Management and Planning Organisation (MPO) will jointly monitor the results. Time frame is 2004-2010.
<b>Other relevant information</b>	This master plan will be coordinated with other national development programmes, such as Five-Year-Development-Plans.
<b>Contact person</b>	<b>Dr Ahmad Kahrobaian</b> , Director general, Renewable Energy Office, Ministry of Energy, Fax: + 98-21-8086737, Email: kahroba@iranenergy.org.ir
<b>Link</b>	<a href="http://www.iranenergy.org.ir">www.iranenergy.org.ir</a> , and <a href="http://www.moe.org.ir">www.moe.org.ir</a>



## Italian National Programmes on Renewables

<b>Region / country</b>	Europe / Italy
<b>Leading actor(s)</b>	<b>Italy / Italian Ministry for the Environment and Territory (IMET)</b>
<b>Participating actor(s)</b>	Regional and local authorities, public and private actors
<b>Main objective(s)</b>	Promotion of renewable energies (REs) in Italy
<b>Contents</b>	<ul style="list-style-type: none"> <li>• National Programme PV roofs: organized in 2 sub-programmes, aims at co-financing, in the period 2000-2004 and in collaboration with regional and local authorities, PV installations between 1-20 kWp in public or private buildings. A similar programme has been implemented for public building of high architectural interest.</li> <li>• National Programme on solar thermal: includes two bids co-financed by Regional Administrations addressed to local Administrations, gas delivering companies and public and private actors for the co-financing of solar thermal installations to be integrated in buildings.</li> <li>• Small Islands Programme: agreements with ENEA (National institution for Energy and Environment) and ANCIM (the Association of municipalities of small islands) has been signed for the environmental interventions in small islands municipalities included in marine protected areas or national parks, that includes financing for energy saving, REs and sustainable transport.</li> <li>• Programme on Promotion of REs in national parks: it includes a bid for the co-financing of the promotion of REs and sustainable transport in protected areas.</li> </ul>
<b>Expected results</b>	The overall impact of the measures foreseen is to contribute to meet the EU White Paper indicative national targets.
<b>Target area / place</b>	Italy
<b>Arrangement(s) for financing</b>	More than EUR 87 million have been co-financed by IMET for these Programmes, and other specific Regional funds have been allocated. With the next financial law, a new financial framework will be established.
<b>Monitoring process and time frame</b>	All Regional Authorities are involved in the monitoring of the implementation steps of the above Programmes.
<b>Other relevant information</b>	For the implementation of such Programmes Italy has utilised the financial resources coming from Carbon Tax (Ministerial Decree n°377/2000).
<b>Contact person</b>	<b>Ms Valeria Rizzo</b> , Director, Bilateral and Multilateral Cooperation Division, IMET, Via C. Colombo 44, 00147 Roma, Italy; Tel.: + 39-06 57228125 8109, Email: pia-s1d@minambiente.it
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## Italian Policy for a Renewable Energy Market

<b>Region / country</b>	Europe / Italy
<b>Leading actor(s)</b>	<b>Italy / Government of Italy; Italian Ministry for the Environment and Territory (IMET); Italian Ministry for Productive Activities; Gestore della Rete di Trasmissione Nazionale SpA (GRTN); Gestore del Mercato Elettrico SpA (GME)</b>
<b>Participating actor(s)</b>	Electricity producers, regional and local authorities, public and private sectors, other governments
<b>Main objective(s)</b>	Liberalisation of electricity and gas market, according to EU Framework. Specifically, promotion of renewable energies (REs) in Italy, promotion of electricity from REs in Italian and EU market.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Implementation of “Green Certificate System” under the Annex Decree n°11/99 of Legislative Decree n°79/1999 (liberalisation of electricity and gas market), with a fix minimum rate of green electricity for each producer at 2% of the overall electricity production;</li> <li>• Further promotion of RE in electricity market (Legislative Decree n°387/2003) by increasing the minimum quota of RE electricity requested from electricity producers under “green certificates system” by 0.35% p.a., increasing the lifetime of Green Certificates to meet the market demand, and introducing a “Guarantee of Origin” for electricity produced from REs.</li> </ul>
<b>Expected results</b>	Increase Italian electricity production from renewable energies to 75 TWh by 2012 (from 50 TWh today).
<b>Target area / place</b>	Italy and Europe
<b>Arrangement(s) for financing</b>	The implementation of a Green Certificates System is already in practice since 2002. Responsible for trading this commodity is GRTN/GME. In the first phase, the price of a Green Certificate was established by GRTN at 8.4 cents EUR/KWh. The second phase, after full liberalisation of the electricity market, creates a self-financing mechanism for the promotion of renewable energies.
<b>Monitoring process and time frame</b>	A National Observatory for renewable energies and energy efficiency has been foreseen by Legislative Decree n° 387/2003.
<b>Other relevant information</b>	The policy measures already identified by the above mentioned legislative acts will be reinforced by 2005 with the full implementation of the Italian Law N° 120/2002 ratifying the Kyoto protocol and the Emission Trading Scheme Directive (and the incoming link Directive) that allow Certified Emission Reductions trading as additional measures towards emission reduction of greenhouse gases and RE promotion.
<b>Contact person</b>	<b>Ms Valeria Rizzo</b> , Director, Bilateral and Multilateral Cooperation Division, IMET, Via C. Colombo 44, 00147 Roma, Italy; Tel.: + 39 06 5722 8125/8109, Email: pia-s1d@minambiente.it
<b>Link</b>	<a href="http://www.minambiente.it">www.minambiente.it</a> ; <a href="http://www.europa.eu.int">www.europa.eu.int</a> ; <a href="http://www.unfccc.de">www.unfccc.de</a>





## Italian Pilot Projects on Renewable Energy and Energy Efficiency

<b>Region / country</b>	Europe / Italy
<b>Leading actor(s)</b>	<b>Italy / Italian Ministry for the Environment and Territory (IMET)</b>
<b>Participating actor(s)</b>	(1) Tsinghua University (China), Politecnico di Milano, MCA Mario Cucinella Architects, China Architecture Design & Research Group; (2) Ente Parco Dolomiti Bellunesi; (3) Municipality of Specchia (Lecce/Italy)
<b>Main objective(s)</b>	Three representative pilot projects aim at: (1) Promotion of “green” energy-saving by building eco-design, (2) Isolated areas energy supply by RE, (3) Local basis promotion of renewables in agriculture and tourist areas.
<b>Contents</b>	<p>(1) “Sino-Italian Environment &amp; Energy Building”: design and realisation of 20,000 m<sup>2</sup> building located in the campus of Tsinghua University (Beijing), that will host a Sino-Italy education, training and research centre for environment protection and energy conservation.</p> <p>(2) “Fossil-free” demonstrative area in “Dolomiti Bellunesi” National Park by renewables utilisation, demonstrative &amp; promotional application of RE (particularly concerning tourist flows and infrastructures), “sustainable electrification of ‘Valle del Mis’” and “households energy supply”.</p> <p>(3) “Ecological Village” (Cardigliano agricultural &amp; tourist complex) in Specchia by adoption of “emission zero approach” starting from planning phase of restoration activities in the entire area. Energy requirements in Cardigliano will be satisfied using a mix of renewable energies, and in particular wind generation, PV and solar thermal at low temperature.</p>
<b>Expected results</b>	<p>(1) Enhanced energy saving potential, REs utilisation, improved energy efficiency, resource saving (construction material, water), reduced environmental impact (construction, use, materials), intelligent control during operation &amp; maintenance, clean indoor air, durable materials, water recycling and re-use;</p> <p>(2) Demonstrative area with energy supply by solar, thermal and PV, wood as biomass, mini-hydro power, biofuels for heating, micro-cogeneration and diesel engines;</p> <p>(3) “Ecological village” in the agricultural and tourist complex, supplying energy services with renewables.</p>
<b>Target area / place</b>	Italy (“Dolomiti Bellunesi”, Cardigliano/Lecce), China (Beijing)
<b>Arrangement(s) for financing</b>	IMET as principal financing institution (1) within Sino-Italian Cooperation Programme for Environmental Protection, and Tsinghua University, as co-financing institution, (2) with co-financing and implementation in co-operation with “Ente Parco Dolomiti Bellunesi”, (3) implemented in co-operation with the Municipality Specchia.
<b>Monitoring process and time frame</b>	Technical and financial reports are regularly submitted to IMET by the partners involved in the three pilot projects.
<b>Contact person</b>	<b>Ms Valeria Rizzo</b> , Director, Bilateral and Multilateral Cooperation Division, IMET, Via C. Colombo 44, 00147 Roma, Italy, Tel.: + 39 06 5722 8125/8109, Email: pia-s1d@minambiente.it
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## **Italian Renewable Energy Initiatives (Type II): Mediterranean Renewable Energy Programme (MEDREP)**

<b>Region / country</b>	Europe / Mediterranean Region
<b>Leading actor(s)</b>	<b>Italy / Italian Ministry for the Environment and Territory (IMET)</b>
<b>Participating actor(s)</b>	Ministry for Industry and Energy of Tunisia (TMIE), Tunisian National Agency for Renewable Energies (ANER), New & Renewable Energy Authority of Egypt (NREA), Centre for Renewable Energy Development (CDER) of Morocco, Ministry for Resources and Infrastructure of Malta, Ministry of Water and Environment of Yemen, French Agence de l'Environnement et de la Maitrise de l'Energie (ADEME), International Energy Agency (IEA), International Solar Energy Society Italy (ISES ITALY), Mediterranean Association of the National Agencies for Energy Conservation (MEDENER), Observatoire Méditerranéen de l'Energie (OME), Regional Environmental Centre for Central and Eastern Europe (REC), United Nations Environment Programme (UNEP), World Bank, other countries will also shortly be involved in the partnership
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Providing modern energy services, particularly to rural populations,</li> <li>• Contributing to climate change mitigation by increasing the share of renewable energy technologies in the energy mix in the target region.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Implement renewable energy pilot projects already identified in the framework of bilateral agreements carried out by IMET in Algeria, Egypt, Morocco and Tunisia, and design new and innovative pilot projects as a “catalogue” of best practices to be replicated.</li> <li>• Develop two financial mechanism projects in Morocco and Tunisia for Solar Water Heating, supporting customers and investors scale up financing in the energy sector.</li> <li>• MEDREC (Mediterranean Renewable Energy Centre, since January 2004, Tunis) as operational focal point for MEDREP activities, in particular training, information dissemination, networking and development of pilot projects, in the Southern Mediterranean Region; extend this model to Central and Eastern European countries.</li> </ul>
<b>Expected results</b>	Enhanced development of a sustainable renewable energy market system in the greater Mediterranean Region, through <ul style="list-style-type: none"> <li>• Tailored financial instruments and mechanisms;</li> <li>• Strengthened policy frameworks and removal of barriers to projects development;</li> <li>• Stronger private sector infrastructure, considering the positive role of ‘Tradable Renewable Certificates’ &amp; ‘Certified Emission Reductions’</li> </ul>
<b>Target area / place</b>	Mediterranean Region
<b>Arrangement(s) for financing</b>	IMET has allocated EUR 8 million for renewable projects implementation. Through a Memorandum of Understanding with UNEP, IMET finances a Trust Fund for the Promotion of renewable energy in the Mediterranean Region addressed to design and implement financial mechanisms



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#### **Monitoring process and time frame**

MEDREP is guided by a Steering Committee, composed by one representative from each partner, who monitor and review the Work-Plan of activities and project implementation. Being a Type II Initiative, MEDREP complies with the procedures and requirements established by the Commission on Sustainable Development (CSD). The timeframe for MEDREP activities is 2002-2010.

#### **Other relevant information**

MEDREP and MEDREC will be officially launched in September 2004 (Tunis) with the involvement of new Country-partners, financial institutions and the private sector. The possibility of collaboration between MEDREP and other initiatives will further been explored, in order to enhance synergies and activities in the renewable energy field.

#### **Contact person**

**Ms Valeria Rizzo**, Director, Bilateral and Multilateral Cooperation Division, Ministry for the Environment and Territory, Via C. Colombo 44, 00147 Roma, Italy, Tel.: + 39 06 5722 8125/8109,  
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#### **Link**

[www.medrep.it](http://www.medrep.it)



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## Introduction of Renewable Portfolio Standard (RPS) Law

<b>Region / country</b>	Asia / Japan
<b>Leading actor(s)</b>	<b>Japan / Government of Japan, Ministry of Economy, Trade and Industry</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	The RPS law (enacted in 2003) obligates electricity retailers to utilise new energy for a specified amount of their electricity generation. It targets an even more expanded application of new energy in the electricity field.
<b>Contents</b>	New energy includes the following: <ul style="list-style-type: none"> <li>• Wind power</li> <li>• Photovoltaic power generation</li> <li>• Thermal heat</li> <li>• Small and medium hydraulic power</li> <li>• Biomass</li> </ul>
<b>Expected results</b>	The indicator for 2010 is 12.2 TWh, which would comprise 1.35% of the national electricity supply. (This indicator might be changed by the monitoring process and time frame as below.)
<b>Target area / place</b>	Japan
<b>Arrangement(s) for financing</b>	A budget for developing systems to facilitate implementation and conducting research on the potential of future development of new energy facilities has been obtained.
<b>Monitoring process and time frame</b>	METI will monitor each electricity retailer's obligation amount for electricity from new energy every year. METI will follow up implementation of RPS for a period of three years after its introduction and, if necessary, will review the scheme for RPS. Every four years METI will set annual indicators for the generation of electricity from new energy resources by electric retailers based on an eight-year time frame.
<b>Contact person</b>	<b>Mr Shiro Hori</b> , Director, Office for Promotion of the Use of New Energy by Electric Utilities, Energy Conservation and Renewable Energy Department, Agency for Natural Resources and Energy (ANRE), METI. Kasumigaseki 1-3-1, Chiyoda-ku, Tokyo 100-8931 Japan, Tel.: + 81 3 3580 3023, Fax: + 81 3 3501 7698, Email: hori-shiro@meti.go.jp / nakajima-eri@meti.go.jp



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## Accelerating the Development of Renewable Energy in Jordan

<b>Region / country</b>	Middle East / Jordan
<b>Leading actor(s)</b>	<b>Jordan / Ministry of Energy and Mineral Resources</b>
<b>Participating actor(s)</b>	National Energy Research Center, Electricity Regulatory Commission, related government agencies, international organisations (World Bank, Global Environment Facility (GEF), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), CDM, European Union, European Investment Bank, DANIDA), private-sector investors
<b>Main objective(s)</b>	To diversify energy generation by expanding the use of renewable energy resources. This will in the long-term contribute to secure the national energy supply.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Development of an implementation plan as part of the Jordanian energy sector strategy.</li> <li>• Establishment of appropriate institutional arrangements including a framework for policy and regulatory instruments</li> <li>• Development of financial scenarios and options.</li> </ul>
<b>Expected results</b>	<p>By 2015 5% of the total energy mix in Jordan comes from renewable energy resources. The following IPP renewable energy projects are expected to be implemented:</p> <ul style="list-style-type: none"> <li>• A wind Park with a capacity of 75-100 MW.</li> <li>• A Hybrid Solar Power Plant (CSP) with a capacity of 100-150 MW.</li> <li>• A Waste to Energy Plant</li> </ul>
<b>Target area / place</b>	Jordan
<b>Arrangement(s) for financing</b>	Required financing for the projects will be arranged through the private developer. In addition international funding will be arranged through the related Government ministries.
<b>Monitoring process and time frame</b>	The Ministry of Energy and Mineral Resources will monitor the process through a Steering Committee to be established for this project.
<b>Other relevant information</b>	The implementation of this programme will be coordinated with other national development plans such as the rural electrification programme.
<b>Contact person</b>	<b>Mr Eng. Ziad J. Sabra</b> , Director, Renewable Energy Department Ministry of Energy and Mineral Resources, Fax: + 962 6 5865 714 Tel.: + 962 6 5863 326, Email: Renewable@memr.gov.jo



## Promoting Low-cost Renewable Energy Options that Target the Poor in Kenya

<b>Region / country</b>	Africa / Kenya
<b>Leading actor(s)</b>	<b>Kenya / Ministry of Energy</b>
<b>Participating actor(s)</b>	Renewables NGOs, government ministries, small and medium-scale industries, academia, independent research organisations, parastatals, rural energy NGOs, national electricity utilities, parliamentary committees/bodies, donor organisations; interested bilateral partners
<b>Main objective(s)</b>	To contribute to poverty alleviation using small and medium low-cost and local renewable energy technologies
<b>Contents</b>	<p>Promote appropriate small and medium scale renewable energy technologies appropriate for rural poor communities including:</p> <p>Phase 1: Non-Electrical Technologies: Pico/micro/small hydro both power generation targeted at income generation, water provision; Windpumps for water pumping; Solar dryers; Biogas; Ram pumps, hydrams; Solar water heaters; Solar distillers/pasteurizers; Efficient bio-fuel kilns (for income generation)</p> <p>Phase 2: RETs or Rural and remote Electrification: Small hydro for electricity generation; Wind electric generators; Biomass-based cogeneration; Biomass gasification; PV for institutional and commercial applications; Include other technologies that are appropriate for poverty alleviation in rural and peri-urban areas</p>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Greater use of renewables among the poor for non-electrical and electrical applications;</li> <li>• Strengthened capacity and skills of local RE manufacturers, assemblers, installers and end-users;</li> <li>• Increased access among the poor to modern energy services and widened opportunities for income generation;</li> <li>• Greater penetration and contribution of renewables in the national energy mix;</li> <li>• Greater empowerment of women and reduction of their drudgery;</li> <li>• Appropriate financing mechanisms that reach the poor;</li> <li>• Comprehensive national renewable energy assessment;</li> <li>• A supportive legal and regulatory framework for rural energy delivery</li> </ul>
<b>Target area / place</b>	Kenya
<b>Arrangement(s) for financing</b>	Renewable Energy Facility (financed by levies on electricity and petroleum; donor funds government budgetary allocation and grants) to provide a stable financial base for renewables. Could lead to the establishment of a rural energy efficiency and management center
<b>Monitoring process and time frame</b>	Technical reports to appropriate authorities; Develop appropriate monitoring and evaluation indicators (e.g. modern energy consumption per capita etc); Time frame: 5 years.
<b>Contact person</b>	<b>Mr Jackson N. Maina</b> , Department of Renewable Energy, Ministry of Energy, PO Box 30582, Nairobi. Kenya, Tel.: + 254 20 330048/315857; Email: dre@energymn.go.ke





## Mexico Renewable Energy Initiative

<b>Region / country</b>	Latin America / Mexico
<b>Leading actor(s)</b>	<b>Mexico / Secretariat of Energy</b>
<b>Participating actor(s)</b>	Energy Regulatory Commission (CRE); Federal Electricity Commission (CFE); Electricity Research Institute (IIE); National Bank for Public Works and Services (BANOBRA); Legislative Branch; Multilateral Funding Agencies; Private Sector Investors; Local Governments; NGOs
<b>Main objective(s)</b>	Increase the use of renewable energies through the Mexico Renewable Energy Initiative
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Initiate legal and regulatory framework adequacy, market based incentives, and innovative financing schemes in order to foster all renewable energies, and promote private investment.</li> <li>• Develop and promote market of green energy consumers.</li> <li>• Design and implement transparent methods and systems to estimate, and internalize the environmental benefits and impacts of energy technologies in the total generating costs.</li> <li>• Promote large-scale power and heat renewable energy projects, as well as expansion of the use of renewable energy technologies for rural sustainable energy supply in isolated areas.</li> <li>• Initiate and foster National and International Cooperation Programs among the Federal Government, Local Governments, the Academia, Research Institutes and International Research and Financing Organizations to promote capacity building, research and technological development, and technology transfer.</li> </ul>
<b>Expected results</b>	Increase of the installed capacity of RE for electricity generation in 40% (4000 MW) by 2014. A wind technology research center built and operating.
<b>Target area / place</b>	Mexico
<b>Arrangement(s) for financing</b>	The Federal Government shall finance public works to help advance in the fulfillment of the program goals. The private sector and local governments will be encouraged to play an important role in the investment of self supply and/or independent power production projects. The Mexican Government shall capitalize grants from Multilateral Organizations (GEF) of 80+ million dollars to: 1) supply temporary incentives for electricity generation through large scale renewable energy projects, 2) to foster research, technological development, and capacity building on renewable technologies. Additional funding will be capitalized through the trading of CO <sub>2</sub> eq emission reductions in the international carbon markets.
<b>Monitoring process and time frame</b>	The Program will be implemented during the next 10 years. The Secretariat of Energy, through a Supervising Committee, will periodically assess the progress of the Program.
<b>Contact person</b>	<b>Mr Ernesto Cordero Arroyo</b> , Under-secretary of Energy Policy and Technological Development, Email: <a href="mailto:ecordero@energia.gob.mx">ecordero@energia.gob.mx</a> , Tel: +5255 5000-6000 ext. 1074; <b>Mr Juan C. Mata Sandoval</b> ; Deputy Assistant Secretary for Research, Technological Development, Environment, Email: <a href="mailto:jmata@energia.gob.mx">jmata@energia.gob.mx</a> , Tel: +5255 5000-6047, Insurgentes Sur #890 3rd Floor, México, D.F. 03100
<b>Link</b>	Link: <a href="http://www.energia.gob.mx">www.energia.gob.mx</a>



## Renewable Energies Action Plan for Morocco

<b>Region / country</b>	Africa / Morocco
<b>Leading actor(s)</b>	<b>Morocco / Ministry for Energy and Mines</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	To contribute to the objectives of <ul style="list-style-type: none"> <li>• energy supply security</li> <li>• access to energy</li> <li>• strengthening of the competitiveness of the production sector</li> <li>• protection of the environment</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Electricity production: Implementation of wind parks (50 MW operational, 200 MW in preparation and 350 MW in planning), preparation of thermo-solar project with integrated combined cycle plant (200 to 250 MW) and feasibility studies for biomass energetic valuation and cogeneration.</li> <li>• Decentralized rural electrification: Deploying energetic services in rural areas, using solar PV applications, mini-hydro and small winds turbines. This program that integrates basic social services is being launched in the context of “Global Rural Electrification Program (PERG)” for the benefit of 150 000 households.</li> <li>• Energy efficiency: Programs for the improved and rational use of energy in the residential sector (program for the development of solar water heaters “PROMASOL” which aims at installing 400,000 m<sup>2</sup> of solar panels), in the industrial sector (annual saving of 360,000 tons of oil equivalent can be achieved), in the tertiary sector (saving of 150,000 tons of oil equivalent is achievable) and the transport sector. The program includes improving the energy efficiency in ovens and hammams (3,000 units), pottery ovens (400 units) and improved stoves (1,00,0000 units).</li> <li>• Energy Houses: Promotion of proximity services in rural and urban areas, contributing to the access to energy by creating 500 small energy services enterprises for population living outside urban centers.</li> </ul>
<b>Expected results</b>	600 MW of wind parks, 400 000 m <sup>2</sup> of solar panels, 150 000 rural households supplied with energy, creation of about 500 small energy enterprises and about 500 000 tons of oil equivalent saved.
<b>Target area / place</b>	Morocco
<b>Arrangement(s) for financing</b>	Estimated total financial volume of the proposal: USD 1.5 billion Sources of financing: ONE, CDER national agencies, private sector and International financial institutions (BEI, KfW, JBIC, AFD, GEF, FFEM)
<b>Monitoring process and time frame</b>	2015
<b>Contact person</b>	<b>Mr M. Boutaleb</b> , Minister of Energy and Mines, Ministry of Energy and Mines, Agdal BP 6208, Rabat Morocco <b>Mr M. Berdai</b> Center for Renewable Energies Development, Rue Machaar El Haram, Marrakech, Morocco Email: berdai@mem.gov.ma





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## **Support of International RE Processes through Dedicated Events:**

### **(1) Conference on Energy for Development**

### **(2) Workshop on Offshore Wind Energy Potential**

<b>Region / country</b>	Europe / The Netherlands
<b>Leading actor(s)</b>	<b>The Netherlands / Ministry of Spatial Planning, Housing and the Environment; Ministry of Economic Affairs; Ministry of Foreign Affairs</b>
<b>Participating actor(s)</b>	World Bank, United Nations Development Programme (UNDP), World Business Council for Sustainable Development (WBCSD) (as co-organisers); Governments, international institutions, business representatives and no governmental groups (as participants)
<b>Main objective(s)</b>	<p>(1) As a follow-up to the WSSD, an international conference will be organised in the Netherlands, December 12-14, 2004, to discuss the topic of Energy for Development. The overall objective of the conference is to: Achieve sustainable energy policies for pro-poor growth in developing countries based on the WSSD Implementation Plan.</p> <p>(2) A EU 25-workshop will be organised in order to push the development of the offshore wind energy potential.</p>
<b>Contents</b>	<p>(1) The international conference will address the challenge when dealing in a balanced way with equally important objectives:</p> <ul style="list-style-type: none"> <li>-To supply energy to contribute to economic growth leading to poverty reduction;</li> <li>-To improve access to modern energy services for the poor;</li> <li>-To address environmental concerns related to energy production and consumption in developing countries.</li> </ul> <p>(2) The main topics of the workshop will be:</p> <ul style="list-style-type: none"> <li>-Environmental impact (guidelines for environmental assessments; best practices);</li> <li>-Grid integration (effect of grid integration of 10-50 GW windpower).</li> </ul>
<b>Expected results</b>	<p>(1) The international conference will stimulate a dialogue between governments, business sector, international organisations and non-governmental organisations on the ways energy can contribute to poverty eradication and economic growth on a sustainable way in developing countries.</p> <p>(2) Participants of this workshop will advice the EU Energy and Telecom council on policy measures to develop the EU offshore wind energy potential with respect to the before mentioned topics.</p>
<b>Target area / place</b>	Global, Europe
<b>Arrangement(s) for financing</b>	The Dutch ministries will mainly finance the events.
<b>Monitoring process and time frame</b>	The conference takes place from December 12-14, 2004; the workshop at September 30 and October 1, the discussion in the EU Energy and telecom council in November 2004.
<b>Contact person</b>	<b>Mr Pim van de Locht</b> , Email: <a href="mailto:pimvanderlocht@minvrom.nl">pimvanderlocht@minvrom.nl</a> ; <b>Mr Michel Verhagen</b> , Email: <a href="mailto:Verhagen@minez.nl">Verhagen@minez.nl</a>
<b>Link</b>	<a href="http://www.vrom.nl">www.vrom.nl</a> and <a href="http://www.minez.nl">www.minez.nl</a>



## Domestic Biogas: Capturing the Market in Asia

<b>Region / country</b>	Europe / Netherlands
<b>Leading actor(s)</b>	<b>The Netherlands / Netherlands Development Organisation (SNV)</b>
<b>Participating actor(s)</b>	Government agencies, national and international NGOs, private companies, universities, research institutes and supporting financing institutions in Nepal, Vietnam and Laos, KfW Bankengruppe, Netherlands Directorate General for International Cooperation (DGIS).
<b>Main objective(s)</b>	Support the biogas sector in developing domestic biogas as a mainstream rural energy source in rural Asia, contributing to (a) improving living standards of farmers and (b) reducing environmental pressure
<b>Contents</b>	<p>SNV is developing partnerships with numerous participating actors which are interested in a regional / global approach of commercially feasible domestic biogas dissemination for rural areas. These partnerships will,</p> <ul style="list-style-type: none"> <li>• Develop into a regional network focusing on the development of domestic biogas;</li> <li>• Combine competencies in the fields of rural development, marketing, technology and finance, to (better) address the needs of the rural population in developing countries provide</li> <li>• Provide added value and synergy to existing domestic biogas dissemination initiatives by sharing best practices and economies of scale in the dissemination process as a whole.</li> </ul>
<b>Expected results</b>	Expand its biogas activities to at least two more countries in Asia; Expand the biogas programme in Vietnam to all potential provinces; Start up a pilot biogas programme in Laos PDR; Consolidate the biogas programme in Nepal; Establish a regional (Asian) biogas knowledge network; Contribute to the design and creation of an accessible and sustainable financing structure for domestic biogas investment (CDM, micro finance, ODA)
<b>Target area / place</b>	Nepal, Vietnam and Laos
<b>Arrangement(s) for financing</b>	SNV invests in the human and administrative resources to initiate and coordinate the partnership. Resulting activities, however, will need separate funding by partners / governments. Arrangements for this would have to be made on a case-to-case basis.
<b>Monitoring process and time frame</b>	The time-horizon for the results is two years. SNV developed monitoring methodologies for the project cycle of domestic biogas programmes.
<b>Contact person</b>	<p><b>Mr Rob Ukkerman</b>, Bezuidenhoutseweg 161, 2594 AG Den Haag, The Netherlands, Tel.: + 31 70-344 0114, Fax: + 31 70 385 5531; Email: r.ukkerman@snv.nl;</p> <p><b>Mr Willem Boers</b>, SNV / Nepal, Kathmandu, Nepal, Tel.: +977 1 552 3444; Fax: +977 1 552 3155, Email: wboers@snv.org.np</p>
<b>Link</b>	<a href="http://www.snv.nl">www.snv.nl</a>



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## APEC-CPI – the Global New and Renewable Energy Technologies Forum and Marketplace

<b>Region / country</b>	Asia Pacific / New Zealand
<b>Leading actor(s)</b>	<b>New Zealand / Ministry of Economic Development and Asia-Pacific Economic Cooperation (APEC); Experts Group on New and Renewable Energy Technologies</b>
<b>Participating actor(s)</b>	APEC Energy Working Group, New Zealand Ministry of Economic Development, APEC Member Governments, Evolution Technologies Ltd.
<b>Main objective(s)</b>	To bring together private and public sector players, from the APEC economies and globally, through a web-based collaborative trade platform to accelerate development and uptake of new and renewable energy technologies.
<b>Contents</b>	APEC-CPI (Collaborative Projects Integrator) is a secure database where participants can develop ideas, advertise skills, store research, look up an industry specific library, see the latest industry news, finance ideas, and develop ideas into projects and work on them in one environment that gives access to a range of resources.
<b>Expected results</b>	Improved global technology transfer leading to increased uptake of renewable energy technologies.
<b>Target area / place</b>	Asia Pacific and global
<b>Arrangement(s) for financing</b>	This is a public / private partnership with APEC and Evolution Technologies providing initial seed funding. Ongoing financing will be provided through subscription and opportunities for government and corporate sponsorship.
<b>Monitoring process and time frame</b>	APEC-CPI became operational on 15 May 2004. It will be further developed as user feedback is gathered. It is reviewed at regular (2-3 times p.a.) meetings of “APEC Experts Group on New and Renewable Energy Technologies“. The level of subscriptions will evaluate its success, and technology developed using APEC-CPI.
<b>Contact person</b>	<b>Mr Cary Bloyd</b> , Chairman, APEC Experts Group on New and Renewable Energy Technologies, Argonne National Laboratory, Argonne, IL 60439, USA, Tel.: + 01 301 651 8899, Email: <a href="mailto:bloyd@anl.gov">bloyd@anl.gov</a> ; <b>Ms Dominique Dowding</b> , Managing Director, Evolution Technologies Ltd, PO Box 82, Christchurch, New Zealand, Tel.: + 64-3-379-9896, Email: <a href="mailto:ddowding@xtra.co.nz">ddowding@xtra.co.nz</a>
<b>Link</b>	<a href="http://www.apec-cpi.com">www.apec-cpi.com</a>



## Projects to Reduce Emissions

<b>Region / country</b>	Pacific / New Zealand
<b>Leading actor(s)</b>	<b>New Zealand / Ministry for the Environment: Climate Change Office</b>
<b>Participating actor(s)</b>	Ministry for Economic Development, Treasury, Energy Efficiency and Conservation Authority
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Additional greenhouse gas abatement through incentives under the Kyoto mechanism;</li> <li>• Meet New Zealand's climate change objectives and renewable energy target, i.e. by 2012, an extra 30 PJ of consumer energy per year above 2000 levels from renewables;</li> <li>• Promote growth in the renewable energy sector and encourage business practices that are less greenhouse gas intensive.</li> </ul>
<b>Contents</b>	The "Projects to Reduce Emissions" mechanism provides incentives for firms to reduce greenhouse gas emissions. The mechanism involves a closed tender with projects bidding for a share of a fixed allocation of Kyoto emission units. The smaller the ratio of emission units sought compared to emission reductions offered from the project, the greater the chance of success. Upon verified delivery of abatement, projects will receive assigned amount units (AAUs) from the New Zealand Government, or projects can receive Emission Reduction Units (ERUs) provided that projects meet the terms of Joint Implementation under the Kyoto Protocol.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased supply of renewable energy,</li> <li>• Greenhouse gas emissions below a "business-as-usual" pathway,</li> <li>• The first 15 recipient projects under the first tender round of the mechanism (held in late 2003) will provide 240 MW of additional generation capacity from renewable energy, and 1,484 GWh of additional electricity supply per year in 2008.</li> </ul>
<b>Target area / place</b>	New Zealand
<b>Arrangement(s) for financing</b>	The Projects mechanism is financed by prior allocation of emission units from New Zealand's Kyoto Protocol assigned amount. Administrative costs of the mechanism are funded as part of the New Zealand Climate Change Office's normal budget allocation.
<b>Monitoring process and time frame</b>	All project agreements include milestone points, which must be reported to the Government. Promised greenhouse gas abatement, as set out in agreements, must also be verified and reported to the Government. Monitoring will be carried out by the New Zealand Climate Change Office from first milestones through to reporting of final abatement in 2013.
<b>Contact person</b>	<b>Ms Kirsty Eames</b> , New Zealand Climate Change Office, PO Box 10362, Wellington, New Zealand; Tel.: +64-4-916-7600; Fax: +64-4-916-7615, Email: <a href="mailto:Kirsty.Eames@mfe.govt.nz">Kirsty.Eames@mfe.govt.nz</a>



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## **Hydronet – Sustainable Water Resources Management in Nigeria**

<b>Region / country</b>	Africa / Nigeria
<b>Leading actor(s)</b>	<b>Nigeria / Federal Ministry of Water Resources</b>
<b>Participating actor(s)</b>	Energy Commission of Nigeria in partnership with UNIDO
<b>Main objective(s)</b>	Collection of existing data and data rescue survey on Nigeria's perennial and non-perennial rivers, national and trans-national basins and aquifer systems
<b>Contents</b>	<p>Hydro-power projects derive their energies from water (river and other reservoirs), and in Nigeria the Federal Ministry of Water Resources is the agency responsible for managing the nation's water resources through the gathering of accurate hydro-meteorological, hydrological and hydro-geological data/information which makes it possible to prioritise parametric design of dams, reservoirs and other hydraulic structures, and the citing of hydro-power projects. This is achieved by maintaining a robust database that will support comprehensive research and development facilities related to</p> <ul style="list-style-type: none"> <li>• Turbine, generator and auxiliary systems,</li> <li>• Hydro-geological (including GIS) potential, and</li> <li>• Ecological, watershed and catchments area-wise investigation related to hydro potential of Nigeria.</li> </ul>
<b>Expected results</b>	A network of robust and accurate database management system that will enable sustainable water resources management.
<b>Target area / place</b>	Nigeria
<b>Arrangement(s) for financing</b>	Federal Government of Nigeria; ADB / NEPAD / ECOWAS
<b>Monitoring process and time frame</b>	3 years. The Federal Ministry of Water Resources will monitor the project within Nigeria's borders
<b>Other relevant information</b>	The project is also a feeder programme to the Regional Centre on small Hydropower scheme which centre is being proposed in Abuja, Nigeria.
<b>Contact person</b>	<b>Mr M.I. Nwabufo</b> , Federal Ministry of Water Resources, P.M.B 159, Garki, Abuja, Nigeria, Tel: + 234 9 2342520, Fax: + 234 9 2343714, Email: mnwabufo@yahoo.com



## Institutional Cooperation with Developing Countries

<b>Region / country</b>	Europe / Norway
<b>Leading actor(s)</b>	<b>Norway / Ministry of Foreign Affairs</b>
<b>Participating actor(s)</b>	Norwegian governmental institutions and governments of developing countries
<b>Main objective(s)</b>	<p>Access to energy is a precondition for economic growth and social and political development. For the poor to have access to adequate energy supplies, production has to increase. The main focus must therefore be on ensuring adequate, affordable and sustainable energy supplies. Norway supports broadly based cooperation initiatives with the aim of achieving increased access to modern energy services and development of environmentally friendly energy systems Norway will continue to actively support the improvement of national systems for the management of energy resources. Norway's particular expertise and experience in hydropower development will be made available to the country concerned. Public participation in the decision-making process will ensure that all interests are identified and taken into consideration for a balanced long-term development for the benefit of the population. Actions are under implementation or being prepared in the following countries: Angola, Bhutan, Vietnam, East-Timor, Mozambique, Uganda, Nepal and Sri Lanka.</p>
<b>Contents</b>	Institutional cooperation between Norway and developing countries.
<b>Expected results</b>	Strengthened institutions and capacity at regional and national levels. More emphasis on renewable and sustainable energy systems
<b>Target area / place</b>	Norway, Angola, Bhutan, Vietnam, East-Timor, Mozambique, Uganda, Nepal and Sri Lanka
<b>Arrangement(s) for financing</b>	In addition to the WEHAB (Water, Energy, Health, Agriculture and Biodiversity initiative by UN Secretary General Kofi Annan) commitments, there is financing over the state budget for bilateral cooperation. At present the total contribution to the above mentioned activities is about NOK 500 million per year.
<b>Monitoring process and time frame</b>	Each activity / project has its own monitoring process and time frame.
<b>Contact person</b>	<b>Ms Inger-Marie Bjonness</b> , Ministry of Foreign Affairs, PO Box 8114 Dep, 0032 Oslo, Norway Tel.: + 47 22 24 36 06 Fax: + 47 22 24 27 82; Email: <a href="mailto:ibj@mfa.no">ibj@mfa.no</a>
<b>Link</b>	<a href="http://www.mfa.no">www.mfa.no</a>





## Strengthening of the Norwegian Renewable Energy Policy

<b>Region / country</b>	Europe / Norway
<b>Leading actor(s)</b>	<b>Norway / Ministry of Petroleum and Energy</b>
<b>Participating actor(s)</b>	Government, local authorities, industry
<b>Main objective(s)</b>	<p>Significant growth in renewable energy production and increased energy efficiency; significant increase in wind power production:</p> <ul style="list-style-type: none"> <li>• Minimum 3 TWh annual production by the end of 2010;</li> <li>• Develop a mandatory renewable energy certificate market to be introduced in 2006.</li> </ul> <p>Significant increase in heat production (district heating) based on renewable energy:</p> <ul style="list-style-type: none"> <li>• Minimum 4 TWh annual heat production by the end of 2010;</li> <li>• Increased efforts for reducing market barriers, i.e. financing mechanism for heat distribution in particular</li> </ul> <p>Increase energy efficiency:</p> <ul style="list-style-type: none"> <li>• Particular focus on industry, buildings and end-users;</li> <li>• Information, education and training, and investment support.</li> </ul>
<b>Contents</b>	The Norwegian Parliament has approved the increased efforts in May 2004.
<b>Expected results</b>	By the end of 2010, a minimum of 10 TWh annual increased renewable energy production and energy efficiency, which is close to 10 % of the Norwegian electricity consumption.
<b>Target area / place</b>	Norway
<b>Arrangement(s) for financing</b>	Financial support is given from the Energy Fund (managed by Enova SF). The Energy Fund has been increased to approx. EUR 70 million for the fiscal year 2004.
<b>Monitoring process and time frame</b>	Yearly reporting by Enova SF, state-owned company for supporting increased renewable energy production and energy efficiency. Mid-term and final evaluation of the efforts and of Enova in 2005 and 2010 respectively.
<b>Other relevant information</b>	The efforts are part of an ongoing 10-year programme, which was enhanced and strengthened by the Norwegian Parliament in 2004.
<b>Contact person</b>	<b>Mr Ove Flataker</b> , Ministry of Petroleum and Energy, Email: <a href="mailto:ove.flataker@oed.dep.no">ove.flataker@oed.dep.no</a>
<b>Link</b>	<a href="http://www.oed.dep.no">www.oed.dep.no</a>





## 1) Small Hydropower Development and 2) Increased Power from existing Hydropower Schemes

<b>Region / country</b>	Europe / Norway
<b>Leading actor(s)</b>	Norway / Norway Water Resources and Energy Directorate (NVE)
<b>Participating actor(s)</b>	Government, University Research Units, Energy Industry
<b>Main objective(s)</b>	<ol style="list-style-type: none"> <li>1) Promote rural development by facilitating new local electricity generation from small hydro. Highlight understanding of the resource and develop new technology to cut cost and environmental impacts.</li> <li>2) Promote energy efficiency in existing hydropower plants for increased generation capacity, peak power capacity at low environmental cost. Existing plants with reservoir capacity is the “storage” for increased capacity of wind power generation and run of river small hydro</li> </ol>
<b>Contents</b>	<ol style="list-style-type: none"> <li>1) New on resource mapping, methodology and tools (GIS) developed in 2003. New on research projects. Additional on information to Stakeholders.</li> <li>2) New focus on security of supply</li> </ol>
<b>Expected results</b>	<ol style="list-style-type: none"> <li>1) Between 2.5 and 5 TWh/annual production developed by 2015</li> <li>2) Electricity supplies system improved by additional 3 TWh capacity for reservoir hydropower. Ability to receive large scale wind generation</li> </ol>
<b>Target area / place</b>	Norway
<b>Arrangement(s) for financing</b>	Norwegian Government, through Norway Water Resources and Energy Directorate
<b>Monitoring process and time frame</b>	Monitoring according to Norway Water Resources and Energy Directorate standards.
<b>Contact person</b>	<b>Mr Torodd Jensen</b> , NVE, Middelthunsgt 29, Post Box 5091 Maj, 0301 Oslo, Norway, Tel.: +47 22959595, Fax: +47 22959000, Email: tje@nve.no
<b>Link</b>	<a href="http://www.nve.no">www.nve.no</a>



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## School Programme for Application of Resources and Energy (SPARE)

<b>Region / country</b>	Europe / Norway
<b>Leading actor(s)</b>	<b>Norway / Ministry of Foreign Affairs; Norwegian Society for the Conservation of Nature</b>
<b>Participating actor(s)</b>	National NGOs, schools, educational authorities, energy experts, Global Environment Facility (GEF)
<b>Main objective(s)</b>	To give students in preliminary schools all over Eastern Europe, Caucasus and Central Asia (EECCA) region knowledge and awareness on renewable energy and sustainable energy consumption
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Producing and distributing educational material for preliminary schools in Russian and national languages in all participating countries.</li> <li>• RE-training teachers in cooperation with national institutes.</li> <li>• Involvement of families and local society.</li> <li>• Focus on practical measures for application of new renewable energy sources and energy saving for schools and household needs.</li> <li>• Based on the increased interest from schools and NGOs, simple methods for demonstration and introduction of renewables are developed as additional and following up activities to the energy efficiency programme.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Systems for wide dissemination of the project are established in all participating countries.</li> <li>• Cooperation with educational and environmental authorities is established in all participating countries.</li> <li>• Good systems for teaching of teachers in energy issue are established in all countries.</li> <li>• Good system and materials for dissemination of experience on self-construction courses of solar heaters for household needs is established.</li> <li>• Well-developed network of main NGOs and ministerial stakeholders in all countries.</li> <li>• Involved NGOs capacity in promotion of renewable energy and education for substantially developed.</li> </ul>
<b>Target area / place</b>	Eastern Europe, Caucasus and Central Asia region
<b>Arrangement(s) for financing</b>	The Norwegian Ministry of Foreign Affairs and the Norwegian Ministry of Environment support SPARE in the EECCA countries, by approximately EUR 200,000 per year. MS P GEF project in Russia.
<b>Monitoring process and time frame</b>	(not specified)
<b>Contact person</b>	<b>Mr Dag A. Hoystad</b> , Bruksvn. 17 B, N-1390 Vollen, Tel.: +47 66901508, Fax +47 66901509; Email: spare@naturvern.no,
<b>Link</b>	www.spare.net.ru; www.naturvern.no/spare



## Pakistan Renewable Energy Initiatives

<b>Region / country</b>	South Asia / Pakistan
<b>Leading actor(s)</b>	<b>Pakistan / Alternative Energy Development Board (AEDB) – Government of Pakistan</b>
<b>Participating actor(s)</b>	Public-private sector
<b>Main objective(s)</b>	To achieve a 10% share of total electricity generation in Pakistan through Renewable Energies by the year 2015.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• To make policies, give incentives, and develop tax structures for creating an enabling environment for Renewable Energies in Pakistan.</li> <li>• To engage in a broad awareness campaign for the use of renewable energy to attract the private sector.</li> <li>• Guaranteed Power Purchase to Private Sector at viable rates.</li> <li>• Remote area electrification.</li> <li>• Initiation of projects in Wind, Solar, Bio-mass, Bio-gas, Microhydel, Fuel Cells and other RE fields to achieve the target.</li> <li>• Strengthening of existing research institutions.</li> <li>• Engaging in the transfer of the state of the art know how on renewable energy technologies to local research institutions and private industries in Pakistan.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• More than 2.500 MW of electricity generated through Renewable Energies in Pakistan by year 2015.</li> <li>• Enabling environment for the private sector to invest in Renewable Energies created so that the growth is sustainable.</li> <li>• More that 50,000 villages electrified.</li> </ul>
<b>Target area / place</b>	Pakistan
<b>Arrangement(s) for financing</b>	Government of Pakistan has taken the initiative and committed funds for the pilot and demonstration projects of 5.000 solar homes, more than 2 MW wind energy and 100 units of 5 kW of microhydel. Additional assistance from Donor agencies (GTZ, ADB, GEF, UNDP) and other sources has already been sought for joint projects, seminars and awareness campaign.
<b>Monitoring process and time frame</b>	A phase-wise approach will be adopted, short-term targets will be made and regular monitoring will be done by AEDB to achieve the long-term target of 10% by year 2015.
<b>Other relevant information</b>	<p>AEDB has already initiated following projects in Pakistan:</p> <ul style="list-style-type: none"> <li>• 100 MW Wind Energy Project</li> <li>• 5000 solar homes project</li> <li>• Awareness Campaign</li> </ul>
<b>Contact person</b>	<b>Dr Nasim A Khan, Member Technical</b> , Alternative Energy Development Board, 344-B, Prime Minister's Secretariat, Islamabad, Pakistan. Tel.: + 92 51 9223427, Fax: + 92-51-9205790; <b>Mr Irfan Afzal Mirza, Director Technical</b> , Alternative Energy Development Board, 347-B, Prime Minister's Secretariat, Islamabad, Pakistan. Tel: +92-51-9008313, Fax: +92-51-9205795, Email: irfanmirza@aedb.org
<b>Link</b>	<a href="http://www.aedb.org">www.aedb.org</a>



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## Promotion of Renewable Energy Development in Peru

<b>Region / country</b>	Latin America / Peru
<b>Leading actor(s)</b>	<b>Peru / National Environmental Council (CONAM) / National Environmental Fund (FONAM)</b>
<b>Participating actor(s)</b>	Ministry of Energy and Mines, Ministry of Agriculture, National Science and Technology Council, Ministry of Foreign Affairs, NGOs
<b>Main objective(s)</b>	Promotion of the development of a renewable energy market in the Country, to cover the energy demand in urban and rural areas.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Create institutional mechanisms to finance renewable energy projects, to support the elaboration of projects proposals and the following execution.</li> <li>• Elaboration and update of maps of Renewable Energy Sources</li> <li>• Create a Technical Group – with the participation of national stakeholders and decision makers - to define national strategies for RE</li> <li>• Realise technical studies to identify specific institutional and legal barriers that impede the introduction of RE technologies in the Peruvian electric market.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Institutional finance mechanisms to fund renewable energy created by 2006</li> <li>• The RE maps available to public and private investors</li> <li>• At least one project in wind, hydro (up to 10 MW), solar (PV and thermal) and biomass executed before 2008. With a maximum installed total capacity of 100 MW</li> <li>• Technical Group conformed and supporting national decision makers in the introduction of national policies frameworks and strategies which facilitate the development of the RE markets.</li> </ul>
<b>Target area / place</b>	Peru
<b>Arrangement(s) for financing</b>	A commitment of National entities, private companies and multilateral financial institutions to establish appropriate financing mechanisms
<b>Monitoring process and time frame</b>	All the activities will be monitored by CONAM and FONAM in close coordination with the rest of participants. The proposed actions will be scheduled and completed in a time frame of four years.
<b>Contact person</b>	<p><b>Mr Carlos Loret de Mola</b>, President, CONAM, Av. Guardia Civil 205, San Isidro, Lima, Peru, Tel.: +51 1 2255370 Fax: +51 1 2256373, Email: <a href="mailto:cldemola@conam.gob.pe">cldemola@conam.gob.pe</a>;</p> <p><b>Ms Julia Justo</b>, Executive Director, FONAM, Hermanos Quinteros 103, Surco, Lima, Peru, Tel.: +51 1 4496200 Fax: +51 1 4496200, Email: <a href="mailto:jjusto@fonamperu.org">jjusto@fonamperu.org</a></p>
<b>Link</b>	<a href="http://www.conam.gob.pe">www.conam.gob.pe</a> / <a href="http://www.fonamperu.org">www.fonamperu.org</a>



## Doubling the Generating Capacity from Renewable Energy Sources by 2013

<b>Region / country</b>	Asia / Philippines
<b>Leading actor(s)</b>	<b>Philippines / Department of Energy</b>
<b>Participating actor(s)</b>	Department of Environment and Natural Resources (DENR), Legislative Branch, Local Government Units (LGUs), National Transmission Corporation (TransCo), Electric Cooperatives and Distribution Utilities, donor agencies, funding institutions (e.g. multi-lateral and bilateral funding agencies), private sector investors
<b>Main objective(s)</b>	To increase renewable energy-based capacity by 100% by 2013, increase efficiency and substantially contribute to the protection of the environment and contribute to the economic growth of the countryside through rural electrification.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Preference to the development and utilisation of RE over hydrocarbons, encourage the use of RE for rural development and off-grid electrification, endorse RE projects as “priority” for avilment of special tax privileges, and prioritise RE for endorsement for bilateral and multilateral financing;</li> <li>• Promote wide-scale power and non-power use of RE as a cleaner energy choice, introduce market-based incentives / financing schemes, and pursue both national and international cooperation programme on RE technology transfer.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Double installation of generating capacity from renewable energy sources to approximately 4,700 MW, enabling the Philippines to be the largest geothermal energy producer in the world, the leading wind energy producer in Southeast Asia and to double its hydro capacity by 2013</li> <li>• To become a regional solar cell manufacturing export hub within ASEAN region, and to increase the non-power contribution of renewable energy to the energy mix.</li> </ul>
<b>Target area / place</b>	Philippines
<b>Arrangement(s) for financing</b>	<ul style="list-style-type: none"> <li>• The Government will continue to promote private sector participation in the development of renewable energy in the country. RE investments in the amount of PHP 295,28 billion and PHP 106,01 billion for rural electrification and energy efficiency programmes shall be offered for consideration by the private sector.</li> <li>• Government shall undertake financing for investments promotion through RE Trade Mission, holding of business meetings and other fora, and the preparation and development of RE Investment Kits.</li> </ul>
<b>Monitoring process and time frame</b>	The programme will be implemented within the next ten years. The Department of Energy, through the Energy Utilisation Management Bureau will supervise the implementation of the programme.
<b>Contact person</b>	<p><b>Mr Vicente S. Pérez, Jr.</b>, Secretary, Department of Energy, Merritt Road, Fort Bonifacio, Taguig, Metro Manila, Philippines, Tel.: + 632 840-2192 / 2286, Fax: + 632 840-1731, Email: vperez@doe.gov.ph;</p> <p><b>Ms Teresita M. Borra</b>, Director, Energy Utilisation Management Bureau Department of Energy, Merritt Road, Fort Bonifacio, Taguig, Metro Manila, Philippines, Fax: +632 840-2289, Email: tborra@doe.gov.ph</p>



## Renewable Energy and Energy Efficiency Partnership (REEEP)

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>Renewable Energy and Energy Efficiency Partnership</b>
<b>Participating actor(s)</b>	Governments: UK, Austria, US, Italy, Ireland, Netherlands, Spain, Ghana, South Africa, the Philippines, Sri Lanka, Indonesia, Germany and Brazil. Businesses, NGOs and international organisations including: BP, Shell, Chinese Renewable Energy Industry Association, WWF International, European Commission, United Nations Industrial Development Organisation (UNIDO), United Nations Environment Programme (UNEP). For a full list of partners see link below
<b>Main objective(s)</b>	To share knowledge, communicate across national boundaries and work to spread best practice in order to overcome the barriers to the development of renewable energy and energy efficiency.
<b>Contents</b>	<p>REEEP is the only systematic attempt to build human and institutional capacity for REES market growth and innovation from the bottom up on a global basis. REEEP aims to accelerate such institutional change, by:</p> <ul style="list-style-type: none"> <li>• Enhancing stakeholder participation and interaction, thus enabling greater sharing of information and improved understanding of lessons being learnt on REES policy, regulation and financing. The development and provision of network services and targeted forums is particularly relevant in this respect</li> <li>• Building the necessary human and institutional capacity for the market development of REES by developing and disseminating user-friendly tools for scaling up or replicating good policy, regulatory and financing practice</li> <li>• Catalysing the development of financing funds and facilities for REES, through supporting and promoting the introduction of new and innovative approaches</li> <li>• Building a strong constituency of sustainable energy financiers and investors, by establishing a forum to share information on the needs of the REES market</li> </ul>
<b>Expected results</b>	<p>A three year work programme, has been drawn-up, covering the period from April 2005 to March 2008, which provides the basis for REEEP to make a decisive contribution to bringing about the following tangible outcomes over the next decade:</p> <ul style="list-style-type: none"> <li>• Doubling the current projected rate of REES investment</li> <li>• Threefold increase in the rate of annual renewable energy installations</li> <li>• Implementation of economy-wide national energy efficiency programmes in all REEEP Partner countries</li> <li>• Widespread fuel substitution by REES throughout all sectors of the economy</li> <li>• Significant reduction in cost of solar PV installations through market growth</li> <li>• Increased access to energy services to achieve Millennium Development Goals</li> <li>• Widespread REES in rural areas</li> </ul>



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	<ul style="list-style-type: none"><li>• Rapid growth of the REES manufacturing and services industry</li><li>• Major R&amp;D programme for the next generation of REES</li></ul> <p>The programme of work can be found on the REEEP website and will evolve over time to meet the needs and expectations of the Partners</p>
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Financial commitments have so far been made by the following Governments: the UK, Austria, US, Ireland, Italy, Netherlands, Spain as well as the European Commission. The UK Foreign and Commonwealth Office has already committed over GBP 2 million for funding REES projects on the ground and more is planned. Further funding from donors and Partners is being sought.
<b>Monitoring process and time frame</b>	The International Secretariat, in consultation with regional REEEP Secretariats and the REEEP Programme Board, will develop a robust monitoring and evaluation process for measuring REEEP's global impacts and progress towards specific objectives and outcomes set out in the Programme of Work. REEEP's impact is likely to be achieved over a ten-year timeframe and progress will need to be measured and evaluated over this period.
<b>Contact person</b>	<b>Dr Marianne Osterkorn</b> , REEEP International Director, REEEP Secretariat, Room D1732 and D1733, Vienna International Centre, Austria; Tel.: + 431 26026 3679, Email: <a href="mailto:marianne.osterkorn@reep.org">marianne.osterkorn@reep.org</a>
<b>Link</b>	<a href="http://www.reep.org">www.reep.org</a>





## National Strategy for Renewable Energy Development for Poverty Alleviation

<b>Region / country</b>	Senegal
<b>Leading actor(s)</b>	<b>Senegal / Ministry of Energy and Mines</b>
<b>Participating actor(s)</b>	Relevant government agencies, private sector, civil society, local stakeholders
<b>Main objective(s)</b>	Improve access to energy services for a wider number of people by developing the renewable energies, which exist in large quantities in the country, in connection with local development plans for poverty alleviation in order to better contribute in achieving the millennium development goal.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Reinforcement of the institutional and legal framework to promote the development of RE market;</li> <li>• Reinforcement of the involvement of the private sector;</li> <li>• Reinforcement of the existing training and research systems;</li> <li>• Encourage local production of RE appropriated equipments;</li> <li>• Launching new approaches in technology transfer.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Better integration of RE in the overall development policies (from less than 1% up to 15% of share in the energy balance of Senegal by 2025);</li> <li>• Improvement of rural motorisation for income generating activities;</li> <li>• Raising the rural electrification rate from presently 8% to 60% by 2025.</li> </ul>
<b>Target area / place</b>	Senegal
<b>Arrangement(s) for financing</b>	Government of Senegal, public private partnership, multi and bilateral funding
<b>Monitoring process and time frame</b>	Periodical reports and auditing
<b>Other relevant information</b>	Over the past 30 years Senegal has collected substantial experiences in RE development that need to be linked with poverty alleviation policies
<b>Contact person</b>	<b>Mr Madicke Niang</b> , Minister of Energy and Mines, Tel.: +221 8497167 Fax: +221 823 44 70



## Government of Sierra Leone – UNDP Initiative

<b>Region / country</b>	Africa / Sierra Leone
<b>Leading actor(s)</b>	<b>Sierra Leone / Ministry of Energy and Power (MEP)</b>
<b>Participating actor(s)</b>	National Power Authority (NPA)
<b>Main objective(s)</b>	Access to modern energy services for the rural sector of Sierra Leone.
<b>Contents</b>	<ul style="list-style-type: none"><li>• Set up solar home systems in 100 villages</li><li>• In addition to solar, to identify other accessible renewable energy resources as possible resource:<ul style="list-style-type: none"><li>○ Biomass (with crop residues having an annual energy potential of at least 2,706G Wh),</li><li>○ Wind (with speed that may very well exceed 5m/s), and</li><li>○ Hydro power (with a total countrywide potential of about 1.200MW)</li></ul></li></ul>
<b>Expected results</b>	<ul style="list-style-type: none"><li>• Promote sustainable human development,</li><li>• Reduce poverty and promote sustainable human development in the country.</li></ul>
<b>Target area / place</b>	Sierra Leone
<b>Arrangement(s) for financing</b>	The United Nations Development Programme (Sierra Leone) funds the project. The amount involved for a modest electrification of 100 rural households is estimated at USD 300,000 which is completely covered by UNDP programme. The Ministry of Energy and Power will be responsible for planning and coordinating the implementation of the project.
<b>Monitoring process and time frame</b>	The time frame for the commitment is 2004-2007, the period covered by Sierra Leone's first PRSP. Monitoring will be done via the "access to electricity" indicator, with a baseline of 10%, that being the percentage of the population that currently has access to electricity.
<b>Other relevant information</b>	Alliances are expected to be formed at Renewables 2004 to facilitate the exploitation of these resources in an effort to diversify the country's energy supply resources and hence enhance its energy security.
<b>Contact person</b>	<b>Dr Shem-Gbay Mohamed Swaray</b> , Ministry of Energy and Power, Freetown, Sierra Leone, Tel.: + 232 30 238148, Fax: + 232 22 22 4067, Email: swaraym@hotmail.com



## Increasing the Share of Renewables and Improving Efficiency of Energy Use in Slovenia

<b>Region / country</b>	Europe / Slovenia
<b>Leading actor(s)</b>	<b>Slovenia / Ministry of the Environment, Spatial Planning and Energy</b>
<b>Participating actor(s)</b>	Slovenian Government, Agency for Efficient Use of Energy and Renewables, local authorities, public and private actors.
<b>Main objective(s)</b>	To increase the share of renewables in the primary energy balance and to improve the efficiency of energy use
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Financing measures: CO<sub>2</sub> tax, incentives for private investments in the energy sector, reduction of energy costs through contractual arrangements, subsidies for innovative energy technologies and investments for energy efficiency, low-rate credits for small and medium sized enterprises, incentives for investments in energy efficiency of old buildings and new higher-standard buildings.</li> <li>• Administrative measures: priority use of renewables or cogeneration instead of fossil fuels, public procurement of energy with a mandatory share of renewable energies, strategy for the development of renewable sources for electricity production, mandatory minimal share of bio fuels, special demands concerning energy efficiency of integrated environmental permits as set in the IPPC Directive of the EU, special requirements concerning energy characteristics of buildings, energy equipment and products, promotion of district heating and cooling systems Options for installing cogeneration units must be explored with each new installation or changing of boiler with more than 500 kW heat power.</li> <li>• Education: informing consumers, raising awareness and ensuring qualifications of energy consumers and other target groups, developing educational programmes on efficient energy use for primary schools.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased share of renewables in heating, electricity and transport.</li> <li>• Possible diversification of renewable energy sources.</li> <li>• Increased efficiency of energy use in industry, buildings, public sector (schools, hospitals, etc.) and transport.</li> <li>• Increased share of electricity production from cogeneration.</li> </ul>
<b>Target area / place</b>	Slovenia
<b>Arrangement(s) for financing</b>	Funding allocated by the Government will be optimised to ensure the start of maximum number of projects, but will also aim to involve private sector investments.
<b>Monitoring process and time frame</b>	Annual energy review will be carried out as determined by the National Energy Programme that sets goals to be achieved until 2010.
<b>Contact person</b>	<b>Mr Djordje Zebeljan</b> , State Secretary for Energy, Ministry of the Environment, Spatial Planning and Energy, Dunajska 48, 1000 Ljubljana, Slovenia, Tel.: + 386 1 478 3167, Fax: + 386 1 478 7182, Email: <a href="mailto:djordje.zebeljan@gov.si">djordje.zebeljan@gov.si</a>
<b>Link</b>	<a href="http://www.gov.si/mop/">www.gov.si/mop/</a> ; <a href="http://www.gov.si/aure/">www.gov.si/aure/</a>



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## The White Paper, the Energy Efficiency and the Appliance Labelling Programme

<b>Region / country</b>	Africa / Republic of South Africa
<b>Leading actor(s)</b>	<b>South Africa / Department of Minerals and Energy</b>
<b>Participating actor(s)</b>	Key government departments, Danish International Development Agency (DANIDA), Eskom, Global Environmental Facility (GEF), National Electricity Regulator, Central Energy Fund, Development Bank of Southern Africa, World Bank, Association of Commercial Building Owners, Esco's, South African Qualifications Authority, Energy-Sector Education and Training Authority, educational institutions, The Appliance Labelling Industry, consumer groups, European Union (EU), US Agency for International Development (USAID)
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To implement the White Paper on Renewable Energy target;</li> <li>• Contribute to achieve the Public and Commercial Sector Energy Efficiency target of a 15% demand reduction by 2014;</li> <li>• Contribute to achieve the Residential Sector Energy Efficiency target of a 10% demand reduction by 2014.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• 10,000 GWh (0.8 Mtoe) renewable energy contribution to final energy consumption by 2013, from biomass, wind, solar and small-scale hydro;</li> <li>• A Renewable Energy Strategy is being developed to implement the White paper on Renewable Energy Policy and target;</li> <li>• Energy Efficiency Standards for Commercial and Public Buildings;</li> <li>• Energy Management Systems;</li> <li>• Appliance labelling.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• An estimated, cumulative, renewable energy capacity by end of 2013 of approximately 1667 MW which would result in 10 000 GWh consumed over the 10 year period</li> <li>• Increased Energy Efficiency</li> </ul>
<b>Target area / place</b>	South Africa
<b>Arrangement(s) for financing</b>	The participating actors finance the actions.
<b>Monitoring process and time frame</b>	The White Paper is to be implemented from July 2004 until June 2013. The Energy Efficiency Strategy and the Appliance Labelling Programme will be implemented over 10 years. The implementation will be monitored through specific monitoring system, which is under development.
<b>Contact person</b>	<b>Mr Kevin Nassiep</b> , Dept Minerals and Energy, P Bag x59, Pretoria, South Africa, Tel.: + 27 12 3179617; Fax: + 27 12 31 79511 Email: Kevin.nassiep@dme.gov.za



## 1) Regulatory Framework for Renewable Energy 2) Research and Development on Renewable Energy

Region / country	Africa / Republic of South Africa
Leading actor(s)	<b>South Africa / 1) National Electricity Regulator, 2) Department of Science and Technology</b>
Participating actor(s)	1) Energy utilities, Central Energy Fund, other energy stakeholders and the donor community, 2) research bodies
Main objective(s)	1) Development of renewable energy markets in South Africa, 2) To boost the scientific capacity in South Africa
Contents	<p>1) Regulatory Framework for Renewable Energy</p> <ul style="list-style-type: none"> <li>To ensure the integrity and fundamentals of renewable energy market development by facilitating market access, fair return on investment, quality of supply, concessions / subsidies and their compliance, technical and customer standards, monitoring and evaluation, dispute management, etc.</li> <li>To explore non-traditional funding mechanisms like Grid Feed-in Tariff, Renewable Energy Obligation, Renewable Energy Certificates and partnerships with banking institutions and other agencies to attract private financing for renewable energy development.</li> </ul> <p>2) Research and Development on Renewable Energy</p> <ul style="list-style-type: none"> <li>New programmes were initiated to support the objectives of the White paper on Renewable Energy</li> </ul>
Expected results	<p>1) Regulatory instruments and funding to ensure the target beyond the government's cumulative target of 10 000 GWh</p> <p>2) New materials and new and improved technologies to access renewable energy.</p>
Target area / place	South Africa
Arrangement(s) for financing	<p>3) Donor support for study tours / training / capacity building in countries with advanced renewable energy regulatory framework is proposed.</p> <p>4) Department of Science and Technology through the Innovation Fund and donor funding</p>
Monitoring process and time frame	<p>1) Workshop to draft regulatory framework with stakeholders in Sept. 2005. Final regulatory framework and stakeholder comments in Nov. 2005; Annual monitoring of the regulatory framework from Nov. 2006 and every year</p> <p>2) Projects will be funded in a three-year cycle and monitored through the Innovation Fund. Renewable Energy R&amp;D</p>
Contact person	<p><b>1) Mr Yaw Afrane-Okese</b>; National Electricity Regulator, PO Box 40343, Arcadia, 0007, South Africa; Tel.: +27 12 401 4721/4600, +27 84 564 2965, Fax: +27 12 401 4700/4686, Email: yaw.afrane-okese@ner.org.za; <b>2) Ms Boni Mehlo Makulu</b>, Department of Science and Technology, Tel.: + 27 12 3174345; Fax: + 27 12 3174645, Email: boni.mehlomakulu@dst.gov.za</p>



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## South African Wind Energy Programme

<b>Region / country</b>	Africa / Republic of South Africa
<b>Leading actor(s)</b>	<b>South Africa / Department of Minerals and Energy</b>
<b>Participating actor(s)</b>	Development Bank of Southern Africa, United Nations Development Programme (UNDP), Central Energy Fund, Eskom, National Electricity Regulator, public/private sector, World Bank, Global Environmental Facility (GEF) and donor community
<b>Main objective(s)</b>	To investigate the possibility of implementing the full size GEF/UNDP South African Wind Energy Programme (SAWEP) with the objective of 50 MW commercial wind farms operating by 2013.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Installation of total 50 MW grid connected wind farms by 2013</li> <li>• 50 MW wind farm capacity is regarded as the minimum installed wind farm capacity in South Africa to attract foreign investment and to establish a local manufacturing industry.</li> </ul>
<b>Expected results</b>	(a) A funding plan for 50 MW wind energy by 2013 and if viable, (b) 50 MW wind farms operating by 2013.
<b>Target area / place</b>	South Africa
<b>Arrangement(s) for financing</b>	Financing will be arranged by: Energy Development Corporation; Government once-off capital subsidy; Public/private sector equity investment; Debt financing; "Green" premium (Tradable Renewable Energy certificates etc); PCF, CDM Carbon financing; World Bank, GEF and donor financing.
<b>Monitoring process and time frame</b>	The SAWEP Investment phase is intended to be implemented over a 5-year period (2004-2009) and monitored according to GEF and the Renewable Energy Strategy monitoring process.
<b>Other relevant information</b>	A macro-economic analyses of the White Paper on Renewable Energy indicates that wind energy has the biggest potential contribution to renewable energy after the 10 000 GWh target.
<b>Contact person</b>	<b>Mr Andre Otto</b> , Dept Minerals and Energy, P Bag x59, Pretoria, South Africa, Tel.: + 27 12 3179225, Fax: + 27 12 3225224, Email: Andre.Otto@dme.gov.za





## Spanish Policy for the Support of Renewable Energy Sources

<b>Region / country</b>	Spain
<b>Leading actor(s)</b>	<b>Spain / Spanish Government</b>
<b>Participating actor(s)</b>	Ministry of Industry, Tourism and Trade, Institute for the Diversification and Saving of Energy (IDAE), Ministry of the Environment, other ministries, public authorities and civil society
<b>Main objective(s)</b>	To achieve the GHG reduction targets, to contribute to sustainable development and to improve the competitiveness of the economy by increasing the use of RE and improving the energy efficiency.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Revising the existing RE promotion plan; modifying existing policies to overcome barriers to the dissemination of RE (regulatory, financing and technological); increasing awareness among key economic actors</li> <li>• Achieving compliance of Spanish legislation with European regulations on RE (special emphasis on the obligation to underwrite the guarantee of origin of electricity generated from RE sources)</li> <li>• Approving the Royal Decree for establishing a system of payment for electricity deriving from RE; where necessary, revise the Royal Decree 436/2004, 12 March 2004 (Official State Bulletin issue 75) with a special focus on the increase of the contribution of biomass</li> <li>• Improving the co-ordination between the different levels of the national administration with competencies relating to energy</li> <li>• Exemplary disseminating and training aimed at companies &amp; end users; promoting energy saving and energy efficiency</li> <li>• Participating in international initiatives like REEEP, MEDREP and EUEI</li> <li>• Promoting research and development on the various RE technologies; the Spanish Government has passed a Technology and Research Plan for the period 2004-2007, which has a thematic priority about renewable and emerging technologies</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• By 2010, at least 12% of the energy consumed in Spain will come from renewable sources (target for electricity is 29.4%, starting out from the level of 19.4% registered in 1997).</li> <li>• The Spanish GHG reduction targets agreed upon with the EC in accordance to the Kyoto Protocol will be achieved.</li> </ul>
<b>Target area / place</b>	Spain
<b>Arrangement(s) for financing</b>	The action plan is fully financed. Detailed arrangements depend on the specific actions.
<b>Monitoring process and time frame</b>	Most of the activities are monitored and modified (if necessary) on an annual basis. Most of the monitoring is subject to the Spanish Parliament. In other cases, the IDAE takes up this role.
<b>Contact person</b>	<b>Mr Francisco Javier García Breva</b> , IDAE, Calle de la Madera, 8; 28.004 Madrid, España; Email: <a href="mailto:iblanco@idae.es">iblanco@idae.es</a> ; <a href="mailto:molano@idae.es">molano@idae.es</a>
<b>Link</b>	<a href="http://www.idae.es">www.idae.es</a>





## Supporting Energy Sector Reform in Eastern Europe

<b>Region / country</b>	Europe / Sweden
<b>Leading actor(s)</b>	<b>Sweden / Swedish Energy Agency; Swedish Environmental Protection Agency; Swedish National Forestry Board</b>
<b>Participating actor(s)</b>	Public-sector actors in Eastern Europe (specifically in Russia and Ukraine) and Swedish public-sector actors as well as private industry (Swedish utilities or companies responsible for energy supplies, Swedish suppliers of technology equipment for the use of renewable energy)
<b>Main objective(s)</b>	Increase the use of renewable energy in Eastern Europe and create prerequisites for sound national institutions in different fields influencing the national energy system.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• co-operation between public sector actors (“twinning”),</li> <li>• facilitating demonstration projects using renewable energy, for example district heating with biomass.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Policy framework and good practices introduced in the relevant countries to promote sustainable and efficient energy systems</li> <li>• Transparent systems introduced that estimate and consider the environmental cost of different energy sources.</li> <li>• Pilot projects implemented that demonstrate competitiveness from different perspectives in using different sources of renewable energy.</li> </ul>
<b>Target area / place</b>	Eastern Europe
<b>Arrangement(s) for financing</b>	Swedish public actor (e.g. Swedish Energy Agency) or co-operating partner(s) and/or the Swedish development cooperation budget finance twinning arrangements. Possible instruments for financing of demonstration projects include the “ <i>Baltic Billion Fund 2</i> ”, the Swedish development cooperation budget and/or Joint Implementation Funds.
<b>Monitoring process and time frame</b>	Different instruments, including regular meetings between the parties, external reviews, etc, will monitor the various projects within this action. Twinning cooperation between Swedish public authorities and other activities funded under the Swedish development cooperation budget in e.g. Russia and Ukraine will continue for at least 4 more years. The time frame for demonstration projects with funding from the Baltic Billion Fund will continue until the end of 2005.
<b>Contact person</b>	<b>Ms Anne-Charlotte Malm</b> , Sida, SE 105 25 Stockholm, Sweden, Tel.: +46 8 6985073, Fax: +46 8 6985330, Email: anne-charlotte.malm@sida.se
<b>Link</b>	<a href="http://www.sida.se">www.sida.se</a>



## “Swiss Energy” Programme

<b>Region / country</b>	Europe / Switzerland
<b>Leading actor(s)</b>	<b>Switzerland / Swiss Federal Office of Energy</b>
<b>Participating actor(s)</b>	Swiss Federal Government, jointly with cantonal governments, industry associations and networks
<b>Main objective(s)</b>	To increase the share of renewables in energy and electricity mixes
<b>Contents</b>	Federal and cantonal promotion of renewables (direct financing of pilot & demonstration projects, public awareness campaigns, feed-in tariffs, tax rebates, power exchanges, renewable certificates, labelling schemes).
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased electricity production from new renewables by 500 GWh (or 1% of total electricity production) from 2001 until 2010.</li> <li>• Increased heat production from new renewables by 3,000 GWh (or 3% of total heat production) from 2001 until 2010.</li> </ul>
<b>Target area / place</b>	Switzerland
<b>Arrangement(s) for financing</b>	CHF 9 million (EUR 6 million) p.a. is allocated for the promotion of new renewables and pilot & demonstration projects, leveraging about CHF 30 million (EUR 19 million) in cantonal and third party co-financing.
<b>Monitoring process and time frame</b>	Results are monitored annually. Results as of end 2002 show that electricity production from new renewables increased by 53 GWh and heat production from new renewables by 632 GWh in 2001-2002.
<b>Other relevant information</b>	The “Swiss Energy” Programme is an ongoing 10-year programme (2001-2010), and successor to the “Energy2000” Programme of the 1990s. An equally important component of “SwissEnergy”, with slightly higher financing than renewables, is dedicated to the promotion of energy efficiency.
<b>Contact person</b>	<b>Dr Walter Steinmann</b> , Director, Swiss Federal Office of Energy, 3003 Berne, Switzerland, Tel.: + 41 31 322 56 01, Fax: + 41 322 25 51, Email: <a href="mailto:walter.steinmann@bfe.admin.ch">walter.steinmann@bfe.admin.ch</a>
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## Swiss R&D Funding for Renewables

<b>Region / country</b>	Europe / Switzerland
<b>Leading actor(s)</b>	<b>Switzerland / Swiss Federal Office of Energy</b>
<b>Participating actor(s)</b>	Swiss Federal Government, academia, research institutes and industry
<b>Main objective(s)</b>	<ul style="list-style-type: none"><li>• Promotion of renewables R&amp;D</li><li>• Reduction of unit cost and enabling of market deployment</li></ul>
<b>Contents</b>	Public R&D funding for renewables is scheduled to increase (both in absolute terms and as a share of total energy R&D) from CHF 52.2 million (EUR 35 million; or 30% of public energy R&D) in 2001 to CHF 81 million (EUR 54 million) by 2007.
<b>Expected results</b>	R&D funding for renewables as the single largest energy research field (38% of total), with solar PV, chemistry and heat, geothermal, biomass and ambient heat as focus areas.
<b>Target area / place</b>	Switzerland
<b>Arrangement(s) for financing</b>	Funds allocated by Federal Government.
<b>Monitoring process and time frame</b>	The Federal Commission for Energy Research publishes a progress report every second year.
<b>Contact person</b>	<b>Dr Walter Steinmann</b> , Director, Swiss Federal Office of Energy, 3003 Berne, Switzerland, Tel.: + 41 31 322 56 01, Fax: + 41 322 25 51, Email: <a href="mailto:walter.steinmann@bfe.admin.ch">walter.steinmann@bfe.admin.ch</a>
<b>Link</b>	<a href="http://www.energie-schweiz.ch">www.energie-schweiz.ch</a> ; <a href="http://www.energieforschung.ch">www.energieforschung.ch</a>



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## Promotion of Renewables in Development Aid

<b>Region / country</b>	Europe / Switzerland
<b>Leading actor(s)</b>	<b>Switzerland / Swiss Federal Office of Energy</b>
<b>Participating actor(s)</b>	Swiss Federal Government, Ministries of Economics, Foreign Affairs (Development Aid) and the Federal Offices of Energy and Environment
<b>Main objective(s)</b>	Promote renewable energy projects within Swiss official development aid
<b>Contents</b>	Establish a common platform (since 2004), called REPIC (Renewable Energy Promotion in International Cooperation) geared to provide initial finance to help kick-start projects which require additional co-financing.
<b>Expected results</b>	Initiate and facilitate renewable projects in developing and transition countries. Facilitate networking between Swiss players in the renewables sector, financial institutions, international organisations and renewable projects/promoters in transition/developing countries.
<b>Target area / place</b>	Switzerland
<b>Arrangement(s) for financing</b>	CHF 2 million (EUR 1,3 million) over 3 years (2004-2007).
<b>Monitoring process and time frame</b>	Activities of REPIC will be reported annually
<b>Contact person</b>	<b>Dr Walter Steinmann</b> , Director, Swiss Federal Office of Energy, 3003 Berne, Switzerland, Tel.: + 41 31 322 56 01, Fax: + 41 322 25 51, Email: <a href="mailto:walter.steinmann@bfe.admin.ch">walter.steinmann@bfe.admin.ch</a>
<b>Link</b>	<a href="http://www.energie-schweiz.ch">www.energie-schweiz.ch</a> (REPIC link under construction)



## Promoting Market Penetration of Renewables and Renewable Transport Fuels

<b>Region / country</b>	Europe / Switzerland
<b>Leading actor(s)</b>	<b>Switzerland / Swiss Federal Office of Energy</b>
<b>Participating actor(s)</b>	Swiss federal Government, cantonal governments, power industry
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Promote market penetration of renewables through feed-in tariffs and labelling.</li> <li>• Promote market penetration of less CO<sub>2</sub>-intensive and renewable transport fuels</li> <li>• Reduce greenhouse gas emissions according to Kyoto targets.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Setting a minimum feed-in tariff for independent power producers; Amending the Energy Law to include a legal obligation for labelling of electricity and incorporating EE-costs into transmission tariffs is being considered; Restructuring and partial liberalisation of the Swiss electricity sector, so as to approach EU-compatibility. Long-term (2030) targets for renewables: maintain the current share of hydro-power; increase power production from new renewables six-fold to 5400 GWh (10% of total electricity production by 2030). Energy efficiency is to increase 15%, resulting in net savings of 8000 GWh</li> <li>• A fuel tax reform, which would differentiate taxation rates according to the CO<sub>2</sub>-intensity of fuels, is currently being examined and may be introduced by 2007.</li> <li>• The 2000 CO<sub>2</sub> Law mandates a 10% reduction of Switzerland's CO<sub>2</sub> emissions. The Law calls for introducing a CO<sub>2</sub> tax by 2004 at the earliest, should ongoing policy measures and voluntary agreements prove insufficient</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Further increases in the share of renewables in energy and electricity mixes.</li> <li>• The aim of the fuel tax reform is to ease taxation of fuels with lesser CO<sub>2</sub>-emissions, such as diesel, LNG/CNG and biofuels</li> <li>• Meeting Kyoto target and CO<sub>2</sub> law mandate</li> </ul>
<b>Target area / place</b>	Switzerland
<b>Arrangement(s) for financing</b>	<ul style="list-style-type: none"> <li>• Feed-in tariff: Funds allocated by cantonal governments. Federal loans could be envisaged for fulfilling the long-term goals (2030).</li> <li>• Fuel tax revenues are allocated to the overall state budget, some are directed to special funds</li> <li>• The CO<sub>2</sub> levy is to be fiscally neutral, i.e. redistributed to the population and the economy to alleviate social expenditures</li> </ul>
<b>Monitoring process and time frame</b>	Energy policy developments are monitored and impacts analysed and quantified and reported in an annual report.
<b>Contact person</b>	<b>Dr Walter Steinmann</b> , Director, Swiss Federal Office of Energy, 3003 Berne, Switzerland, Tel.: + 41 31 322 56 01, Fax: + 41 322 25 51, Email: <a href="mailto:walter.steinmann@bfe.admin.ch">walter.steinmann@bfe.admin.ch</a>
<b>Link</b>	<a href="http://www.energie-schweiz.ch">www.energie-schweiz.ch</a>



## Incentives to the Private Sector to Invest in Developing Countries: Wind Energy

<b>Region / country</b>	Africa / Tunisia
<b>Leading actor(s)</b>	<b>Tunisia / National Renewable Energies Agency (ANER)</b>
<b>Participating actor(s)</b>	Government, private sector and international financial institutions
<b>Main objective(s)</b>	Implementation of a concession-based wind energy programme in Tunisia targeting 300 MW by 2011 and 100 MW during the initial phase
<b>Contents</b>	A new approach, private sector concessions, will be adopted in order to introduce large-scale wind farms to Tunisia. Innovative sources of finance are additionally being sought to cover the additional costs compared with conventional options, in particular within the framework of international climate protection mechanisms (CDM, GEF, etc.)
<b>Expected results</b>	Fuel economies; Reduction in greenhouse gas emissions; Integration of local industry; Creation of new jobs
<b>Target area / place</b>	Tunisia
<b>Arrangement(s) for financing</b>	As this programme is to be implemented as a BOT scheme, financing will be provided by the private sector. Projects to convert wind energy into power are still uncompetitive compared with conventional power stations, leaving additional costs to cover. International cooperation is needed to play a pivotal role in helping to fund the incremental cost by strengthening partnerships of scale and also by implementing new mechanisms, notably those associated with combating climate change (green certificates, Clean Development Mechanism and others).
<b>Monitoring process and time frame</b>	2004: Preliminary call for tender 2005: Limited consultation with short listed candidates 2005-2006: Provisional award and contract negotiations 2006-2007: Construction and commissioning of a wind farm with installed capacity of 100 MW
<b>Contact person</b>	<b>Mezzanine Khalfallah</b> , Director General, 3, Rue 8000 Montplaisir BP 23-1073 Tunis; Tel.: + 216-71 782 419, Fax: + 216-71782 622, Email: dg@aner.nat.tn



## Enactment of the Laws for

### (1) Utilisation of Renewable Energy Sources for the Purpose of Generating Electricity and (2) Geothermal Resources and Spring Waters

<b>Region / country</b>	Europe / Turkey
<b>Leading actor(s)</b>	<b>Turkey / Ministry of Energy and Natural Resources</b>
<b>Participating actor(s)</b>	Energy Market Regulatory Authority (EMRA)
<b>Main objective(s)</b>	<p>(1) To reduce greenhouse gas emissions from energy sector, to protect the environment and to develop manufacturing industries which enable to benefit from renewable resources in a secure, economic and qualified manner.</p> <p>(2) To utilise geothermal energy resources and spring waters in a sustainable and effective manner by means of investigation, exploration, development, production, and their protection.</p>
<b>Contents</b>	<p>(1) To enact the Law, in order to provide separate legislation for the promotion of renewable energy sources on the generation side within the liberalized electricity market.</p> <p>(2) To draft and enact the legal framework for the effective use of geothermal resources for which up to date no specific law exists.</p>
<b>Expected results</b>	<p>(1) Increased utilisation of renewable energy sources through generation investments within competitive market conditions. Increased diversity of energy resources mix. Reduced barriers to investment due to insufficient legal frameworks for the use of renewable energy.</p> <p>(2) Increased utilisation of Turkey's geothermal resource fields having moderate to high enthalpy.</p>
<b>Target area / place</b>	Turkey
<b>Arrangement(s) for financing</b>	Fully financed by leading actor.
<b>Monitoring process and time frame</b>	The enactment of the Laws by the end of 2004.
<b>Contact person</b>	<p>(1) <b>Dr Sami Demirbilek</b>, Undersecretary, Ministry of Energy and Natural Resources, Inonu Bulvari, No. 27, Bahçelievler, Ankara, Turkey, Tel.: + 90 312 212 41 92, Fax: + 90 312 223 40 84;</p> <p>(2) <b>Mr Selahattin Çimen</b>, Deputy Undersecretary, Ministry of Energy and Natural Resources, Inonu Bulvari, No. 27, Bahçelievler, Ankara, Turkey, Tel.: + 90 312 223 43 95, Fax: + 90 312 223 61 38</p>





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## Renewable Energy Project under the Support of the World Bank to Supply Credit to Investors

<b>Region / country</b>	Europe / Turkey
<b>Leading actor(s)</b>	<b>Turkey / Industrial Development Bank of Turkey; Turkish Development Bank</b>
<b>Participating actor(s)</b>	Ministry of Energy and Natural Resources, the World Bank, The Undersecretary of Treasury, Turkish Development Bank, Industrial Development Bank of Turkey, private investors
<b>Main objective(s)</b>	To promote renewable energy investments by increasing the private sector involvement in the utilisation of renewable energy sources
<b>Contents</b>	A USD 200 million loan is being supplied by the World Bank to private enterprises engaged in investments for generation of electricity based on renewable resources. The loan will be issued through Turkish Industrial Development Bank (TSKB) and Turkish Development Bank (TKB).
<b>Expected results</b>	Encouraged private sector participation in the electricity generation from renewable energy sources.
<b>Target area / place</b>	Turkey
<b>Arrangement(s) for financing</b>	The World Bank through Turkish Development Bank (TKB) and Industrial Development Bank of Turkey (TSKB) provides financing.
<b>Monitoring process and time frame</b>	Credit mechanisms will be effective in 2004
<b>Contact person</b>	<b>Mr Orhan Beşkök</b> , Executive Vice President, Industrial Development Bank of Turkey, Tel.: + 90 212 334 50 07, Fax: + 90 212 243 29 75 Email: <a href="mailto:beskoko@tskb.com.tr">beskoko@tskb.com.tr</a>



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## Supporting the Development of Institutional Capacity to Manage Rural Electrification in Africa

<b>Region / country</b>	Africa / Uganda
<b>Leading actor(s)</b>	<b>Uganda / Government of Uganda; Sweden/ Swedish International Development Cooperation Agency (Sida)</b>
<b>Participating actor(s)</b>	World Bank
<b>Main objective(s)</b>	To create well functioning and conducive environments, and related capacity for commercially sustainable service delivery of rural / renewable energy
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Institutional reinforcing of a Rural Electrification Agency (REA) and training of staff</li> <li>• Establishing of subsidy award guidelines and operational procedures for the use of a Rural Electrification Fund (REF)</li> <li>• Preparing of bid packages for priority rural electrification projects</li> <li>• Compiling of a comprehensive list of potential project sponsors and developers.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• An appropriate REA structure in operation with required procedures, trained staff and guidelines in place.</li> <li>• REF established where the World Bank, Global Environmental Facility (GEF) and other donors channel their future contributions/ funds (instead of financing individual projects)</li> <li>• Strengthened institutional capacities to handle procurement and processes for private investments of priority projects.</li> </ul>
<b>Target area / place</b>	Uganda
<b>Arrangement(s) for financing</b>	Sweden will, through Sida, finance technical assistance for the project. Government of Uganda will allocate funds for the REA
<b>Monitoring process and time frame</b>	REA will need approx. 4 years to reach the results above. The progress will be monitored through regular meetings between Uganda and Sweden.
<b>Other relevant information</b>	A similar process is planned in Tanzania and Zambia.
<b>Contact person</b>	<b>Ms Anne-Charlotte Malm</b> , Sida, SE 105 25 Stockholm, Sweden. Tel.: +46 8 6985073, Fax: +46 8 6985330, Email: <a href="mailto:anne-charlotte.malm@sida.se">anne-charlotte.malm@sida.se</a>
<b>Link</b>	<a href="http://www.sida.se">www.sida.se</a>



## Support of Renewable Energy Development in Uganda

<b>Region / country</b>	Africa / Uganda
<b>Leading actor(s)</b>	<b>Uganda / Ministry of Energy and Mineral Development (MEMD)</b>
<b>Participating actor(s)</b>	Rural Electrification Agency (REA), Uganda; ministries responsible for agriculture, health, education, water, telecommunication, Uganda; World Bank; AfDB; Energy Advisory Project / Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Sida, NORAD, United Nations Development Programme (UNDP), JICA, private sector, Private Sector Foundation, local governments
<b>Main objective(s)</b>	To support the development of renewable energy sources so that they may significantly contribute to Uganda's energy supply, especially in the power sector, and also contribute to national and global environment protection by reducing pressure on natural resources (mainly woodlands) and reducing greenhouse gas emissions.
<b>Contents</b>	Supporting renewable energy development in Uganda
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• By mid-2005: a policy framework to facilitate renewable energy based power transactions in place</li> <li>• By 2006: solar PV systems equivalent to 320 kW<sub>p</sub> sold to households and institutions; a comprehensive database of Uganda's renewable energy resources developed; feasibility studies for the development of an additional 60 MW completed</li> <li>• By 2007: at least 33 MW installed capacity from renewable energy sources (including 9 MW from small hydros and 14 MW from bagasse co-generation) commissioned and operational</li> <li>• By 2008: large-scale dissemination of energy efficiency methods and technologies: at least 10000 improved stoves for households, 1000 improved institutional stoves and 200 improved baking ovens are in use; at least 50 industries implement the recommendations of professional energy audits</li> <li>• By 2010: one new hydropower plant (minimum 150 MW) operational, at least 90 MW capacity from renewable energy sources installed</li> </ul>
<b>Target area / place</b>	Uganda
<b>Arrangement(s) for financing</b>	The private sector is expected to finance the projects through equity and debt. The Government of Uganda, with the assistance of development partners (e.g. WB – IDA/GEF, NORAD, Sida, JICA, GTZ, ADB) is providing subsidy funds through the Rural Electrification Fund and technical assistance to the projects
<b>Monitoring process and time frame</b>	The REA monitors projects being implemented by the private sector. The MEMD monitors activities in other participating ministries and receives reports from REA on activities in the private sector
<b>Contact person</b>	<b>Mr Paul Mubiru</b> , Commissioner for Energy, MEMD, PO Box 7270 Kampala, Uganda, Tel.: + 256 41 349 010; Fax: + 256 41 349 342; Email: mubiru@energy.go.ug
<b>Link</b>	<a href="http://www.energyandminerals.go.ug">www.energyandminerals.go.ug</a>



## Energy Efficiency: The UK Government's Plan for Action

<b>Region / country</b>	Europe / United Kingdom
<b>Leading actor(s)</b>	<b>United Kingdom / Department of Environment, Food and Rural Affairs</b>
<b>Participating actor(s)</b>	Central and local government, industry, business and commerce, individual consumers
<b>Main objective(s)</b>	To assist in putting the UK on a path to cut its carbon dioxide emissions by some 60% by about 2050, as announced by the UK's Energy White Paper. Over half the expected carbon savings to 2020 are expected to come from energy efficiency. The Action Plan sets out how the UK will deliver its energy efficiency commitments, particularly for the period 2004-2010.
<b>Contents</b>	<p>Key elements of the Plan for Action are:</p> <ul style="list-style-type: none"> <li>• A new aim to save 4,2 million tonnes of carbon from households by 2010</li> <li>• A doubling in the level of activity under the Energy Efficiency Commitment from 2005 through to 2011, subject to a review in 2007</li> <li>• Changes to the Building Regulations, which will raise standards of new and refurbished buildings from 2005</li> <li>• New energy services pilots, through which energy suppliers will be able to offer innovative new energy efficiency packages to customers</li> <li>• Fiscal incentives to promote energy efficiency in households</li> <li>• Government leadership, e.g. a new commitment for central government to use only the best 25% energy performance buildings</li> <li>• The launch of the EU Emission Trading Scheme, together with Climate Change Agreements, the Climate Change Levy, and other targeted tax allowances</li> <li>• A much stronger emphasis on communicating the reality of climate change, and how energy use by individuals, business and the public sector can make a real difference</li> </ul>
<b>Expected results</b>	In total we expect the measures set out in the plan to deliver over 12 million tonnes of carbon savings to 2010 relative to the baseline of the existing UK Climate Change Programme.
<b>Target area / place</b>	United Kingdom
<b>Arrangement(s) for financing</b>	The measures set out in the Action Plan will be funded using a variety of mechanisms including direct Government Funding, re-cycling of Climate Change Levy revenues, business investment, provision of grants and loans and recovery of investment through billing of domestic consumers
<b>Monitoring process and time frame</b>	The UK Government will report annually on progress and is developing a suite of energy efficiency indicators
<b>Contact person</b>	<b>Mr Jeremy Eppel</b> , 6F/15 Ashdown House, 123 Victoria Street, London SW1E 6DE
<b>Link</b>	<a href="http://www.defra.gov.uk/environment/energy/review/index.htm">www.defra.gov.uk/environment/energy/review/index.htm</a>



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## **Extension of the Profile of the Renewables Obligation from 2010/11 to 2015/16**

<b>Region / country</b>	Europe / United Kingdom
<b>Leading actor(s)</b>	<b>United Kingdom / Department of Trade and Industry</b>
<b>Participating actor(s)</b>	Government, industry and other interested parties
<b>Main objective(s)</b>	To increase the amount of renewables electricity supplied in Great Britain under the Renewables Obligation through to 15.4% in 2015/16.
<b>Contents</b>	Our previous commitment had a rising profile for the Obligation to 2010/11 then remained at that level (10.4%) through to March 2027. To help with longer-term investments, assurance is needed that Renewables Obligation Certificates will continue to have a positive value beyond 2010.
<b>Expected results</b>	Through increased investor confidence, we would expect to see a faster rate of deployment of renewables projects.
<b>Target area / place</b>	United Kingdom
<b>Arrangement(s) for financing</b>	Electricity suppliers may pass on the costs of the Renewables Obligation to consumers.
<b>Monitoring process and time frame</b>	Ofgem produce an annual report by 1 March each year on the implementation of the Renewables Obligation.
<b>Contact person</b>	<b>Mr John Thorpe</b> , Department of Trade and Industry, EIBU, Bay 108, 1 Victoria Street, London SW1H 0ET, United Kingdom



## Renewable Obligation Certificates

<b>Region / country</b>	Europe / United Kingdom
<b>Leading actor(s)</b>	<b>United Kingdom / Department of Trade and Industry</b>
<b>Participating actor(s)</b>	Government administrations in Northern Ireland and Great Britain, energy regulation organisations, electricity suppliers in both Great Britain and Northern Ireland, renewable generating stations
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Incentives renewables generation in Northern Ireland</li> <li>• Increase the proportion of electricity consumption there that is derived from renewable sources;</li> <li>• Ensure, through a mutual recognition of ROCs between Northern Ireland and Great Britain, a UK-wide market in ROCs that will support the operation and viability of the relatively small Northern Ireland Obligation</li> </ul>
<b>Contents</b>	The mutual recognition and UK-wide trading aspects represent a co-operation between two separate regions each of which has responsibility for its own energy matters. Although the incentive is within the wider UK, its application is analogous to an arrangement between two separate states to ensure the effective operation of a market-driven renewables initiative in the smaller state.
<b>Expected results</b>	Attainment of a 12% target for Northern Ireland electricity consumption derived from renewable sources
<b>Target area / place</b>	United Kingdom
<b>Arrangement(s) for financing</b>	This will be a market-driven initiative that does not require public sector funding; financing will be spread across all electricity supply companies and may, in part be recovered as an additional charge on consumers; however, it is anticipated that the Obligation trading arrangements will generate excess funding that can be ploughed back into further renewables promotion/ development activities.
<b>Monitoring process and time frame</b>	Monitoring will be by the Energy Regulatory organisations of Northern Ireland and Great Britain and will be on an annual basis.
<b>Other relevant information</b>	Commencement of the new arrangements is planned for April 2005. Consultation and legislation processes have yet to be carried out. Northern Ireland is a relatively small region (annual electricity consumption 8 TWh compared with 340 TWh in Great Britain). Moreover, it is currently 98% dependent on imported fossil fuel for electricity generation and has little or no excess generating capacity.
<b>Contact person</b>	<b>Mr John Thorpe</b> , Department of Trade and Industry, Bay 109; 1 Victoria Street, London, SW1H 0ET, United Kingdom



## European Marine Energy Test Center

<b>Region / country</b>	Europe / United Kingdom
<b>Leading actor(s)</b>	<b>United Kingdom / Department of Trade and Industry</b>
<b>Participating actor(s)</b>	Central and local Government and regional funding organisations and industry
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Stimulate and accelerate the development of marine power devices both domestically and internationally</li> <li>• Stimulate the supply chain industry</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Provide a centre of excellence in the U.K. The site is located in Stromness, Orkney</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Availability of internationally recognised Standards for the testing, rating and certification of marine power generation devices (wave and tidal stream)</li> <li>• Greater confidence in these technologies by Industry, Investors and regulatory bodies</li> </ul>
<b>Target area / place</b>	United Kingdom
<b>Arrangement(s) for financing</b>	Funding will come from the Department of Trade and Industry and contributions will also be sought from collaborating partners. A total of six Government and Public Bodies contributed to the capital cost of building and setting up the centre. They are, Highlands and Islands Enterprise (HIE), Orkney Islands Council, DTI, Scottish Enterprise, the Carbon Trust and the Scottish Executive. HIE will also represent the interests of the Scottish Executive.
<b>Monitoring process and time frame</b>	To be agreed
<b>Other relevant information</b>	Pelamis the first full-scale wave device is currently undergoing sea trials and will shortly be moved to the test centre to begin a period of extensive testing.
<b>Contact person</b>	<b>Mr John Spurgeon</b> ; Department of Trade and Industry; 1 Victoria Street, EIBU, Bay 118, 1 Victoria Street; London SW1H 0ET, United Kingdom





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## Round 2 Offshore Wind Farm Development in the UK

<b>Region / country</b>	Europe / United Kingdom
<b>Leading actor(s)</b>	<b>United Kingdom / Department of Trade and Industry</b>
<b>Participating actor(s)</b>	Departments of Environment and Transport, Crown Estate, Office For Gas and Electricity Markets
<b>Main objective(s)</b>	To reach the UK's target of 10% of electricity generation from renewables by 2010
<b>Contents</b>	<ul style="list-style-type: none"><li>• To put in place the necessary regulatory framework and provide initial support for industry to reduce costs.</li><li>• Mixture of Capital Grants/R&amp;D support and market based support mechanism (the Renewable Obligation)</li></ul>
<b>Expected results</b>	The development of 6-7 GW of wind power offshore
<b>Target area / place</b>	United Kingdom
<b>Arrangement(s) for financing</b>	The Government of the UK has in place a number of schemes to support industry developing offshore wind.
<b>Monitoring process and time frame</b>	By 2010 the development of offshore wind energy is a key part of the UK's 10% target.
<b>Contact person</b>	<b>Mr John Overton</b> , Department of Trade and Industry, 115 1 Victoria Street, London, SW1H 0ET, United Kingdom, Tel.: +44 0 20 7215 6481, Email: john.overton@dti.gsi.gov.uk
<b>Link</b>	<a href="http://www.dti.gov.uk/energy/renewables/index.shtml">www.dti.gov.uk/energy/renewables/index.shtml</a>



## Advancing the Integrated Biorefinery

<b>Region / country</b>	North America / United States of America
<b>Leading actor(s)</b>	<b>United States / Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy; U.S. Department of Agriculture</b>
<b>Participating actor(s)</b>	National laboratories, universities, private sector, and other institutions
<b>Main objective(s)</b>	Advance the technologies necessary for integrated biorefineries producing power, process heat, liquid transportation fuels (ethanol, biodiesel) and products (plastics, paints, adhesives, solvents and other valuable chemicals today made mainly from petroleum) from biomass feedstocks at competitive market prices.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• “Sugar platform” biorefinery processes will be advanced to break biomass down to different types of component sugars for fermentation or other processing into various fuels and chemicals.</li> <li>• “Thermochemical platform” biorefinery processes will be advanced to convert biomass to synthesis gas (hydrogen and carbon monoxide) or pyrolysis oil, the various components of which could be used as fuel or converted to other fuels and chemicals by chemical catalysis.</li> <li>• Activities will be conducted in accordance with detailed programme plans, and success will be judged against the same.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• If successful, fossil fuel chemical feedstocks (petroleum, natural gas) can be displaced by “carbon neutral” feedstocks comprised of biomass.</li> <li>• To be competitive with fossil fuels, the technical goal is to reduce the cost of sugar feedstock streams suitable for fermentation from the 2003 estimated cost of USD 0,14/lb to USD 0.10/lb by 2012.</li> <li>• To be competitive with fossil fuels, the technical goal is to reduce the cost of producing syngas from USD 9,00/MMBtu (2003 estimated cost) to USD 7,38/MMBtu (our intermediate target) by 2012.</li> </ul>
<b>Target area / place</b>	This work has broad application.
<b>Arrangement(s) for financing</b>	The Department of Energy is seeking USD 72,6 million for these activities in Fiscal Year 2005, not including additional cost-shared funding from non-federal resources, in pursuit of these and associated goals.
<b>Monitoring process and time frame</b>	These goals will be integrated into programme planning and the annual budget and congressional appropriations process. Periodic peer review will be employed and technology goals will be monitored until achieved or modified.
<b>Contact person</b>	<b>Mr Doug Kaempf</b> , Biomass Technology Programme Manager, U.S. Department of Energy, Tel.: + 202 586 5264
<b>Link</b>	<a href="http://www.eere.energy.gov/biomass/">www.eere.energy.gov/biomass/</a>



## Geothermal Electricity Market Cost Target

<b>Region / country</b>	North America / United States of America
<b>Leading actor(s)</b>	<b>United States of America / Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy; Sandia National Laboratory</b>
<b>Participating actor(s)</b>	Other national laboratories, industry, universities, and other research institutions
<b>Main objective(s)</b>	To lower the cost of electricity from geothermal generation systems to a specified market price by a target date.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Geothermal electricity systems in the United States currently produce electricity at a cost of approximately USD 0,05 to USD 0,08 per kilowatt-hour.</li> <li>• The Geothermal Technology Programme, Office of Energy Efficiency and Renewable Energy, is establishing a levelised cost target of USD 0,03 to USD 0,05 per kilowatt/hour by the year 2010.</li> <li>• The Geothermal Technology Programme, Office of Energy Efficiency and Renewable Energy will be publishing and updating a detailed programme plan, which outlines the research agenda/approach, designed to achieve the specified cost targets.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Geothermal electricity will be increasingly competitive with non-renewable generated electricity.</li> </ul>
<b>Target area / place</b>	This goal is applicable in areas with proven or potential geothermal resources.
<b>Arrangement(s) for financing</b>	The United States is expected to spend approximately USD 25 million per year, not including additional cost-shared funding from non-federal resources, in pursuit of this goal and associated goals.
<b>Monitoring process and time frame</b>	This goal will be integrated into the annual budget and congressional appropriations process and monitored until successfully achieved or modified. Periodic peer review will be employed and technology goals will be monitored until achieved or modified.
<b>Contact person</b>	<b>Dr Leland (Roy) Mink</b> , Geothermal Technology Programme Manager, U.S. Department of Energy. Tel.: + 202 586 5463
<b>Link</b>	<a href="http://www.eere.energy.gov/geothermal/">http://www.eere.energy.gov/geothermal/</a>



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## Solar Photovoltaic (PV) Electricity Market Cost Target

<b>Region / country</b>	North America / United States of America
<b>Leading actor(s)</b>	<b>United States of America / Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy; National Renewable Energy Laboratory (NREL);</b>
<b>Participating actor(s)</b>	Other national laboratories, industry, universities, and other research institutions
<b>Main objective(s)</b>	To lower the cost of electricity from solar photovoltaic (PV) systems to a specified market price by a target date
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Grid connected solar PV systems in the United States today deliver electricity at a cost of USD 0.20 – USD 0.30 per kilowatt/hour.</li> <li>• The Solar Technology Programme, Office of Energy Efficiency and Renewable Energy is establishing a cost target for grid connected solar PV systems of USD 0.06 per kilowatt/hour by the year 2020.</li> <li>• The Solar Programme, Office of Energy Efficiency and Renewable Energy will be publishing a detailed programme plan, which outlines the research agenda/approach designed to achieve the specified cost target.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Solar PV will be increasingly competitive with retail, grid-connected electricity.</li> </ul>
<b>Target area / place</b>	This technology has global applications.
<b>Arrangement(s) for financing</b>	The United States is expected to spend approximately USD 75 million per year, not including additional cost-shared funding from non-federal resources, in pursuit of this goal and associated goals.
<b>Monitoring process and time frame</b>	This goal will be integrated into the annual budget and congressional appropriations process and monitored until successfully achieved or modified.
<b>Contact person</b>	<b>Mr Raymond Sutula</b> , Solar Technology Programme Manager, U.S. Department of Energy. Tel.: + 202 586 8064
<b>Link</b>	<a href="http://www.eere.energy.gov/solar/">www.eere.energy.gov/solar/</a> <a href="http://www.cleangroup.org">www.cleangroup.org</a> and <a href="http://www.cleanenergystates.org">www.cleanenergystates.org</a>



## Wind Electricity Market Cost Target

<b>Region / country</b>	North America / United States of America
<b>Leading actor(s)</b>	<b>United States of America / Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy; National Renewable Energy Laboratory (NREL);</b>
<b>Participating actor(s)</b>	Other national laboratories, industry, universities, and other research institutions
<b>Main objective(s)</b>	To lower the cost of electricity from utility scale wind generation systems to a specified market price by a target date
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Utility scale wind-generated electricity in the better wind regimes of the United States currently costs approximately USD 0.05 per kilowatt/hour at the point of production (undistributed).</li> <li>• The Wind and Hydropower Programme, Office of Energy Efficiency and Renewable Energy, is establishing an unsubsidised cost target for onshore utility-scale wind turbines of USD 0.03 per kilowatt/hour by the year 2012.</li> <li>• The unsubsidised cost target for offshore utility-scale wind turbines will be USD0.05 per kilowatt/hour by the year 2012.</li> <li>• The Wind and Hydropower Programme, Office of Energy Efficiency and Renewable Energy will be publishing and updating a detailed programme plan, which outlines the research agenda/approach, designed to achieve the specified cost targets.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Wind generated electricity will be increasingly competitive with non-renewable generated electricity.</li> </ul>
<b>Target area / place</b>	This goal is applicable in “Class 4” wind regimes (7.0 to 7.5 m/s) and greater (broad geographic application).
<b>Arrangement(s) for financing</b>	The United States is expected to spend approximately USD 40 million per year, not including additional cost-shared funding from non-federal resources, in pursuit of this goal and associated goals.
<b>Monitoring process and time frame</b>	This goal will be integrated into the annual budget and Congressional Appropriations process and monitored until successfully achieved or modified.
<b>Contact person</b>	<b>Mr Peter Goldman</b> , Wind and Hydropower Programme Manager, U.S. Department of Energy. Tel.: + 202 586 1995
<b>Link</b>	<a href="http://www.eere.energy.gov/windandhydro/">www.eere.energy.gov/windandhydro/</a>



## Renewable Energy Production Tax Credit

<b>Region / country</b>	North America / United States of America
<b>Leading actor(s)</b>	<b>United States of America / The United States Federal Government</b>
<b>Participating actor(s)</b>	Investor-owned utilities and other taxable entities generating renewable electricity.
<b>Main objective(s)</b>	To provide a financial incentive to renewable energy generators; to expand the generation and use of renewable energy.
<b>Contents</b>	<ul style="list-style-type: none"> <li>Specified renewable energy resources will be eligible for a production tax credit (PTC) of USD 0.018 per kilowatt/hour (adjusted for inflation) of electricity produced.</li> <li>A more narrow tax credit has expired, and President Bush has called on the U.S. Congress to reinstate the tax credit and expand its application.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>Continued expansion of renewable energy, particularly wind generated electricity, in the United States.</li> <li>The U.S. Energy Information Administration (EIA) estimates an additional 28.16 billion kilowatt/hours of renewable energy per year in 2025 as a consequence of this provision.</li> </ul>
<b>Target area / place</b>	The United States
<b>Arrangement(s) for financing</b>	The revenue impact of the PTC will depend on the final version adopted by the Congress. The initial ten year cost impact of the version of the legislation now under consideration is estimated to range from USD3 billion (Joint Tax Committee estimate) to USD 6.7 billion (EIA estimate).
<b>Monitoring process and time frame</b>	The PTC would be available to plants coming on line within a three-year period (to be specified) for a period of ten years. Certain biomass plants would be eligible for a USD 0.012 per kilowatt/hour PTC during a five year repayment period.
<b>Contact person</b>	(not specified)



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## Developing Renewable Energy Policies and Promoting Electricity Supply to Remote Off-Grid Areas

<b>Region / country</b>	Vietnam
<b>Leading actor(s)</b>	<b>Vietnam / Ministry of Industry</b>
<b>Participating actor(s)</b>	Vietnamese Government
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To develop a decree of the Government to encourage and advance renewable energy</li> <li>• To establish service companies in remote areas to support development and exploitation of renewable energy</li> <li>• To develop an independent hydro power system at commune level</li> <li>• To encourage technology transfer of renewable energy</li> </ul>
<b>Contents</b>	Development of renewable energy sources to integrate renewable energy into the national energy balance
<b>Expected results</b>	Electricity provided to 35.000 – 90.000 households that cannot connect to the national grid up to 2010.
<b>Target area / place</b>	Vietnam
<b>Arrangement(s) for financing</b>	Total costs: USD 46-91 million up to 2010. The level of disbursement depends on commitments of the Government and support of international organisations.
<b>Monitoring process and time frame</b>	Ministry of Industry cooperates with Ministry of Natural Resources and Environment to develop a monitoring plan (up to 2010)
<b>Other relevant information</b>	Renewable Energy Action Plan in Vietnam (development supported by the World Bank)
<b>Contact person</b>	<b>Mr Nguyen Dinh Hiep</b> , Department of Science and Technology, Ministry of Industry, No. 54 Hai Ba Trung Str., Hanoi, Vietnam, Tel./Fax: + 84-4-934 9300, Email: hiepnd@moi.gov.vn





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## Promotion and Expansion of Renewable Energies in Yemen

<b>Region / country</b>	Yemen
<b>Leading actor(s)</b>	<b>Ministry of Electricity and Public Electricity Corporation (PEC) Ministry of Water and Environment and Environmental Protection Authority (EPA)</b>
<b>Participating actor(s)</b>	Global Environment Facility (GEF), World Bank, USAID, UNDP, UNESCO, UNEP, UNIDO, GTZ, Gov. of Japan, private sector, NGOs (e.g. Socotra Conservation Fund), local councils and communities.
<b>Main objective(s)</b>	To develop and start implementation of a comprehensive National RE Strategy including clear targets to promote renewable energy in Yemen.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Increasing access to affordable and sustainable sources of energy in rural Yemen.</li> <li>• Increasing water availability through solar desalination, especially in remote communities.</li> <li>• Reducing the use of fuel wood and thus combat desertification</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Political, institutional and financial framework in place to promote RE including the removal of counter productive subsidies.</li> <li>• 10% of the budget for rural electrification will be spent for RE.</li> <li>• Implementation of at least 20 pilot projects.</li> <li>• Basic capacity amongst government and private sector.</li> <li>• Installed solar desalination technology to provide at least 20% of the population of the islands of Yemen with safe drinking water.</li> <li>• First wind energy applications implemented</li> <li>• 5% of the urban hot water supply of the capital city (Sana'a) based on solar water heaters</li> <li>• 10% increase of the energy efficiency especially for the use of fuel wood and fossil fuels</li> <li>• 5 initiatives of regional and international cooperation for the promotion of RE in Yemen implemented</li> <li>• Establishment of a regional centre of excellence on Climate Change</li> </ul>
<b>Target area / place</b>	Yemen
<b>Arrangement(s) for financing</b>	A MSP GEF proposal for a National RE Strategy and a Rural Electrification is under development. In cooperation with the GTZ, the Ministry of Electricity will complete the rural electrification strategy based on RE and start pilot installations. Further Pilot projects within the GEF-Small grants scheme, embassy funds and the Socotra Conservation Fund.
<b>Monitoring process and time frame</b>	The national RE strategy is expected to be finalised by the end of 2005. The outlined actions are implemented by 2010. Monitoring mechanisms are included in the National RE strategy and in project documents.
<b>Contact person</b>	<b>H.E. Mr Abdul Rahman Tarmoom</b> , Ministry of Electricity; P.O. Box 11422; Sana'a, Yemen; Tel.: + 967 1 326 191; Fax: + 967 1 326 214 <b>HE Dr Mohamed L. Al-Eryani</b> ; Ministry of Water and Environment, P.O. Box:19237; Sana'a, Yemen; Tel.: + 967 1 418284; Fax: + 967 1 418296



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## **2.2 Section B:**

### **Actions and Commitments by the United Nations and other International Organisations, including International Financial Institutions**



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## ADB FINESSE Africa Programme

<b>Region / country</b>	Africa
<b>Leading actor(s)</b>	<b>African Development Bank (ADB) / Sustainable Development and Poverty Reduction Unit (PSDU)</b>
<b>Participating actor(s)</b>	African Development Bank and its regional member countries
<b>Main objective(s)</b>	The proposed programme supports the overarching development objective of poverty alleviation by providing improved access to electricity in developing countries in Africa.
<b>Contents</b>	The programme will assist decision-makers in determining the appropriate policy framework and the proper regulatory and institutional set-up, and in addressing the capacity development needs of national authorities.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Establish Regional Member Countries' ownership and commitment to renewable energy and energy efficiency programmes;</li> <li>• Increase capacity of African Development Bank staff to deal with renewable energy and energy efficiency issues;</li> <li>• Operationalise renewable energy and energy efficiency in the Bank's projects and programmes;</li> <li>• Identify and prepare renewable energy and energy efficiency components to be included in Bank's lending portfolio.</li> </ul>
<b>Target area / place</b>	ADB Member Countries
<b>Arrangement(s) for financing</b>	The ADB FINESSE programme is funded by a grant from the Royal Dutch Government through its Ministry of Development Co-operation. Additional support for activities by the private sector arm of the ADB is received through technical assistance from the Danish Government.
<b>Monitoring process and time frame</b>	The ADB FINESSE Africa programme will be executed as a special programme during 2004-2007, after which renewable energy and energy efficiency projects will be mainstreamed in the normal ADB activities. The programme is subject to standard ADB procurement, monitoring and evaluation.
<b>Other relevant information</b>	Additional information about the programme, as well as copies of a monthly newsletter are available from the FINESSE team via <a href="mailto:finesse@afdb.org">finesse@afdb.org</a> .
<b>Contact person</b>	<b>Dr Yogesh Vyas</b> , Head PSDU, ADB / Temporary Relocation Agency, B.P. 323, 1002 Tunis-Belvedere, Tunisia, Tel.: +216-7110 2178, Email: <a href="mailto:y.vyas@afdb.org">y.vyas@afdb.org</a> ; <b>Dr Aimée Bella</b> , FINESSE task manager, Tel.: +216-7110 2649, Email: <a href="mailto:a.bella@afdb.org">a.bella@afdb.org</a> ; <b>Mr Wim Klunne</b> , FINESSE co-ordinator, Tel.: +216-7110 3004, Email: <a href="mailto:w.klunne@afdb.org">w.klunne@afdb.org</a>
<b>Link</b>	<a href="http://www.afdb.org">www.afdb.org</a>



## EC – ASEAN Energy Facility (EAEF)

<b>Region / country</b>	Asia / ASEAN countries
<b>Leading actor(s)</b>	<b>Association of Southeast Asian Nations (ASEAN); European Union (EU)</b>
<b>Participating actor(s)</b>	Organisations, institutions and companies from European Union (EU) and Association of Southeast Asian Nations (ASEAN)
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Increasing the security of energy supply of ASEAN and EU;</li> <li>• Increasing the economic exchanges between EU and ASEAN member countries;</li> <li>• Improving the environment at local and global level;</li> <li>• Facilitating a substantial implementation of the ASEAN Plan of Action for Energy Cooperation</li> </ul>
<b>Contents</b>	The EAEF programme will stimulate regional energy projects and initiatives proposed by the energy industry, either public or private from the EU and ASEAN. The programme will co-finance groups of EU and ASEAN energy actors for the implementation of consistent projects which have a regional ASEAN dimension and which also clearly have a real EU added value, i.e. featuring the diversity of the EU experience in terms of institutional or technological options. The EAEF supports actually 18 renewable energy projects.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Contributions to institutional development in ASEAN countries;</li> <li>• Stronger linkages between EU and ASEAN business and policy makers;</li> <li>• Regulatory frameworks conducive to investment in regional energy issues</li> <li>• Detailed investment and business opportunities for energy equipment and service suppliers</li> <li>• EU technology solutions adapted to ASEAN conditions.</li> </ul>
<b>Target area / place</b>	ASEAN countries
<b>Arrangement(s) for financing</b>	EC contribution is available 15-50 % and EUR 100.000 – 500.000 of the project total eligible costs fewer than four facilities upon response to annual Calls for Proposals until 2006.
<b>Monitoring process and time frame</b>	The members of Project Management Unit will do monitoring process of each project and the time frame for each project should not exceed 2 years.
<b>Other relevant information</b>	Financing support from EAEF can be obtained by submission of proposals to the Programme Management Unit (contacts and link see below).
<b>Contact person</b>	ASEAN Centre for Energy (ACE), Bloc X-2, Kav. 07-08, Kuningan, Jakarta 12950, Indonesia, Tel.: + 62 21 5279332; Fax: + 62 21 5279350, <b>Dr Weerawat Chantanakome</b> , Email: <a href="mailto:weerawat@aseanenergy.org">weerawat@aseanenergy.org</a> ; <b>Mr Pekka Skytta</b> , Email: <a href="mailto:pekka.skytta@aseanenergy.org">pekka.skytta@aseanenergy.org</a> ; <b>Mr Tjarinto</b> , Email: <a href="mailto:tjarinto@aseanenergy.org">tjarinto@aseanenergy.org</a>
<b>Link</b>	<a href="http://www.aseanenergy.org/EAEF">www.aseanenergy.org/EAEF</a>



## Global Partnership on Biowaste to Biofuels

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>Basel Convention Secretariat - UNEP</b>
<b>Participating actor(s)</b>	UNFCCC, Municipalities, donor parties, donor agencies (to be discussed)
<b>Main objective(s)</b>	The Secretariat of the Basel Convention (SBC) in close cooperation with the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) will design a global partnership on using biowaste as biofuels. This partnership gives the unique opportunity to meet goals and obligations of the Basel Convention on the environmentally sound management (ESM) of waste, of the UNFCCC and the Kyoto Protocol on the reduction of greenhouse gas emissions and of the Rio Declaration and the Johannesburg Declaration on sustainable development.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• To identify and analyse the extent of municipal organic wastes available for energetic use in municipalities.</li> <li>• To identify and analyse common disposal chains used for municipal waste (streams), taking into consideration collection, transportation, storage and pre-treatment as well as cost, energy consumption and greenhouse gas emissions for the whole process chain.</li> <li>• To develop and implement action plans to manage existing waste disposal facilities, e.g. landfills, waste incinerators, in an environmentally sound manner and to use their energetic potential, e.g. landfill gas, for the supply of renewable energy (heat and power).</li> <li>• To develop and implement alternative technologies and waste disposal strategies which meet the requirements on the ESM of wastes and offer the possibility to use biowastes as a biofuel, e.g. fermentation of separately collected biowaste from households, co-fermentation of biowaste in agricultural biogas plants or sewage sludge fermenters, combustion of woody waste, demolition wood and skip wood in.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Demonstrated biowaste to biofuels projects</li> <li>• Reduced greenhouse gas emissions in selected municipalities</li> <li>• Broader environmentally sound management of municipal waste</li> </ul>
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Financing will be dependent upon the satisfactory completion of a partnership forum with key stakeholders. No financing is guaranteed yet. Stakeholders and input has to be decided on.
<b>Monitoring process and time frame</b>	The Basel Convention is aiming to publicly launch this partnership at its seventh biennial Conference of Parties 25-29 October 2004. Time frame depends on project set up and agreement by partner's process.
<b>Contact person</b>	<b>Mr Milton Catelin</b> , Secretariat of the Basel Convention; 15, Chemin des Anémones, CH-1219 Châtelaine, Geneva; Tel.: + 41 22 917 8227; Fax: + 41 22 797 3454, Email: <a href="mailto:milton.catelin@unep.ch">milton.catelin@unep.ch</a> ; <b>Mr Andreas Arlt</b> , Secretariat of the Basel Convention; 15, Chemin des Anémones, CH-1219 Châtelaine, Geneva; Tel.: + 41 22 917 8364; Fax: + 41 22 797 3454; Email: <a href="mailto:andreas.arlt@unep.ch">andreas.arlt@unep.ch</a>
<b>Link</b>	<a href="http://www.basel.int">www.basel.int</a> , <a href="http://www.unfccc.int">www.unfccc.int</a>



## EBRD Action Plan for Renewable Energy

<b>Region / country</b>	Central and Eastern Europe
<b>Leading actor(s)</b>	<b>European Bank for Reconstruction and Development (EBRD)</b>
<b>Participating actor(s)</b>	Private-sector investors and renewable energy project developers
<b>Main objective(s)</b>	To facilitate the development of renewable energy projects in the EBRD's countries of operation.
<b>Contents</b>	<p>Investment in and support of a range of key projects, including</p> <ul style="list-style-type: none"> <li>• Launch of a Renewable Energy Financing Entity (REFE) to be financed by EBRD and other investors. The focus is to undertake equity investments in creditworthy renewable energy projects with investment needs up to EUR 5 million equity. EBRD seeks to raise an initial total amount of EUR 30-50 million, and to raise technical assistance of up to EUR 5 million which will be used to carry out legal, technical and commercial due diligence of selected projects.</li> <li>• Bulgarian Energy Efficiency and Renewable Energy Credit Line: This EUR 50 million facility was launched in 2004 with the participation of three Bulgarian banks. Additional banks are expected to sign up soon. The facility provides loans for small and medium sized energy efficiency and renewable energy projects in Bulgaria (currently up to EUR 1,5 million per project). Possibilities to extend the scheme by increasing the size of the overall facility and allowing larger loans for individual projects are being discussed.</li> <li>• Romanian Energy Efficiency and Renewable Energy Credit Line similar to the Bulgarian project is being considered with possible support from the Global Environment Facility (GEF).</li> <li>• Establishment of an Armenia Renewable Energy Fund capitalised by a combination of blended funding from the International Development Agency and GEF and other donor funds. EBRD is looking to provide EUR 7 million debt facility to the Fund, which will extend affordable long-term loans to qualified renewable energy projects (mini-hydro, wind, biomass). The Bank expects to close the Fund and have the project operational by the end of 2004 with a World Bank commitment approved and disbursed by mid-2005. Fund operating costs and development work will be funded by USAID and advanced disbursements from World Bank and GEF.</li> <li>• Enhancement of the EBRD Renewable Energy Web Site to facilitate access to relevant information about projects and policies. The first phase of the project involved a study of the renewable potential in each of the Bank's countries of operation. The second phase focuses on assessing renewable energy project proposals and providing a 'clearing house' facility for project developers: <a href="http://www.ebrd.com/renewables">www.ebrd.com/renewables</a>.</li> <li>• <b>Review of the EBRD's Energy Policy</b> to increasing the emphasis on renewable energy and energy efficiency.</li> </ul>
<b>Expected results</b>	Each of the above projects is designed to lead to the commissioning of new renewable energy capacity in the EBRD's countries of operation.



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<b>Target area / place</b>	EBRD's Countries of Operation
<b>Arrangement(s) for financing</b>	Arrangements for each project are developed on a case-by-case basis along the lines described above. The EBRD is, or will be, a significant investor in these initiatives, and will seek to be a catalyst for commercial financing.
<b>Monitoring process and time frame</b>	The described projects are all under development or already in implementation. Development projects are envisaged to be completed during the next 12 to 18 months.
<b>Contact person</b>	<b>Mr Peter Reiniger</b> , Director of Energy Business Group, EBRD, One Exchange Square, London EC2A 2JN, Tel: + 44-20-7338 6668, Fax: + 44-20-7338 7588, Email: <a href="mailto:reinigep@ebrd.com">reinigep@ebrd.com</a>
<b>Link</b>	<a href="http://www.ebrd.com/renewables">www.ebrd.com/renewables</a>





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## Renewable Energy Lending Objectives

<b>Region / country</b>	Europe / Luxembourg
<b>Leading actor(s)</b>	<b>European Investment Bank</b>
<b>Participating actor(s)</b>	Member States, Partner Countries, public and private business and financial sectors, European Commission
<b>Main objective(s)</b>	To support European Renewable Energy policy objectives
<b>Contents</b>	New target and timetable for Renewable Energies lending in the EU and increased Renewable Energies lending in developing countries and emerging markets
<b>Expected results</b>	Increase European Investment Bank (EIB) Renewable Energies lending in the EU to up to 50% of total lending for electricity generation by 2010 and a significant increase in EIB Renewable Energies lending in other regions
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Application of the range of European Investment Bank financial instruments
<b>Monitoring process and time frame</b>	To be monitored in the context of the European Investment Bank Corporate Operational Plan (COP)
<b>Other relevant information</b>	Related to a number of recent European Investment Bank Climate Change initiatives
<b>Contact person</b>	<b>Environmental Unit</b> , Projects Directorate, EIB, 100 Boulevard Konrad Adenauer, L-2950 Luxembourg, Tel.: +352 4379 3418, Email: <a href="mailto:pj-environment@eib.org">pj-environment@eib.org</a>
<b>Link</b>	<a href="http://www.eib.org">www.eib.org</a>



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## Promotion of the EU Environmental Technologies Action Plan (ETAP)

<b>Region / country</b>	Europe / Luxembourg
<b>Leading actor(s)</b>	<b>European Investment Bank</b>
<b>Participating actor(s)</b>	Member states, partner countries, public and private business and financial sectors, European Commission
<b>Main objective(s)</b>	To improve the development and wider use of environmental technologies, including renewable energies (e.g. biofuels, fuel cells and solar), within the framework of European Investment Bank support for Research, Development and Innovation-RDI (Innovation 2010 Initiative-i2i)
<b>Contents</b>	New policy emphasis, in accordance with European Commission policy priorities
<b>Expected results</b>	An increase in European Investment Bank lending for Research and Development in the renewable energy sector, principally in the European Union
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	The EIB offers a variety of financial services (see RDI, A Practical Investors' Guide to European Investment Bank Financing)
<b>Monitoring process and time frame</b>	To be monitored in the context of the European Investment Bank Corporate Operational Plan (COP)
<b>Other relevant information</b>	Part of the European Investment Bank strategy to promote renewable energy
<b>Contact person</b>	<b>Environmental Unit</b> , Projects Directorate, EIB, 100 Boulevard Konrad Adenauer, L-2950 Luxembourg; Tel.: + 352 43793418, Email: <a href="mailto:pj-environment@eib.org">pj-environment@eib.org</a>
<b>Link</b>	<a href="http://www.eib.org">www.eib.org</a>



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## European Investment Bank Climate Change Initiatives

<b>Region / country</b>	Europe / Luxembourg
<b>Leading actor(s)</b>	<b>European Investment Bank</b>
<b>Participating actor(s)</b>	Member states, partner countries, public and private business and financial sectors, European Commission, other international financial institutions
<b>Main objective(s)</b>	To address the issue of climate change through three new initiatives: 1) To finance investment that results in a significant reduction in CO <sub>2</sub> emissions 2) To finance the transactions costs associated with the generation of Joint Implementation (JI) and Clean Development Mechanism (CDM) credits 3) To improve the liquidity of the carbon credit market possibly through sponsoring the establishment of a compliance fund that would invest in particular in JI and CDM credits
<b>Contents</b>	Ref. 1) above: EUR 500 million (EUR 400 million in the European Union, EUR 100 million for JI and CDM projects) Ref. 2) above: EUR 10 million
<b>Expected results</b>	Generation of high quality carbon credits for use by EU Member States and European corporations for compliance purposes, project enhancement and sustainable energy development
<b>Target area / place</b>	European Union and JI and CDM countries
<b>Arrangement(s) for financing</b>	According to existing and new operational procedures
<b>Monitoring process and time frame</b>	Initially 3 years; to be monitored in the context of the European Investment Bank Corporate Operational Plan (COP)
<b>Contact person</b>	<b>Environmental Unit</b> , Projects Directorate, EIB, 100 Boulevard Konrad Adenauer, L-2950 Luxembourg, Tel.: + 352 43793418, Email: <a href="mailto:pj-environment@eib.org">pj-environment@eib.org</a>
<b>Link</b>	<a href="http://www.eib.org">www.eib.org</a>



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## International Cooperation on Bioenergy

<b>Region / country</b>	Europe / Italy
<b>Leading actor(s)</b>	<b>Food and Agricultural Organization of the United Nations (FAO)</b>
<b>Participating actor(s)</b>	United Nations Energy Unit, International Energy Agency (IEA), governments, research institutions, private sector
<b>Main objective(s)</b>	The main objective is to establish an international bioenergy cooperation scheme.
<b>Contents</b>	Developing methodological approaches and tools for utilisation of bioenergy taking into consideration <ul style="list-style-type: none"> <li>• Issues of sustainability of biomass supply systems</li> <li>• Global issues of on food security and trade</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Development of an international bioenergy information system</li> <li>• Availability of tools for policy and technical decision-making on bioenergy utilisation</li> <li>• An increased number of bioenergy projects and programmes</li> </ul>
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Partial funding is available from the technical assistance programme of FAO. Contributions will be sought from other sources (GEF, bilateral donors)
<b>Monitoring process and time frame</b>	An international programme should be in place before the start of the 2006 session of the United Nations Commission for Sustainable Development
<b>Other relevant information</b>	The potential growth of bioenergy utilisation with its direct local impacts on food security, land use, employment and rural infrastructure coupled with international impacts on trade, commodity prices and markets and the global environment require an international cooperative effort. The shift from dominantly unsustainable patterns of use to modern, efficient and clean bioenergy systems are urgent. Recently, awareness of the need to mitigate climate change has renewed the attention on bioenergy as an environmentally friendly, cost-effective and locally available source of energy and has emerged as a key factor in both developmental and environmental terms. As intersectoral cooperation is crucial to the success of bioenergy utilisation FAO proposes to join forces with others, each placing their comparative advantages at the disposal of a concerted international and intersectoral approach to promote use of bioenergy.
<b>Contact person</b>	<b>Mr Gustavo Best</b> , Senior Energy Coordinator; Environment and Natural Resources Service, Viale delle Terme di Caracalla, 00100 Rome, Italy, Tel.: + 39-06-5705-5534, Fax: + 39-06-5705-3369, Email: <a href="mailto:gustavo.best@fao.org">gustavo.best@fao.org</a>
<b>Link</b>	<a href="http://www.fao.org">www.fao.org</a>



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## Data and Structured Analysis on Renewable Energy Markets, Policies and Use in Developing Countries

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>Global Environment Facility (GEF)</b>
<b>Participating actor(s)</b>	International Organisations (GEF and its partners) and member country governments
<b>Main objective(s)</b>	To support the extension of IEA's structured analysis of GEF recipient countries by providing reliable and comparable data.
<b>Contents</b>	The GEF proposes to use its networks to provide the IEA with the data to extend their analysis to non-member GEF recipients.
<b>Expected results</b>	<ul style="list-style-type: none"><li>• Coordinated worldwide analyses and data on renewable energies</li><li>• Create a coherent and focused network on renewable energy information</li></ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	GEF provides access to studies, project reports, and project teams that it has funded and that can provide relevant data and analyses.
<b>Monitoring process and time frame</b>	GEF will work with IEA to monitor and ensure the quality of the data and analyses
<b>Contact person</b>	<b>Mr Richard H. Hosier</b> , Team Leader, Climate Change, GEF, 1818 H St., N.W. Washington DC 20433, USA, Tel.: + 1 202 458 0290, Email: rhosier@theGEF.org
<b>Link</b>	<a href="http://www.gefweb.org">www.gefweb.org</a>



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## **Finance for the Development of Markets for Renewable Energy in Countries eligible for GEF Support**

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>Global Environmental Facility (GEF)</b>
<b>Participating actor(s)</b>	International organisations
<b>Main objective(s)</b>	To create, open, and transform markets for renewable energy in developing countries
<b>Contents</b>	GEF will commit USD 100 million p.a. for high quality country-driven project proposals submitted through GEF's Implementing Agencies and Executing Agencies.
<b>Expected results</b>	This is expected to leverage a multiple of this amount in co financing, and lead to the expanded use of renewable energy.
<b>Target area / place</b>	Countries eligible for GEF support under the UNFCCC
<b>Arrangement(s) for financing</b>	<p>GEF funds.</p> <p>On the basis of GEF's co-financing requirements, the commitment is expected to support renewable energy projects with a total value of around USD 600 million p.a., i.e. to leverage more than USD 500 million p.a. in the process.</p> <p>The process of replenishing the GEF (GEF-4) will begin next year – if donor countries are generous, the GEF will be in a position to increase its commitment beyond USD 100 million in the years ahead.</p>
<b>Monitoring process and time frame</b>	<p>GEF's Implementing Agencies will monitor the projects.</p> <p>GEF's independent Monitoring &amp; Evaluation Unit will evaluate the programmes.</p> <p>The proposals approved by the GEF Council will be made public on the GEF website, and reported to the Convention of the Parties to the UNFCCC.</p>
<b>Contact person</b>	<b>Mr Richard H. Hosier</b> , Team Leader, Climate Change, GEF, 1818 H St., N.W. Washington DC 20433, USA, Tel.: +1 202 458 0290, Email: rhosier@theGEF.org
<b>Link</b>	<a href="http://www.gefweb.org">www.gefweb.org</a>



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## Consultation Forum on Renewable Energy

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>Global Environmental Facility (GEF)</b>
<b>Participating actor(s)</b>	International organisations, NGOs
<b>Main objective(s)</b>	Facilitate follow-up to the Bonn conference by helping to establish a consultation forum on renewable energy for development agencies with renewable energy operations and international agencies undertaking renewable energy analysis with a focus on sharing lessons, experiences and analyses.
<b>Contents</b>	Convene initial meeting to which GEF would invite international organisations and other key stakeholders and organisations working in the renewables area. The meeting determines how such a forum will be established and continued.
<b>Expected results</b>	The Forum provides opportunities to exchange best practice and lessons in renewable energy among relevant operational and analytical entities. The forum could be a useful link between this conference and the energy work of the Commission on Sustainable Development, and its focus of attention in 2006/07.
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	GEF covers costs of hosting initial meeting.
<b>Monitoring process and time frame</b>	To be determined collaboratively by the stakeholders.
<b>Contact person</b>	<b>Mr Kenneth King</b> , Deputy CEO, GEF, 1818 H St., N.W. Washington DC 20433, USA, Tel.: + 1 202 473 1075, Email: <a href="mailto:kking@theGEF.org">kking@theGEF.org</a>
<b>Link</b>	<a href="http://www.gefweb.org">www.gefweb.org</a>





## **Establishment of a new IEA Implementing Agreement for Renewable Energy Technology Deployment (RETD)**

<b>Region / country</b>	Europe / Italy
<b>Leading actor(s)</b>	<b>International Energy Agency (IEA)</b>
<b>Participating actor(s)</b>	Governments of Denmark, France, Germany, Ireland, Italy, and Norway with input from the European Commission
<b>Main objective(s)</b>	To establish a new approach for an accelerated and effective deployment of renewable energy technologies through international collaboration.
<b>Contents</b>	Identifying and developing effective measures: <ul style="list-style-type: none"> <li>• To overcome barriers to dissemination of renewable energy technologies;</li> <li>• To support adoption of improved RE deployment strategies by industrialised and developing countries, underpinning successful investment.</li> </ul>
<b>Expected results</b>	An Implementing Agreement (IA) for Renewable Energy Technology Deployment (RETD) will advance technical improvement and reduction of costs of RE technologies through international collaboration.
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Member Governments participating in the Implementing Agreement will finance the RETD.
<b>Monitoring process and time frame</b>	An Executive Committee, consisting of delegates appointed by each participating Member Government, will supervise the RETD. The Executive Committee will adopt an annual programme of work and budget, together with an indicative work programme and budget for the following years. RETD is planned to be a cost-sharing activity. The Executive Committee will hire and manage one or more operating agents to implement the programme.  Initially, the RETD will be established for a period of five years.
<b>Other relevant information</b>	The IEA Implementing Agreement is also open to participation by economies in transition and developing countries as well as industry and non-governmental organisations.
<b>Contact person</b>	<b>Mr Roberto Vigotti</b> , Chairman, IEA Renewable Energy Working Party, Via Regina Margherita 125, 00198 Rome, Italy, Tel.: + 39 06 8509 7036, Fax: + 39 06 8509 4751, Email: roberto.vigotti@enel.it
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## Pacific Islands Greenhouse Gas Abatement through Renewable Energy Programme (PIGGAREP)

<b>Region / country</b>	Asia / Pacific Islands (Governments of the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Island, Tokelau, Tonga, Tuvalu, Vanuatu and Papua New Guinea)
<b>Leading actor(s)</b>	<b>South Pacific Regional Environment Programme (SPREP), Global Environment Facility (GEF), United Nations Development Programme (UNDP)</b>
<b>Participating actor(s)</b>	Regional intergovernmental organisations in the Pacific, Greenpeace, WWF, NGOs, financial institutions, power utilities and private-sector institutions in the Pacific
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To reduce the long-term growth of greenhouse gas (GHG) emissions from fossil fuel uses, especially diesel.</li> <li>• To accelerate the adoption and commercialisation of feasible and applicable RE technologies (RETs).</li> <li>• To provide a sustainable supply of electricity to the 70% of the people in the Pacific Islands who still do not have access to electricity.</li> </ul>
<b>Contents</b>	The PIGGAREP will be directly linked to and build on the experiences from the European Union's Lomè II & III Pacific Regional Energy Programme (PREP), the Pacific Islands Renewable Energy Programme (PIREP) and the Caribbean Renewable Energy Development Programme (CREDP). It will also build on the experiences with the Fiji Electricity Authority's mission of "providing clean and affordable energy solutions to Fiji and the Pacific and its aim of providing all energy through renewable resources by 2011."
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Adoption of greenhouse gas emission and renewable energy targets</li> <li>• Adoption of enabling national and regional policies and the implementation of supporting capacity building activities</li> <li>• Win-win commercial transactions in the renewable energy sector</li> </ul>
<b>Target area / place</b>	Pacific Islands (enlisted above)
<b>Arrangement(s) for financing</b>	A GEF Full Size Project proposal linking to the European Union's Energy Initiative's (EUEI) confirmed funding for two regional projects in the Pacific Islands, the European Union's renewable energy assistance under the Cotonou Agreement to five PICs, related national bi-lateral projects and a leverage target of approximately USD 30 million from the private sector.
<b>Monitoring process and time frame</b>	The programme will be subject to the established review procedures of the GEF and UNDP.
<b>Other relevant information</b>	The programme will also assist PICs in their national effort to complete their second National Communication under the UNFCCC.
<b>Contact person</b>	<b>Ms Solomon Fifita</b> , Chief Technical Adviser, South Pacific Regional Environment Programme, PO Box 240, Apia, Samoa, Tel.: + 685 21929, Fax: + 685 20231, Email: <a href="mailto:SolomoneF@sprep.org.ws">SolomoneF@sprep.org.ws</a>
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## Thematic Network on Renewable Energies in the Context of Combating Desertification in Africa (TPN5)

<b>Region / country</b>	Africa
<b>Leading actor(s)</b>	<b>Secretariat of the United Nations Convention to Combat Desertification (UNCCD)</b>
<b>Participating actor(s)</b>	The TPN5 network has two focal points: The Agence Nationale des Energies Renouvelables (ANER, Tunisia), and the NGO Environnement et Développement du Tiers Monde (ENDA-TM), various public and private institutions and NGOs active in combating desertification
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To facilitate exchange of information, data, experience and traditional local know-how and practices for the promotion of renewable energies.</li> <li>• To put into operation an integrated information system, a database on renewable energies.</li> <li>• To ensure coherence and more efficient use of the programmes at sub-regional and regional level.</li> <li>• To facilitate technology transfer, scientific and technical cooperation among the members of the network, ensuring that the gender aspect (men-women) is taken into consideration.</li> </ul>
<b>Contents</b>	TPN5 is a platform on renewable energies and their interrelationship with the fight against desertification and poverty. It is a framework for dialogue and action, aiming at greater harmonisation of policies for promoting these energies.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Capacity building</li> <li>• Enhancement of local and regional resources</li> <li>• Information exchange</li> <li>• Mobilisation of financial resources in the framework of existing financial mechanisms</li> <li>• Contribution to initiatives at sub-regional and regional level</li> </ul>
<b>Target area / place</b>	African countries
<b>Arrangement(s) for financing</b>	The activities will mainly be financed by the countries, which are Parties to the UNCCD, and by international organisations (GEF, UNDP, UNEP, the World Bank, ADB, the Environment and Energy Institute of FrancoTel.: Countries, IEPF, etc.)
<b>Monitoring process and time frame</b>	Network coordinators: ANER – Tunisia (a government structure); ENDA-TM (an international NGO).
<b>Contact persons</b>	<b>Mr Naceur HAMMAMI</b> , ANER B.P. 213, 1002 Tunis, Tunisia, Tel.: + 216 71 787 700, Fax: + 216 71 784 624, Email: nhammami@aner.nat.tn; <b>Mr Moise AKLE</b> , UNCCD regional coordination unit for Africa, BP 323 1002, Tunis, Tunisia, Tel: + 216 71103691, Fax: + 216 71 832 208/351 933, Email: m.akle@afdb.org; <b>Ms Bettina Horstmann</b> , UNCCD Secretariat, Martin Luther King Str. 8, 53175 Bonn, Germany, Tel.: + 49 228 815 2816, Fax: + 49 228 815 2898, Email: secretariat@unccd.int
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## Disseminating Renewable Energy for Poverty Alleviation in ESCWA Member Countries

<b>Region / country</b>	Middle East / ESCWA Member Countries
<b>Leading actor(s)</b>	<b>United Nations Economic and Social Commission for Western Asia</b>
<b>Participating actor(s)</b>	13 Member countries from UN ESCWA region
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To improve the quality of life in rural areas by increasing energy accessibility through renewable energy;</li> <li>• To increase energy accessibility to women, to enhance their development opportunities;</li> <li>• To improve the environment, through the use of renewable energy to reduce greenhouse gases emissions;</li> <li>• To promote private sector participation, through awareness campaigns, on renewable energy market potentials and possible investment opportunities;</li> <li>• To create job opportunities on system installation, operation and maintenance.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Renewable energy assessment studies to evaluate application potentials and market opportunities;</li> <li>• Development of an Awareness Campaign for rural areas;</li> <li>• Developing means for removing barriers facing RE applications;</li> <li>• Capacity building seminars and workshops on relevant fields;</li> <li>• Demonstration of renewable energy rural electrification systems in the Yemeni villages</li> </ul>
<b>Expected results</b>	The high regional potential for renewable energy is tapped to reduce suffering from inadequate health care, education services and water supplies all restricted by lack of energy provision. Through increased energy accessibility an environment for better job opportunities is created and living conditions for women in rural areas are improved.
<b>Target area / place</b>	ESCWA region member countries.
<b>Arrangement(s) for financing</b>	UN-ESCWA has allocated USD 70,000 for preparatory activities, UNESCO Cairo has allocated USD 28,000. The project is being considered by OPEC fund and other regional funding agencies are being contacted.
<b>Monitoring process and time frame</b>	The project duration is 5 years (2003-2007), three regional capacity building workshops have already been implemented on wind and solar technologies. Project activities will be coordinated by UN-ESCWA through the identified National Focal Points (NFP) of the ESCWA Regional Mechanism On Sustainable Energy System.
<b>Contact person</b>	<b>Ms Anhar Hegazi</b> , Director of Sustainable Development and Productivity Division, Email: <a href="mailto:hegazi@un.org">hegazi@un.org</a> ; <b>Mr Mohammad Kordab</b> , Sustainable Energy Issues team leader, Email: <a href="mailto:Kordab@un.org">Kordab@un.org</a> . Economic Commission for Western Asia, PO Box. 11-8575, Riad El Solh 1107 2812, Beirut – Lebanon. Tel.: +961 1 981301, Fax: + 961 1 981510. <a href="http://www.escwa.org.lb">www.escwa.org.lb</a>
<b>Link</b>	<a href="http://www.escwa.org.lb">www.escwa.org.lb</a>



## African Rural Energy Development Facility (AREDF)

<b>Region / country</b>	Africa / Ethiopia
<b>Leading actor(s)</b>	<b>United Nations Economic Commission for Africa / Sustainable Development Division (UNECA/SDD)</b>
<b>Participating actor(s)</b>	African Development Bank (ADB), Development Bank of Southern Africa (DBSA), Bank of West African Development (BOAD), other African development financial institutions, other international development partners, United Nations Environment Programme (UNEP), African Economic Communities
<b>Main objective(s)</b>	Advocate and support the establishment of an African Rural Energy Development Facility
<b>Contents</b>	<p>Establish an AREDF with the following elements:</p> <ul style="list-style-type: none"> <li>• The Renewable Energy and EE Entrepreneurial Development Facility (REEDF): Expert technical service to RE entrepreneurs to develop ideas into investment ready document, and to provide financial intermediation service</li> <li>• The RE/EE investment funds (REEIF), support bankable projects with established positive impact on energy access of rural and peri-urban population</li> <li>• The Rural Capacity Fund for Energy (RCFE): A microcredit-type financial service to assist the rural population to access RE services.</li> <li>• Promote a strong partnership for public decision-makers and the private sector.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Development of private sector in RE services to African rural areas</li> <li>• Increased access to energy to rural population</li> <li>• Increased share of RE in the provision of energy</li> <li>• Development of productive use activities in the Rural areas with impact on poverty reduction and sustainable development</li> <li>• Development of an African energy market</li> </ul>
<b>Target area / place</b>	Africa
<b>Arrangement(s) for financing</b>	Funds will be allocated for: REEDF through partnership with donor institutions, with participation from Global Environment Facility (GEF); REEIF by development financial institutions, RCFE will operate with participation of rural people, and Rural Community based organisations (CBO).
<b>Monitoring process and time frame</b>	UN ECA must initiate a high level dialog with various partners. Agreement must be reached for feasibility and operationalisation of the facility. Initial pipeline of project to be developed within 18 to 24 month.
<b>Other relevant information</b>	AREDF requires additional support from the main development financial institutions and from economic communities of regions where activities will be launched.
<b>Contact person</b>	<b>Mr Josué Dioné</b> , UNECA/SDD, BP 3005 Addis Ababa, Ethiopia; Tel.: +251-144 34 37; Email: jdione@uneca.org



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## Andean Programme for Energisation through Renewables (APER)

<b>Region / country</b>	Latin America
<b>Leading actor(s)</b>	<b>UN Economic Commission for Latin America and the Caribbean (ECLAC); General Secretariat of the Andean Community (CAN)</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Steady, measurable increase in the share of renewable energies in the energy supply of areas of extreme poverty and off-grid areas</li> <li>• In at least 3 Andean Community countries and within a time-frame of 10 years meeting 30% of the increase in energy demand in isolated areas using renewable energy sources</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Mapping of the Andean areas that need energy and also have suitable conditions for the use of renewable technologies,</li> <li>• Establishment of a sub regional information network for the promotion of renewable energy sources in the Andean Community,</li> <li>• Capacity building will focus on the training of both public- and private-sector professionals</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Enhance capacities to identify, evaluate, generate and monitor projects that use renewable technologies on a local and regional level</li> <li>• Strengthen capacities to establish the best financing conditions for renewable energy projects, and the Andean countries' Public National Investment Systems</li> </ul>
<b>Target area / place</b>	Andean Community (Bolivia, Colombia, Ecuador, Peru, Venezuela)
<b>Arrangement(s) for financing</b>	ECLAC and CAN provide human resources and will also take steps to urge multilateral financial institutions to establish "ad hoc" financing mechanisms for renewable energy projects in the Andean Community.
<b>Monitoring process and time frame</b>	The proposed action is scheduled and completed within a time frame of 3 years (possible extension of additional 3 years) with the definition of short-, medium- and long-term objectives that will be monitored and verified jointly by all project actors.
<b>Contact persons</b>	<p><b>José Luis Machinea</b>, Executive Secretary, UN ECLAC, Av. Dag Hammarskjöld s/n, Vitacura, Santiago, Chile, Tel.: + 56 2 2102553, Fax: +56 2 2080252, Email: <a href="mailto:jlmachinea@eclac.cl">jlmachinea@eclac.cl</a>;</p> <p><b>Fernando Sanchez-Albavera</b>, Email: <a href="mailto:fsanchez@eclac.cl">fsanchez@eclac.cl</a>;</p> <p><b>Hugo Altomonte</b>, Email: <a href="mailto:haltomonte@eclac.cl">haltomonte@eclac.cl</a>;</p> <p><b>Allan Wagner Tizón</b>, Secretary General, CAN, Av. Paseo de la República 3895, San Isidro, Lima, Peru, Tel.: +511 4111400, Fax: +511 2213329, Email: <a href="mailto:awagner@comunidadandina.org">awagner@comunidadandina.org</a>;</p> <p><b>Hector Maldonado Lira</b>, Email: <a href="mailto:hmaldonado@comunidadandina.org">hmaldonado@comunidadandina.org</a></p>
<b>Link</b>	<a href="http://www.eclac.cl">www.eclac.cl</a> ; <a href="http://www.comunidadandina.org">www.comunidadandina.org</a>





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## Energy Efficiency 21 Project Financing Mechanism

<b>Region / country</b>	UNECE Economies in Transition in Eastern Europe, South Eastern Europe and CIS
<b>Leading actor(s)</b>	<b>United Nations Economic Commission for Europe (UNECE)</b>
<b>Participating actor(s)</b>	UNF/UNFIP, French Global Environment Facility (FFEM), Norwegian Government, Italian Government, US EPA, US DOE, UNEP, UNDP, GEF, the Regional Network for the Efficient Use of Energy and Water Resources (RENEUER)
<b>Main objective(s)</b>	To enhance regional cooperation on energy efficiency and renewable energy market formation and investment project development to reduce greenhouse gas emissions in economies in transition
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Implementation of a Project Plan for a second phase of the Energy Efficiency 21 Project 2003-2006 on the basis of significant inputs and important lessons of the previous work (since 1991).</li> <li>• The Energy Efficiency 21 Project is designed to develop the skills of the private and public sector experts at the local level to develop energy efficiency and renewable energy investment projects</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Develop carbon emissions trading standards and emissions tracking based on specific energy efficiency projects developed and financed within Energy Efficiency 21 monitored and evaluated for Assigned Amount Units (AAU) in line with the UNFCCC Kyoto Protocol mechanisms</li> <li>• Finance energy efficiency investments through advisory services to project sponsors and investors on bankable projects including submission to sources of finance and negotiation through Energy Efficiency Seminars for projects that meet the criteria of the UNFCCC Kyoto Protocol</li> <li>• Promote a sound business environment and corporate governance to introduce the economic, institutional and regulatory reforms needed to support energy efficiency investments to reduce greenhouse gas emissions and the Kyoto Protocol mechanisms</li> </ul>
<b>Target area / place</b>	Regional, UNECE transition countries
<b>Arrangement(s) for financing</b>	Partial funding is available from the UNECE regular budget. Co-financing will be sought from other sources, notably participating actors, governments departments, UN agencies, companies and foundations.
<b>Monitoring process and time frame</b>	Monitoring process will be based on donors requirements as well as within the intergovernmental process of the Energy Efficiency 21 Project, i.e. Monitoring and evaluation through the Steering Committee of the Energy Efficiency 21 Project
<b>Contact person</b>	<b>Ms Gianluca Sambucini</b> , Energy Efficiency 21, Industrial Restructuring, Energy and Enterprise Development Division, UNECE; Palais des Nations, Bureau 348, CH -1211 Geneva 10, Switzerland, Tel.: + 4122 9171175, Fax: +4122-9170038, Email: gianluca.sambucini@unece.org
<b>Link</b>	<a href="http://www.unece.org/ie/">www.unece.org/ie/</a> ; <a href="http://www.ee-21.net">www.ee-21.net</a>





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## Open University for Renewable Energies (OPURE)

<b>Region / country</b>	Worldwide
<b>Leading actor(s)</b>	<b>UNESCO Programme on Renewable Energy, ForschungsVerbund Sonnenenergie</b>
<b>Participating actor(s)</b>	National and international institutions, especially universities, research centres and specialised institutions concerned with the information, communication and cooperation of science, technology and human resources development for renewable energy
<b>Main objective(s)</b>	To provide the framework for exchange of know-how, capacity building and research in RES. Including the different education and research levels as well as the different forms of renewable energy
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The Open University for Renewable Energy (OPURE) is established as an international framework, uniting National and international institutions concerned with the information, communication and cooperation in science, research and human resources development in renewable energy. The OPURE will aim at exchanging information, promotion cooperation and partnerships as well as developing education and training, research and development programmes including the definition of national strategies and energy policies.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Better sharing of know-how and experiences</li> <li>• Enhanced capacity and know-how of renewable energy research, technology use and applications</li> <li>• Improvement of national technological development, research, education and training in the area of renewable energy</li> <li>• Improvement of international and national energy strategies, policy planning and socio-economical development</li> </ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	Arrangements for financing will be developed on a case-by-case basis. The partner's contribution will serve as a catalyst for a further development of the OPURE activities. The German Federal Ministry of Education, Research and Technology Assessment expressed their commitment to provide the initial funding. Other governments, national and international institutions will be called upon to complement the initial funding and the further development of OPURE.
<b>Monitoring process and time frame</b>	The OPURE management committee will supervise the implementation of the different foreseen activity programmes. The quality will be controlled by peer review.
<b>Contact person</b>	<b>Dr Osman Benchikh</b> , UNESCO, Division of Basis and Engineering Sciences, Tel.: +334568916, Email: o.benchikh@unesco.org; <b>Prof. Dr Jürgen Schmid</b> , Email: jschmid@iset.uni-kassel.de; <b>Hans-Josef Fell</b> , German Delegate, Deutscher Bundestag, Platz der Republik 1, 11011 Berlin, Email: hans-josef.fell@bundestag.de



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## Small hydro resource development – Decentralized power supplies for poverty reduction

<b>Region / country</b>	Eastern and Central Africa
<b>Leading actor(s)</b>	<b>United Nations Environmental Programme (UNEP) and Intermediate Technology Development Group-Eastern Africa</b>
<b>Participating actor(s)</b>	Governments, NGOs, private Sector, Regional Center for Remote Sensing and Mapping Nairobi, local energy networks
<b>Main objective(s)</b>	To promote use and development of small hydro resources through resource assessment, capacity development including manufacturing capacity, policy development and barrier removal and facilitating local community participation on resource development and utilization
<b>Contents</b>	Small hydro resource assessment, mapping and documentation, and pre feasibility and feasibility studies for at least 20 project sites in five countries in the region
<b>Expected results</b>	Increased uptake of the small hydro technologies for income generation and improving access to infrastructure services by the poor.
<b>Target area / place</b>	Kenya , Uganda, Ethiopia, Tanzania, Mozambique, Rwanda, Burundi
<b>Arrangement(s) for financing</b>	Fundraising through Governments, Donor Support projects and GEF
<b>Monitoring process and time frame</b>	Monitoring according to UNEP principles and national requirements. Development of impact monitoring tools on energy poverty 4 years
<b>Other relevant information</b>	Efforts are part of the on going poverty reduction initiatives by governments and Millennium Development Goals
<b>Contact person</b>	<b>Mr Peerke de Bakker</b> , Programme Officer, UNEP Division of GEF Coordination, P.O. Box 30552, 00100, Nairobi, Kenya, Tel. +254 20 62 39 67, Email: peerke.bakker@unep.org <b>Mr Daniel Theuri</b> , ITDG-EA, P.O. Box 39493, Nairobi, Kenya, Tel. +254-20-2713540, Fax +271-20-2710081, Email: daniel.theuri@itdg.or.ke



## World Bank Group – Renewable Energy and Energy Efficiency Scale-Up

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>World Bank Group</b>
<b>Participating actor(s)</b>	World Bank Group client countries
<b>Main objective(s)</b>	Contribute to the challenges of eradicating energy poverty through enhanced economic growth, and improving the environment
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Work in partnership with the global community to lead to a transition to cleaner energy environment.</li> <li>• Ensure that renewable energy and energy efficiency are seen as economically viable and essential ingredients in the energy choices of our member nations, not marginal considerations.</li> <li>• Increase World Bank Group staff capacity, the resources at their disposal and the incentives within their programmes to more effectively assist the World Bank Group’s country teams to succeed in renewable energy and energy efficiency projects, as well as more rapidly transfer best practice across sectors and regions.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Commit – with the concurrence of the World Bank Group Board of Directors – to a target of at least 20 percent average growth annually in both World Bank Group renewable energy and energy efficiency commitments over the next five years.</li> </ul>
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	World Bank Group
<b>Monitoring process and time frame</b>	<p>Progress will be monitored through the following mechanisms:</p> <ul style="list-style-type: none"> <li>• Report on the World Bank Group’s annual performance in renewable energy and energy efficiency programmes against the figures of other leading organisations.</li> <li>• Provide sector-specific information to better engage a wide range of stakeholders on trends regarding specific technologies, whether those are hydroelectric, wind, solar, geothermal, or biomass.</li> </ul>
<b>Contact person</b>	<b>Jamal Saghir</b> , Director Energy and Water Department, World Bank, Email: <a href="mailto:jsaghir@worldbank.org">jsaghir@worldbank.org</a>
<b>Link</b>	<a href="http://www.worldbank.org/energy">www.worldbank.org/energy</a>



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## **2.3 Section C:**

### **Actions and Commitments by Stakeholders from Civil Society, the Private Sector and other Stakeholder Groups**



## Promotion of Renewable Energies in Cameroon and Central Africa

<b>Region / country</b>	Africa / Cameroon
<b>Leading actor(s)</b>	<b>Action pour un Développement Equitable, Intégré et Durable</b>
<b>Participating actor(s)</b>	Ministries concerned, local authorities, development organisations, local trades people, EED Bonn, Germany, NC-IUCN Netherlands
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To assist the local authorities with their energy strategies</li> <li>• To develop simple technology to give women easier access to energy produced using domestic waste</li> <li>• To improve the access of poor communities to rural electrification.</li> </ul>
<b>Contents</b>	<p>The forms of energy to be developed are</p> <ul style="list-style-type: none"> <li>• Hydroelectricity, through studies and the establishment of small hydropower stations. The strategy will be to form local energy management committees. Priority will be given to mountainous regions and areas with waterfalls.</li> <li>• Biogas, by establishing micro and small methane generators. Priority will be given to livestock farming areas and urban areas.</li> <li>• Solar energy (photovoltaic and thermal energy). Priority will be given to areas in the Sahel.</li> <li>• Biomass, through studies and installation of gasifiers.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Local councillors are involved in developing an integrated energy strategy for their local authority area with the aim of managing local energy requirements.</li> <li>• At least 30 small hydropower stations are in operation, with around 1000 huts, lighting for 50 schools and at least 5 health centres</li> <li>• At least 300 women have access to a biogas production unit.</li> <li>• 25 gasifiers and at least 100 solar panels have been installed</li> <li>• Small transformer units have been installed in the villages to make women's work easier</li> <li>• Local technicians are better able to maintain the equipment</li> </ul>
<b>Target area / place</b>	Cameroon and the CAEMC area
<b>Arrangement(s) for financing</b>	This programme will be conducted for 5 years, with the possibility of an extension, with a budget of around EUR 3,500,000 to be raised progressively on the basis of the budget and the financing plan.
<b>Monitoring process and time frame</b>	A meeting will be scheduled with local councillors in Central Africa/CAEMC to agree on aims, priorities and procedures and on impact and performance indicators. This could lead to the establishment of a regional committee of local councillors and local authorities on renewable energy, in line with the ACP-EU Cotonou Agreement and in keeping with the spirit of Johannesburg.
<b>Contact person</b>	<p><b>Mr Takam Michel</b>, BP 1354 BAFOUSSAM-CAMEROUN; Tel/Fax: 237 344 58 82, Email: mtakam2000@yahoo.fr, Tel: + 237 778 29 15;  <b>Mr Stefan Rostock</b>, Tel: + 237 796 20 03,          Email: Stefan_rostock@gmx.net</p>



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## **The Role of Small and Medium-Scale thermal and mechanical Renewables and Other Energy Options in Poverty Alleviation in Africa**

<b>Region / country</b>	African / Kenya
<b>Leading actor(s)</b>	<b>African Energy Policy Research Network / Foundation for Woodstove Dissemination (AFREPREN/FWD); Heinrich Böll Foundation Regional Office for East Africa (HBF)</b>
<b>Participating actor(s)</b>	Community-based renewables NGOs, Government ministries, small and medium scale industries (SMEs), academia, independent research organisations, regulatory agencies, community-based development organisation, rural energy NGOs, national electricity utilities, rural-based NGOs, parliamentary committees/bodies, donor organisations
<b>Main objective(s)</b>	To contribute to a better understanding of small-scale renewable and cleaner energy technologies and their contribution to poverty alleviation. To promote small-scale renewable and cleaner energy technologies in Kenya.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Compiling an inventory of small and medium scale thermal and mechanical based renewables and other small-scale cleaner energy options with strong poverty alleviation link</li> <li>• Reviewing the appropriateness of these applications in poverty alleviation, based on cost (upfront and running); range of productive functions available; and, ability for local manufacture, assembly and maintenance. Based on the review, recommend the most appropriate non-electrical renewable energy applications for productive use.</li> <li>• In-depth reviewing of successful case study experiences of promoting small and medium scale renewable and cleaner energy for poverty alleviation</li> </ul>
<b>Expected results</b>	Prioritised small and medium scale renewables and cleaner energy options suitable for poverty alleviation in Africa.
<b>Target area / place</b>	Kenya
<b>Arrangement(s) for financing</b>	Donor funded (initial support from HBF and Sida/SAREC with possibility of additional donors)
<b>Monitoring process and time frame</b>	Monitoring: International peer review Time frame: one year
<b>Contact person</b>	<p><b>Mr Stephen Karekezi, Ms Waeni Kithyoma and Mr Ezekiel Manyara</b>; AFREPREN/FWD, PO Box 30979-00100 GPO Nairobi, Kenya, Tel.: + 254-20-566032, Fax: +254-20-561464, Email: <a href="mailto:afrepren@africaonline.co.ke">afrepren@africaonline.co.ke</a>;</p> <p><b>Ms Asghedech Ghirmazion, Mr Hezron Gikang'a</b>, HBF Regional Office for East Africa, PO Box 10799-00100 GPO Nairobi, Kenya, Tel.: +254-20-3744227/3750329; Fax: + 254-20-3749132; Email: <a href="mailto:Nairobi@hbfha.com">Nairobi@hbfha.com</a></p>
<b>Link</b>	<a href="http://www.afrepren.org">www.afrepren.org</a>



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## **Bio-diesel Initiative:**

### **Substitution of Oil Products in Transportation and Household Fuels**

<b>Region / country</b>	Africa / Senegal
<b>Leading actor(s)</b>	<b>African Support Group (RPTES)</b>
<b>Participating actor(s)</b>	African governments and those of the North, regional and international institutions, civil society and private sector
<b>Main objective(s)</b>	To contribute in a sustainable way to the energetic independence of Senegal and Africa, to preserve the environment and to reduce poverty.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Modernizing the use of biomass</li> <li>• Realizing high potentials to generate added value locally</li> <li>• Initiating activities in a still under exploited field in Africa</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Reduction of the oil importation bill</li> <li>• Improvement of the foreign exchange balance sheet</li> <li>• Preservation of the environment</li> <li>• Creation of permanent jobs</li> <li>• Creation of close collaboration of agro forestry and industry</li> </ul>
<b>Target area / place</b>	Africa
<b>Arrangement(s) for financing</b>	CDM funding, GEF, EU, World Bank
<b>Monitoring process and time frame</b>	A regional committee under participation of the Technical Secretariat of the GAA with the assistance of European and South American organisations as well as financial backers.
<b>Other relevant information</b>	Initiatives and interesting tracks are already in progress in Senegal, Mali, Ethiopia, Malawi, South Africa and Zimbabwe. Those initiatives should be developed.
<b>Contact person</b>	<b>Mr Mamadou Dianka</b> , Technical secretary of the African Support Group, RPTES, 104 rue Carnot, BP 14150, Dakar, Senegal, Tel.: + 221 8230804, Fax: +221 8211568, Email: mdianka@hotmail.com





## Pilot Programme on African Cross Border Villages Electrification by Means of Hydroelectric Power

<b>Region / country</b>	Africa
<b>Leading actor(s)</b>	<b>African Union of Producers, Transporters and Distributors of Electric Power (UPDEA)</b>
<b>Participating actor(s)</b>	The power utilities of the following countries participate in the project: Tunisia, Algeria, Angola, Zambia, RSA, Lesotho, Mozambique, Zimbabwe, Malawi, Togo, Benin, Côte d'Ivoire, Senegal, Gambia, Ghana, Burkina-Faso, Nigeria, Niger, Cameroon, Chad, Gabon, Equatorial Guinea, CAR, Congo, DR Congo, Tanzania, Burundi, Rwanda, Uganda
<b>Main objective(s)</b>	The programme is designed to draw on a renewable energy source (hydropower) to supply African villages in border areas, which either lack electricity or are supplied by generators.
<b>Contents</b>	There are a number of African villages and rural centres, which do not receive electricity, supply although power is available a few miles away, sometimes a few hundred yards away, in a neighbouring country. This situation has existed for a long time but it must not be allowed to continue.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Improve living conditions and combat poverty among communities in these areas by providing an adequate supply of reliable energy</li> <li>• Stimulate economic activity in these areas and limit rural exodus</li> <li>• Increase the rate of access to electricity among African communities</li> <li>• Improve environmental conditions by offering communities an alternative energy source to firewood</li> </ul>
<b>Target area / place</b>	86 projects across Africa
<b>Arrangement(s) for financing</b>	Participating electricity companies may finance a proportion of the costs in local currency (+/- 10% of global cost).
<b>Monitoring process and time frame</b>	Overall monitoring of the programme will be provided by UPDEA In each region implementation will be monitored by regional power pools supervised by UPDEA Short timelines for implementation: 6 to 24 months depending on the project
<b>Other relevant information</b>	During the 1990s UPDEA supervised the feasibility studies for interconnectors between various countries in Western and Central Africa, demonstrating that it is a reliable partner. UPDEA is a Permanent Member of the Executive Council of the AFREC (African Energy Commission)
<b>Contact person</b>	<b>Mr Herman Mutima Sakrini</b> , Secretary General UPDEA, 01 BP 1345 ABIDJAN 01, Côte d'Ivoire; Tel.: + 225 20206053, Fax: + 225 20331210, Email: <a href="mailto:secgen@updea-africa.org">secgen@updea-africa.org</a>
<b>Link</b>	<a href="http://www.updea-africa.org">www.updea-africa.org</a>



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## Transaction Support Facility (TSF)

<b>Region / country</b>	Europe / Switzerland
<b>Leading actor(s)</b>	<b>Basel Agency for Sustainable Energy (BASE)</b>
<b>Participating actor(s)</b>	An activity of the Sustainable Energy Finance Initiative - a joint initiative of UNEP Energy Unit, UNEP Finance Initiative, and BASE. Participants will be financial institutions including commercial banks, investment banks, multilateral development banks, and private investors. Beneficiaries will be project developers and SMEs, particularly in developing countries.
<b>Main objective(s)</b>	The objective is to shift flows of finance towards energy systems that align with sustainable development, thus decreasing GHG emissions relative to the 'business as usual' situation
<b>Contents</b>	The Transaction Support Facility (TSF) shall provide small amounts of financial support to make expert advisory services available to financiers for evaluating specific investments in renewable energy and energy efficiency. The facility will provide support in the form of direct or contingent grants to share the costs of project assessment and advisory work undertaken by third-party experts. By sharing the costs of such services, the TSF aims to give financial institutions the incentive to provide support for sustainable energy projects it finds attractive in order to bring it forward to closure. While the users of the facility will be financial institutions. The beneficiaries of the TSF will ultimately be project developers.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased investment in renewable energy and energy efficiency: A USD 2 million Transaction Support Facility could support approximately 60 project interventions. Assuming a 33% success rate and an average supported investment of USD 10 million, the facility could leverage USD 200 million in financing for sustainable energy projects</li> <li>• Shift of finance towards clean energy systems, resulting in reduced GHG emissions relative to business as usual</li> <li>• Increased and improved capacity among financiers through development of skills to evaluate renewable energy and energy efficiency projects independently.</li> </ul>
<b>Target area / place</b>	Developing Countries
<b>Arrangement(s) for financing</b>	The UN Foundation, multinational and national donors, and private entities.
<b>Monitoring process and time frame</b>	With a possible start of the TSF by late 2004, initial results will be available mid - late 2005. Tracking the progress of the project following the TSF support does monitoring.
<b>Contact person</b>	<b>Ms Virginia Sonntag-O'Brien</b> , BASE, Bäumleingasse 22, CH-4051 Basel, Tel.: +41 61 274 0480; Fax: + 41 61 271 1010; Email: virginia.sonntagob@energy-base.org
<b>Link</b>	<a href="http://www.sefi.unep.org">www.sefi.unep.org</a>



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## Promotion of Renewable Energies in Northern Cameroon

<b>Region / country</b>	Africa / Cameroon
<b>Leading actor(s)</b>	<b>Center of Environmental and Development Studies (CECD) of Cameroon at Maroua (Far North province)</b>
<b>Participating actor(s)</b>	Ministry of Environment and Forestry, Department of Economy and Rural Development, Agricultural University of Gembloux, Belgium; Institut für Solare Energieversorgungstechnik (ISET) Kassel, Germany
<b>Main objective(s)</b>	Contribute to a better knowledge of the situation of the use of renewable energies in Cameroon
<b>Contents</b>	Creation of an energy programme at the Center of Environment and Development Study of Cameroon (CEDC) with the following tasks: <ul style="list-style-type: none"> <li>- Promotion of renewable technology,</li> <li>- Empowering the existing photovoltaic uses,</li> <li>- Support of local and international synergies on the organisational aspects, training, information and coordination of reflections at the local level for the promotion of rural electrification projects.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Information and training on the use of renewable energies in northern Cameroon provided</li> <li>• Arguments to national and regional institutions to engage in feasibility studies of rural electrification projects by other sources than the conventional network provided.</li> <li>• Study reviewing the different categories of actors involved in solar systems, including a diagnostic of the present situation and analysing ways of promoting renewable energies compiled</li> <li>• Potential of solar energy to contribute to domestic energy needs in the far north of Cameroon, to stimulate socio-economic activities and to help to preserve the environment by reducing emissions demonstrated</li> </ul>
<b>Target area / place</b>	Northern Cameroon
<b>Arrangement(s) for financing</b>	<ul style="list-style-type: none"> <li>• Cameroonian Government (Ministry of Environment and the Forestry + the Ministry Research and the Ministry of high education: 30%)</li> <li>• Local NGOs and organisations involves (10%)</li> <li>• Department of economy and rural development of Gembloux Agricultural University and others partners contributions in negotiation (60%).</li> </ul>
<b>Monitoring process and time frame</b>	Time frame is three years from October 2004
<b>Contact person</b>	<b>Mr Djuikom Marthe</b> , PO Box 30724, Cameroon, Tel.: + 237-7515638, in Belgium contact Tel.: +32 478 69 22 95, Email: djuikom12@yahoo.fr or djuikom@hotmail.com



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## Improve Livelihood and environmental Quality in Cameroon through the Use of Renewable Energy Technologies

<b>Region / country</b>	Africa / Cameroon
<b>Leading actor(s)</b>	<b>Centre for Appropriate Technology (CAT), Bamenda / Cameroon</b>
<b>Participating actor(s)</b>	Government of Cameroon (Special Support Fund for Local Authorities, FEICOM; Divisional Delegations of Mines, Water Resources and Energy North West Province), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Local Councils (Donga Mantung, Bui, Menchum, Boyo, Mezam, Momo and Ngokentugia Divisions of the North West Province) and Schools (J.M.B.C. Ndu, S.A.C. Kumbo, P.S.S. Wum, B.C.H.S. Belo, B.H.S. Mankon, R.E.C.I.A.S.T. Alah-Mankon and St. Mary's College Ndop).
<b>Main objective(s)</b>	Raise awareness, acceptance, use and application of renewable energy technologies as tools to rural lighting and energy supply.
<b>Contents</b>	Seminars in all 7 Divisional Head Quarters of the Province for local decision makers and other major stakeholders, launching and training of the youth in Centres for Appropriate Technology ("CAT Clubs").
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Sensitisation of decision makers and key stakeholders for consideration of renewable energy technologies as tools to rural lighting and energy supply in the target area;</li> <li>• Strengthened capacities of key community leaders (council leaders) on the identification, design, implementation and management of renewable energy technology projects;</li> <li>• Strengthened capacities of school curricula, teachers (14) and students (140) of "CAT Clubs" on the design, construction and delivery of renewable energy technology projects;</li> </ul>
<b>Target area / place</b>	7 Divisions of the North West Province of Cameroon
<b>Arrangement(s) for financing</b>	The Cameroonian Special Support Fund for Local Authorities (FEICOM) supports CAT Bamenda NGO in the offering of special training to local authorities with a grant of Euro 12,000. German contributions are provided through the German Appropriate Technology Exchange-Small Scale Project Fund (SSPF). The German grant of Euro 20,000 supports the organisation of the seminars and workshops. Local councils and school authorities make further contributions for the execution of renewable energy technology projects for their communities and schools.
<b>Monitoring process and time frame</b>	The project is implemented in 2004 and monitored using standard monitoring and reporting procedures of German technical cooperation. CAT Bamenda NGO and the GTZ Project Liaison Office receive progress and seminar/workshop reports.
<b>Contact person</b>	<p><b>Mr Tanto Hycinth Ndikilar</b>, Coordinator Projects/Programmes, Email: hycinthndi@hotmail.com;</p> <p><b>Mr Njini Victor Nkuh</b>, Programme Director, CAT Bamenda NGO, PO Box 996, Bamenda, Cameroon, Tel.: +237 – 336 30 72, Email: victornas@yahoo.com</p>



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## Local Renewables

<b>Region / country</b>	Europe and Asia
<b>Leading actor(s)</b>	<p>(1) <b>City of Freiburg im Breisgau (Germany)</b></p> <p>(2) <b>City of Pune (India), City of Pimpri-Chinchwad (India), City of Bremen (Germany)</b></p> <p>(3) <b>City of Bonn (Germany), City of Buchara (Uzbekistan)</b></p> <p>(4) <b>City of Aachen (Germany)</b></p>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	<p>(1) Increase of renewable energies as proportion of total electricity supply to 10 % until 2010. -Reducing CO2 emissions by 25 % until 2010.</p> <p>(2) Strengthen the Local Agenda 21-Process for Sustainability Strategies with the Follow up Conference of the Local Renewables in Pune in December</p> <p>(3) School partnership between the schools of Bonn and Buchara to increase the contribution of solar energy</p> <p>(4) Increase the Renewable Energy Consumption by 10% until 2010; reducing the energy consumption of housings; reducing the costs for heating up to <math>\frac{3}{4}</math> of the today's costs and reducing CO<sub>2</sub> emissions.</p>
<b>Contents, Expected results, Target area / place, Arrangement(s) for financing, Monitoring process and time frame</b>	<p>(4) Two years (from may 2004 to may 2006)</p> <p>(1) / (4) Germany, (2) India (3) Uzbekistan</p>
<b>Contact persons</b>	<p>(1) <b>Dr Dieter Wörner</b>, Director of the Environmental Protection Agency, Chief Executive of Municipal Waste Management Enterprise, Talstraße 4, 79102 Freiburg i. Br., Germany; Tel.: +49 761 / 201-6100; Fax: +49 761 / 201-6199, Email: woerndi@stadt.freiburg.de;</p> <p>(2) <b>Ms Sanjay Kumar</b>, Municipal Commissioner, Municipal Commissioner Office; Shivaji Nagar, Pune, 411005 Maharashtra, India; Tel.: +91 20 / 25501103; Fax: +91 20 / 25501104, Email: pmcmco@giasp01.vsnl.net.in;</p> <p><b>Mr Andreas Ulrich</b>, Managing Director, BORDA; Industriestr. 20, 28195 Bremen, Germany, Tel.: +49 421 / 13718, Fax: +49 421 / 1655323, Email: Ulrich@borda.de;</p> <p>(3) <b>Dr Maria Hohn-Berghorn</b>, Head of International Affairs and Protocol Department, City of Bonn, Altes Rathaus / Markt, 53111 Bonn, Germany; Tel.: +49 228 / 77-2022, Fax: +49 228 / 77-5341; Email: international@bonn.de;</p> <p>(4) <b>Dr Gisela Nacken</b>, Director of Environment City of Aachen; Lagerhausstr. 20, 52074 Aachen, Germany; Tel.: +49 432-7507; Fax: +49 432-7537; Email: Gisela.Nacken@mail.aachen.de</p>



## SPICE:

### Schools Partnership to Improve the Conservation of Energy

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>City of Bonn, International Affairs Dept, Germany</b>
<b>Participating actor(s)</b>	Emilie Heyermann School, Bonn, Germany; City of Bukhara Secondary School No. 4, Buchara, Uzbekistan
<b>Main objective(s)</b>	To influence the mindset of schoolchildren, parents and teachers in favour of the conservation of non-renewable energy and the use of renewable energy through partnership building.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Form a partnership among the schools to reduce dependency on non-renewable energy</li> <li>• The main target groups are schoolchildren, parents, teachers and civil society.</li> <li>• Common solutions for common challenges are to be found.</li> <li>• The strategy, i.e. learning from each other on the same level of age, is much more promising than the traditional approaches of Know-How-transfer from the West to the South.</li> <li>• Exchange visits among schoolchildren, teachers, and parents and the construction of a symbolic piece of renewable energy infrastructure.</li> <li>• Preparing an energy information leaflet and a teaching pack, making a documentary video, providing training, establishing a website</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Awareness raising among young people with regard to renewable energy and sustainability issues</li> <li>• Investment in youth, a key sector of civil society, is an attempt to create an energy-conscious culture amongst tomorrow's adults.</li> <li>• The project focuses on awareness rising of energy issues and to try to persuade children and adults alike to change their lifestyle and use natural resources. Awareness rising is an on-going activity that ought to be sustained over the long-term.</li> </ul>
<b>Target area / place</b>	Uzbekistan / Bukhara
<b>Arrangement(s) for financing</b>	The City of Bonn has applied for co-funding within the European Unions' TACIS IBPP Programme. To a large extent, contribution will be made in-kind and on a voluntary basis.
<b>Monitoring process and time frame</b>	Expected start of the project: January 2005. Project period: 24 month. Regularly monitoring; detailed list of objectives that need to be met; duration and action plan for the whole duration of the project.
<b>Contact person</b>	<b>Dr Maria Hohn-Berghorn; Stefan Wagner</b> ; Altes Rathaus., Markt D-53111 Bonn, Germany Tel.: +49 228 77 5291, Fax: +49 228 77 5341 Email: international@bonn.de
<b>Link</b>	Progress of project can be followed on internet-web-site <a href="http://www.bonn.de">www.bonn.de</a>





## Promoting Offshore Windenergy Development and Regions (POWDeR)

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>City of Bremen, Germany</b>
<b>Participating actor(s)</b>	Senator for Construction, Environment and Transport, regional and international partners
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To support the increase of the production and use of renewable energies and the access to reliable, cost-effective energy sources</li> <li>• To exploit windenergy and offshore windenergy potentials</li> <li>• To foster climate protection, create jobs and reduce poverty</li> </ul>
<b>Contents</b>	In 2003 the government of Bremen decided to become a competence centre for (offshore) windenergy by adopting a windenergy strategy. It intends to promote research, technological development, cooperation, qualification, and pooling of competence. Bremen will support the work of the newly, yet already well established Windenergy Agency Bremerhaven / Bremen beyond 2005 with more than 130 members and secure its networking activities. A research and transfer center (fk-wind) will be ready to fully operate in 2004. The application of new technologies for windenergy will be fostered by publicly funded research projects and grants for development costs.
<b>Expected results</b>	Sites for demonstration and construction of modern wind turbines will be offered onshore with the potential of a power yield of app. 100 Mio. KWh p.a. until 2008. Three 5 MW turbines will be erected as demonstration and testing schemes for offshore implementation until 2005. Training courses will be designed and university curricula adjusted to windenergy challenges. Bremen will seek for partners in order to build a strong regional as well as international network, which is supportive to further development.
<b>Target area / place</b>	Germany
<b>Arrangement(s) for financing</b>	Actions are financed either by the City of Bremen (state and local level), matched by EU-funding, by partners' money and business engagement complemented by supportive national law.
<b>Monitoring process and time frame</b>	A cross-lateral working group from all sectors of government including business development companies and experts will constantly monitor the progress of the implementation of Bremen's strategy.
<b>Other relevant information</b>	In spring 2004 an additional interregional EU-project called POWER (Pushing Offshore Windenergy Regions) has been launched to improve interregional cooperation in the northwest of Europe.
<b>Contact person</b>	<b>Dr Rita Kellner-Stoll</b> , Head of Department, Der Senator für Bau, Umwelt und Verkehr, Ansgaritorstr. 2, D-28195 Bremen, Germany; Tel.: + 49 421 361 9561, Fax: + 49 421 361 9253, Email: Rita.Kellner-Stoll@umwelt.bremen.de





## **10% Target for Renewable Energy by the Year 2020 10% of Households to have Solar Water Heaters by 2010**

<b>Region / country</b>	Africa / South Africa
<b>Leading actor(s)</b>	<b>City of Cape Town, South Africa</b>
<b>Participating actor(s)</b>	The Darling Independent Power Producer (DarlIPP), various international and national financing and funding agencies, locally based marketing agencies, voluntary subscribers for renewable energy, solar heater manufacturers, and city stakeholders.
<b>Main objective(s)</b>	To introduce a stated target of renewable energy sources in the energy mix of Cape Town, thereby moving towards a greater mix of cleaner and more efficient energy forms
<b>Contents</b>	(not specified)
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased renewable energy mix for the City,</li> <li>• Reduced Cape Town's ecological footprint,</li> <li>• Reduced Cape Town's peak demand electricity load</li> <li>• Improved health of residents, reduction in spending on energy by residents and</li> <li>• Reduced the City's contribution towards Carbon Dioxide emissions.</li> <li>• These targets aim to spur employment creation; as well as economic development opportunities for City residents and through this promote poverty reduction.</li> </ul>
<b>Target area / place</b>	Cape Town
<b>Arrangement(s) for financing</b>	The City is already in liaison with various international development funding agencies, calling for funding mechanisms to be established. The City has already committed itself to the provision of renewable energy, depending on the outcome of an environmental impact assessment in this regard.
<b>Monitoring process and time frame</b>	Wind based energy would be over a period of fifteen years and the introduction of solar water heaters over a period of five to ten years. Monitoring processes for these commitments require to be established.
<b>Other relevant information</b>	The City hopes to finalise these targets within its Integrated Development Plan (IDP), which is the legislative long-term planning document, as well as to finalise these targets in the Cape Town Energy Strategy.
<b>Contact person</b>	<b>Mr Osman Asmal</b> , City of Cape Town, Private Bag X4, Parow 7499, South Africa, Tel.: +27 21 918 7424 or Tel.: + 27 21 487 2284 Fax: + 27 21 918 7440 or Fax: + 27 21 487 2255, Email: Osman.Asmal@capetown.gov.za or Email: enviro@capetown.gov.za
<b>Link</b>	<a href="http://www.capetown.gov.za">www.capetown.gov.za</a>



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## Renewable Energy Sources and Rational Use of Energy

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>City of Munich, Germany</b>
<b>Participating actor(s)</b>	NGOs, chambers and local institutions, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany (BMU), Umweltbundesamt, Öko-Institut, Wuppertal-Institut, Deutscher Städtetag (national level); Climate Alliance, Energie-Cités, Eurocities, Energy and Climate Task Force (international level)
<b>Main objective(s)</b>	To spread renewable energy sources and efficient use of energy by means of intense networking, social, technical and financial participation of stakeholders, awareness raising, support programmes, control of success and functioning of the city as a model
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Local subsidy programmes and stimulation of investments, intense public relations work, co-operation and networking, financial participation, citizens' partnership plants and green electricity, involvement of local utilities, monitoring.</li> <li>• Mobilisation of human capacity via the operation of a tight network including actors at the local, regional, national and international level.</li> <li>• Mobilisation of financial capacity e.g. via mediation of the construction of citizens' partnership plants. At present, citizens' partnership plants with a power of 2,444 kWp, are installed within the area of Munich. Roofs of buildings of the city of Munich are made available free of charge for citizens who want to invest into PV plants.</li> </ul>
<b>Expected results</b>	Significant increase of the share of renewables leading to a decrease of CO <sub>2</sub> emissions, improved urban quality of life and urban environment.
<b>Target area / place</b>	Europe / Germany / City of Munich
<b>Arrangement(s) for financing</b>	Utilisation of national legislation (above all: renewable energies act), support programmes of the City of Munich and the Munich utilities company, citizens' partnership plants and green electricity.
<b>Monitoring process and time frame</b>	A regular annual CO <sub>2</sub> monitoring is carried out at the local level in co-operation with the Munich utilities company.
<b>Other relevant information</b>	The climate protection activities of the city of Munich comprise all fields of renewable energies. Nearly 6 MW of PV power could be installed by 2004 including Munich airport, of which more than a third was realised in the form of citizens' partnership plants. Energy conservation is promoted by financial support of district heating, cogeneration, heat insulation measures and passive houses.
<b>Contact person</b>	<b>Mr Joachim Lorenz</b> , Head of Department, Department of Health and Environment, City of Munich, Bayerstraße 28 a, D-80335 München, Tel.: + 49 89 233 4 75 00, Fax: + 49 89 233 4 75 05, Email: Joachim.Lorenz@muenchen.de
<b>Links</b>	<a href="http://www.muenchen.de/referate/rgu/37588/index.html">www.muenchen.de/referate/rgu/37588/index.html</a> <a href="http://www.muenchen.de/bauzentrum">www.muenchen.de/bauzentrum</a> <a href="http://www.fit-for-sun.de">www.fit-for-sun.de</a>



## Clean Energy Group and Clean Energy States Alliances Clean Technology Implementation Network

<b>Region / country</b>	United States
<b>Leading actor(s)</b>	<b>Clean Energy Group</b>
<b>Participating actor(s)</b>	The states of California, Connecticut, Massachusetts, Minnesota, New Jersey, Oregon, Pennsylvania and Wisconsin and other interested states and regional actors, foundations, clean energy financiers
<b>Main objective(s)</b>	The Clean Technology Implementation Network will facilitate exchange of best practices and innovative financing between U.S. state clean energy fund managers and their international counterparts.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• To foster open exchange and dialogue between states and all parties interested in sharing information and leveraging state, federal and international funding;</li> <li>• To offer our successful models for capacity building to other states and regions to create new clean energy funds;</li> <li>• To participate actively in the continuation of the initiatives launched at Renewables 2004 and Multi-Stakeholder Dialogues;</li> <li>• To go beyond R&amp;D to increase use of new business models for further deployment and commercialisation of clean energy technologies;</li> <li>• To encourage other public and private investors to explore new investments vehicles for joint or parallel investments in clean energy technologies; and,</li> <li>• To accelerate low carbon technology deployment by closing the collaborative gap among practitioners using public investment programmes.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Strengthened transatlantic initiatives</li> <li>• Greater dissemination of best practices</li> <li>• Creation of new clean energy investment mechanisms</li> <li>• Creation of sister clean energy funds</li> </ul>
<b>Target area / place</b>	United States and other partner countries
<b>Arrangement(s) for financing</b>	The Clean Energy Group is currently working with the UK Carbon Trust To explore the creation of a Transatlantic Clean Energy Development Fund to serve as a new financing vehicle.
<b>Monitoring process and time frame</b>	Indefinite period of time, recognizing the importance of a long-term investment structure for clean energy technologies.
<b>Contact person</b>	<p><b>Mr Lewis Milford</b>, President, Clean Energy Group, 50 State Street, Suite 1, Montpelier, Vermont, 05602, USA, Tel.: + 802 223 2554, Fax: + 802 223 4967, Email: <a href="mailto:LMilford@cleanegroup.org">LMilford@cleanegroup.org</a>;</p> <p><b>Ms Allison Schumacher</b>, Project Director, Clean Energy Group, 50 State Street, Suite 1, Montpelier, Vermont, 05602, USA, Tel.: + 802 223 2554, Fax: + 802 223 4967, Email: <a href="mailto:Allison@cleanegroup.org">Allison@cleanegroup.org</a></p>
<b>Link</b>	<a href="http://www.cleanegroup.org">www.cleanegroup.org</a> and <a href="http://www.cleanenergystates.org">www.cleanenergystates.org</a>



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## Climate Alliance's Renewable Energy Programme to Mitigate Climate Change ("Renew the Climate")

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>Climate Alliance – Klima-Bündnis – Alianza del Clima e.V.; Climate Alliance of European Cities with Indigenous Rainforest Peoples</b>
<b>Participating actor(s)</b>	European local governments and local stakeholders, national coordinators and focal points of the Climate Alliance
<b>Main objective(s)</b>	To promote local action in Europe towards increasing the share of renewable energies, and emphasise renewables as part of the local climate protection strategy.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Promoting the "Local Governments' Renewables Declaration"</li> <li>• Focusing the next „Climate Star“ Award on renewable energy</li> <li>• Promoting models and schemes for citizen-financed local renewable energy projects, in combination with energy efficiency measures</li> <li>• Working with renewable energy manufacturers and suppliers to investigate obstacles towards renewable energies related to local authorities, in order to develop solutions to remove administrative barriers</li> <li>• Promoting and further developing Climate Alliance's monitoring system on renewable energies for local governments (see online version at <a href="http://www.aim-solarcity.net">www.aim-solarcity.net</a>).</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased number of local governments that actively contribute to increasing the share of renewable energies;</li> <li>• Enhanced and more effective action of local governments that are committed to climate protection and sustainable energy</li> </ul>
<b>Target area / place</b>	Climate Alliance members (1200 European cities and towns), and other European local governments and their networks
<b>Arrangement(s) for financing</b>	Financing arrangements differ by each activity; mainly they are financed by Climate Alliance's own means.
<b>Monitoring process and time frame</b>	Annual reports. Climate Alliance will publish a status report in 2005 or 2006 that will put an emphasis on renewable energies. Time frame for activities: 2004 and 2005.
<b>Other relevant information</b>	The "Local Governments' Renewables Declaration", drafted by the Climate Alliance, is the first worldwide local government position paper on the issue of renewable energy. It was the main political input of local government to the renewables2004 conference, and includes commitments and recommendations.
<b>Contact person</b>	<b>Ms Gotelind Alber</b> , Director Climate Alliance, Galvanistr. 28, D-60486 Frankfurt am Main, Tel.: + 49-69-717139-11, Fax: + 49-69-717139-93, Email: <a href="mailto:g.alber@climatealliance.org">g.alber@climatealliance.org</a>
<b>Link</b>	<a href="http://www.climatealliance.org">www.climatealliance.org</a>



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## CEPI's Declaration of Intent on Renewable Energy Sources

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>Confederation of European Paper Industries (CEPI)</b>
<b>Participating actor(s)</b>	National confederations and their members (companies)
<b>Main objective(s)</b>	Increase the use of biomass within the paper and pulp sector and thus to reduce the overall level of emissions of greenhouse gases. The initiative aims at an increased use of biomass of a 25% average (compared with an 18% average increase in the business as usual scenario) in its on-site biomass-based primary energy consumption for on-site heat and power production by the year 2010 (compared to 2001).
<b>Contents</b>	The implementation of the objective of the action will be done via industry-based initiatives and complementary measures.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Extra use of 130,000 TJ of energy from biomass for heat and electricity production.</li> <li>• The initiative will also have a positive impact on the forest and agricultural industries and the management of waste.</li> <li>• An increase in the reduction of CO<sub>2</sub> emissions between 2001 and 2010 of nearly 3 million tons (in the business as usual scenario it would only be 1,5 million tons and via the Declaration it is 4,4 million tons), mainly achieved by the substitution of coal, natural gas and fuel oil by biomass.</li> </ul>
<b>Target area / place</b>	Europe
<b>Arrangement(s) for financing</b>	All launching costs of the Declaration: CEPI and its members finance Euro 6,000 and an annual budget of Euro 10,000 p.a. for monitoring and reporting. CEPI members on a case-by-case basis finance all specific commitments under the umbrella of the Declaration.
<b>Monitoring process and time frame</b>	The Declaration is managed by the CEPI secretariat. Annually, the CEPI RES survey will be sent out to the national associations for completion. All results are the basis for further monitoring and progress reporting by VTT Technical Research Centre (Finland) up to 2010. Reports are publicly available and will be forwarded to the Commission.
<b>Contact person</b>	<b>Mr Bernard de Galembert</b> , Confederation of European Paper Industries, Avenue Louise 250 Box 80, 1050 Brussels, Belgium, Tel.: + 32 2 62749 27, Fax: + 32 2 6468137, Email: b.degalembert@cepi.org
<b>Link</b>	<a href="http://www.cepi.org">www.cepi.org</a>



## Basic Standards for the Establishment of Wind Energy (based on German experience)

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Deutscher Naturschutzring (DNR) e.V.</b> (Umbrella association of the German environmental NGOs); <b>Bundesverband Windenergie (BWE) e.V.</b> (umbrella association of the main German actors of wind-energy)
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	To secure general environmental compatibility of wind mills
<b>Contents</b>	The actors will develop environmental “Basic Standards” on the basis of the environmental directives of the EU and international conventions such as the Biodiversity Convention and the Climate Convention of 1992. This “Basic Standards” to be developed would be the “best practise” for establishing big wind generation capacities while securing their general environmental compatibility. The “Basic Standards” are intended for professional use for establishing large-scale windmill power.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• New sites for wind power capacities are to be selected according to the “Basic Standards”.</li> <li>• Based on these standards, an eco-labelling pattern is to be developed in the future.</li> <li>• “Basic Standards” will be discussed first on international European level, if successful may be later further more.</li> </ul>
<b>Target area / place</b>	Germany
<b>Arrangement(s) for financing</b>	The development and further discussion of the “Basic Standards” based on financing by the German “Umweltbundesamt”, by the DNR and by private funding. Further sponsoring is required.
<b>Monitoring process and time frame</b>	The common aim of “Basic Standards for the establishment of wind energy” will be discussed at the renewables2004 in Bonn.
<b>Other relevant information</b>	The “Basic Standards” will not replace national environmental law. The actors agree to use the standards on a voluntary basis.
<b>Contact person</b>	<p><b>Mr Helmut Röscheisen</b> Manager DNR;  <b>Mr Hubert Weinzierl</b> President DNR, Am Michaelshof 8-10,  53177 Bonn, Tel.: +49 228 359005 Fax: +49 228 359096,  Email: sekretariat@dnr.de;  <b>Mr Walter Feldt</b>, Action Coordinator DNR., Fax: + 49 511 8506388,  Email: walfel@gmx.de;  <b>Dr Peter Ahmels</b> , President BWE, Herrenteichstraße 1,  49074 Osnabrück, Tel.: +49-541-35060-0, Fax: + 49 541 35060 30,  Email: bwe-info@wind-energie.de;</p>





## National Renewable Energy Strategies in 25 EU Countries

<b>Region / country</b>	Europe / Poland
<b>Leading actor(s)</b>	<b>EC Baltic Renewable Energy Centre, Poland</b>
<b>Participating actor(s)</b>	National government, regional governments, local sustainable energy actors
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To reach the current general EU targets (White Paper '97)</li> <li>• To share existing Polish experiences in establishing RE national strategies with other member countries</li> </ul>
<b>Contents</b>	Setting up coordinated goals for the development of national and regional indicative targets and technological priorities and for involving regions and local actors.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• More efficient and cheaper implemented Renewable Energy Strategies targets in the enlarged EU</li> <li>• Increased co-operation and better co-ordination of actions</li> <li>• Raised awareness across Europe</li> <li>• Better planned and better used of structural funds for sustainable energy at regional and local level (especially in the EU New Member States).</li> <li>• Better mapped of renewable energy resources and intelligent spatial planning changes modifications</li> <li>• Prepared ground for efficient investment in medium and small scale sustainable energy technology</li> </ul>
<b>Target area / place</b>	Poland
<b>Arrangement(s) for financing</b>	National budget, EU RTD and Energy framework programmes for the development of methodologies, ERDF/INTERREG for the development of common/joint regional renewable energy programmes (twinning) and pilot implementations.
<b>Monitoring process and time frame</b>	Deadline for the development of national renewable energy strategies – end of 2005; deadline for regional renewable energy programmes- end of 2006.
<b>Other relevant information</b>	Involvement of RTD sector and relevant European and national associations of regions, counties and local authorities, as well as regional and local energy agencies, is essential.
<b>Contact person</b>	<b>Mr Grzegorz Wisniewski</b> , Director, EC BREC Rakowiecka 32, 02-532 Warsaw, Poland, Tel.: + 48 22 6466850, Email: <a href="mailto:grewis@ibmer.waw.pl">grewis@ibmer.waw.pl</a>





## Support to Small and Medium Clean Energy Enterprises (SMEEs)

<b>Region / country</b>	Europe / Netherlands
<b>Leading actor(s)</b>	<b>E+Co Europe</b>
<b>Participating actor(s)</b>	Governments; NGOs; public and private companies and financing institutions; charitable foundations; bilateral and multilateral organisations; specialized programmes.
<b>Main objective(s)</b>	To enable small and medium clean energy enterprises (SMEEs) to meet existing market demand by building sustainable business and financial infrastructure in order to provide clean, affordable and reliable energy, often to poor people in rural areas of developing countries.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Developing a sector of local SMEEs is enabled by identifying capable local entrepreneurs and providing them a menu of enterprise specific training, support services, seed capital and growth capital.</li> <li>• Financial commitment of USD 84 million to commence the investment cycle required to build up to USD 1 billion for SMEEs.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Result of E+Co direct investment (over five years, estimates): access to modern energy for 7,5 million people; 387 investments made in over 200 companies in selected markets, significant increase of jobs and income via productive use goods and services, women and children's time freed from water pumping and fuel wood collection and re-directed to income generation and education.</li> <li>• Estimated results of indirect investments: 130 million people served with modern energy, over 1400 companies provided services, 1120 companies receiving direct investment, 69 million tones of CO<sub>2</sub> p.a. saved, significant financial leverage by third parties.</li> </ul>
<b>Target area / place</b>	Africa, Asia and Latin America
<b>Arrangement(s) for financing</b>	E+Co, a public investment company, will invest USD 84 million in 200 new clean energy enterprises in 2004-2008. The investment will be supported by USD 21 million in enterprise development services and capacity building.
<b>Monitoring process and time frame</b>	E+Co proposes to implement a transparent and concise monitoring mechanism, in cooperation with other supporters and external (independent) experts. The system would use E+Co's existing web-based Global Management System with key data available to the general audience and, possibly, a specific database with restricted access for donors, investors and supporters with limited (geographic) interests.
<b>Contact person</b>	<b>Mr Paul van Aalst</b> , E+Co Europe, Ruysdaelkade 153, NL 1072 AS Amsterdam, Tel.: + 31 20 471 5257; Fax: + 31 20 471 5258, Email: paul@energyhouse.com, Email: call-for-action@energyhouse.com
<b>Link</b>	<a href="http://www.energyhouse.com">www.energyhouse.com</a>



## Integrated Biomass Utilisation System (IBUS)

<b>Region / country</b>	Europe / Denmark
<b>Leading actor(s)</b>	<b>Elsam Kraft A/S</b>
<b>Participating actor(s)</b>	The Royal Veterinary and Agricultural University, Denmark; Risoe National Laboratory, Denmark; Sicco K/S, Denmark; Agrol Biotechnologies Ltd., United Kingdom; Energia Hidroelectrica de Navarra S.A., Spain
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Strengthening the role of organic waste to energy systems and improving sustainable waste management systems,</li> <li>• Providing means for energy production from biomass from surplus production of EU's agriculture and forestry, and organic waste from the industry and households,</li> <li>• Contributing to the EU's objective of replacing 5.75% of petrol and diesel consumption by 2010 by biofuels</li> </ul>
<b>Contents</b>	Development of cost and energy effective production systems (IBUS plants) for bio ethanol and power production based on biomasses. Principally, the IBUS plants will be integrated with existing centralised coal dust-fired combined heat and power plants.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Reduction in production costs from alcohol and power production to levels that allow for a competitive utilisation of Europe's large amounts of organic waste from agriculture, forestry, industry and households,</li> <li>• Increased power production on the basis of a combination of biomasses poor in lignin (cereals, molasses, etc.) and biomasses rich in lignin (straw, wood chips, domestic waste, etc.).</li> </ul>
<b>Target area / place</b>	Europe
<b>Arrangement(s) for financing</b>	The EU contributes DKK 48 millions. Elsam Kraft Kraft A/S contributes DKK 24 millions.
<b>Monitoring process and time frame</b>	According to EU procedure with progress report every half year. End of project: 2007.
<b>Contact person</b>	<b>Mr Charles Nielsen</b> , R&D Manager, Elsam Kraft A/S, Overgade 45, Fredericia, Denmark, Tel.: + 45-76 22 24 06, Fax: + 45 76 22 19 66, Email: <a href="mailto:chn@elsam.com">chn@elsam.com</a>



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## Wind Power and Drinking Water to the Developing World

<b>Region / country</b>	Germany
<b>Leading actor(s)</b>	<b>Enercon</b>
<b>Participating actor(s)</b>	None
<b>Main objective(s)</b>	To refine research and application of technology combining the production of clean sustainable wind power with water desalination using leading edge energy efficient technology. By combining clean wind power production and production of clean drinking water the commitment will address two of the most crucial and challenging issues facing the developing countries: energy poverty and thirst.
<b>Contents</b>	Too many of this world's citizens have no access to drinking water, and too many have no access to water at all. Perhaps the three most crucial challenges facing the global community today is the reduction of energy poverty, the securing of access to clean drinking water and measures to reverse the catastrophic effects of climate change and global warming. This commitment would build on preliminary research conducted by Enercon in this field and provide workable solutions to all of these three major global challenges. It will also have a positive effect on the maintaining of global biodiversity.
<b>Expected results</b>	Developing the wind-water desalination technology further with the ultimate aim of large-scale implementation in developing countries. A combined wind power / water desalination plant will be able to produce potable water by means of reverse osmosis in quantities ranging from 60,000 up to 900,000 litres of drinking water per day.
<b>Target area / place</b>	Developing Countries
<b>Arrangement(s) for financing</b>	Enercon has already invested Euro 3,5 million in the technology over the past 10 years.  Enercon commits to set aside funding in the order of Euro 1 million over the next 3 years, to further develop, deploy and transfer the technology to developing countries around the globe.
<b>Monitoring process and time frame</b>	All ENERCON desalination plants are equipped with a monitoring system.
<b>Other relevant information</b>	ENERCON desalination plants already installed: Syros (in operation since 2002) Crete (in operation since 2001) Tenerife (in operation since 1998).
<b>Contact person</b>	<b>Mr Frank Hensel</b> , Desalination Department ENERCON, Tel.: + 49 4941 9794-628, Fax: + 49 4941 9794 629, Email: frank.hensel@enercon.de
<b>Link</b>	www.enercon.de



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## Mainstreaming Gender into Energy Policy, Planning and Programmes at the International, National, Regional and Local Level

<b>Region / country</b>	Worldwide / Europe, Asia, Africa and the Pacific
<b>Leading actor(s)</b>	<b>ENERGIA; The International Network on Gender and Sustainable Energy</b>
<b>Participating actor(s)</b>	LIFE e.V. Women develop eco-techniques, Germany, The Pacific Energy and Gender Network (South Pacific Applied Geoscience Commission), Intermediary Technology Development, Group , GEWNet, Centre for Rural Technology, Nepal, GRATIS, Ghana
<b>Main objective(s)</b>	To mainstream gender into energy policy, planning and programmes at the international, regional, national and local level
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Developing instruments, methodologies, tools, guidelines for mainstreaming gender into energy planning, programmes and policy</li> <li>• Gender impact assessment of renewable energy programmes, projects and policy</li> <li>• Gender and energy awareness raising and advocacy at international, regional, national and local level</li> <li>• Developing renewable energy technologies using a gender sensitive, participatory-technology-development (PTD) approach</li> <li>• Training in using a gender inclusive approach in policy, technology, planning and programmes</li> <li>• Professional training of women to be employed in the energy sector</li> <li>• Support and participation in networking on gender and energy</li> <li>• Facilitation and the mobilization of funds for gender and energy initiatives.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Availability of gender and energy methodologies, tools, guidelines</li> <li>• Improved and inclusive energy policies, planning and programmes that meet the needs and interests of all target groups</li> <li>• Gender disaggregated information for policy, planning and programme</li> <li>• Increases understanding, knowledge and adoption of user friendly technologies</li> <li>• Increased active participation of women in planning and decision making in the energy sector.</li> <li>• Increased number of gender and energy focused activities</li> </ul>
<b>Target area / place</b>	The Pacific, Asia, Europe, Africa
<b>Arrangement(s) for financing</b>	Donor funds.
<b>Monitoring process and time frame</b>	Reporting and review of activities, monitoring and evaluation of activities by 2006
<b>Contact person</b>	<b>Ms Sheila Oparaocha</b> , ENERGIA Secretariat, Coordinator, Tel.: + 31 33 4326027, Fax: + 31 33 4040791, Email: <a href="mailto:energia@etcnl.nl">energia@etcnl.nl</a> .
<b>Link</b>	<a href="http://www.energia.org">www.energia.org</a> ; <a href="http://www.genanet.de">www.genanet.de</a> ; <a href="http://www.sopac.org">www.sopac.org</a> ; <a href="http://www.crt.org.np">www.crt.org.np</a> ; <a href="http://www.itdg.org">www.itdg.org</a>



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## Central European Renewable Energy Fund

<b>Region / country</b>	Europe / Poland
<b>Leading actor(s)</b>	<b>Environmental Investment Partners (EIP)</b>
<b>Participating actor(s)</b>	PP Investments, as fund manager
<b>Main objective(s)</b>	Profits for Fund investors and an additional 250-600 MW of renewable energy projects in Central Europe. The Fund seeks to help project sponsors finance the construction and operation stage of renewables projects and help governments meet their EU Renewables Targets. The Fund will also seek to increase the use of carbon credits.
<b>Contents</b>	Establish an Euro 50 million-mezzanine fund for investment into renewable energy projects in the EU accession countries. The Fund will provide 10-25% of project costs, to private project developers, as medium risk loan finance with a potential equity upside. Fund investments will be subordinate to commercial bank debt but senior to common equity. The Fund will work closely with the providers of debt and equity to structure viable and cost efficient financing packages for project developers.
<b>Expected results</b>	The fund aims at catalysing projects that need additional finance. Of the Euro 18 billion in commercially viable renewables projects in central Europe only a few are getting financed as there is a gap in the middle of the financing structure – the mezzanine level. This Fund will fill that gap and aims to provide its investors a fair and substantial return on investment using sustainable investment principals (the Fund seeks to provide a 12 % annual return to its investors).
<b>Target area / place</b>	The 8 continental EU accession countries: Poland, Slovakia, Hungary, Czech Republic, Estonia, Lithuania, Latvia, and Slovenia.
<b>Arrangement(s) for financing</b>	Of the Euro 50 million about Euro 15 million is already committed from private investors – an additional Euro 35 million is being sought at this time.
<b>Monitoring process and time frame</b>	The fund raising will continue through 2004 and the fund will run for 12 years from early 2005.
<b>Contact person</b>	<b>Mr Adam de Sola Pool</b> , Environmental Investment Partners (EIP), Ul. Piaskowa 12c, 05-510 Konstancin-Chylice, Poland, Tel.: + 48 22 756 3232, Fax: + 48 22 756 4919, Email: Pool@eip.com.pl
<b>Link</b>	<a href="http://www.eip.com.pl">www.eip.com.pl</a>



## South American Renewable Energy Council

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>EREC (European Renewable Energy Council)</b>
<b>Participating actor(s)</b>	European Wind Energy Association (EWEA), European Photovoltaic Industry Association (EPIA), European Renewable Energy Centres Agency (EUREC), European Biomass Industry Association (EUBIA), European Small Hydropower Association (ESHA), European Solar Thermal Industry Federation (ESTIF), various partners in South America
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Know-How Exchange between Europe and South America to help establish a South American Renewable Energy Council</li> <li>• To identify actors in the field of renewable energy in South America and by exchanging knowledge and experience help to establish a similar structure as the European Renewable Energy Council in South America.</li> <li>• South American Renewable Energy Council should help to promote renewable energy, provide information and consultancy on renewable energy for political decision makers as well as industrial and other market actors.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The creation of a counterpart for EREC in that region of the world would facilitate collaboration in the field of RES policy, industrial co-operation, technology exchange, etc., and could by this significantly contribute to the uptake of RES in this region of the world.</li> <li>• EREC will support the creation of such a body through advice based on its own experience when setting up a similar body in Europe as well as through its extensive contacts worldwide, especially in Latin America during a currently on-going project (OPET Latin America), particularly in the Caribbean area, Brazil, Bolivia and Ecuador.</li> </ul>
<b>Expected results</b>	Developing South American Renewable Energy Council as the core partner for political decision-makers for consultation and advise on RES policy and knowledge.
<b>Target area / place</b>	South America
<b>Arrangement(s) for financing</b>	The main input should be know-how, and EREC will mobilize financial resources from the European RES industry to help to kick-start the initiative.
<b>Monitoring process and time frame</b>	The South American Renewable Energy Council should be established within the next two years. If this will be successful, additional regions should follow.
	This region was chosen because of vast yet untapped RES potential as well as given immediate industrial interest in that part of the world. Other continents are to follow.
<b>Contact person</b>	<b>Mr Oliver Schäfer</b> , Policy Advisor, <b>Ms Christine Lins</b> , Secretary General, Rue du Troon 26, 1000 Brussels, Tel.: +3225461933 / +32496652837
<b>Link</b>	<a href="http://www.erec-renewables.org">www.erec-renewables.org</a>





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## South African Renewable Resource Database and Electrification Planning Tool

<b>Region / country</b>	Africa / Republic of South Africa
<b>Leading actor(s)</b>	<b>Eskom, South Africa</b>
<b>Participating actor(s)</b>	Eskom, South African Government Department of Minerals and Energy, CSIR
<b>Main objective(s)</b>	Develop a planning tool to identify the most suitable method for off-grid electrification by taking into accounts both conventional technologies and renewable resources.
<b>Contents</b>	The first phase created an electronic geographic information system (GIS) that contains the country's renewable energy resource information insofar as solar, wind, bio-energy and micro-hydro potential is concerned. The resource data extends to a level of one data point per km <sup>2</sup> . The second phase created the planning software that will provide the electrification options. The software system, called HomerGIS, is able to calculate the cost of generating electricity using the resource potentials calculated in phase 1. The software contains a database of technologies that can be used for off-grid electrification (including all their associated costs) and by accessing the resource value from the GIS, together with demographic information, such as number of households and load information, it is able to identify the best system to be implemented, as well as calculate the associated costs.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Update renewable resource atlas for South Africa.</li> <li>• Updated version of the HomerGIS package.</li> <li>• Performance evaluation/validation report.</li> <li>• User feedback report.</li> <li>• Report on the integration with existing planning systems</li> <li>• Completed User Guide.</li> </ul>
<b>Target area / place</b>	South Africa
<b>Arrangement(s) for financing</b>	The action is equally financed between the participating actors.
<b>Monitoring process and time frame</b>	The project will be monitored through the Eskom Research Management System as well as the DME's feedback process. Feedback on the progress will be on a quarterly basis. The timeframe is 12 months.
<b>Other relevant information</b>	The action is in support of the recently released South African White Paper on Renewables and will be carried out from June 2004 to June 2005. This system will be a new introduction into the SA electrification planning process and will have a direct impact on the application of renewable energy.
<b>Contact person</b>	<b>Mr Greg Tosen</b> ; General Manager Research, Tel.: + 27 11 629 5061; Fax: + 27 11 629 5338 Email: Greg.Tosen@eskom.co.za





- 1) Concentrating Solar Power Feasibility Study
- 2) Eskom Klipheuwel Wind Demonstration Facility
- 3) Solar Dish/Stirling Demonstration Project
- 4) Biomass Gasification Demonstration Project

<b>Region / country</b>	Africa / Republic of South Africa
<b>Leading actor(s)</b>	<b>Eskom, South Africa</b>
<b>Participating actor(s)</b>	3) Development Bank of Southern Africa, Stirling Energy Systems 4) University of Fort Hare and the Melani Community in the Eastern Cape Province
<b>Main objective(s)</b>	<ol style="list-style-type: none"> <li>1) Assessing the technical and financial feasibility of using concentrating solar power (CSP) technologies for large-scale power generation within South Africa.</li> <li>2) Assess the techno-economic feasibility of wind generation in South Africa and quantify the performance of the different types of turbines in the South African environment</li> <li>3) To assess if the Solar Dish/Stirling technology can be successfully applied as a cost-effective option for distributed or off-grid generation within South Africa at a significantly reduced cost.</li> <li>4) To install a demonstration unit of the 100kW biomass gasification system in the Melani community in the Nkonkobe region in the E. Cape with assistance from the University of Fort Hare.</li> </ol>
<b>Contents</b>	<ol style="list-style-type: none"> <li>1) The work that is being proposed will be a world first for this technology and will introduce a new option for large-scale renewable power generation within South and Southern Africa. The work proposed for 2004/2005 will address technical and financial barriers including mechanisms to reduce costs.</li> <li>2) The Eskom Klipheuwel Wind Demonstration Facility was commissioned in 2003 and consists of three wind generators with varying technical characteristics. This demonstration project seeks to identify issues that impact on the performance of the plant and suggest processes or remedies that could be applied towards addressing them; investigate technologies that can improve the viability of wind energy generating such as energy storage and hybrid systems; introduce and demonstrate this type of technology to the South African public.</li> <li>3) The system was commissioned during the WSSD in 2002. Research activities are ongoing and new actions surrounding this technology will be carried out through 2004. An example is the grid simulator and energy storage system that will be linked to the system through 2004. This will allow for continuous power delivery, as well as stand-alone, remote power generation.</li> <li>4) Assessment of the technical performance of the System Johansson Biomass Gasifier (SJBG) in a real-life environment and prove the commercial viability of the technology as a source of distributed power generation. Review the sustainable application in a rural environment.</li> </ol>



<p><b>Expected results</b></p>	<p>1) Test results address the key component technical concerns identified previously and Financing plan that will enable the project to move towards implementation as a cost-effective option.</p> <p>2) Technology transfer through the training of Eskom staff, Creation of a condition monitoring baseline for wind generators, Study and conclusion on tower resonance, Conclusions on operational issues, affecting factors and remedies, Installation and optimisation of an advanced energy storage system, Development of a business case for wind power generation in South Africa.</p> <p>3) Assessment and evaluation of the technical and economic viability of the Dish/Stirling technology, Modification of the system to allow for stand-alone generation, Local manufacturing study to assess the impacts and cost of possible local manufacture of the systems in future</p> <p>4) Successfully commissioned biomass gasification system, fully trained members of the community to operate and maintain the system, the provision of energy to enable economic activities within the target community and final report and business case for the biomass gasification system that will speak to its technical and commercial viability.</p>
<p><b>Target area / place</b></p>	<p>South Africa</p>
<p><b>Arrangement(s) for financing</b></p>	<p>Eskom finances the projects. It is being proposed that Eskom will seek financial equity partners and other donor funding for the Concentrating Solar Power Feasibility Study</p>
<p><b>Monitoring process and time frame</b></p>	<p>All projects will be monitored through the Eskom Research Management System. Feedback on the progress will be on a quarterly basis.</p> <p>1) The proposed timeframe is 18 months.</p> <p>2) The research, evaluation and assessment will continue until the end of 2005.</p> <p>3) The research, evaluation and assessment will continue until the end of 2004, following which a decision will be taken as to the way forward.</p> <p>4) The timeframe for the installation and commissioning of the system will be 12 months. The research, evaluation and assessment period is currently being determined by the relevant stakeholders</p>
<p><b>Contact person</b></p>	<p><b>Mr Greg Tosen</b>, Eskom, General Manager Research, Tel.: + 27 11 629 5061, Fax: + 27 11 629 5338 Email: Greg.Tosen@eskom.co.za</p>



## e5 Sustainable Energy Accelerator (e5-SEA)

<b>Region / country</b>	Europe
<b>Leading actor(s)</b>	<b>European Business Council for Sustainable Energy (e5)</b>
<b>Participating actor(s)</b>	Local and national governments of 25 EU countries and emerging markets, renewable energy investors, consultants in management, business administration, marketing & sales, public relations, and sustainable energy/information technology, financial and legal advisors; sustainable energy, technology, and entrepreneurial/SME associations
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Strengthen competitiveness of renewable energy SMEs globally</li> <li>• Catalyse technology/know-how transfer to least developed countries</li> <li>• Improve qualification, competitiveness, profitability and market valuation of new and existing sustainable energy SMEs</li> <li>• Facilitate public private partnerships within target areas</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Data-base &amp; virtual market place with regional access and content</li> <li>• Integrated business development center (BDC) guidance mechanism for reaching SEA main objectives and SME development goals</li> <li>• Project stakeholder council to facilitate open market access in different developed and emerging markets</li> </ul>
<b>Expected results</b>	Establish 10 new SMEs (on average) p.a. in target areas; Financial independence for the e5-SEA within 2 years from July 2004; Significant improvements in profitability and market valuation of supported SMEs.
<b>Target area / place</b>	EU25, Asia, Africa and Latin America
<b>Arrangement(s) for financing</b>	Kick-off presentation at R04, business plan development, and early stage co-operations are funded by e5. Seed funding to develop database, recruit regional partners, and establish the business will be sought from the various target areas' public sector business development programmes. After the start-up phase, administration fees, success provisions, and sponsorships will comprise 80% of e5-SEA's ongoing resources. The e5-SEA's financial objective is to be self-sufficient after 36 months and guarantee good leverage for public sector seed funding
<b>Monitoring process and time frame</b>	1 <sup>st</sup> year: establish BDC, first 5 VMP windows and database, seed funding; 2 <sup>nd</sup> year: setting up business, improve BDC model and VMP; 3 <sup>rd</sup> year: become financially independent, extend regional partner organisation base and BDC to least developed markets outside the EU25; 4 <sup>th</sup> year: e5-SEA will be the leading SME catalyst for global markets
<b>Other relevant information</b>	The SEA reduces barriers through VMP regional windows, encourages mutual SME assistance, and provides custom products for RES investors
<b>Contact person</b>	<b>Ms Loren Hurst</b> , SEA Lead Manager, Representation Office, Square Marie Louise, 35; B-1000 Brussels, Belgium, Tel.: + 32 2 2309975, Fax: + 49 6151 27905 23, Email: <a href="mailto:hurst@e5.org">hurst@e5.org</a>
<b>Link</b>	<a href="http://www.sea.e5.org">www.sea.e5.org</a>



## Initiative to Promote Investment Security for Renewable Energy (ISRE)

<b>Region / country</b>	Worldwide
<b>Leading actor(s)</b>	<b>European Business Council for Sustainable Energy, UK Business Council for Sustainable Energy, US Business Council for Sustainable Energy, Australian Business Council for Sustainable Energy</b>
<b>Participating actor(s)</b>	European Climate Forum
<b>Main objective(s)</b>	To mould political framework conditions in order to ensure a secure and reliable investment environment for sustainable energy businesses
<b>Contents</b>	<ul style="list-style-type: none"> <li>• June 2004: launching of the ISRE principles at the Renewables 2004 conference = e5 and UK BCSE, several major companies already in support;</li> <li>• Marketing and promotion of ISRE, promoting stable, legally based policy and incentive structures to reduce investment risks and increase investor interest and confidence in the sector;</li> <li>• Embark on marketing and promotion campaign July – December 2004 – based upon strengthening alliances with companies and business organisations in other countries</li> <li>• Facilitate communication between business, governments and NGOs to build a wider support base backing ISRE principles</li> <li>• Link ISRE with the EU investment strategy in new energy installations, and the energy security of supply debate</li> <li>• Promote ISRE in national and international government processes, including governments participating in JREC coalition and follow up to the renewables 2004 conference, and through other partnerships BCSEs are engaged in such as REEEP.</li> </ul>
<b>Expected results</b>	Raised understanding for the need for, and implementation of, a policy environment, which creates investment security.
<b>Target area / place</b>	International coalition of business organisations and companies that support and promote the principles on Investment Security for Renewable Energy (ISRE).
<b>Arrangement(s) for financing</b>	Arrangement e5 will finance the follow up of the initiative by contributions from the signatories to the initiative.
<b>Monitoring process and time frame</b>	Regularly revisit timeframe and plan above, monitor range of organisations and contact with companies backing this approach.
<b>Contact person</b>	<b>Mr Sebastian Gallehr</b> , Chair of the Executive Board, E5 Head Office Scheppe Allee 47, Darmstadt, Germany, Tel.: + 49 6151 27905 21, Fax: + 49 6151 27905 23, Email: office@e5.org
<b>Link</b>	www.e5.org, www.bcse.org.uk, www.bcse.org, www.bcse.org.au, www.european-climate-forum.net



## Renewable Energy in Indigenous Regions and Other Isolated communities

<b>Region / country</b>	Latin America / Venezuela
<b>Leading actor(s)</b>	<b>Experimental University Ezequiel Zamora of the Occidental Plains (UNELLEZ), Venezuela's Bolivarian Women Association Rigoberta Menchú in Maneiro - Margarita Island (AMBM-“Rigoberta Menchú“)</b>
<b>Participating actor(s)</b>	Global Education and International Cooperation Group at the Technical University Berlin (GLIK-TU Berlin), National Institute for Rural Development (INDER)
<b>Main objective(s)</b>	Involvement not only of women's organisations but also indigenous' groups in enhancing the interaction between the sciences and all levels from policy-making and decision-making in order to achieve substantial improvements in the environmentally and socially responsible sustainable development in isolated settlements of Venezuela by means of implementation of renewable energy
<b>Contents</b>	This action is aimed to integrate not only women's participation but also those of the indigenous people and their communities, in full partnership with Government, in offering the option of the use of renewable energy to communities that are isolated because of its difficult access to the energy
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• To implement Strategies for the appropriate use of renewable energy, with regard to women's participation and indigenous people and their communities in national ecosystem management and control of environment degradation</li> <li>• Empower women and indigenous people to protect their communities by means of recognition of activities that are environmentally unsound or that the people concerned consider to be socially and culturally inappropriate; recognition of the appropriate use of renewable sources.</li> <li>• To identify the state of the scientific knowledge and its research needs and priorities for implementation of renewable energies and identification of especially indigenous and local knowledge to reach a sustainable development, taking into account interrelations at the national, regional and international levels</li> </ul>
<b>Target area / place</b>	Venezuela
<b>Arrangement(s) for financing</b>	GLIK- TU-Berlin, INDER and AMB-“Rigoberta Menchú“ provide human resources. Multilateral projects funds will be arranged: UNELLEZ, INDER, Venezuelan Ministry of Energy, Venezuelan Ministry of Science and Technology, Venezuelan Ministry of Environment, Venezuelan Ministry of Superior Education, DAAD, InWent, GTZ, BMZ, BMU
<b>Monitoring process and time frame</b>	The proposed action is scheduled within a period of 4 years with the definition of short-, medium-and long-term objectives that will be monitored and verified jointly by all project actors.
<b>Contact person</b>	<b>Dr. rer. nat. Virginia Negretti de Brätter</b> , Scientific-Director of the Venezuelan Team, (GLIK-TU Berlin), Email: virginianegretti@ciencia-tecnologia.org, <b>Professor Dr. Jaime Carrillo</b> , Rector, (UNELLEZ) Email:jaimecarrillo@ciencia-tecnologia.org



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## **European E-Zine by and for Young Consumers**

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Federation of German Consumer Organisations / Verbraucherzentrale Bundesverband (vzbv)</b>
<b>Participating actor(s)</b>	8 European consumer organisations, about 20 European schools, German Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU)
<b>Main objective(s)</b>	The project will place emphasis on energy saving and utilisation of renewable energies. Main objectives are: <ul style="list-style-type: none"> <li>• To change wasteful consumption patterns by focusing on the youth as a group who can facilitate changes</li> <li>• To make young people aware of the influence and responsibility of consumers in relation to the sustainable development of our planet</li> </ul>
<b>Contents</b>	Enabling students to invent and discuss visions of a lifestyle, which reflects principles of sustainable development.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• By the end of the project period, the development of a network of multipliers in the field of consumer education for energy saving is completed</li> <li>• A basis for future activities both at national level and for further co-operation between international organisations is established</li> </ul>
<b>Target area / place</b>	Participating countries are Belgium, Germany, Italy, Norway, Poland, Greece, Romania, Macedonia, Czech Republic, Slovakia
<b>Arrangement(s) for financing</b>	Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU)
<b>Monitoring process and time frame</b>	Time frame: 2005
<b>Contact person</b>	<b>Ms Elke Salzmann</b> , Federation of German Consumer Organisations, Email: <a href="mailto:salzmann@vzbv.de">salzmann@vzbv.de</a>
<b>Link</b>	<a href="http://www.yomag.net">www.yomag.net</a>





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## International Science Panel on Renewable Energy (ISPRES)

<b>Region / country</b>	Worldwide
<b>Leading actor(s)</b>	<b>Fraunhofer Institute for Solar Energy Systems ISE, Germany</b>
<b>Participating actor(s)</b>	International institutions involved in renewable energy research and development or monitoring
<b>Main objective(s)</b>	ISPRES shall assess the scientific, technical & socio-economic global status relevant to the development and deployment of renewable energy technologies and bridge the way from R&D results to policymaking.
<b>Contents</b>	<p>Fraunhofer ISE will be networking in order to include other research institutes, institutions and networks in the process of initiating ISPRES. Fraunhofer ISE will also co-ordinate the process of setting up a detailed concept and a first work programme for ISPRES.</p> <p>ISPRES will perform high-level scientific assessments of the global status and progress of renewable energy research, education, technological development, industrial activities and technology deployment. Based on these assessments, policy options in the fields mentioned will be evaluated.</p>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• detailed concept for ISPRES including milestones towards operational network structures and results</li> <li>• scientific assessment reports on the global progress of renewable energy technology R&amp;D and deployment</li> <li>• scientific evaluation of policy options</li> <li>• stimulation of necessary activities in R&amp;D</li> </ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	Funding for an initial phase is being secured.
<b>Monitoring process and time frame</b>	Fraunhofer ISE will act as co-ordinating seed centre for one year. Afterwards, ISPRES will have to be adopted by suitable existing international organisations.
<b>Contact person</b>	<p><b>Prof. J. Luther</b>, Fraunhofer Institute for Solar Energy Systems, Email: Joachim.Luther@ise.fraunhofer.de</p> <p><b>Dr C. Agert</b>, Fraunhofer Institute for Solar Energy Systems, Email: Carsten.Agert@ise.fraunhofer.de</p>
<b>Link</b>	<a href="http://www.ispres.org">www.ispres.org</a>





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## **Assessment of Priority Options for RETs Contribution to Poverty Alleviation in Selected Sub-Regions.**

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>GNESD Secretariat</b>
<b>Participating actor(s)</b>	Global Network on Energy for Sustainable Development, Members constituted of 20 Centres of excellence located in Africa, Asia, Latin America, EU and US. Activities are facilitated by UNEP and supported by a number of governments, intergovernmental organisations and other partners.
<b>Main objective(s)</b>	Policy recommendation for RETs contribution to poverty alleviation.
<b>Contents</b>	Assessment of a limited number of high potential options for RETs contribution to poverty alleviation in selected sub-region focusing on specific success criteria and opportunities for larger scale implementation.
<b>Expected results</b>	Results will be concrete case studies with an assessment of success criteria and replicability conditions supported by a set of recommendations for implement able programmes
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	National donors, private entities and the UN Foundation fund the GNESD. In addition, UNDP has supported work at member centres directly and UNEP provides in-kind support and overall facilitation.
<b>Monitoring process and time frame</b>	With a possible start of the activity 2nd half of 2004, results will be available late 2005. The GNESD Steering Committee does monitoring.
<b>Other relevant information</b>	The GNESD plans to undertake a number of similar activities supporting energy for sustainable development. Additional planned themes include efficiency and poverty, MDGs and energy etc. Output from the proposed work will also form input to CSD in 2006/7. The GNESD works on a thematic basis and is currently examining the general contributions RETs can make to poverty alleviation. The proposed activity will be based on the existing work but be entirely additional and incorporate the results of the RE 2004.
<b>Contact person</b>	<b>Mr John Christensen</b> , c/o Risø National Laboratory, 4000 Roskilde, Denmark Tel.: + 45 4677 5130, Fax: + 45 46 321 999, Email: john.christensen@risoe.dk
<b>Link</b>	<a href="http://www.gnesd.org">www.gnesd.org</a>



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## Promotion of Efficient Industrial Biomass Cogeneration for Electricity Production

<b>Region / country</b>	Africa / Kenya
<b>Leading actor(s)</b>	<b>Institute for Research in Sustainable Energy and Development (IRSEAD)</b>
<b>Participating actor(s)</b>	M&E Consulting Engineers, Nairobi, Kenya; Ministry of Energy, Kenya Sugar Board, Sugar Factories, Sugar Farmers
<b>Main objective(s)</b>	Long term impact: Significant influence on energy generation in the region, with at least 10% of total electrical energy coming from biomass within the next 10-15 years. Parallel impact on agriculture will improve local revenues and contribute to poverty reduction efforts.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Stimulating awareness in policy makers, industry stakeholders and investors to facilitate, realise and achieve the implementation of medium to large-scale cogeneration, renewable and energy efficiency projects.</li> <li>• Promote the development of efficient cogeneration projects in Kenya to exploit existing potential of up to 120 MW electricity generation to feed into the national grid. The plan is to put together necessary resources to build one plant of 15 MW and to encourage investors and stakeholders to build the rest of the plants over the next 10 years.</li> </ul>
<b>Expected results</b>	A guidelines document for the development of cogeneration projects, and 2-4 bankable business plans that leads to increased power on the grid from bagasse cogeneration. Commitments for the building of the first 10MW plant should be made within the next 15 months. The plant should be built and commissioned 24 to 30 months later. The impact of the power plants within the sugar sector will be to stimulate the commercial production of sugar for export, and to increase the industry revenues by up to 40%. Over the next 10 to 15 years, some 120 MW of electricity generation should be developed in the Kenyan sugar industry. The experience could be replicated in the East African Region.
<b>Target area / place</b>	Kenya
<b>Arrangement(s) for financing</b>	The efforts up to now have been supported by the African Energy Policy Research Network (AFREPREN) and funded by the Heinrich Böll Foundation and M&E Consulting Engineers. Some support has been secured from the REEEP, and M&E have confirmed their continued support. The annual budget is 60,000 euros, 70% of which has been secured. IRSEAD will carry all the costs not supported by donors, which are necessary for the project to be carried to completion. The Ministry of Energy has offered support in kind, of experts and other facilities.
<b>Monitoring process and time frame</b>	Clearly defined outputs have been identified for each stage of the project, and will be shared with all participating stakeholders. Newspaper articles will be placed in local media and posted on key sites in the internet.
<b>Contact person</b>	<b>Mr David Yuko</b> , Executive Director, Institute for Research in Sustainable Energy And Development, P.O. Box 3576-00100, Nairobi, Kenya, Email: dnyuko@yahoo.com



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## Quality Assurance Standards and Guidelines for Solar Technology

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>International Solar Energy Society / German Section Deutsche Gesellschaft für Sonnenenergie e.V. (DGS)</b>
<b>Participating actor(s)</b>	International Solar Energy Society (ISES), Deutsche Gesellschaft für Sonnenenergie e.V. DGS, Asociación Espanola de Energia Solar (AES), Czech Solar Energy Society (CSES), Danish Solar Energy Society (DSES), Hungarian Solar Energy Society (HUSES), ISES Austria, ISES Belgium, ISES Bulgaria, ISES Cyprus, ISES Europe, ISES Finland, ISES France, ISES Greece, ISES Israel, ISES Italia, ISES Netherlands, ISES Slovenia, Norwegian Solar Energy Society, Polish Solar Energy Society, Romanian Solar Energy Society, Sociedade Portuguesa de Energia Solar, Solar Energy Association of Sweden, The UK Solar Energy Society Austria Solar, Arbeitsgemeinschaft Erneuerbare Energie, Technologie Transfer Zentrum Bremerhaven, Deutsches Institut für Gütesicherung und Kennzeichnung (RAL) e.V., 40 SME and corporate partners, 12 financial and insurance companies.
<b>Main objective(s)</b>	Establishment of reliable quality assurance standards and best-practice guidelines for the integration of solar thermal and photovoltaics applications in engineering, energy and architecture applications. Creation of a reference system of technical standards for the financial community.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Technical Standards for components of solar systems</li> <li>• Technical Standards for the design and planning of solar systems</li> <li>• Technical Standards for the installation of solar systems</li> <li>• Technical Standards for the operation and maintenance of solar systems</li> </ul>
<b>Expected results</b>	Improvement of the integration of Solar Technology in the classical fields of architecture and engineering. Improved integration of Solar Technology in the banking and finance sector.
<b>Target area / place</b>	Europe / Germany / Austria / Switzerland / Italy
<b>Arrangement(s) for financing</b>	Pre-financed by the DGS in the project phase. Action will be fully carried by the voluntary member organisations in the association phase.
<b>Monitoring process and time frame</b>	The project will be conducted throughout 2004 with frequent reviews after the initial completion in order to represent the current state of the art.
<b>Other relevant information</b>	The quality assurance standards are to be created in order to represent best practice in engineering. Further participation in the development, formulation and adaptation of the standards and guidelines in other national versions is highly appreciated. The project is conceived as a networking effort of the above participating actors in order to jointly create common international standards for solar products and installations.
<b>Contact person</b>	<b>Mr Jan Kai Dobelmann</b> , DGS-Vice President, Augustenstr. 30, 80333 Munich, Germany, Tel.: + 49 89 524071, Fax: + 49 89 521216, Email: info@dgs.de
<b>Link</b>	www.dgs.de; www.gueteschutz-solar.de



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## Implementing Fuels for Clean Cooking in Developing Countries

<b>Region / country</b>	South America / Brazil
<b>Leading actor(s)</b>	<b>International Energy Initiative (IEI)</b>
<b>Participating actor(s)</b>	Wide range of stakeholders, including private-sector decision makers, national policymakers (in both developing and industrialized countries), decision - makers at multilateral development agencies.
<b>Main objective(s)</b>	The objective of the project is to accelerate the substitution of clean fuels for direct solid fuels used for cooking in developing countries, including renewable fuel options such as biogas, ethanol gel, and biomass-derived dimethyl ether.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The project will develop policy proposals and strategies for creating universal access to clean household fuels and guaranteeing universal provision of clean cooking fuels to at least the extent needed to satisfy basic human needs.</li> <li>• The project builds on WSSD-inspired momentum to address poverty and public health issues in rural, peri-urban, and urban areas of developing countries and is consistent with several of the Millennium Development Goals.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• The project will generate original and innovative policy proposals and implementation strategies based on sound analytical work.</li> <li>• Both generic and country-specific analyses will be undertaken, leading to the development of national policy and action plans for several key case-study countries and recommendations for actions by the international community.</li> <li>• There will also be information dissemination and advocacy components to the project to encourage implementation of the ideas that are developed.</li> </ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	Funding is being sought from multiple donors. Total project cost is estimated to be USD1million per year over a 3-year period.
<b>Monitoring process and time frame</b>	The project will span 3 years. Regular stakeholder meetings will be held to vet analysis and ideas developed in the project. Intermediate outputs will be widely circulated and reviewed.
<b>Contact person</b>	<b>Dr Gilberto Jannuzzi</b> , Executive Director, Faculdade Engenharia Mecânica, Departamento Energia, C.P. 6122 Campinas, São Paulo 13083-970, Brazil, Tel.: +55 19 3249-0288, Fax: +55 19 3289 3125, Email: jannuzzi@fem.unicamp.br



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## Network South - South - North for the Formation of Promoters of the Renewable Energies of Poor Communities in the Third World

<b>Region / country</b>	Europe / South America
<b>Leading actor(s)</b>	<b>International team for capacity building in the promotion of sustainable development (InTCaB), Technical University of Berlin, Investigation and formation network on sustainable development (IFAN), University of Sancti Spiritus</b>
<b>Participating actor(s)</b>	Several Cuban Universities, NGO CUBASOLAR, The local governments of the selected communities, Institutions linked to the development of renewable energy in participating countries such as Germany, Cuba, Nicaragua, Haiti and Venezuela.
<b>Main objective(s)</b>	Formation in Cuba of promoters of renewable energies in poor communities of countries of the third world that promote a high impact in the development of these communities, by means of the application of practical solutions starting from the endogenous resources.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Structuring of an international network south - south - north for the promotion of the renewable energy</li> <li>• Contributing a new concept given by the possibilities of transferring solutions among the countries of the south and that it can mean this for the own development of the industrialized countries that participate.</li> <li>• Including the academic formation of promoters,</li> <li>• Using of solutions with renewable energy from endogenous resources and the investigation for the development of new solutions</li> </ul>
<b>Expected results</b>	Energy supply in goal villages is improved with the creation of a network south - south - north that assures the development of the renewable energy by means of activities of promoters' formation, application of novel solutions and scientific investigation.
<b>Target area / place</b>	South America
<b>Arrangement(s) for financing</b>	Human resources are provided by the Universitaria Sancti Spiritus, Cuba and the Technical University of Berlin, Germany; Projects will be funded by DAAD, InWent, GTZ Haiti, BMBF, DFG
<b>Monitoring process and time frame</b>	To develop an autonomous system of monitoring the actions of formation, implementation and investigation, these monitoring systems should be developed according to the characteristics of each country and of the selected communities. The action should be carried out in 4 years.
<b>Contact person</b>	<p><b>Ms Lucía Muriel</b>, InTCaB, Email: info@luciamuriel.de;</p> <p><b>Mr Werner Siebel</b>, M.A., Ph.D, scientific leader, Email: werner.siebel@tu-berlin.de;</p> <p><b>Stefan Wolf</b>, coordinator IFAN, Email: stefan.wolf@berlin.de;</p> <p><b>Oswaldo Romero Romero</b>, coordinator in Cuba, Email: osvaldo@suss.co.cu</p>



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## World Youth Partnership for Communication, Education and Public Awareness (CEPA) on Renewable Energies

<b>Region / Country</b>	Africa/Republic of Angola
<b>Leading Actor(s)</b>	<b>JEA – The Ecological Youth of Angola</b>
<b>Participating Actor(s)</b>	Ministries for Youth Affairs and National Youth Councils of Angola, Cape Verde, Guinea Bissau, Mozambique, Sao Tome and Principe; TINIGUENA, Guinea Bissau; Friends of Nature Association Cape Verde; LINK, Mozambique; Clean Environment for Islands, Sao Tome and Principe; UNDP Capacity 2015 Initiative, UNEP TUNZA Youth Advisory Council, UNESCO Youth Unit, IUCN Commission on Education and Communication (CEC), SADC Regional EE Programme, Environmental Education Association of Southern Africa (EEASA), Angolan Business Council for Sustainable Development (AIA), ChevronTexaco Angola Office
<b>Main Objective(s)</b>	To improve communication, education and public awareness on renewable energies among young people worldwide, with main (initial) focus to those from unrepresentative African Portuguese speaking countries, namely Angola, Cape Verde, Guinea Bissau, Mozambique and Sao Tome and Principe.
<b>Contents</b>	Communication, information and database management; research, case studies development; training / capacity building; networks, partnerships
<b>Expected Results</b>	Through specific programmes and initiatives in initial phase (2005-2007): Increased inspiration, information and ability of young people to actively participate in decision-making processes on renewable energies undertaken by their respective governments. National Governments from target areas receive support in designing, implementing and monitoring local initiatives for renewable energies. In 2007, the initial phase of CEPA will be accomplished with a “TUNZA Youth Conference on Renewable Energies”.
<b>Target Area / Place</b>	PALOP Countries
<b>Arrangement(s) for Financing</b>	The total amount needed for the first phase is USUSD 255.000,00. Funds will be provided and allocated by the Participating Actors from Business and UN agencies.
<b>Monitoring Process and Time Frame</b>	An initial two-year pilot development phase is required to establish the project (2005-2007). For coordination “PALOP Youth Committee” as well as national youth committees will be established. An “Advisory Committee” consisting of youth representatives from the Participating Actors provides monitoring. The pilot development phase will be accomplished with a “TUNZA Youth Conference on Renewable Energies” (2007) in parallel to the “UNEP TUNZA International Youth Conference”.
<b>Contact Person</b>	<b>Mr Constantino Mendes</b> , Head, Department for Cooperation, JEA, PO Box 542, Luanda, Angola; Tel./Fax: +244 2 39 97 34, Email: <a href="mailto:jea@mail.netangola.com">jea@mail.netangola.com</a>
<b>Link</b>	<a href="http://www.angoladigital.net">www.angoladigital.net</a> ; <a href="http://www.unep.org/children_youth">www.unep.org/children_youth</a>





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## Parliamentary / NGOs Call for Action and Commitments of the Latin American Parliament

<b>Region / country</b>	Latin America
<b>Leading actor(s)</b>	<b>Latin American Parliament; Sustainable Chile Programme, Sustainable South Cone Programme</b>
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To encourage the use of renewable energy and energy efficiency while allowing satisfactory levels of development for the energy sector</li> <li>• To promote the fulfilment of the regional target stipulating that by 2010 10% of total energy supply are provided by renewable energy sources (wind, solar, geothermal, tidal, hydropower (less than 30 MW), sustainable biomass, biogas and methane gas)</li> <li>• To improve regional and international cooperation in the promotion of energy efficiency, energy conservation &amp; environmental protection</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Promoting legislative initiatives, regulatory frameworks and reforms</li> <li>• Promoting public investment to encourage science and technology inputs into the development of renewable energies</li> <li>• Promoting the exchange of technologies &amp; experiences on renewable energies.</li> <li>• Promoting jointly with the legislators and the Parliaments of the EU a broad programme of cooperation to harmonize legislative procedures</li> <li>• Encouraging dialogue through the Energy and Mining Commission of the Latin American Parliament and the European Parliament Committee for Industry, External Trade, Research and Energy</li> <li>• Continuing dialogue and joint work with Latin American NGOs and civil society organisations</li> <li>• Promoting creation of a Global Fund, with contributions from the industrialized countries, to finance research and technology development in developing countries for renewable energy use</li> <li>• Proposing that international economic, intellectual property and industrial protection treaties include provisions for broad access to, and non-monopolistic use, of technologies for renewables energies</li> </ul>
<b>Expected results</b>	Strengthened position of renewable energy resources in the regional energy sector policies
<b>Target area / place</b>	Latin America
<b>Arrangement(s) for financing</b>	The commitment focuses on promoting political will and legislative initiatives. No specific arrangements for financing are envisaged.
<b>Monitoring process and time frame</b>	The Energy and Mining Commission of the Latin America Parliament and Sustainable South Cone Programme will monitor the political process.
<b>Contact person</b>	<p><b>Mr Francisco Encina</b>, Representative of the Latin American Parliament, President of the Energy and Mining Commission, Tel.: + 5632 505823 Email: fencina@congreso.cl</p> <p><b>Ms Sara Larrain</b>, Director, Sustainable Chile Programme; Seminario 774 - Santiago, Chile, Tel.: + 562-209 70 28; Email: slarrain@chilesustentable.net</p>
<b>Link</b>	<a href="http://www.parlatino.org.br">www.parlatino.org.br</a> ; <a href="http://www.chilesustentable.net">www.chilesustentable.net</a>





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## Renewable Energy and Energy Efficiency Programmes of North Rhine-Westphalia

<b>Region / country</b>	Europe / Germany, North Rhine Westphalia
<b>Leading actor(s)</b>	<b>North Rhine-Westphalia, State Government of Germany</b>
<b>Participating actor(s)</b>	Industry, SMEs, research and development institutions, universities, local authorities, communities
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To contribute to energy saving, increasing energy efficiency and promoting renewable energy use throughout the State of North Rhine Westphalia</li> <li>• To initiate cooperation between the actors to create projects on the development and dissemination of energy technologies</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Energy Concepts for Companies</li> <li>• Creation of an Energy Agency</li> <li>• Consulting and training-programmes for small and medium sized companies, towns and communities</li> <li>• European Energy Award (award for activities in towns and communities to promote actions in energy saving, energy efficiency and renewables use)</li> <li>• Energy School North Rhine Westphalia: Information programme to initiate activities in schools on energy saving, energy efficiency upgrading and renewables use</li> <li>• REN - Programme North Rhine Westphalia: Programme on supporting technology development in energy saving and renewable energies use</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• CO<sub>2</sub> emissions reduced</li> <li>• Energy costs reduced</li> <li>• Information on renewable energy use and energy efficiency disseminated</li> <li>• New products developed, new business activities generated</li> <li>• Exports of energy equipment and services increased</li> <li>• New jobs created</li> </ul>
<b>Target area / place</b>	North Rhine Westphalia, world market
<b>Arrangement(s) for financing</b>	Subsidies by the state Government
<b>Monitoring process and time frame</b>	Permanent evaluation
<b>Contact person</b>	<b>Dr Wolfgang Schöll</b> , Ministry of Transport, Energy and Spatial Planning Nordrhein-Westfalen, Haroldstrasse 4, D-40190 Düsseldorf, Germany, Email: wolfgang.schoell@mwmev.nrw.de
<b>Link</b>	<a href="http://www.mvel.nrw.de">www.mvel.nrw.de</a>



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## **Control Desertification and Improve Livelihood in Sub-Saharan Countries through the Promotion of Vegetable Oil as Prime Source of Energy**

<b>Region / country</b>	Sub-Saharan Africa /Tanzania
<b>Leading actor(s)</b>	<b>North South Initiative e.V. / SUDERETA</b>
<b>Participating actor(s)</b>	Government of Tanzania, Ministry of Energy and Minerals (MEM), North South Initiative (NSI), Sustainable Development through Renewable Energies in Tanzania (SUDERETA), Tanzania Traditional Energy Development Organisation (TaTEDO), Savings and Credit Co-operative Union League of Tanzania (SCCULT), Bagani.
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Decentralised power generation</li> <li>• Income generation through use of vegetable oil (Jathropa in particular) as a prime source of energy in rural areas.</li> <li>• Soil conservation and reclaim of degraded land.</li> <li>• Production of vegetable oil as raw-material (e.g. soap-production) and for domestic use (e.g. substitution of fuel wood).</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Establishment of nurseries, seedbanks and model plantations.</li> <li>• Entrepreneurial development related to the production and application of vegetable oil as biofuel.</li> <li>• Networking, data collection and information exchange.</li> <li>• Mobilisation of local finances through Micro Financing Schemes</li> <li>• Training of extension workers, animators and farmers.</li> <li>• Skills development in oil processing</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased level of income in rural households and entrepreneurs</li> <li>• Reduction of land degradation and desertification, reforestation</li> <li>• Creation of additional arable land, enhancing food security</li> <li>• Substitution of fossil fuel and fuel wood</li> <li>• Job-creation and creation of SMEs</li> </ul>
<b>Target area / place</b>	Initially rural Tanzania (Arusha, Singida, Shinyanga, Dodoma, Mwanza, indi-Mtwara and Iringa Regions), later replication in other East-African Countries.
<b>Arrangement(s) for financing</b>	Funding by private donations, the German Federal Ministry of Economic Co-operation and Development (BMZ) and UNDP – GEF. Local inputs are financed through locally raised funding through co-operation with existing SACCOS and it's umbrella organisation SCCULT.
<b>Monitoring process and time frame</b>	Reviews will be conducted every two years as the project develops. Monitoring and reporting will be conducted by NSI in compliance with German Industrial Standards DIN/ISO.
<b>Contact person</b>	<b>Dr Eckhard Krüger</b> , NSI, Seerieder Str. 20, 81675 München, Germany, Tel.: +49 89 472037, Fax: +49 89 474511, Email: EU.Muenchen@t-online.de
<b>Link</b>	<a href="http://www.nsiev.de">www.nsiev.de</a>



## Cogeneration Plant with Bio-pellet Production

<b>Region / country</b>	Europe / Russian Federation, Germany
<b>Leading actor(s)</b>	<b>OAO “Derevoobtabotchik”, OOO Enteks, Russia; Ec Bioenergie Heidelberg GmbH, Germany</b>
<b>Participating actor(s)</b>	Russian Ministry of Energy, Russian Parliament, German Ministry of Economics and Labour, German Energy Agency (Dena)
<b>Main objective(s)</b>	<ul style="list-style-type: none"><li>• Reduction of pollutant and CO<sub>2</sub> emissions from power generation in project region by 1.100 tons p.a. (CO<sub>2</sub>), 60 tons p.a. (NO<sub>x</sub>) and 250 tons p.a. (SO<sub>2</sub>) by substitution of coal and fuel oil (mazut) by wood.</li><li>• Increase export of wood bio-pellets into EU by 35.000 tons p.a.</li></ul>
<b>Contents</b>	<ul style="list-style-type: none"><li>• Installation of wood fired cogeneration plant and production of wood pellets from waste wood and saw dust for export.</li><li>• Set-up of Russian-German Joint venture Company for project implementation.</li></ul>
<b>Expected results</b>	Increasing utilisation of waste wood and saw dust for power generation (2 MW), local process heat (10 MW) and bio-pellet production for export (170.000 MWh p.a.) by 200.000 m <sup>3</sup> p.a.
<b>Target area / place</b>	Zapadnya Dvina, Tverskaya oblast, Russian Federation
<b>Arrangement(s) for financing</b>	The Joint venture Company (50:50 Russian and German Partner) is installed and fully financed, and a business plan is available. For additional investments Euro 10 million from bank or other partner(s) are sought.
<b>Monitoring process and time frame</b>	Project start in 2004, construction time approx. one year, start of operation / pellet export in 2006. A great number of similar local projects is scheduled in the area. Continuous project reports will be the basis of monitoring process
<b>Other relevant information</b>	The project and company in Tverskaya shall serve as a model for similar Russian biomass projects such as industrial heat, cogeneration, and pellet circles, rape oil integrated circles.
<b>Contact person</b>	<b>Mr Kokh Alexander Mikhailovich</b> , General Director, OAO “Derevoobtabotchik”, Zapadaya Dvina, Tverskaya oblast, Russia; Tel.: +7 8265 22131 / 134, Fax: +7 8265 22128; <b>Mr Belyi Vladimir Mikhailovich</b> , General Director, OOO Enteks, Moscow oblast, Narofominsk region, village Selyatino, Russia Tel./Fax +7 736 5787; <b>Dr-Ing. Ulrich Kaier</b> , Managing Director, Ec Bioenergie Heidelberg GmbH, Englerstraße 4, 69126 Heidelberg, Germany; Tel.: +49 6221 3649-10, Fax +49 6221 3649-36, Email: <a href="mailto:info@bioenergie-heidelberg.de">info@bioenergie-heidelberg.de</a>
<b>Link</b>	<a href="http://www.bioenergie-heidelberg.de">www.bioenergie-heidelberg.de</a> , <a href="http://www.bioenergie-tver-russia.ru">www.bioenergie-tver-russia.ru</a>



## Wind Farms in North East Brazil

<b>Region / country</b>	Latin America / Brazil
<b>Leading actor(s)</b>	<b>renergys GmbH, SES Ltda. (Brazilian subsidiary of renergys)</b>
<b>Participating actor(s)</b>	Bioenergy Ltda, Eólica Tecnología EPF Ltda.
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Establish wind energy as an efficient and cost-saving complementary energy source to secure steady energy supply and avoiding power cuts in North East Brazil. Hydro electrical energy production is limited in summer time due to water shortages</li> <li>• Promotion of infrastructural and economic development of the region</li> </ul>
<b>Contents</b>	Existing hydropower capacity will be complemented by decentralized energy supply through several wind farms (located in near to ideal sites with total capacity of more than 300 MW), connected by a shared transmission line, to ease existing grid problems.
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Significant reduction of the extra costs and of the environmental impact caused by nearly 1000 MW emergency diesel power plants</li> <li>• Avoidance of high transmission losses that occur due to long-distance power transmission</li> <li>• Improvement of the base electrical grid and its usage</li> <li>• Step wise implementation (step 1 with 150 MW minimum) and possibilities for further extensions</li> <li>• Development of a model case for other regions with similar conditions</li> </ul>
<b>Target area / place</b>	North East Brazil
<b>Arrangement(s) for financing</b>	A sound investment and financing plan is prepared. The financing will include a major commitment of private and public Brazilian banks, which typically finance up to 70% of the project. The rest of the required investment will be covered by banks and/or equity provided by the development partners and/or co-investors.
<b>Monitoring process and time frame</b>	The related wind farm projects and the transmission line are in a very advanced development stage and have received nearly all permits and licenses required for the construction and installation. The project realisation depends on the legal and political framework that still needs to be implemented. The end of 2006 could conclude the project.
<b>Other relevant information</b>	Recent changes in the Brazilian law on renewable energy pose a risk for implementation under the first PROINFA phase. The project partners are prepared to intensify financial and managerial efforts to guarantee implementation, preferably within the context of PROINFA.
<b>Contact person</b>	<b>Mr Ralf Kynast</b> , General Manager Latin America, renergys GmbH, Wallstadter Strasse 59, 68562 Ladenburg, Tel.: +49 6203 931 510, Fax: +49 6203 931500, Email: r.kynast@renergys.com
<b>Link</b>	<a href="http://www.renergys.com">www.renergys.com</a>



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## Promoting Renewable Energy through International Law

<b>Region / country</b>	Worldwide / Australia, Europe, United States, Canada
<b>Leading actor(s)</b>	<b>Renewable Energy &amp; International Law Project</b> , in association with the Renewable Energy and Energy Efficiency Partnership, Baker & McKenzie's Global Clean Energy & Climate Change Practice, and Yale, University's Center for Environmental Law and Policy
<b>Participating actor(s)</b>	Partners: NAFTA Commission on Environmental Cooperation; IEA; Sustainable Energy Authority, Victoria, Aus.; UNEP; European Wind Energy Association; EU Directorates General; IUCN – World Conservation Union; University College, London. <i>Advisors</i> : US Department of Energy; UN; European Renewable Energy Council; US EPA; Federal Ministry for the Environment, Germany; National Renewable Energy Lab, US; Natural Resources Defence Council; Environmental Finance; Organisation of American States; University of Dundee, American Council on Renewable Energy; Kuhbier Law Firm, Brussels; Adelphi Research, Berlin; George Washington University, D.C; Climate Change Capital, UK.
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To promote and help in the development of a coherent international legal framework that supports renewable energy</li> <li>• To assess current barriers, intended and unwitting, to and unexploited opportunities for the development of the market for renewable energy that may be present in international regimes</li> <li>• To determine the appropriate role for international law in the global promotion of renewable energy</li> <li>• To work with industry and finance communities to define obstacles and opportunities on the ground and develop a remediation strategy for uncovered effects; work with stakeholders, including governments and IGOs, to implement the remediation strategy</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Creating an international partnership to focus on these issues, to carry out research and to share input</li> <li>• Disseminating findings through interim papers, experts meeting and final report; coordinate events to bring policy makers and industry together</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Significant contribution to optimising the international legal framework with regard to its ability to support renewables development</li> <li>• Increased international knowledge exchange and cooperation on international law; providing useful input to international forum</li> </ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	The necessary costs will be covered by the participants. Additional fundind will be sought, as required.
<b>Monitoring process and time frame</b>	<ul style="list-style-type: none"> <li>• Annual progress reports by the partnership; interim papers</li> <li>• Complete report and hold final meeting by the end of 2006</li> </ul>
<b>Contact person</b>	<b>Ms Leslie Parker</b> , Managing Director, REIL Project, Tel.: +44 / 7766/351598 or +1 / 917 / 5396012, Email: LeslieParker@reilp.org



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## Public-Private Partnership for Utilisation of geothermal Resources in the Russian Federation

<b>Region / country</b>	Russian Federation
<b>Leading actor(s)</b>	<b>Russian Geothermal Energy Society</b>
<b>Participating actor(s)</b>	JC Nauka, JSC Geotherm, administration of Krasnodar Kraj, administration of Stavropol Kraj, municipal heat-supply companies, Geothermal Association of Germany (GVEV), international financial institutions
<b>Main objective(s)</b>	To accelerate development of geothermal energy in the Russian Federation aimed to reduce GHGs emissions and to achieve a sustainable economic growth. It will be carried out through the close collaboration of engineering, scientific and consulting companies with regional and local authorities, financial institutions.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Developing and testing for widespread dissemination of advanced binary technology of complex utilisation of low-enthalpy geothermal resources in Russia and other countries of the former Soviet Union.</li> <li>• Disseminating regularly new information on scientific researches and practical experience through organising of annual geothermal conferences and workshops.</li> <li>• Coordinating required efforts to overcome technological, institutional and financial barriers for geothermal energy development</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Documentation for at least 5 new geothermal projects is prepared,</li> <li>• Two Geothermal Heat-Power Plants in the period 2005-2008 are constructed.</li> </ul>
<b>Target area / place</b>	Russian Federation
<b>Arrangement(s) for financing</b>	RAO UES, Administrations of Krasnodar Kraj and Stavropol Kraj committed to allocate more than USD450k for preparation of project concepts and business plans for several priority projects. It is expected that this initiative will be supported by the World Bank/GEF Framework Geothermal Energy Development Project in Europe and Central Asia, which is under preparation now.
<b>Monitoring process and time frame</b>	Task Force for coordination geothermal project development, consisting of representatives of key ministries and companies, established in late 2003. It will monitor the progress in development of new binary technology and concrete project preparation. Business plans for three projects will be prepared in 2004 and for two other projects – in 2005. Feasibility studies and other project documentation will be carried out in the period of 2005-2006.
<b>Contact person</b>	<b>Prof. Oleg Povarov</b> , President Geothermal Energy Society, Russian Federation, Moscov, Krasnokazarmennaya 9, Tel.: + 70959181561, Email: povarov@geotherm.ru





## Awareness of the Government and Private Investors of the Use of RE in Afghanistan

<b>Region / country</b>	Europe / Asia, Germany, Afghanistan
<b>Leading actor(s)</b>	<b>Siemens AG Afghanistan Branch</b>
<b>Participating actor(s)</b>	Government, private investors, NGOs
<b>Main objective(s)</b>	The main objective is to use Siemens infrastructure for capacity building establishing a positive environment for the installation of renewable energy systems
<b>Contents</b>	<ul style="list-style-type: none"> <li>• The current electricity supply is very limited especially in rural areas. With the excellent resources for RE such as water, sun and wind a decentralized energy supply system could be established.</li> <li>• Capacity building as a first step towards a positive investment environment for RE is essential. The Government and the private investors as well as the donors shall be made aware of RE by inviting them to presentations and knowledge transfer. Siemens AG locally represented by Siemens AG Afghanistan Branch will promote RE by arranging presentations and briefings about the various technology options and financial requirements.</li> <li>• In a second step concrete demonstration RE projects could be launched to demonstrate the functionality and raise the public awareness for RE.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Understanding of the requirements by the government officials to start reforming the energy market and create the feasible legal and economical framework for private investors.</li> <li>• Due to the lack of expertise of Afghan private investors – they are mainly traders – serving information about technical and financial requirements, maintenance and plant operation.</li> <li>• First project ideas for the installation of RE are envisaged</li> </ul>
<b>Target area / place</b>	Afghanistan
<b>Arrangement(s) for financing</b>	All activities for the described capacity building will be financed by Siemens
<b>Monitoring process and time frame</b>	Within a maximum of one year 3 to 4 presentations or briefing days will be done with local officials and potential Afghan investors. The information will be prepared by experts from Siemens HQ's and local company on their own costs. If there are concrete project ideas during the year these projects will be prepared for further realization.
<b>Other relevant information</b>	The capacity building phase is essential for the establishment of RE in Afghanistan. In a second phase – project phase – financial contribution of external private and public donors is necessary for the installation.
<b>Contact person</b>	<b>G.S. Hassanzadah</b> , Siemens AG Afghanistan Branch, House 2/3, Street 3, Kartahe Seh, Kabul Afghanistan; Tel.: + 93 79 27 91 21 or Tel.: + 93 20 25 00 640, 641,642, Email: hassanzadah@yahoo.com or gholam.hassanzadah@siemens.com





## Good Energies for Development in Mali: PPP to Develop Solar Home Systems and Solar Water Pumping

<b>Region / country</b>	Africa / Europe, Mali, Switzerland
<b>Leading actor(s)</b>	<b>Solsuisse GIE, Timbuktu, Mali; ecos, Basel, Switzerland</b>
<b>Participating actor(s)</b>	Paix et Progrès, Timbuktu; Sundance, Timbuktu; Ministère des Mines, de l'Energie et de l'Eau AMADER, Mali; Wirz Solar GmbH, Switzerland
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Supply solar home systems SHS and solar water pumping based on activities in the northern part of Mali by local partners since 1999</li> <li>• Develop organisational structure ensuring independent further development of local and regional market for solar energy</li> <li>• Provide increased productive use and reduce poverty</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Installation of solar home systems SHS and water pumping units</li> <li>• Sensitise the local population regarding renewable energy</li> <li>• Develop finance mechanism to ensure payback and reduced risks using bottom up approach and based on local partnerships</li> <li>• Building up and running local training centre to ensure training local technicians and sustainable maintenance of solar systems</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• 15 solar systems on schools and dispensaries in place</li> <li>• 10 solar water pumping systems installed</li> <li>• 7000 homes with solar home systems</li> <li>• Local training centres for technicians</li> <li>• Local / regional organisational structure ensuring profitable financial management and business for independent further development of market</li> </ul>
<b>Target area / place</b>	Timbuktu region, total population 300,000, target number of 50 villages
<b>Arrangement(s) for financing</b>	Total project cost is EUR 2,4 million. Negotiations under way with public and private partners. Proposed cost share: 60% AMADER (Rural electrification fund), 25% Micro finance Fund, 15% customers / beneficiaries. Cost for training centre, expertise, development of local capacities and organisational structure, evaluation and follow up to be covered by public partner (not yet secured). Project is supported by potential private partners / investors in Switzerland i.e. Good Energies Inc., Switzerland, Swiss Re, ResponsAbility.
<b>Monitoring process and time frame</b>	<ol style="list-style-type: none"> <li>1. Jan-July 2004: Preparatory phase / negotiations with partners;</li> <li>2. Aug-Oct 2004: Field study / Detail project design;</li> <li>3. Nov 2004-Apr 2005: Initial phase of implementation (1200 SHS);</li> <li>4. May-June 2005: Intermediate evaluation;</li> <li>5. July 2005-Sept 2007: Expansion of project (additional 5800 SHS);</li> <li>6. Oct-Nov 2007: Final evaluation and proposed measures for multiplication</li> </ol>
<b>Contact person</b>	<b>Pierre Strub</b> , ecos, Baumeleingasse 22, CH-4001 Basel, Tel.: + 41 61 205 10 45, Fax: + 41 61 271 10 10, Email: pierre.strub@ecos.ch
<b>Link</b>	<a href="http://www.ecos.ch/de/invest/themen.php">www.ecos.ch/de/invest/themen.php</a>



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## **Integrated Renewable Energy Services for Poverty Reduction and Environmental Conservation Initiative for the East African Region**

<b>Region / country</b>	Africa / Tanzania
<b>Leading actor(s)</b>	<b>Tanzania Traditional Energy Development and Environment Organisation (TaTEDO)</b>
<b>Participating actor(s)</b>	East African Energy Technology Development Network (EAETDN)-regional energy NGO / Kenya, Uganda and Tanzania; Tanzania Solar Energy Association (TASEA); energy ministries from Kenya, Uganda and Tanzania
<b>Main objective(s)</b>	To increase the uptake and usage of renewable energy technologies and services for poverty reduction and environmental conservation
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Promoting efficient woodfuel technologies</li> <li>• Undertaking participatory planning exercises together with locally based partners to determine area-specific regional, national and local priorities and linkages, taking into consideration local competencies and capacities and agreeing on how to jointly share strengths and resources in undertaking identified developmental activities</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Increased adoption and usage of efficient woodfuel stoves in households, social centers and SMEs</li> <li>• Environmentally adverse effects associated with energy production and use mitigated by promoting improved charcoal production technologies, solar PV and solar thermal, supply and use of Jatropha oil as an alternative source of energy for rural households for cooking, lighting</li> <li>• Strategic social, economic and environmental assessment and development of off-grid renewable energy electrification options facilitated</li> <li>• Energy information management and networking with partners and other stakeholders in the region enhanced</li> <li>• Institutional capacity and core support for participating actors strengthened for effective delivery of the programme outputs</li> </ul>
<b>Target area / place</b>	Kenya / Uganda / Tanzania
<b>Arrangement(s) for financing</b>	The estimated total programme (phase one) budget over a three-year period is USD 6.0 mill of which USD 5,7 million (95 percent) is being sought from donor contribution while remaining USD 0,3 million (5 percent) is expected to be contributed from TaTEDO, EAETDN and TASEA own funds and from local partners through cost-sharing in implementing some activities
<b>Monitoring process and time frame</b>	Monitoring and evaluation system will be participatory involving stakeholders at all levels. The system will be continuously revised and improved to facilitate efficient and effective allocation of resources. Mid-term and closeout programme evaluations will be done.
<b>Contact person</b>	<b>Mr Estomih N.Sawe</b> , PO Box BOX 32794, Dar Es Salaam, Tanzania, Tel.: +255-22-2700771; Fax: +255 22 2774400, Email: <a href="mailto:energy@tatedo.org">energy@tatedo.org</a>
<b>Link</b>	<a href="http://www.tatedo.org">www.tatedo.org</a>



## Large Scale Solar Thermal Power and Desalination as a Joint Development Effort by North Africa, the Middle East and Europe

<b>Region / country</b>	Europe (EU), the Middle East (ME), North Africa (NA)
<b>Leading actor(s)</b>	<b>Trans-Mediterranean Renewable Energy Cooperation (TREC)</b>
<b>Participating actor(s)</b>	11 actors/5 countries from ME, 10/4 from NA, 15/4 from EU (see link)
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• Market introduction of Concentrating Solar Power (CSP) as key technology for global climate stabilisation and secure supply of energy.</li> <li>• Cogeneration of power and desalted water in and for MENA, economic and industrial development in MENA, clean power for EU.</li> <li>• Initiate a EUMENA interconnecting grid as infrastructure of a free trade zone EUMENA for wind and solar electricity.</li> <li>• Exploit solar synergies for emerging community sustainability.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Identify power and water demands, the present and expected ones until 2025 (2040), of all urban centers in MENA.</li> <li>• Economical ranking of power and water cogeneration projects for urban centers, based on demand study and solar radiation data.</li> <li>• Compile a project package sufficient for CSP market introduction.</li> <li>• Involve local authorities/industry in project definition and realisation.</li> <li>• Use solar energy co-operation in EUMENA to create the perspective of EUMENA as community for climate, energy and water security.</li> <li>• Concluding conference on strategy and finance (MENAREC-2).</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Comprehensive urban center power and water demand register</li> <li>• Hit list of cost effective projects for CSP market introduction package</li> <li>• Identification of “Light House” projects</li> <li>• Proposals for financing involving European and world wide funds</li> </ul>
<b>Target area / place</b>	MENA, urban centers from Mauritania to Iran
<b>Arrangement(s) for financing</b>	Access to MED-CSP and TRANS-CSP studies in progress at German Aerospace Center DLR Euro 315.000, financed by the German Ministry for the Environment (BMU). Optional: concluding EUMENA-wide strategy conference for implementation; basic services offered by NERC.
<b>Monitoring process and time frame</b>	(1) Demand register until end of October 2004, (2) ranking of projects and pre-selection for a market introduction package by January 2005, (3) concluding public conference MENAREC-2 in April 2005. Steps 1 and 2 are preconditions of each next step. Monitoring by the DLR-BMU study.
<b>Other relevant information</b>	General TREC concept, “Sustainable Water and Energy Security Initiative” SWESI, MED-CSP study, TREC thematic background paper for MENAREC conference, MENAREC-Sana’a declaration: see links.
<b>Contact persons</b>	<b>Dr Malek Kabariti</b> , TREC, c/o NERC, PO Box 1945, Amman 11941 Jordan, Tel.: + 962 653380 41, Fax: + 962-653380-43, Email: malek.kabariti@nerc.gov.jo; <b>Dr Gerhard Knies</b> , TREC coordinator, Stauffenbergstr. 15, 22587 Hamburg, Germany, Tel.: +49 40 8663 154, Fax: +49 40 8663 001, Email: Gerhard.knies@trec-eumena.org
<b>Link</b>	www.trec-eumena.org, (www.renewables2004.de for Sana’a declaration)



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## Triodos Renewable Energy for Development Fund

<b>Region / country</b>	Europe / The Netherlands
<b>Leading actor(s)</b>	<b>Triodos International Fund Management BV</b>
<b>Participating actor(s)</b>	Funders, bilaterals, multilaterals, foundations, private sector
<b>Main objective(s)</b>	The Triodos Renewable Energy for Development Fund aims to serve as a source of finance and business development support to private sector enterprises (SMEs), (micro) finance institutions and organisations that facilitate the introduction of and widespread access of off grid renewable energy services to underserved people in developing countries (solar, small scale hydro, wind and biomass).
<b>Contents</b>	The Fund has been launched 1 April 2004. It provides investments (loans, guarantees and limited 'seed capital') in the range of EUR 100,000 to EUR 250,000 at market rates. The Fund has its main focus on countries in Africa and Asia, with investment officers in some priority regions.
<b>Expected results</b>	The Triodos Renewable Energy for Development Fund aims to make new investments in the order of EUR 3 million or more p.a., and through these investments aims to contribute to bring clean energy services to people, most of them in rural areas, without access to reliable energy.
<b>Target area / place</b>	The Fund's focus is on direct investments into organisations in developing countries in Africa and Asia: Kenya, Tanzania, Uganda, South Africa, Namibia, Angola, Senegal, Ghana, India, Sri Lanka, Nepal, Bangladesh, Laos, Cambodia, Vietnam, Indonesia, Philippines.
<b>Arrangement(s) for financing</b>	Current capital of the Fund amounts to EUR 7,5 million, mainly from funders like World Bank, Dutch and Swiss Government, development NGOs and several charitable foundations. About EUR 2,5 million is invested and/or committed to ca. 50 projects in more than 20 countries. The Fund seeks to raise new funding to support the level of activities planned in the coming years. New funders are welcome.
<b>Monitoring process and time frame</b>	The Fund plans to operate for an indefinite term as a revolving fund with a growing portfolio of loans and guarantees. The impact, in terms of customers served in developing countries, will be monitored on a regular basis.
<b>Other relevant information</b>	The activities of the former 'Solar Development Group' have been merged into Triodos Renewable Energy for Development Fund.
<b>Contact person</b>	<b>Mr J.F. Schut</b> , Managing Director, Triodos International Fund Management BV, Postbus 55, 3700 AB Zeist, The Netherlands, Tel.: +31 30 693 6561, Fax: +31 30 693 6566, Email: <a href="mailto:hans.schut@triodos.nl">hans.schut@triodos.nl</a>
<b>Link</b>	<a href="http://www.triodos.com">www.triodos.com</a>



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## Italian Center for Geothermal Energy Promotion and Development

<b>Region / country</b>	Europe / Italy
<b>Leading actor(s)</b>	<b>Region of Tuscany, Italy</b>
<b>Participating actor(s)</b>	Italian Ministry of Environment
<b>Main objective(s)</b>	To implement an international geothermal energy promotion and development center.
<b>Contents</b>	<ul style="list-style-type: none"><li>• Contributing to the creation of an international network of geothermal energy centers</li><li>• Implementation of international working groups towards geothermal energy promotion and development</li></ul>
<b>Expected results</b>	<ul style="list-style-type: none"><li>• The traditionally strong local standing (25% of energy used is generated by geothermal sources) is combined with current research</li><li>• Italian experience in this field is disseminated</li><li>• The sustainable integration of geothermal energy is improved</li><li>• A commitment towards improved and extended application of the technology is created</li></ul>
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	Financed by leading actor. Further support and co-finance for the implementation and start up of the center provided by the region and the ministry.
<b>Monitoring process and time frame</b>	December 2004: Official presentation of the structure of the center (partners, budget, time planning for start up).
<b>Contact person</b>	<b>Mr Tommaso Franci</b> , Councilor for Environment, Tel.: +39 055 4383879, Email: t.franci@mail.regione.toscana.it; <b>Dr Fulvio Passalacqua</b> , ETA – renewable energies, Tel.: +39 055 5002174, Fax: + 39-055-573425, Email fulvio.passalacqua@etaflorence.it



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## Community Hydrogen Opportunities in Clean Energy Solutions (CHOICES) Programme

<b>Region / country</b>	Europe / United Kingdom
<b>Leading actor(s)</b>	<b>Unst Partnership Ltd.</b>
<b>Participating actor(s)</b>	Local Governments, local enterprise companies, community development agencies, further education institutions, Local Renewable Energy Partnerships
<b>Main objective(s)</b>	To promote an understanding of, provide technical advice about; disseminate practical experiences of, small-scale local production of hydrogen from renewable energy – for local consumption.
<b>Contents</b>	Support for the establishment of community owned demonstration schemes, which use a renewable energy, supply to produce hydrogen as a means of energy storage and as an alternative clean fuel for local consumption. The programme will also support public awareness-raising and learning activities relating to the development of hydrogen demonstration projects, and for exploring spin-off developments in training, research, applications testing and small business development.
<b>Expected results</b>	The proliferation of small-scale community owned hydrogen production facilities (particularly in remote rural areas), which can deliver a local supply of the fuel of the future (hydrogen) for local consumption.
<b>Target area / place</b>	Fragile rural communities.
<b>Arrangement(s) for financing</b>	Unst contributes with GBP 400.000 to the realisation of the action. Existing regional public sector and public allocations for community development funds/private sector investment in demonstration schemes by hydrogen plant manufacturers. Once operational all renewables /hydrogen schemes will be income generating and ultimately sustainable. Whilst the initial capital costs of plant and equipment for the demonstration projects will be largely met from public grant funding, the sale of electricity and locally produced hydrogen to local consumers will generate sufficient income to cover all operation and maintenance costs.
<b>Monitoring process and time frame</b>	The principal monitoring will be by mapping throughout the world the spread of community owned schemes, which produce hydrogen from renewable energy.
<b>Other relevant information</b>	The Unst Partnership currently has the only community owned renewable energy to hydrogen production facility in Europe – installed by a local engineering graduate on the most northerly island in the UK. This demonstration system is replicable in remote rural areas throughout the world, and is helping to address now issues both of sustainable clean energy production and of high-energy costs.
<b>Contact person</b>	<b>Ms Sandy Macaulay</b> , Director, Unst Partnership Ltd., Unit 3 Hagdale Industrial Estate, Baltasound, Unst, Shetland, ZE2 9DS Tel.: + 44 1957 711838; Fax: + 44 1957 711685, Email: up@unst.shetland.co.uk





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## Biomass-Based Sun Diesel

<b>Region / country</b>	Europe / Germany
<b>Leading actor(s)</b>	<b>Volkswagen AG, DaimlerChrysler AG</b>
<b>Participating actor(s)</b>	none
<b>Main objective(s)</b>	Pushing of Biomass to Liquid (BTL) Fuels
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Feasibility studies on synthetic fuels based on biomass in preparation of fuelling new cars with SunDiesel</li> <li>• First fuel filling with SunDiesel of new produced cars</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• Reduction of greenhouse gases</li> <li>• Establishing biomass as a source for production of synthetic fuels</li> <li>• Creation and safeguarding of jobs in agriculture and industry</li> </ul>
<b>Target area / place</b>	Germany / Europe / Worldwide
<b>Arrangement(s) for financing</b>	Fully financed by leading partners.
<b>Monitoring process and time frame</b>	First fuelling of VW's and DC's diesel-cars with SunDiesel as soon as required quality is available. Expected start: 2006
<b>Other relevant information</b>	VW and DC follow a common fuel strategy
<b>Contact persons</b>	<p><b>Dr Wolfgang Steiger</b>, Volkswagen AG, Letter box 1778, 38436 Wolfsburg, Germany, Tel.: +49 5361 925377, Fax: +49 5361 928923, Email: wolfgang.steiger@volkswagen.de;</p> <p><b>Dr Hans-Otto Herrmann</b>, DaimlerChrysler AG, RBP/C, HPC G 203, 70546 Stuttgart, Germany, Tel.: +49 711 17 20894, Fax: +49 711 17 59799, Email: Hans-Otto.Herrmann@daimlerchrysler.com</p>
<b>Link</b>	www.volkswagen.de; www.daimlerchrysler.com





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## Public Procurement of Certified Green Energy

<b>Region / country</b>	Europe / Belgium – Walloon Region
<b>Leading actor(s)</b>	<b>Walloon Government</b>
<b>Participating actor(s)</b>	Regional, provincial, local authorities
<b>Main objective(s)</b>	To foster the interest of public entities in purchasing green energy and to develop the market for green energy
<b>Contents</b>	<ul style="list-style-type: none"><li>• Setting up of a process with all relevant stakeholders such as administrations and energy suppliers to generate interest in green energy procurement</li><li>• Identifying and removal of potential barriers such as knowledge, legislation, market availability</li><li>• Stimulating commercial offers from the private sector to respond to the green energy demand</li><li>• Setting up of a labelling system to guarantee the green origin</li><li>• The dynamics created will target as well private large consumers of the service sector. It will tap in currently existing experience in other countries.</li></ul>
<b>Expected results</b>	In the short term (until 2007), a significant share of at least 10 % of current public energy purchase is redirected to green energy sources. Electricity is the first targeted energy vector.
<b>Target area / place</b>	Walloon Region, with extend to other areas in Belgium
<b>Arrangement(s) for financing</b>	Financial support by the Walloon administration of energy
<b>Monitoring process and time frame</b>	A 6-monthly progress report to the government is scheduled
<b>Contact person</b>	<b>Mr Michel Gregoire</b> , inspecteur général, Division de l’Energie, Ministère de la Région wallonne, av Prince de Liège, 7 à 5100 Jambes, Belgium, Tel.: +32 81 33 55 01, Email: Mi.gregoire@mr.w.wallonie.be
<b>Link</b>	<a href="http://Energie.wallonie.be">Energie.wallonie.be</a>



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## World Energy Council's Centres of Excellence for Sustainable Energy (CESE) in Egypt and Senegal

<b>Region / country</b>	Africa / Egypt; Senegal
<b>Leading actor(s)</b>	<b>Senegalese and Egyptian National Committees of the World Energy Council (WEC)</b>
<b>Participating actor(s)</b>	WEC's national members representing local utilities, industries, institutions, and government agencies in Egypt and Senegal; WEC's member companies, overseas Development Agencies and industry ministries in the donor countries; WEC Secretariat
<b>Main objective(s)</b>	To demonstrate how a pro-active and business-led collaboration can forward the course of sustainable development by accelerating access to modern energy. Particular focus is placed on distributed generation and renewable energy resources and technologies.
<b>Contents</b>	<ul style="list-style-type: none"> <li>• Promoting sustainable technologies and communicating their benefits to policy decision-makers and other stakeholders</li> <li>• Providing local market information and analysis; undertaking market research for new project development</li> <li>• Working together with the local industry representatives and government agencies to identify and develop opportunities to deploy sustainable energy technologies and initiate concrete projects;</li> <li>• Serving as a clearinghouse for information on business opportunities in sustainable energy.</li> </ul>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>• A cost-effective and transparent method to match donor funding to local needs offered through the project-focused partnership.</li> <li>• Clear competitive advantage thanks to WEC's National Members first-hand experience, knowledge and understanding of the local energy industry and the surrounding social, economic, political and environmental realities.</li> </ul>
<b>Target area / place</b>	Africa / Senegal, Egypt
<b>Arrangement(s) for financing</b>	Project funding (financial and in-kind contributions) provided by the founding partners. Local WEC Committees provide "intellectual capital", local experts and office infrastructure; national government agencies identify and support priority projects and concepts; private and institutional donors provide operational financing. The total financing requirement at the start-up stage is approx. €250,000 p.a. (40% thereof contributions in kind).
<b>Monitoring process and time frame</b>	The CESE will be managed under direct oversight by its founding partners who will also play an active role in the implementation. Project duration will be initially two years, with an option on extension to be agreed by the partners.
<b>Contact person</b>	<b>Ms Elena Virkkala Nekhaev</b> , WEC Director of Programmes, 1-4 Warwick Street, London W1B 5LT; Tel.: + 44 207 734 5996; Fax: + 44 207 734 5926/27/28, Email: nekhaev@worldenergy.org
<b>Link</b>	<a href="http://www.worldenergy.org">www.worldenergy.org</a>



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## WEC Handbook on Renewable Energy Projects

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>World Energy Council (WEC) Renewable Energy Committee</b>
<b>Participating actor(s)</b>	WEC National Member Committees from 17 countries (including 8 developing countries), energy industry representatives from 12 companies, government representatives from: Egypt, Senegal, Slovenia, Turkey and Venezuela, international organisations: World Renewable Energy Network and International Hydropower Association
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• The WEC Renewable Energy Handbook is intended to serve as a manual and an information source to facilitate the successful identification and implementation of viable renewable energy projects in different categories, both in developed and developing countries.</li> <li>• WEC is committed to promoting all energy options as part of its mission to achieve the sustainable supply and use of energy for the greatest benefits of all. The Handbook provides objective, impartial and practical advice to anyone looking for guidance on various aspects of renewable energy, including resource and technology assessment, risk analysis and risk management, financing aspects, sample project documentation.</li> </ul>
<b>Contents</b>	This Handbook serves as an invaluable information resource tool, bringing together all aspects of renewable energy project development. The Handbook was conceived, written and promoted by the WEC Renewable Committee with the direct input and guidance of industry, and the private and public sector in the developed and developing world. This Handbook differs by targeting a precise audience and summarising otherwise overly technical terms into language that can be easily understood by those wanting to develop renewable projects. Finally, there is no rhetoric discussion about benefits or deficiencies of various renewable energy options or arguments in favour of a certain technology or solution. The Handbook presents factual information.
<b>Expected results</b>	The Handbook is a succinct reference publication of practical nature which, in addition to providing basic information about the included energy resources: biomass, geothermal, hydro, solar and wind, contains a wealth of references to other information sources. Listings of companies and other organisations active in the renewable energy field provide a hyper link to their respective websites.
<b>Target area / place</b>	Global
<b>Arrangement(s) for financing</b>	Level of funding will be decided by the local WEC Members in conjunction with WEC London Office on a case-by-case basis.
<b>Monitoring process and time frame</b>	(not specified)
<b>Contact person</b>	<b>Ms Elena Nekhaev</b> , WEC Director of Programmes, 5th Floor Regency House, 1-4 Warwick Street, London W1B 5LT, Email: nekhaev@worldenergy.org
<b>Link</b>	<a href="http://www.worldenergy.org">www.worldenergy.org</a>



## WWF PowerSwitch! Campaign – from coal to clean - Pioneers' commitments on renewable energies

<b>Region / country</b>	Worldwide / Germany, USA
<b>Leading actor(s)</b>	<b>World Wide Fund for Nature / WWF</b>
<b>Participating actor(s)</b>	Austin Energy, Austin, Texas, USA; Burlington Electric Department, Burlington, Vermont, USA; EWS-Schönau GmbH, Germany; Naturstrom AG, Germany; NaturPur Energie AG, Germany; NaturEnergie AG, Germany; Sacramento Municipal Utility District, Sacramento, California, USA; Stadtwerke Heidelberg AG, Germany
<b>Main objective(s)</b>	WWF's international PowerSwitch!-Campaign represents the very ambitious but realistic vision of a CO <sub>2</sub> - free power sector by 2050. PowerSwitch!-Pioneers commit to invest in renewable power generation in order to increase the share of <i>new</i> renewable energy sources to at least 20% by 2020 (excluding unsustainable hydro and waste incineration) compared with <8% in Germany and <4% in the US today.
<b>Contents</b>	<p>WWF challenges power companies to take the important strategic decisions for a carbon dioxide free energy future today. Power companies which already make significant efforts for a climate friendly energy system and commit to continue do so in the future can become PowerSwitch!-Pioneers. Each company commits to at least two of the following issues:</p> <ul style="list-style-type: none"> <li>• Increase the energy efficiency of the fossil power plants by 20% in Germany and 15% in the US by 2020 (compared to 1990).</li> <li>• Implement consumer orientated measures to increase demand-side efficiency.</li> <li>• Increase the share of new renewable energies to at least 20% by 2020.</li> <li>• No investment in new coal power stations.</li> <li>• Support political measures and framework to increase energy efficiency and renewable energies.</li> </ul>
<b>Expected results</b>	PowerSwitch!-Pioneers investment in renewable energy projects and increased energy efficiency realized.
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	Project activities will be financed by participating institutions.
<b>Monitoring process and time frame</b>	In order to insure the credibility of the commitments (10 German and 5 US power companies since 2003) WWF pays attention to the public activities of the PowerSwitch!-pioneers. WWF will continue to monitor realization of new renewable energy projects, company support towards favourable political and legal framework conditions for renewables and energy efficiency and if it promotes energy efficiency to its customers. If WWF fears that a PowerSwitch!-pioneer risks to break its commitment WWF will intervene, get in contact and, if necessary, make it public.
<b>Contact person</b>	<b>Ms. Claudia Kunz</b> , <a href="mailto:kunz@wwf.de">kunz@wwf.de</a>
<b>Link</b>	<a href="http://www.wwf.de">www.wwf.de</a>



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## Setting Up Sustainability Guidelines for the Improved Development of Wind Energy Projects

<b>Region / country</b>	Global
<b>Leading actor(s)</b>	<b>World Wind Energy Association</b>
<b>Participating actor(s)</b>	WWEA member organisations, national governments, international organisations like the World Bank and UNEP, developers, financiers, local communities, environmental NGOs and further stakeholders
<b>Main objective(s)</b>	<ul style="list-style-type: none"> <li>• To expand the development of renewable resources, diminish greenhouse gas emissions, protect the environment, ensure public acceptance and treat waste streams</li> <li>• To initiate a consultative process to finalise WWEA's draft Due Diligence procedures and Sustainability Guidelines ('the WWEA Guidelines'), and to develop complementary Compliance Protocols ('the Protocol') for wind energy developments.</li> <li>• To trial selected wind energy projects to be developed in participating countries that are to be subjected to the procedures set down in the WWEA Guidelines, and then subjected to the procedures set down in the Protocol which build on the objectives of the World Summit on Sustainable Development (WSSD) and of the Political Declaration of the International Conference for Renewable Energies, Bonn 2004.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>• In selected wind energy projects (in developed and developing countries and irrespective of the size of the project), the WWEA Guidelines will be applied throughout all stages of planning, construction and initial operation of the project.</li> <li>• The project and the associated procedures and outcomes will be subjected to the Protocol to assess the sustainability performance</li> <li>• This will involve obtaining objective evidence to support the sustainability score.</li> </ul>
<b>Expected results</b>	A general assessment of the WWEA Guidelines and Protocol is made towards their effectiveness. Improvements, which should be made to WWEA Guidelines and Protocol, are identified.
<b>Target area / place</b>	Worldwide
<b>Arrangement(s) for financing</b>	The Governments involved ensure that the cost of applying the WWEA Guidelines and Protocol is included in the project cost.
<b>Monitoring process and time frame</b>	The Governments involved ensure that process and results are reported to the WWEA, which undertakes to collate and publish the resultant material at its cost. This process will commence immediately and involve annual reports by the WWEA to publish a summary of the results with exception of material, which has been reported as commercial 'in-confidence'.
<b>Contact person</b>	<b>Mr. Stefan Gsänger</b> , Secretary General, World Wind Energy Association, Charles-de-Gaulle-Str. 5, 53113 Bonn, Germany, Tel.: + 49 228 3694080, Fax: +49 228 3694084, Email: <a href="mailto:secretariat@wwindea.org">secretariat@wwindea.org</a>
<b>Link</b>	<a href="http://www.windea.org">www.windea.org</a>



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All contributions included in this document have been authorised for publication by their respective authors (leading actors). The review and editing team does not guarantee the accuracy of the data and information included in this document and accepts no responsibility whatsoever for any consequence of their use. All views expressed in the contributions to the International Action Programme are those of the contributing actors and do not necessarily reflect those of Convenors of the Conference.