

UN Organization	Energy-related programmes and activities	Funding and operation	Coordination of activities
<p>United Nations Environment Programme (UNEP) Mark Radka mark.radka@unep.fr</p>	<p>http://www.unep.org/energy</p> <p style="text-align: center;">I. Policies and mandates of the entity</p> <p>Part of UNEP's overall mandate, as stated in the Nairobi Declaration is to:</p> <ul style="list-style-type: none"> - 'catalyze and promote international cooperation and action, based on the best scientific and technical capabilities available' - stimulate cooperative action to respond to emerging environmental challenges', and - promote greater awareness and facilitate effective cooperation among all sectors of society and actors involved in the implementation of the international environmental agenda.' <p>The UNEP Energy Policy and Programme focuses on the need for a global shift to less carbon intensive energy systems and through this reduced adverse environmental impacts on local, regional, and global scales by promoting:</p> <ul style="list-style-type: none"> - greater deployment of renewable energy technologies - efficiency improvements in conventional energy supply and end-use technologies - provision of better energy services from existing energy systems. <p>In order to promote this shift, environmental considerations need to be fully integrated in energy decisions and not just seen as external to the decision making process or pushed off to environmental experts. Given the nature of environmental issues this implies promoting a longer broader framework for energy analyses and planning. As well it means making the finance and industry sectors view change induced by environmental concerns as an opportunity rather than as a cost so that they willingly bring new, cleaner energy options to market and support efforts to use the existing technology base more efficiently.</p> <p>A special feature of the UNEP energy programme is the combination of a programme unit within UNEP and closely associated collaborating centres, most notably the UNEP Collaborating Centre on Energy and Environment (UCCEE), which provides direct programme support, underlying research and implementation of national and regional programme activities that lie within the organisation's general mandate.</p> <p style="text-align: center;">II. Overview of programmes and activities</p> <p>* The GEF -supported <i>Commercial Financing of Renewable Energy and Energy Efficiency Investments</i> project is piloting an Investment Advisory Facility aimed at promoting renewable energy and energy efficiency investments in developing countries and countries with economies in transition. This facility provides expert advice to financial institutions concerning specific sustainable energy investments, and helps bank loan officers develop the skills to evaluate such projects independently. Elements of the effort have been included in the Sustainable Alternatives Network, or SANet effort, also supported by the GEF.</p> <p>* The pilot Sustainable Energy Advisory Facility (SEAF) has provided a variety of targeted advisory services related to sustainable energy to partners in seven developing countries. The facility helped decision makers overcome specific problems regarding sustainable energy policies, projects, investments, technologies, and financing.</p>	<p>Biennial UNEP Environment Fund expenditures on the core UNEP Energy Programme are approx. \$1.6 million.</p> <p>The annual core budget for the UCCEE project is approx. \$1.6 million, 89% of which is counterpart funding. \$750,000 GEF</p> <p>\$400,000 Danida</p>	<p>The energy programme is implemented in cooperation with other UN agencies; WB; GEF; public and private sector banks; business associations; NGOs and numerous national government and research institutions.</p> <p>Danida and the Risø National Laboratory, Denmark</p> <p>Private sector and development banks, other financial institutions</p> <p>Government agencies, NGOs</p>

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	<p>* Building on SEAF experience, UNEP is coordinating creation of a Global Network on Energy for Sustainable Development (GNESD) that responds to various calls for networking amongst 'centres of excellence'. The Network will promote energy for sustainable development through coordinated programmes of policy analysis, practical advice, targeted research and investment facilitation involving leading energy centres in developing and developed countries.</p> <p>*The <i>African Rural Energy Enterprise Development (AREED)</i> initiative in Senegal, Mali, Ghana, Zambia, Tanzania, and Botswana. AREED develops new sustainable energy enterprises that use clean, efficient, and renewable energy technologies to meet the energy needs of under-served populations. The AREED approach offers rural energy entrepreneurs a combination of enterprise development services and seed funding. Integrated financial and technical support allows entrepreneurs to plan and structure their sustainable energy companies in a manner that prepares them for growth and makes eventual investments by mainstream financial partners less risky. See http://www.areed.org for more information. * Other energy enterprise development initiatives have been started in North Eastern Brazil (<i>Brazil Rural Energy Enterprise Development</i> or B-REED) and China (<i>China Rural Energy Enterprise Development</i> or C-REED).</p> <p>* With the World Bank, UNEP is conducting a project <i>Developing Financial Intermediation Mechanisms for Energy Efficiency Projects in Brazil, China and India</i>; the effort is overcoming barriers to energy efficiency lending in the three countries.</p> <p>* Work has started on <i>Capacity Development for the CDM</i> project. This project will generate, in participating developing countries, a broad understanding of the opportunities offered by the Clean Development Mechanism (CDM). It will develop the institutional capability and human capacity needed for these countries to participate as equal partners with developed countries in the formulation and implementation of CDM projects.</p> <p>* UNEP is designing a rural finance facility for solar system purchases that uses UNF resources to buy down the initial risks of lending. The project is a short-term Intervention designed to start a large-scale market for rural credit finance of the solar energy sector in India.</p> <p>* UNEP and UCCEE have conducted several studies on environmental and social implications of power sector reform; a report from a Africa regional workshop on this subject was published in 1999 followed by commercial publication of <i>Power Sector Reform in Sub-Saharan Africa</i> in 2000.</p>	<p>Approximately \$2.0 million for core activities in 2003-2004 (Germany, France, UK and Denmark, UNF, e7).</p> <p>\$8.5 million (UNF, WA Jones Foundation, The Nature Conservancy, Development Bank of South Africa)</p> <p>\$2.2 million (UNF, ESMAP)</p> <p>\$9.8 million (the Netherlands)</p> <p>\$1.2 million (UNF)</p>	<p>Governments, IGOs, NGOs, private sector companies, national/regional centers of excellence working on energy and development issues</p> <p>Environment & Development Cooperation, Coordination of activities</p> <p>Development Bank of Southern Africa; NGOs in AREED countries; E+Co; Brazilian NGOs; and financial Institutions, World Bank; Chinese NGOs; and financial institutions, the Nature Conservancy</p> <p>Partner institutions in China, India, and Brazil, WB</p> <p>Local project teams in 12 countries; regional institutions</p> <p>Indian financial institutions</p> <p>National research institutions</p>

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	<p>* The <i>Solar and Wind Energy Resource Assessment (SWERA)</i> project is pulling different renewable energy assessment and mapping efforts under a common framework and using geographic information systems to deliver more easily used data on resource potential to decisionmakers. The effort involves 13 developing countries and 7 partner institutions.</p> <p>UNEP continues to work with the Canadian Government to adapt RETScreen™, a software tool that helps renewable energy project developers and financiers analyse projects. UNEP developed a GHG indicator module that increases the usefulness of RETScreen™ as well as suggested changes that make the tool easier for international users, and is now working with NRCan to develop a RETScreen™ training module.</p> <p>* <i>UNEP Guidelines for Calculating Greenhouse Gas Emissions for Business and Non-Commercial Organisations</i>, developed through the UNEP Insurance Industry Initiative, have been upgraded to spreadsheet form, making the tool easier to use in calculating GHG emissions from energy use.</p> <p>* Linking with its Cleaner Production Programme, UNEP is undertaking pilot projects to remove barriers to implementing energy efficiency in industry. A larger programme using the network of national cleaner production centres to expand this type of activities is being developed.</p> <p>* UNEP supports the work of the OECD Working Party on Export Credits and Credit Guarantees by linking Export Credit Agencies to its Financial Services Initiatives. Information provided by private banks on their experiences with environmental screening, environmental risk assessment, staff training on environmental issues, etc. helps ECAs to generate new ideas and approaches.</p> <p>* UNEP's Mobility Forum with 11 major Auto Manufacturers from Europe, the US, Japan and Korea undertakes joint activities that lead toward sustainable mobility. First activities include an effort to produce sector specific indicators for reporting and a public awareness campaign on environmentally friendly driving.</p> <p><u>Recently Completed Activities</u></p> <p>* <i>Implementation of Renewable Energy Projects – Opportunities and Barriers in Egypt, Ghana and Zimbabwe</i> provided recommendations for removing various types of barriers to RETs based on analysis of specific energy projects in the three countries.</p> <p>* <i>Wind Energy in the 21st Century: Economics, Policy, Technology, and the Changing Electricity Industry</i> provides an overview of wind energy technology, economics, finance, competitive power markets, environmental impacts, experience with national promotional policies, and related topics.</p> <p>* A global study of the potential for adding photovoltaic systems to existing hydropower facilities was made with the International Finance Corporation and the German Development Bank KfW.</p> <p>* A Regional Caribbean Programme on Sustainable Energy Development involved preparation of national case studies and training seminars.</p> <p>* A study on increased utilisation of RETs on Pacific Islands, especially those that are wind based, also developed a post-graduate curricula on wind energy development for the University of the South Pacific.</p> <p>* Guidance document for policy-makers and industry decision-makers in developing countries considering setting up (or participating in) voluntary programmes to promote energy efficiency.</p> <p>* Training manual on Integrated Resource Planning in developing countries prepared and published jointly with the University of Campinas, Brazil; this was used in training courses in Latin America and Africa, for training task managers in the World Bank, and as input to regional seminars.</p>	<p>\$7.5 million (GEF)</p> <p>\$100,000</p> <p>\$20,000</p> <p>\$950,000 (GEF)</p>	<p>Technical institutions and 13 national teams</p> <p>Natural Resources Canada</p> <p>NCPCs in Vietnam, China, India, Czech, Slovak, Hungary ECAs, private sector financial institutions, OECD</p> <p>Major auto companies</p> <p>UNDP, IFC, KfW, OLADE, ECLAC, USP, SOPAC, NCPCs, UNIDO, EBRD, private sector banks in Central and Eastern Europe, USEPA, IEA, ECLAC, World Bank, National and regional institutions, NGOs, UNESCO, OECD, industry</p>

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	<p>* Series of regional workshops on <i>Energy Subsidy Reform and Sustainable Development</i> with the aim of improving the understanding of social, economic, and environmental effects of energy subsidies. The workshops allowed government experts, NGOs, and industry to discuss the challenges of energy subsidy reform and learn from the examples of successful reform programmes undertaken in other countries.</p> <p>* Analytical tool for integrating global environmental externalities into planning of transport projects. The <i>Global Overlays</i> calculate GHG emissions for the transport sector and outline cost-effective GHG abatement options available to a specific country.</p> <p>* Regional seminar for Latin America in El Salvador on sustainable transport initiatives.</p> <p>* Special issues of <i>Industry and Environment Review</i> on the topics of sustainable energy and transport as a contribution to the CSD-9 preparatory process.</p> <p>* GEF-funded study of the market potential for fuel cells in buses and for distributed power generation.</p>		