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Norway

Climate change is seriously threatening achievement of the MDGs. Nevertheless, the world society has never been better equipped to meet today’s climate and energy challenges.

Norway regards REEEP as an important partnership through which international and regional collaboration in the energy sector may increase in quantity as well as in quality.

Industrialised countries must do what is in our power to ensure that developing countries make a technological leap forward and avoid falling into the traps of polluting technologies. With a three-year pledge of €3.7 million from 2006 to 2008 Norway has become a key financial contributor to REEEP.

REEEP objectives are consistent with the aims of the ‘Norwegian action plan for environment in development cooperation’. The plan was launched in 2006 and will be operational until 2015. It sets out ambitious goals for poverty reduction and contributions to sustainable ecological, economical and social development. In accordance with the plan, Norway will promote greater use of renewable energy and more energy efficiency to address climate change, and also improve access to clean energy.

22 out of 36 new projects announced by the REEEP partnership in June 2007 are co-funded by Norway. Our funding is primarily focused on supporting projects in Brazil, China, and India. There is some funding of projects in South Africa as well. We are also contributing to a renewable energy fund in West Africa, targeting Ghana, Mali and Senegal.

The threat of climate change may seem insuperable. However, we have the tools, the technology and to a great extent a favourable international environment towards cooperation. Now it is in the interest of both developing countries, emerging economies and industrialised ones to act upon this basis and secure our common future.

In our view funding REEEP projects is one way to contribute to making a difference.

Erik Solheim
Minister of the Environment and International Development

Norwegian Ministry of the Environment

ERIK SOLHEIM
United Kingdom

Defra is proud of its involvement in REEEP: a leading global partnership that has seen continued growth in its membership, funding support and project delivery since its launch in 2003.

The partnership has now funded more than fifty high quality projects globally.

In March this year the UK Government published its plan for tackling climate change in the draft Climate Change Bill – the first of its kind in any country. At the same time, as Gordon Brown said to the United Nations, the UK has a special responsibility to help the poorest countries to adapt to climate change and to help them invest in climate-friendly energy production and energy efficiency to ensure that all the Millennium Development Goals are met — not at the cost of economic growth, but to achieve it. Supporting REEEP is one of the ways in which the UK is working to meet this global challenge.

The benefits of, and opportunities from, sustainable energy are attracting increasing interest as it moves to the mainstream: the UK Carbon Trust reports that 10% of all European venture capital investments are now in clean energy, on a par with the biotech and IT sectors. In the US, green technology has become the third largest investment for venture capitalists, and with their fast-paced growth by 2012 India and China are forecast to be the most attractive countries for renewable energy investors.

Operating with a network of eight regional secretariats and more than 3,500 members, REEEP plays an important role internationally. It does this by developing the policy and financial frameworks that are essential to get finance flowing into low carbon infrastructure.

These projects can also help realise the potential of the carbon market and the Clean Development Mechanism (CDM). For example REEEP’s London-Beijing Olympic Games CDM Project will source Certified Emission Reductions from a Beijing CDM project as part of the carbon management strategy for the London Games. Another project with IT Power, the Gold Standard Foundation and WWF has held workshops in the Philippines, China and Brazil to raise awareness and guide developers to consider how the CDM ‘Gold Standard’ could be applied to their projects.

Over and above carbon finance there is a need for substantial additional financing to assist developing countries’ move to a low carbon future. The UK has announced it is setting up a new Environmental Transformation Fund worth US$1.6 billion which will help meet our international commitment to reducing poverty reduction through investment in clean energy, sustainable forestry, adaptation and environmental protection. REEEP is helping to implement such initiatives and realise their full potential.

As REEEP enters its fifth year, I look forward to continuing Defra’s support and funding for the partnership.
Ireland

Climate change is the greatest challenge of our time, which will compromise global sustainable development.

Ireland supports the ultimate objective of the United Nations Framework Convention on Climate Change. To achieve that objective, we believe that global emissions must be reduced to at least 50% of the 1990 level by 2050. In any terms, this is a major global challenge and Ireland is fully committed to contributing to its achievement.

Transition to a low-carbon world is no longer a choice, it is an imperative — an enormous task but not without significant opportunities for those who act quickly and with both commitment and determination.

Ireland welcomes the opportunity that REEEP offers to participate in a multi-stakeholder, sustainable development initiative, which aims to accelerate the global development of renewable energy and energy efficiency systems. Our support is channelled through a suite of programme supports including through GEF and the Framework Convention on Climate Change.

In line with Ireland’s Overseas Development Aid policy, the contributions from the Irish Government enable REEEP to support projects in eastern and southern Africa, including Ethiopia, Lesotho, Mozambique, Tanzania, Uganda and Zambia. This development component of the REEEP initiative brings an important balance to its portfolio of activities, one that is hugely important for these African countries and for Ireland.

In a very direct and effective way, REEEP contributes to the task of building an effective global response to climate change. It is a vehicle through which participants can make a real and positive difference, particularly in least developed countries in sub-Saharan Africa. Ireland values its participation in REEEP and we encourage others to join us in supporting its objectives and in building on its success to date.

John Gormley
Minister for the Environment, Heritage and Local Government

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Minister for the Environment, Heritage and Local Government
Renewables offer a suitable response to address some of the main challenges in the field of environment, energy and sustainable development.

Both the 2001 G8 Renewable Energy Task Force and the 2002 Johannesburg World Summit on Sustainable Development highlighted the need to change energy patterns, in production and consumption, giving a deep speed-up in finding new effective ways for providing sustainable and clean energy services to people all over the world.

In this framework, further enforced by the actual global policies on climate, renewable energies assume a key role in securing energy supply, increasing access to energy services, particularly to poor populations, and combating climate changes.

Providing sustainable energy is a global issue, global efforts and tools are to be promoted. Partnerships for sustainable development offer a unique comprehensive framework to bring actors together, to share responsibilities and to move towards common goals.

In line with this, Italy decided both to implement a Partnership programme, the Mediterranean Renewable Energy Programme (MEDREP), and to become partner of the REEEP Partnership.

MEDREP is a framework to promote the diffusion of renewable energies in the Mediterranean through the implementation of projects and mechanisms able to create and support the related technological markets. At the same time, MEDREP contributes to facilitate the technological and know-how transfer from northern to southern, thus contributing to creating local skills in managing renewables.

Cooperation with REEEP is adding value to achieve these goals. Within the REEEP-MEDREP cooperation framework, four projects concerning mechanisms and regulatory framework to support renewable energies are already under implementation. REEEP and MEDREP, through their valuable experience coming from the implementation of concrete projects, will continue to contribute to the international expert and high-level dialogues on sustainable development and climate change.

Italy

Italy is strongly committed in promoting renewable energies both at national and international level.
New Zealand

As a member since the Renewable Energy and Energy Efficiency Partnership’s inception in 2002, New Zealand is delighted to make additional funding available to REEEP.

This funding is for projects that continue to support access to sustainable energy and greenhouse gas mitigation in the South Pacific region.

Through the provision of funding to REEEP, the New Zealand Government is pleased to support a project to establish a micro credit scheme for solar lighting systems in the Solomon Islands and Kiribati under the 6th project call.

We note that intensified effort is required to ensure the energy challenges facing the region are addressed and consider that the addition of an Asia-Pacific Secretariat last year is an important regional resource to help foster greater sustainable energy networks in the region and internationally.

REEEP’s bottom-up project based approach to deliver social improvements to developing countries and countries in transition is a good fit with New Zealand’s general approach to aid and development in the region.

We note that Pacific Energy Ministers met in April of this year and they identified clear priorities for the Pacific region targeted towards sustainable energy, energy efficiency, and improved policy and regulatory systems. We look forward to continuing to work with REEEP in assisting with achieving these outcomes.

New Zealand also anticipates working with REEEP towards improving access to clean and reliable energy services, by making sustainable energy more affordable in the Pacific.

Hon David Parker
Minister Responsible for Climate Change Issues

David Parker
International Director

REEEP is very happy to present the REEEP Project Profiles 2007/8 reflecting a targeted approach to increase business, finance, policy and regulatory impacts.

REEEP Programmes are a strategic asset of the partnership and represents a potent way to engage and collaborate with our partners to develop a global market for renewable energy and energy efficiency.

REEEP also underwent two evaluations during this period and in response to the evaluation recommendations we have taken a number of actions. We have started commissioning projects using a transparent process and are increasingly working directly with governments and financial institutions. We have also launched a funding stream to support replication and scale-up of successful past projects and have also doubled the duration of projects and significantly increased the financial grants to projects. We have narrowed our geographic focus to the emerging market economies and the least developed countries. During the selection process for the 6th Programme Cycle, the biggest so far, we received a record number of 310 proposals from which 37 projects are being supported. We would like to thank our partners for this positive response to the strategic shift of REEEP Programmes.

We would also like to thank our programme donors who facilitate the delivery of our core aim: the promotion of renewable energy and energy efficiency market development. We are thankful to the governments of Norway, the United Kingdom, Ireland, Italy and New Zealand for their continued support and guidance to REEEP Programmes.

We hope you find the Project Profiles 2007/8 useful in better understanding the projects implemented by our partners and the importance of these initiatives at the local level. We are happy to receive comments or questions about engaging with us.

Dr. Marianne Osterkorn
International Director

MARIANNE OSTERKORN
REEEP Programmes and Media Coverage
Overview of REEEP Programmes

We are very pleased to present the second edition of REEEP’s programme overview. This publication highlights the important work being supported by REEEP and its partners all over the world in the areas of Renewable Energy and Energy Efficiency.

REEEP has been able to leverage this enthusiasm and identify concrete actions that move us towards a sustainable energy future. The projects described in this book are only part of a wider portfolio of work. However, they form an important basis on which to provide evidence-based policy support and market transformation.

All of this work is made possible by the dedicated staff at the International and Regional Secretariats and Focal Points, guidance by the Steering Committee and Programme Board members, REEEP partners and the immense support and leadership of the donor governments.

Process

One of the major activities of REEEP is to support and augment the programming needs of its partners in the renewable energy and energy efficiency sectors through targeted financial support. REEEP identified priority themes in these sectors through a process of eight regional consultative workshops held globally in late 2003. This process identified that the two principle focus areas for REEEP would be:

- Business and Finance
- Policy and Regulation

These themes remain valid today in optimising the impact and usefulness of REEEP resources worldwide.

Since 2004, the specific programme priorities within the two themes have been developed and refined through a bottom-up process of worldwide regional meetings.

Projects

Since its legal establishment in 2004, REEEP has supported a total of 84 projects directly supported by the Governments of the United Kingdom, Norway, Ireland, Italy and New Zealand (many other Government members support REEEP in other essential ways). These 84 projects were mostly identified through open calls, followed by a rigorous two-stage selection process. As the next stage of evolution of the REEEP Programme, we have started commissioning projects and also working directly with governments and development financial institutions to support policy change. Beginning this year REEEP is also providing additional...
support to the scale-up and replication of successful past projects. In addition, REEEP is in the process of the development and implementation of a Programme Management Information System (PMIS) which will automate existing programme processes, making the programme coordination more efficient and more open. The first global meeting of REEEP Project managers was held in Beijing this year, which provided a good opportunity to share experience, collaborate and obtain feedback. These measures ensure good governance and high quality projects with a focus on replicability and long-term sustainability.

Creating a balanced portfolio of projects across regions, themes and technologies has not been a simple task. However, by working together with various REEEP stakeholders we have managed to design an impressive range of project types. The programme portfolio has a balanced regional distribution with similar shares for Africa, Asia-Pacific and Latin America and the Caribbean. Renewable energy projects account for 57% of the portfolio and energy efficiency projects for 43%. The share of policy and regulation projects is 51% and the financing projects account for 49%. The portfolio has also leveraged significant resources through co-financing; for each Euro invested by REEEP donors, over four Euros are contributed by the project implementers and other co-funders.

The number of Government donors continues to increase, with the Government of Australia also supporting REEEP programmes.

**Cooperation**

REEEP has shown leadership by signing memoranda of understanding with other partnerships and organisations such as CLASP, EEP, GNESD, GVEP, ICLEI and MEDREP. Joint programmes with CLASP, GVEP and MEDREP are underway. REEEP also collaborates with the World Bank and IEA. This cooperation is essential in tackling the large array of issues in the sustainable energy sector, and ensuring streamlined solutions.

Due to its important role in this area, REEEP efforts in renewable energy were acknowledged and encouraged in the G8 Heiligendamm Plan of Action.

**The Future**

REEEP is planning to lay more emphasis on working with key stakeholders such as governments and financial institutions to support policy, business and financial change. REEEP will also be synthesising the emerging experiences from the programme so far and plan to carry out the first set of impact assessments of completed projects. Finally, the continuing support by its donors, the identification and support of good quality projects, and their dissemination and replication will be important for REEEP programmes in the future.

We hope you find the publication useful in better understanding the important work of REEEP, and are happy to receive comments, or questions about engaging with the partnership.

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**These topics have witnessed unprecedented levels of interest from national and local governments, business development, financial institutions, banks and the general public in the last three years.**

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**Morgan Bazilian**

Chair of REEEP Programme Board
Media Coverage and Promotion of REEEP Projects

All REEEP projects are promoted to a variety of stakeholders including the media, local and national governments, financial institutions and regulatory bodies.

REEEP’s independent and objective status has allowed the partnership to develop a strong relationship with the international media. At a regional level, REEEP’s Regional Secretariats work to promote projects to local media (in local language). Projects are also promoted by project developers at conferences and workshops. Each year the International Secretariat highlights selected projects for promotion at international fora via side events at the UN Commission on Sustainable Development, the UNFCCC COP/MOP and the annual climate change event at Wilton Park in the UK.

Primary channels of promotion that REEEP provides to projects include:

**Membership**

REEEP’s network continues to grow and the current member database exceeds 5,200 individuals worldwide. The REEEP community platform allows all projects to create their own self-managed webpage in order to promote their project and its outcomes to the entire international membership.

**Website and News**

REEEP newsletter

The monthly REEEP e-newsletter highlights selected projects each month. Project developers are interviewed by writers and a ‘news story’ is produced for the REEEP website. Projects are promoted to the general public on the REEEP website and to the newsletter subscriber list of 3,000 people via direct mail. The result is that projects can be more easily found via Google searches and that news on projects is fed directly into the inboxes of governments, businesses, NGOs and the international development community.

The website also has ‘Projects,’ ‘News’ and ‘Events’ sections where projects are highlighted and links are provided to relevant project documents and reports.

**Events**

REEEP organises a number of strategic events each year in addition to speaking at more than 75 conferences worldwide. Projects and their outcomes are presented at these events and conferences, raising the awareness of the work that REEEP and its partners are doing worldwide. For example, REEEP highlighted several projects at a special meeting of African and developing country Parliamentarians as part of a side event to the Nairobi UNFCCC COP/MOP event.
Reegle – the information gateway for renewable energy and energy efficiency

REEEP, in conjunction with strategic partners, has developed an information gateway for renewable energy and energy efficiency. It is a one-stop shop for high quality, up-to-date information on clean energy policy, with a core objective of supporting the global advancement of energy efficiency and renewables. The website facilitates fast access to continuously updated information for politicians, project developers, companies, municipalities, banks, credit institutions and for all those interested in this issue.

Reegle specifically covers information relating to jurisdiction & laws, policies & measures, finance & investment, reports & analyses, latest news and stakeholders. Reports and news from REEEP’s projects are made available in reegle.

Reegle uses state-of-the-art technology and derives its content from evaluated and preselected databases and sources, mainly provided by our knowledge partners including UNIDO, the World Bank, the World Energy Council and the International Energy Agency.

The next phase of development will see the introduction of multi-lingual options to further broaden reegle’s global reach.

For more information please visit http://www.reegle.info.
Project Profiles: Supported Projects 2007/8
POLICY & REGULATION

National Action Plan for rural biomass renewable energy development in China

PURPOSE
To develop a National Action Plan for rural biomass based energy in China with supporting documentation

MAIN ACTIVITIES AND OUTPUTS
- Review the major experiences of biomass development in Europe
- Evaluate current policy, institutional, technology and financing mechanisms on rural biomass renewable energy in China
- Identify the barriers and priorities for rural biomass development in China
- Set detailed objectives and targets in the 11th and 12th five-year plans on the base of the national strategy
- Design detailed actions on capacity building, institutional building, financing mechanisms, technical renovation, commercialisation, international cooperation and awareness improvement, to achieve the targets
- Design and select some pilot engineering projects
- Develop a framework of measures to ensure the smooth implementation of the Action Plan

EXPECTED IMPACTS
- Provision of detailed measures to enable China to achieve its biomass development target in the medium and long-term as set in the National Strategy and achieve greenhouse long-term emission reductions
- Production of measures to remove the barriers to rural biomass development
- Promotion of public acceptance of the national strategy and improve the public awareness on rural biomass energy
BUSINESS & FINANCE

Using financial and market-based mechanisms to improve building energy efficiency in China

PURPOSE

There is significant potential to improve building energy efficiency in China and this project will consider appropriate financial and, in particular, market-based mechanisms to trigger action in this area. Following assessment of suitable mechanisms, a road-map to increase take-up will be developed.

MAIN ACTIVITIES AND OUTPUTS

- Investigate existing mechanisms (including building codes and standards) to improve building energy efficiency in China
- Consider appropriate financial and market mechanisms being developed or used in other parts of the world. This will include taxes, subsidies, soft loans and other incentives, tradable white certificates (TWCs), a clean development mechanism (CDM) programme of activities and the voluntary emissions reductions (VER) market
- Assess the suitability of proposed mechanisms for China and investigate key issues such as which actors should be targeted by measures (e.g. building residents, district heating companies) and links to other policy objectives such as improved living conditions for residents
- Develop a road-map for improving building energy efficiency in China through the use of financial and market-based mechanisms, in consultation with key stakeholders including, for example, the Energy Research Institute (ERI), the China Designated National Authority and CDM and VER project developers

EXPECTED IMPACTS

- Increased understanding of the role that financial and market-based instruments, particularly the regulated and voluntary carbon markets, can play in reducing building energy consumption in China
- A policy framework to create a favourable environment for implementation of market-based instruments for energy efficiency in buildings
- Increased awareness and readiness within the industry for the use of market mechanisms for energy efficiency

LOCATION:

China

DURATION:

2007-2008

BUDGET:

€90,300 including co-funding from ESD-Sinosphere Ltd.

IMPLEMENTING AGENCY:

- Energy for Sustainable Development Ltd.
- Energy Research Institute (ERI) - National Development and Reform Commission
**LOCATION:**
Ghana, Mali, Senegal

**DURATION:**
2007-2008

**BUDGET:**
€275,000 including co-funding from Global Energy Efficiency and Renewable Energy Fund (GEEREF) and E+Co

**IMPLEMENTING AGENCY:**
E+Co

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**BUSINESS & FINANCE**

**E+Co West Africa Modern Energy Fund**

**PURPOSE**
To realise an investment fund to invest $12 million in 76 clean energy SMEs in Ghana, Mali and Senegal. The fund will replicate and scale up E+Co’s existing activities in an efficient manner

**MAIN ACTIVITIES AND OUTPUTS**
- Provide people with access to energy: 3,191,489
- Offset tonnes of CO₂ annually: 2,112,676
- Mobilise third party capital: $120,000,000

Over the total operational period of 10-12 years, the effects will be roughly four times these numbers:
- Provide people with access to energy: 12,765,956
- Offset tonnes of CO₂ annually: 8,450,704
- Mobilise third party capital: $480 million

**EXPECTED IMPACTS**
- Provide access to clean energy to mainly unserved people
- Socio-economic and environmental benefits of replacing fuelwood, kerosene and charcoal with modern cooking fuels
- Catalyse a sustainable financing value chain for clean energy SMEs in the region
- Include neighbouring African countries in scope of fund, once successful after about two years
- Replicate this first-time fund to other E+Co regions especially Mekong and South-America
- Share lessons learned with the wider network of REEEP and other stakeholders
BUSINESS & FINANCE

Business model for biomass distributed electricity generation

PURPOSE
To develop a commercial model for biomass distributed electricity generation based on an assessment of development needs namely technology, financing mechanisms and capacity building at local level for establishing rural energy supply companies (RESCOs)

MAIN ACTIVITIES AND OUTPUTS
- Review distributed generation (DG) programmes based on available literature & information
- Conduct a feasibility analysis to assess business attractiveness considering market potential and resource availability
- Select appropriate technology, design and implementation of pilot plant
- Conduct further feasibility analysis based on implementation experience
- Develop financing mechanisms for investment in, and commercial expansion of, such projects in consultation with banks
- Identify agencies and capacity building needs for the development of RESCOs
- Prepare a business plan
- Hold a bilateral workshop in New Delhi
- Create and manage a web site during the project period

EXPECTED IMPACTS
- Expansion of rural energy access and clean energy network
  An acceleration of investment in distributed energy systems based on renewable technology and local resources would supplement the efforts on grid expansion in India to meet the target of ‘Energy for all by 2012’
- Positive impact on the environment through the reduction in greenhouse gas emission (from the supply of electricity from fossil fuel based alternatives)
- Poverty alleviation through increased income from the utilisation of wastes and the generation of direct and indirect employment from the development of RESCOs
- Social impact as the availability of electricity in the unserved/underserved areas would improve quality of life

LOCATION:
India

DURATION:
2007-2009

BUDGET:
€180,000 including co-funding from DCM Shriram Consolidated Ltd.

IMPLEMENTING AGENCY:
DSCL Energy Services Company Ltd.
Removal of financial and institutional barriers in mainstreaming the biomass gasifier systems for thermal applications in India

PURPOSE
To facilitate the large-scale penetration of the gasifier technology in India by the creation of a separate line of credit

MAIN ACTIVITIES AND OUTPUTS
- Raise awareness amongst users, banks, manufacturers and local service providers (LSP) about the biomass gasifier technology
- Create a revolving fund to finance manufacturers, users and LSPs through alternative financing options - leasing through the manufacturers and LSP and direct financing to the users. The saving on account of energy costs will be used to repay the loan amount for use as revolving fund
- Finance 30 biomass gasifier systems of various capacities (10 kg/hr to 300 kg/hr) to the Small and Microsized Enterprises (about 2MWth capacity)
- Develop a minimum of five local nodes/local service providers

EXPECTED IMPACTS
- Mainstreaming biomass gasifiers for thermal applications in SMEs
- The problem of energy accessibility for small industry sector could be solved through introduction of locally available biomass resources
- Introduce the scope of livelihood generation for the local service provider for the operation and management of biomass gasifiers and biomass production and processing
BUSINESS & FINANCE

Creating scalable financing models for sustainable energy services via financial and microfinance institutions

PURPOSE
To create a replicable innovative financial mechanism for renewable energy financing which will lead to influencing the existing policy on financing energy services in the region

MAIN ACTIVITIES AND OUTPUTS
- Develop 10 clean energy projects with five different innovative financing mechanisms involving at least five different financial and/or micro-finance institutions in renewable financing
- Train representatives from micro-finance institutions on renewables and innovative financing
- Train and involve the media in promotion of renewable financing and policy reformation
- Collate success stories and use these as examples for policy advocacy for clean energy
- Involve partner micro-finance institutions in policy advocacy

EXPECTED IMPACTS
- Involvement of more financial institutions in renewable financing making the service accessible for rural underserved populations and influencing policy makers to bring appropriate reformation to existing policies
- The policy reformation will encourage mass replication of renewable financing in various areas ultimately increasing the reach of renewable services to the underserved and including them in the ‘bankable category’
- The energy service is expected to result in income generation and promoting sustainable livelihoods

LOCATION:
Karnataka, Gujarat

DURATION:
2007-2008

BUDGET:
€150,000

IMPLEMENTING AGENCY:
SELCO Solar Light (P) Ltd.
POLICY & REGULATION

Technical support to energy efficiency standards and labeling in India

PURPOSE
To provide technical expertise to standards and labeling (S&L) in India, via Bureau of Energy Efficiency, for refrigerators, air conditioners, and consumer electronics resulting in increased consumer awareness and sales of energy efficiency products

MAIN ACTIVITIES AND OUTPUTS
- Support BEE’s S&L programme
- Collect, analyse and disseminate impacts for median product electricity, energy use, CO₂ emissions, change in consumer awareness, sales of energy efficient models and international benchmarking
- Prepare outreach materials explaining labeling and train NGO partners to publicly distribute and track dissemination
- Develop endorsement label design (for consumer electronics) through qualitative market research with consumers and other stakeholders

EXPECTED IMPACTS
- Improved capacity of BEE to develop and implement S&L programmes
- Improved capacity of BEE to deliver and assess consumer awareness and outreach programmes
- Quantification of impacts to support energy efficiency policy decisions
- Improved programme implementation through a credible feedback mechanism on impacts
- More effective outreach to the public through a network of NGOs
- Greater public awareness of energy information labeling
- Strengthening of the NGOs capacity in delivering energy efficiency messages to consumers
- Labeling for consumer electronics – a product category with significant impact on India’s future energy demand
- The anticipated total CO₂ emissions saved in India from S&L for the products in these are expected to be 400 million tCO₂e

LOCATION:
India

DURATION:
2007-2008

BUDGET:
€1,071,000 including co-funding from Bureau of Energy Efficiency (BEE) India, US Environmental Protection Agency (EPA) and US Department of State (DoS)

IMPLEMENTING AGENCY:
Collaborative Labeling and Appliance Standards Program (CLASP)
BUSINESS & FINANCE

Standardised financial & legal documentation for RETScreen

PURPOSE
To help significantly reduce pre-construction financial and legal transaction costs for clean energy projects by establishing a standardised financial and legal document knowledge management system integrated with the RETScreen Clean Energy Project Analysis Software

MAIN ACTIVITIES AND OUTPUTS
- Link existing legal documents for energy efficiency, cogeneration and renewable energy projects to RETScreen Software
- Include an editor-controlled Wiki document management section within the RETScreen Website
- Develop customised initial documents where gaps exist for pilot project in China, India or Brazil
- Disseminate content to users via RETScreen Software and links to RETScreen from other websites, with a focus on REEEP donor priority countries

EXPECTED IMPACTS
- Reduction of the estimated $300 billion dollars invested in pre-construction transaction costs for energy efficiency, co-generation and renewable energy projects over the next 30 years
- Reduction of upfront costs, via the standardisation of documentation and by automating expert knowledge within RETScreen software. Financial and legal documentation adds substantially to these costs, as much as $1 million per project
- Reduction of development costs through an integrated set of freely available forms leading to a greater number of projects implemented, particularly in REEEP donor priority countries

LOCATION:
Global

DURATION:
2007-2009

BUDGET:
€600,000 including co-funding from Natural Resources Canada (NRCan)

IMPLEMENTING AGENCY:
CANMET Energy Technology Centre-Varennes
BUSINESS & FINANCE

Establish a Gold Standard (GS) local experts programme

PURPOSE
To build local expert capacity in clean energy project finance and development in Brazil, China, India and South Africa
To realise eight renewable energy and energy efficiency Gold Standard CDM Project Design Documents (GS PDDS) with financial plans

MAIN ACTIVITIES AND OUTPUTS
- Recruit experts in target countries (China, Brazil, India, and South Africa)
- Educate and brief the recruited experts, providing a GS Local Expert network whereby South-South learning and harmonisation of efforts can occur
- Provide local expert support (financial and technical) to project developers using the GS methodology
- Local experts to provide free assistance in the completion of at least two GS PDDs in each country, including a finance plan
- Develop a finance and project development ‘tool kit’ in Portuguese, Hindi, English and Chinese for public use, by Gold Standard staff, in collaboration with local experts
- Organise a final South-South knowledge sharing workshop for the four local experts and the GS staff to share experiences, strengthen the South-South network and build a road map for multiplication and upscaling of the project’s achievements
- Develop four local experts in GS methodology and project finance who are subsequently able to multiply the project’s benefits after the REEEP component of the project is complete

EXPECTED IMPACTS
- Provision of local support for utilising the CDM Gold Standard to implement energy efficiency and renewable energy in China, Brazil, India and South Africa for at least eight projects
- By using the GS methodology and empowering local experts to lead projects through the financial and technical hurdles associated with the carbon market, the GS Local Expert Programme ensures that CDM projects reap benefits for local communities and therefore contribute to the achievement of the millennium development goals
- Targeting countries with a rapid demand for energy services and the promotion of projects that forward social, environmental and economic goals. This enhances international efforts to tackle climate change and promote energy security while at the same time advancing the achievement of the MDGs
POLICY & REGULATION

Improving electricity governance in Brazil and South Africa

PURPOSE
To improve governance of electricity in Brazil and South Africa by building government and regulatory capacity to implement legislation that promotes renewable energy, energy efficiency and social welfare in line with sustainable development and public interests.

MAIN ACTIVITIES AND OUTPUTS
- Convene a coalition of civil society, regulatory commissions, government, legislators and utility representatives in South Africa and Brazil.
- Research and analyse using the electricity governance initiative indicator toolkit (developed with REEEP support) identifying weaknesses in policy and regulatory processes in Brazil and South Africa.
- Engage legislators, government and regulators through the assessment process to address these weaknesses.
- Build on Electricity Governance Initiative (EGI) partners and experiences in Asia to inform policymakers and regulators in Brazil and South Africa about how open and transparent governance can help build political support for renewable energy and energy efficiency programmes.
- Identify leverage points to influence regional integration in Southern Africa and South America to promote renewable energy, energy efficiency and public interests.

EXPECTED IMPACTS
- New opportunities are created for diverse stakeholders including consumer groups, environmental groups, regulators, energy ministry officials and private sector actors to identify common solutions.
- Civil society actors have enhanced capacity and credibility, enabling them to advocate more effectively for public interests.
- Regulators and policy makers understand how better governance can help build political support for innovations to promote clean energy and energy efficiency.
- Improved transparency and public participation in the development of policy and regulation helps manage tradeoffs between environmental, social and financial considerations.
- Enhanced accountability for implementation of policy and regulatory measures benefits the public interest.

LOCATION:
Brazil, South Africa

DURATION:
2007-2008

BUDGET:
€300,000 including co-funding from USAID, the Netherlands and Energy Collaborative

IMPLEMENTING AGENCY:
World Resources Institute
**LOCATION:**
China

**DURATION:**
- 2007-2009: project set up
- August 2008-2012: project implementation

**BUDGET:**
€350,000 including co-funding from London 2012 Partners/ Stakeholders, London Organising Committee of the Olympic and Paralympic Games (LOCOG)

**IMPLEMENTING AGENCY:**
London Organising Committee of the Olympic and Paralympic Games (LOCOG)

**BUSINESS & FINANCE**

**London-Beijing Olympic Games CDM project**

**PURPOSE**
To develop and promote a sustainable CDM cooperation programme in China between the Beijing and London Olympics which both offsets the emissions from the 2012 Games, and creates a self supporting infrastructure to facilitate the development of additional similar activities in China

**MAIN ACTIVITIES AND OUTPUTS**
- Develop a plan for the programme implementation, including discussing with, and identifying suitable projects (taking into consideration preliminary assessments of rural biogas, bus efficiency, light bulb replacement, small scale rural hydro projects), assessing appropriate technologies and identifying suitable local implementing agencies
- Implement the planned projects, including training and scaling up the identified local NGOs, developing a revolving financing facility or other appropriate structures, developing necessary documentation to support the loans and the transfer and sale of the carbon credits, developing the CDM documentation and application to the CDM Executive Board

**EXPECTED IMPACTS**
- Global promotion of project initiation at the time of the Beijing 2008 – London 2012 Handover in August 2008 – project will phase in from this point to 2012 to accrue CERs towards London 2012 offset
- The high profile of the Olympic Games will provide a global platform for raising awareness of climate change and potentially create a significant multiplier effect
- Development of scaleable renewable energy project(s) and financing facility in China; for example investment of £5million equates to approximately 25,000 rural homes with new biogas digesters, or 5 million new energy efficient light bulbs. Approximate target of 1 million tonnes of greenhouse gases would be avoided
BUSINESS & FINANCE

Energy-Millennium Development Goal Financing Facility (E-MDG-F) – participatory business planning

PURPOSE
To lift significant numbers of the poor out of poverty through their ownership of financially, environmentally and socially sustainable ventures, utilising renewables and energy efficiency provided services and infrastructures

MAIN ACTIVITIES AND OUTPUTS
- Develop a business plan for the Energy – MDG Facility, including governance and agreements; establishing the facility; defining the operational structure, selection and grant-making procedures; defining the monitoring/evaluation system, facility services and technical assistance; launch
- Produce required legal documents drawing on various sources for grant funds (Fondazione Cariplo, Fondazione Monte dei Paschi) to scale up partner venture creation activities and to create new partners; equity investment in the ventures (GEEREF/local sources); and debt (Banca Etica/local sources)

EXPECTED IMPACTS
- Expansion of the number of participating entrepreneurs in the models developed by the existing MOSAICO partners, into the hundreds of entrepreneurs per partner, in the first year
- Expansion of partners by at least four in the first year of operation to begin the three to four year cycle of assessment, venture selection, pilot project and replication through which each partner will, in turn, create hundreds of small ventures

LOCATION:
Brazil, China, India

DURATION:
2007-2008

BUDGET:
€200,000 including co-funding from the Global Energy Efficiency and Renewable Energy Fund (GEEREF) and Banca Etica

IMPLEMENTING AGENCY:
Fiorello H. LaGuardia Foundation
BUSINESS & FINANCE

Scaling up a proven mechanism to implement energy efficiency street lighting projects in India

PURPOSE
Dissemination of a proven approach to develop, implement and finance municipal energy efficiency projects, working with private sector companies (ESCOs) and carbon finance to eliminate the barriers for such projects in India

MAIN ACTIVITIES AND OUTPUTS
- Create a steering committee to implement the concept dissemination activities in India
- Prepare and disseminate the required standard documents based on the previous project including a conceptual document for internal approval in municipalities; technical, legal, financial and other documents for City Councils for bidding procedures; Request for Proposals (RFP); and Monitoring and Verification (M&V) plan and payment mechanism
- Seek support from local organisations
- Organise and deliver dissemination and capacity presentations on the concept in different states and provide all the needed documents (in Hindi and English) to interested participants
- Support municipalities in utilising the concept within their process

EXPECTED IMPACTS
- Over 100 cities exposed directly to the concept in at least five states
- A minimum of 10 cities entering into the process for energy efficiency project implementation
- Five different private sector companies (ESCOs) interested in the concept and willing to bid (or bidding) on projects
- Interest carbon credit buyers in the approach and enter into partnerships with potential sellers

LOCATION:
India

DURATION:
2007-2008

BUDGET:
€145,000 including co-funding from Econoler and Indian municipalities

IMPLEMENTING AGENCY
Econoler International
POLICY & REGULATION

Efficiency Power Plant (EPP) implementation in Jiangsu, China

PURPOSE
To help the Jiangsu Economic and Trade Commission (ETC) and its Demand-Side Management (DSM) Center to strengthen implementation of its DSM/EPP programme

MAIN ACTIVITIES AND OUTPUTS
- Prepare DSM implementation manual
- Co-ordinate DSM monitoring and verification protocol
- Develop case studies on EPP design and implementation for two large-size, energy-intensive factories, with recommendations for integrating the ESCO industry
- Conduct research on appropriate DSM fund management mechanisms for China
- Organise China’s first International DSM Forum
- Organise four training sessions for Chinese experts and utility officials on DSM incentive mechanisms, programme planning & design, project screening and selection, implementation, monitoring and verification and ESCO integration
- Publish technical and scholarly articles in English and Chinese on DSM/EPP implementation in Jiangsu, China

EXPECTED IMPACTS
- Help Jiangsu achieve greater electricity and carbon savings, and pave the way for scale-up to full EPP implementation by developing appropriate management and oversight procedures and capacities for ensuring that DSM funds are used in the most cost-effective manner and that the savings can be fully monitored and verified
- Help Jiangsu to become the ‘California of China’ – a national model for successful EPP programme planning, implementation, oversight and funding
- Increase capacity to build EPPs in other parts of China through training, pilot projects and development of technical implementation materials
- These DSM and energy efficiency financial incentives could both save enough energy to meet eight percent of Jiangsu’s projected electricity growth, and reduce China’s total coal consumption by 167 million tonnes by 2015, eliminating 613 million tonnes of carbon emissions, all at a net cost reduction

LOCATION:
China

DURATION:
2007-2008

BUDGET:
€374,413 including co-funding from Energy Foundation’s China Sustainable Energy Program (CSEP) and Natural Resources Defense Council (NRDC)

IMPLEMENTING AGENCY:
Institute for Market Transformation
POLICY & REGULATION

Panzhihua’s pilot action towards sustainable energy city

PURPOSE
To develop an innovative toolkit with the Panzhihua Sustainable Energy City (SEC) Plan and Action Plan, to improve Panzhihua’s capacity of clean energy policy and market development and establish an integral system with cross-sectoral mechanism

MAIN ACTIVITIES AND OUTPUTS
- Investigate and assess Panzhihua clean energy status quo
- Train local stakeholders on renewables and energy efficiency
- Develop guidelines for Panzhihua SEC Planning and Sustainable Energy Project Manual
- Develop Panzhihua SEC Plan & Action Plan
- Mobilise local stakeholders to develop plans
- Develop two pilot sub-projects within framework of Panzhihua SEC Plan
- Summarise and disseminate experiences
- Establish a public-private partnership based network

EXPECTED IMPACTS
- Mainstreaming of sustainable energy plans into city planning system
- Ensure enough energy supply, environment improvement and economic development by promoting sustainable energy
- Act as a showcase for illustrating that local participation at city level is the effective and optimal approach to achieving clean energy
- Dissemination of the methodologies and toolkit of energy planning and management to local stakeholders
- Encouragement of city energy planners to follow the approach to integrate energy issues with other issues, directly contributing to achieving the MDGs
- Facilitation of additional REEEP outcomes relating to REEEP priorities through its synergistic relations with Sustainable City Programme in Panzhihua
BUSINESS & FINANCE

Business model development for biogas electric power generation at livestock farms in China

PURPOSE
To develop a business model to design, finance, build, integrate and operate large-scale biogas facilities at livestock farms in China through market channels

MAIN ACTIVITIES AND OUTPUTS
- Conduct a feasibility study on setting up ESCOs for biogas-to-power (BTP) including the survey and identification of candidate companies who have the capacity and are willing to engage in ESCO and BTP businesses
- Conduct a technology comparison
- Select farms with different technologies and analyse their operational situation
- Explore the possibility of project financing through CDM
- Develop business plan
- Develop a handbook for BTP
- Build capacity through training to introduce energy service concepts to animal husbandry sector, as well as financing through CDM regime
- Create an ESCO to demonstrate the business model

EXPECTED IMPACTS
- Exploration of a new business model to overcome the barriers of digester construction in the animal husbandry sector in China, which include a heavy reliance on government funds, unreasonable technology options, poor management capacity and low capacity for gaining money for sustainable development
- More companies which can provide technologies of biogas digesters and biogas-to-power generation can be involved in the business using energy service mean
BUSINESS & FINANCE

The Center for Learning on Decentralised Generation

PURPOSE
To build capacity within utilities and government to scale-up decentralised generation and renewable energy use

MAIN ACTIVITIES AND OUTPUTS
- Organise a training and capacity building course
- Develop a methodology that helps decision makers to select the best option: decentralised generation or grid extension
- Improve and fine-tune the management and business model developed
- Organise training in the sustainable maintenance of decentralised generation in isolated or remote areas
- Develop a demonstrative center for decentralised generation solutions and productive use of renewable energy
- Install a demonstrative project where the utilities’ teams can practice under field conditions

EXPECTED IMPACTS
- Increase local renewable energy knowledge and capability amongst the utilities, government and local organisations, facilitating the promotion of energy access and the productive use of renewable energy, mainly in the Brazilian Amazonian region and the Southeast Brazilian region, under the rural electrification public policy called ‘Luz para Todos’ Programme

LOCATION:
Brazil

DURATION:
2007-2008

BUDGET:
€135,000 co-funded by IDEAAS

IMPLEMENTING AGENCY:
The Institute for the Development of Alternative Energy and Sustainability (IDEAAS)
Policy & Regulation

Implementation of a dissemination strategy for efficient cook stoves in Northeast Brazil

Purpose
To implement a dissemination strategy for efficient cook stoves including installation, sustainable forest recovery activities and capacity building, that is adopted in Ceará state public policy through state development plans

Main Activities and Outputs
- Install 200 additional improved cook stoves
- Recover shrubbery forest with native species
- Implement research on best dissemination strategy to determine the relative advantages of subsidising stove manufacturers versus stove users
- Implement best incentives for replanting methods and forest management to generate a sustainable supply of fuel wood
- Capacitate Ceará state government in social, economic and ecological issues around efficient stove fabrication and distribution
- Work within Ceará state government to develop a dissemination model for efficient cook stoves adapted to their development plans and public policy

Expected Impacts
- Enactment of informed public policy that would encourage the sustainable use of biomass in rural communities
- Improve health through energy efficient cook stove application
- State government agencies trained in best dissemination methods for efficient cook stoves in rural communities
- State government has adopted or is close to adopting this technology in the state development plans and will be pursuing financing options for further upscaling

Location:
Brazil

Duration:
2007-2009

Budget:
€110,000 including co-funding from IDER, local state government and USAID

Implementing Agency:
Instituto de Desenvolvimento Sustentável e Energias Renováveis (IDER) Institute for Sustainable Development and Renewable Energy
**POLICY & REGULATION**

Support the implementation of Brazil grid-connected solar photovoltaic roofs programme

**PURPOSE**
To develop the Brazilian legal and regulatory framework towards the implementation of a large-scale grid-connected solar photovoltaic roofs programme

**MAIN ACTIVITIES AND OUTPUTS**
- Review current legislation and regulation
- Meet with stakeholders including representatives of RENOVE, Instituto IDEAL, the Ministry of Mines and Energy (MME), the National Electrical Energy Agency (ANEEL) and financial institutions/development banks
- Conduct a study of technical and economic aspects
- Develop a set of guidelines and recommendations for the implementation of a successful solar roofs incentive programme
- Prepare and present legislation and regulation drafts
- Conduct comprehensive analysis on the type and quantity of incentives and subsidies, as well as the consequent impacts on tariffs

**EXPECTED IMPACTS**
- Establishment of a long-term (20 years) solar roofs (in the GWp scale) incentive programme in Brazil
- Grid parity between solar PV and conventional consumer tariffs
- Establishment of professional and large-scale markets in the area of PV in Brazil, with economies of scale that lead to competitive costs
- Increased energy security
- Reduction in greenhouse gas emissions
- Establishment of attractive investment environments for PV products and services
- Improvement of the environmental profile of electricity generation in Brazil

**LOCATION:**
Brazil

**DURATION:**
2007-2009

**BUDGET:**
€148,000 including co-funding from Instituto IDEAL

**IMPLEMENTING AGENCY:**
Rede nacional de organizações da sociedade civil para as energias renováveis (RENOVE)
FINANCING FOR BUNDLED SMALL-SCALE RURAL RENEWABLE VENTURES IN INDIA

PURPOSE
To define and launch a new credit practice in Yes Bank Ltd. (YBL) focused on financing for small-scale renewable ventures in rural India

MAIN ACTIVITIES AND OUTPUTS
- Establish practice at YBL focused on financing small-scale renewable ventures in rural India
- Develop bundles of small-scale rural renewable ventures for financing that utilise a combination of conventional and carbon finance mechanisms
- Secure conventional and carbon financing for a set of three commercially attractive pilot subject renewable ventures
- Document best practices and lessons learned for scale-up and replication

EXPECTED IMPACTS
- The practice in YBL will be an ongoing commercial operation that will continue to finance small-scale rural renewable ventures after the project is over
- Financing a bundle of subject ventures will provide evidence that this is possible and serve as a model to be implemented in other YBL branches as well as other banks in India
- The projects financed will be active generators of energy from renewable sources, further proving the viability of such options

LOCATION:  
India

DURATION:  
2007-2008

BUDGET:  
€133,652 including co-funding from Blue Moon Fund and Yes Bank Ltd.

IMPLEMENTING AGENCY:  
Environment Energy and Enterprise Ventures Private Ltd.
Replicable financing and institutional model for energy efficiency in Indian cities

PURPOSE
To create a replicable financing model to ensure that the planned Municipal Energy Efficiency projects in Tamil Nadu state are successfully implemented using performance contracting and energy service companies (ESCOs)

MAIN ACTIVITIES AND OUTPUTS
- Assist Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) with auditing and project implementation, and facilitate their interaction with ESCOs
- Guide ESCOs and TNUIFSL during the monitoring and verification process to apply the new International Performance Monitoring and Verification Protocol (IPMVP) and assess/demonstrate its suitability for Indian Watergy projects
- Create a tool kit to enable other cities and states to replicate the financing approach
- Develop a succinct case study describing the project
- Organise a workshop to disseminate the model to other states
- Replicate the application of performance contracting to municipal water supply energy efficiency projects
- Field test IPMVP protocol for water pumping in India for the first time

EXPECTED IMPACTS
- The proposed project will be crucial for ensuring the success of the Tamil Nadu Municipal Energy Efficiency Programme, which in turn is crucial for creating confidence in the use of performance contracting for municipal energy efficiency in India, and for increasing confidence in India’s nascent ESCO industry
- After many years of promoting Watergy in India, its benefits are now widely accepted; the barrier has been financing. This improved confidence in financing with performance contracting will spur the widespread adoption for Watergy in cities and towns across India, including the entire state of Tamil Nadu
- Significant greenhouse gas reductions

LOCATION:
India

DURATION:
2007-2009

BUDGET:
€201,504 including co-funding from USAID and the International Finance Corporation (IFC)

IMPLEMENTING AGENCY:
The Alliance to Save Energy
POLICY & REGULATION

Development of international energy management standards (EMS) for integration into the ISO 9000 or 14000 standards

PURPOSE

To support the development of an international ISO Energy Management Standard (EMS) that incorporates the principles of industrial system optimisation and takes into account developmental perspectives and issues of industry in developing countries and transition economies.

To raise awareness of EMS as an effective policy tool and mechanism to promote and effect sustained energy efficiency in industry.

MAIN ACTIVITIES AND OUTPUTS

- Establish an international working group (IWG)
- Review existing and under-development national EMS experiences
- Conduct regional sector studies and market surveys
- Organise an international workshop on EMS in industry
- Draft a consolidated approach to an international EMS for industry for submission to the ISO Central Secretariat
- Liaise with ISO Central Secretariat and EMS relevant technical committee/working group
- Enhance knowledge/awareness of successful EMS experiences between participating national Bureaus of Standards, policy-makers, industrial energy efficiency experts and key stakeholder groups

EXPECTED IMPACTS

- Increased engagement or commitment to engage of policy makers and national Bureaus of Standards participating in the project to develop national energy management standards or guidelines for increased industrial energy efficiency
- Accelerating the development of an international ISO energy management standard incorporating the principles of system optimisation while helping key developing countries and transition economies to proactively participate in the development of the new ISO standard

LOCATION:

Thailand, Indonesia, Malaysia, the Philippines, Vietnam, Brazil, South Africa, Ukraine, Egypt, Tunisia, Nigeria, Kenya

DURATION:

2007-2009

BUDGET:

€233,875 including co-funding from United Nations Industrial Development Organization (UNIDO)

IMPLEMENTING AGENCY:

United Nations Industrial Development Organization
Development of marketplace competition for affordable non-fossil lighting in Sub-Saharan Africa

PURPOSE
To host a Development Marketplace (DM) competition in Sub-Saharan Africa to develop low cost, non-fossil lighting products and services for low income households and small businesses

MAIN ACTIVITIES AND OUTPUTS
Lighting Africa DM will be held in April 2008 in Ghana. Activities include:
- Logistical activities associated with conducting the DM
- Conduct DM competition to select 10-20 qualified teams
- Monitor/evaluate awardee activities
- Identify 10-20 DM winners
- Develop three-five LED lanterns and lighting products for low income households in Sub-Saharan Africa
- Develop retail linkages for dissemination and sales of lighting products/qualified lanterns in three plus African countries
- Roll out successful products to a broader consumer base
- Generate consumer satisfaction via increased economic development, reduced poverty and improved quality of life

EXPECTED IMPACTS
- Improved lighting quality for households
- Improved health impacts from higher quality lanterns
- Increased school retention and improved grades
- Increased income levels and reduced CO₂ emissions

LOCATION:
Sub-Saharan Africa

DURATION:
2007-2008

BUDGET:
€1,840,000 including co-funding from the Global Environment Facility (GEF), the Public-Private Infrastructure Advisory Facility (PPIAF), the World Bank, the Energy Sector Management Assistance Program (ESMAP), Good Energies, and the Government of Norway

IMPLEMENTING AGENCY:
The World Bank
POLICY & REGULATION

Renewable energy prospective study and proposal to remove the technical, economic, regulatory and financial barriers to its development in Argentina

PURPOSE
To change the existing legal framework to extend the national use of new renewable sources of energy from wind, solar, small hydro, geothermal, biomass and tidal

MAIN ACTIVITIES AND OUTPUTS
• Identify energy policy actions to remove barriers to develop renewable energy
• Improve quality information for natural resources and projects, especially related to biomass residues (from forestry and agriculture)
• Adapt the present legal framework to foster the introduction of distributed generation
• Assess the market development capacity and propose a plan to build capacity
• Exchange experiences in renewable energy with other countries

EXPECTED IMPACTS
• Improvement of the level of knowledge and perception of the different actors on the evolution of the renewables markets in Argentina
• Extension of the renewable frame of reference
• Provision of a level of analysis from within the identified target set that can be duplicated in other countries
• Reflection of the different kinds of entries on the overall subject
• Increased diffusion of financial instruments to develop the renewable energy market

LOCATION:
Argentina

DURATION:
2007-2008

BUDGET:
€80,000

IMPLEMENTING AGENCY:
National Energy Secretariat, Ministerio de Planificación Federal, Servicios Públicos e Inversión
POLICY & REGULATION

Design, writing and validation of the Renewable Energy and Energy Efficiency Law in Ecuador

PURPOSE
To create a law that promotes and regulates all activities in Ecuador related to renewables and energy efficiency

MAIN ACTIVITIES AND OUTPUTS
- Verify the current draft of the clean energy law and refine it according to the national and international reality
- Promote policy awareness and develop and implement policy
- Develop a legal framework that promotes and regulates clean energy

EXPECTED IMPACTS
- Realisation of the national programmes of renewables and energy efficiency
- Capacity building of government officials
- Promotion of the market for energy services in Ecuador including ESCOs and renewable system manufacturers resulting in increased foreign investment and local employment generation
- Development of additional projects in the public and private sector. Pilot projects will also enforce new initiatives by proving clean energy applications as a feasible solution
- Reduction in the demand for energy in Ecuador through energy efficient consumption practices
- Reduction in the emission of greenhouse gases
- Generation of future tax and finance incentives, soft loans and other fiscal and financial initiatives

LOCATION:
Ecuador

DURATION:
2007-2008

BUDGET:
€50,000 including co-funding from the Ministry of Energy, Ecuador

IMPLEMENTING AGENCY:
Ministry of Energy of Ecuador
BUSINESS & FINANCE

Vehicle for solar water heating mass implementation

PURPOSE
To assist at least three cities in developing vehicles for the mass rollout of solar water heaters and make cities aware of all renewable energy and energy efficiency alternatives available to them

MAIN ACTIVITIES AND OUTPUTS
• Choose three leading cities in South Africa to partner
• Finalise choice of model on which the fee-for-service or other mass delivery mechanism will be based
• Identify the key role players in the model (financiers, CDM funding co-ordinators, solar water heater suppliers and installers, local authorities, legal experts)
• Provide technical, legal and financial inputs to cities as necessary in the process of delivery vehicle establishment
• Facilitate and co-ordinate the process of delivery vehicle establishment, bringing in identified players as needed
• Extend the current manual for renewable energy and energy efficiency options (developed under a past REEEP project) to cover all feasible options, and maintain and extend the existing city support website for a fully comprehensive overview

EXPECTED IMPACTS
• Set the process in place for the establishment of vehicles for, and implementation of, SWHs on a mass scale in three cities, leading to similar rollout in other cities
• Improved energy security for cities due to peak load reduction, as well as financial benefits due to reduced peak power needs
• Reduction of greenhouse gas emissions in cities
• Creation of jobs through the resulting boost to the SWH industry
• Informed decisions regarding the mix of renewable energy options to be adopted in cities to meet renewable energy targets
• Increased ability to implement a range of renewable energy and energy efficiency projects

LOCATION:
South Africa

DURATION:
2007-2009

BUDGET:
€112,184 including co-funding from City of Cape Town, City of Tshwane, Sol Plaatje Municipality and SEED

IMPLEMENTING AGENCY:
Sustainable Energy Africa
**BUSINESS & FINANCE**

**Performance and credit risk guarantees and financing mechanisms for ESCO-structured energy efficiency projects**

**PURPOSE**

To encourage local banks in Mexico to provide long-term financing to ESCO-structured energy efficiency projects and accept Nacional Financiera, S.N.C. (NAFIN) guarantees with the project’s cash flows as collateral.

**MAIN ACTIVITIES AND OUTPUTS**

- Develop and finance three ESCO-structured projects in Mexico utilising newly created performance/credit risk guarantees and project-based financing mechanisms to be provided by NAFIN.

- Obtain market feedback based on local bank requirements to finance the three projects for NAFIN to design the final financing mechanisms based on lessons learned.

**EXPECTED IMPACTS**

- Provision of performance and credit risk guarantees from NAFIN and risk mitigation structures to local banks in Mexico to provide cash flow based long-term financing to ESCO-structured energy efficiency projects.

- Acceleration of the implementation of energy efficiency projects and the growth of the ESCO industry in Mexico, which is comprised mostly of small and medium sized enterprises.

- Creation of replicable mechanisms that can be used to aggregate the financing of energy efficiency projects and reduce overall transaction costs.

**LOCATION:**

Mexico

**DURATION:**

2007-2008

**BUDGET:**

€200,000 including co-funding from EPS Capital Corporation and Mexican ESCOs

**IMPLEMENTING AGENCY:**

EPS Capital Corporation
BUSINESS & FINANCE

Engaging the banking sector in financing renewable energy

PURPOSE
To identify the areas of opportunity for the financial sector to engage and accelerate its participation in renewable energy projects, particularly at a micro and small-scale level.
This is an awareness raising effort to accelerate investments in renewable energies and promote the sustainable use of energy in the future.

MAIN ACTIVITIES AND OUTPUTS
- Conduct a market opportunity assessment
- Conduct a review of existing financial products
- Develop a strategy to increase awareness, engagement and capacity building of the financial sector
- Host a consultation meeting with the main stakeholders within the energy and financial market
- Pilot a project that implements the strategies within the solar water heater programme that CONAE is currently developing
- Monitor, evaluate and market the results

EXPECTED IMPACTS
- Engagement of at least one commercial bank in financing small scale renewable energy and energy efficiency projects
- Increased interest and awareness of at least three local banks in the sustainable energy business
- Contribution to clarifying the renewable energy market opportunities in Mexico aiming to increase the awareness and engagement of the local financial sector and consequently accelerate investments
- Replication of the model in other Latin America countries
- Contribution to the design of future government initiatives to increase investment in sustainable energy

LOCATION:
Mexico

DURATION:
2007-2008

BUDGET:
€155,300, including co-funding from United Nations Environment Programme (UNEP) and Comision Nacional de Actividades Espaciales (CONAE)

IMPLEMENTING AGENCY:
Basel Agency for Sustainable Energy
POLICY & REGULATION

Developing an integrated rural energy utility roadmap

PURPOSE
To build a case for, and facilitate the implementation of rural integrated energy service utilities (IEU), supplying grid, off-grid and thermal energy needs in rural communities both efficiently and sustainably

MAIN ACTIVITIES AND OUTPUTS
- Review of existing cases of rural energy service delivery
- Develop guidelines and reference materials for governments, regulators, donors and investors/implementors to use in planning and implementing rural IEU — documents will be developed for a selected case, with emphasis on replication in other regions
- Develop IEU business plan that provides information for investment decisions and growth paths in an identified case
- Develop a financial model for business operations
- Facilitate an IEU investment through the partners in at least one case

EXPECTED IMPACTS
- Enabling of a proper review and rigorous analysis of the Integrated Energy Utility concept as applied to rural regions. If the analysis indicates that this is an optimum energy service delivery model, then the preparatory work undertaken will directly support scale-up of the selected test case, and will facilitate replication of the concept in other countries and regions
- Provision of a model framework for large-scale energy service delivery to under-served areas with impacts on Millennium Development Goals (MDGs) – using both renewable energy and energy efficiency strategies
BUSINESS & FINANCE

Financial risk management instruments for energy service investments

PURPOSE
To design and implement financial risk management instruments that support financing of small scale projects, especially small scale energy equipment and service delivery

MAIN ACTIVITIES AND OUTPUTS
- Promote greater uptake of renewable energy and more efficient use of energy to help address climate change, security of supply considerations, as well as improved access to clean energy
- Support the development and use of renewable energy, including biomass, wind and solar energy
- Support the development of small power plants in conjunction with solutions that address water supplies, flood relief and irrigation
- Support measures designed to improve energy efficiency
- Promote multilateral initiatives in the field of renewable energy

EXPECTED IMPACTS
- Implementation of plans for small scale energy enterprise and equipment finance to achieve energy access. This work will build on the UNEP’s existing Africa Rural Energy Enterprise Development (AREED) network and experience as well as relationships with national government agencies in the target countries
- Gain maximum leverage of donor funds
- Increased capacity for African SMEs to develop and implement energy services delivering projects in peri-urban and rural communities
- Development and use of renewable energy and energy efficiency, to increase energy access for the poor to meet the millennium development goals

LOCATION:
Ghana, Mali, Senegal, Tanzania, Zambia

DURATION:
2007-2008

BUDGET:
€120,000 including co-funding from UNEP

IMPLEMENTING AGENCY:
Econoler International
POLICY & REGULATION

Promotion of solar water heating in Uganda

PURPOSE
To save electricity especially during peak hours by switching water heating in households and institutions to solar energy

MAIN ACTIVITIES AND OUTPUTS
- Create awareness about the benefits of solar water heaters among city planning authorities, the Ministry of Housing, professional bodies of architects and engineering professionals and the general public
- Establish appropriate financing mechanisms for manufacturers, vendor companies and consumers
- Develop policies to promote solar water heaters
- Establish standards and guidelines for integrating solar water heaters in buildings
- Train 20 engineers and technicians to develop local capacity to install and maintain solar water heating systems
- Prepare an investment plan to finance replication and scale-up of solar water heater use
- Save 1 MW of electricity during peak hours by installing 500 solar water heaters
- Increase the local solar thermal industry

EXPECTED IMPACTS
- Reduction in electricity rationing during the peak hour
- Reduction in energy bills in households and institutions using solar water heaters
- Reduced government spending on subsidies to buy down electricity tariffs due to expensive diesel generators
- Reduced greenhouse gas emissions from diesel fuelled thermal power plants
- Reduced cost of solar water heaters
- Development of reliable solar water heating systems
- Availability of trained solar water heater installation engineers
- Increase in the share of renewable energy in the national energy mix

LOCATION:
Uganda

DURATION:
2007-2009

BUDGET:
€377,000 including co-funding from the Government of Uganda

IMPLEMENTING AGENCY:
Ministry of Energy and Mineral Development
POLICY & REGULATION

Policy framework for sustainable energy in the Mediterranean

PURPOSE
To enhance the joint working relationship between the European Union and Morocco and other North African countries, to transfer European best practices in the use of renewables and energy efficiency as well as financial tools for their integration into the energy planning process.

MAIN ACTIVITIES AND OUTPUTS
- Produce a survey on the energy market and legislation in Morocco and other relevant North African countries and an economic analysis of Morocco’s mid and long-term objectives for clean energy.
- Publish a handbook for policy makers on the possible replication of European tools and best practices in selected areas of the country.
- Identify selected local stakeholders that will be involved in the final steps of the project with the crucial contribution of Centre de Développement des Energies Renouvelables (CDER).
- Organise capacity building programmes for selected local stakeholders, to improve knowledge transfer on the European supporting programme, best practices and mid and long-term objectives for clean energy, with linkages to the carbon market.

EXPECTED IMPACTS
- Facilitation of the introduction of programmes supporting renewable energy and energy efficiency based on market mechanisms into North African countries.
- Contribution to the engagement of local financial institutions in the clean energy market or a commitment to engage following targeted training and support for national and government finance sectors in the Mediterranean basin.
- Harmonisation of legal frameworks and supporting programmes contributing to regional energy security and to sustainable energy development.

LOCATION:
Morocco and other North African countries

DURATION:
2007-2008

BUDGET:
€140,000 with co-funding from ISES ITALY–UNEP MAP

IMPLEMENTING AGENCY:
Ingegneri@mbiente
POLICY & REGULATION

Development of renewable heating and cooling use in the tertiary sector of Mediterranean countries

PURPOSE

To identify the existing barriers for renewable energy development in Tunisian and Moroccan hotels and produce an integrated policy structure for their development, highlighting the potential for ESCO project development.

MAIN ACTIVITIES AND OUTPUTS

- Define the legislative and financial background regarding renewables and energy in general
- Develop a catalogue of state-of-the-art technologies appropriate for the region
- Conduct a technical and economical analysis of renewable energy applications for hotel heating and cooling uses
- Identify the main aspects (obligations and benefits) of renewable energy policies
- Develop a guideline policy for the hotel sector
- Complete detailed analysis for the implementation of a renewable energy installation following an ESCO model
- Information dissemination activities such as conferences, published articles and direct mail

EXPECTED IMPACTS

- Innovative solutions for renewable energy applications involving both heating and cooling needs
- Reduction of primary fossil fuel energy consumption and the subsequent environmental impact of such energy generation with a focus on the significant reduction in the summer electric load
- Adoption of appropriate policies and strategies for renewable energy development at different levels (local, regional, national)
- Definition of positive financial conditions for the development of renewable energy projects, in particular regarding the implementation of projects with an ESCO model (based on energy service contract)
BUSINESS & FINANCE

Establish Pacific micro energy service companies (PMESCOs)

PURPOSE
To establish and operate a micro energy service company with a micro credit facility to increase the use of small solar photovoltaic (PV) systems in remote rural areas in the Solomon Islands and Kiribati
To quantify the carbon emission reductions achieved with the replacement of kerosene lights by small PV lighting systems

MAIN ACTIVITIES AND OUTPUTS
- Purchase, sale and installation of the Light Up the World (LUTW) solar LED systems (5 W, 2 lights and a battery) through the Micro Energy Service Companies (MESCOs) in the Solomon Islands and Kiribati
- Identify and train local entrepreneurs in the assembling, installation and maintenance of 90 small solar PV systems to be supported by a micro credit scheme
- Develop a Project Identification Note (PIN) for carbon emission reductions (establish 121 tonnes over a ten year period)

EXPECTED IMPACTS
- Replacement of the use of kerosene for lighting in 90 rural households and therefore reduce dependency on kerosene
- Creation of a micro credit facility for the increased deployment of the solar energy technology and energy efficient LED lighting in Kiribati and Solomon Islands
- Improvement of recipients’ standard of living through better access to modern lighting, leading to the creation of income generating activities at night and improving children’s education, contributing to poverty alleviation
- Increased participation of Solomon Islands and Kiribati in the carbon market mechanisms

LOCATION:
Solomon Islands, the Republic of Kiribati

DURATION:
2007-2008

BUDGET:
€40,300 including co-funding from SOPAC

IMPLEMENTING AGENCY:
Pacific Islands Applied Geoscience Commission (SOPAC)
Project Profiles:
Commissioned Projects 2007/8
Analytical and synthesis study of REEEP programmes

PURPOSE
To conduct an analysis of the outputs and outcomes of REEEP’s project portfolio, including answering evaluation questions, generating lessons learned and formulating recommendations

MAIN ACTIVITIES AND OUTPUTS
- Conduct a three-phased approach to the analysis
- Initial planning and preparation phase including a preliminary documentation review of all relevant REEEP materials; a start-up teleconference; a work plan detailing the different stages of the study; and sampling methodologies for surveys and key interviews
- Data collection phase including email or online survey targeting pre-selected individuals and projects; five case-studies of successes, failures and lessons learned; and complementary interviews to reach key informants
- Data analysis and report writing phase including reviewing statistical results in light of contextual elements

EXPECTED IMPACTS
- Provision of a detailed analysis on project effectiveness against predetermined goals with a view to reviewing the extent to which the projects have had an effect on the intended beneficiaries
- Provision of a ‘relevance checklist’ against which the continuing projects can be reviewed against REEEP’s defined priorities
- Dissemination of lessons learned, best practices and potential for replication which in turn allows for fine-tuning of existing methodologies

LOCATION:
Global

DURATION:
2007-2008

BUDGET:
€99,895

IMPLEMENTING AGENCY:
Baastel – Econoler (Consortium)
BUSINESS & FINANCE

REEEEP report on energy efficiency 2008

PURPOSE
To report on the global status of energy efficiency including an overview of energy efficiency measures, market potential for energy efficiency, annual energy savings, investments in energy efficiency and energy efficiency policies and programmes

MAIN ACTIVITIES AND OUTPUTS
- Clearly define the parameters of energy efficiency
- Investigate the historical and potential thermal and electrical energy efficiency improvements in industry, domestic and non-domestic buildings, transport (passenger and freight) and power generation (including transmission and distribution)
- Review impact of energy efficiency policies and programmes including best practice examples in various countries
- Focus analysis on OECD countries and the emerging market economies of Brazil, China, India and South Africa
- Scope key initiatives/projects globally, regionally and nationally that meet key interests of policy makers, industry, financiers and development professionals

EXPECTED IMPACTS
- Increased interest among policymakers in energy efficiency issues
- Generation of an important global reference document for energy efficiency practitioners and researchers

LOCATION:
Global

DURATION:
2007-2008

BUDGET:
€86,000

IMPLEMENTING AGENCY:
Ecofys Netherlands BV
BUSINESS & FINANCE

Design and establish a risk mitigation mechanism in India

PURPOSE
To design and establish a risk mitigation mechanism to manage the investment risks of renewable energy in India

MAIN ACTIVITIES AND OUTPUTS
• Develop a risk mitigation framework
• Assess existing risk mitigation options
• Select risk mitigation measures
• Inform dissemination through a national workshop
• Develop a pilot programme for implementing a risk management mechanism
• Prepare documentation
• Actual investment/disbursement of financial assistance under the project
• Attract small entrepreneurs into the renewable energy business
• Increase the renewable energy market in India after implementation of the project

EXPECTED IMPACTS
• Increased private sector participation in renewable energy based generation
• Decreased dependence on conventional energy-based generation, although quantification may be difficult at this stage
• Local employment generation
• Reduction in CO₂ emissions resulting in positive impact on environment
• The initiative would also result in meeting Millenium Development Goals (MDGs) as it would address specific issues such as poverty reduction, access to cleaner forms of energy and other basic services, which would be enabled through the provision of renewable energy