

PROJECTS CATALOGUE

*...WORKING TOGETHER IN AFRICA FOR IMPROVED
ACCESS TO ENERGY...*

TABLE OF CONTENT

1. AFRICAN RURAL ENERGY ENTERPRISE DEVELOPMENT (AREED) PROGRAMME	3
2. ECOMMERCE AND RENEWABLE ENERGY (ECARE) PROJECT	4
3. ENERGY FOR POVERTY REDUCTION IN AFRICA: ENERGIZING RURAL DEVELOPMENT USING MULTIFUNCTIONAL PLATFORMS – GHANA PROGRAM (MFP)	5
4. SUPPORT FOR THE COMPLETION OF AN ENERGY FOR POVERTY REDUCTION ACTION PLAN (EPRAP) FOR GHANA THROUGH GLOBAL VILLAGE ENERGY PARTNERSHIP (GVEP).....	6
5. DEVELOPMENT OF A POLICY WHITE PAPER ON ENERGY ACCESS FOR THE ECONOMIC COMMUNITY OF WEST AFRICAN STATES.....	7
6. DEVELOPMENT & ENERGY IN AFRICA PROJECT (DEA)	8
7. CAPACITY DEVELOPMENT FOR CLEAN DEVELOPMENT MECHANISM (CD4CDM) PROJECT	9
8. KNOWLEDGE NETWORKS FOR SUSTAINABLE ENERGY IN AFRICA PROJECT (KNSEA)	10
9. RENEWABLE ENERGY TECHNOLOGIES (RETS) PROJECT	11
10. ENERGY USE, ENERGY SUPPLY, SECTOR REFORM AND THE POOR: THE CASE OF GHANA	12
11. RENEWABLE ENERGY AND ENERGY EFFICIENCY PARTNERSHIP (REEEP)	13
12. ENERGY EFFICIENCY IN SAWMILLS PROJECT	14
13. BUNDLING OF SMALL SCALE ENERGY PROJECTS FOR THE CDM PROJECT.....	15
14. IMPACT OF ICTS IN SMES IN GHANA PROJECT.....	16
15. POVERTY AND SOCIAL IMPACT ASSESSMENT (PSIA): ENERGY SECTOR REFORM – ELECTRICITY TARIFFS PROJECT.....	17
16. KUMASI COGENERATION PROJECT.....	18
17. ENVIRONMENTAL PROTECTION IMPLICATIONS OF THE ELECTRIC POWER RESTRUCTURING IN GHANA PROJECT.....	19
18. MOVING TO EMISSIONS NEUTRAL DEVELOPMENT (MEND) PROJECT	20
19. CLIMATE CHANGE PROJECT GHANA PERSPECTIVE	21
20. EXPANDED PROVISION OF PUBLIC BENEFITS AS POWER SECTORS IN DEVELOPING COUNTRIES ARE REFORMED	22
21. POWER SECTOR REFORM IN AFRICA: ASSESSING THE IMPACT ON POOR PEOPLE AND INFLUENCING POLICY DECISIONS.....	23

AFRICAN RURAL ENERGY ENTERPRISE DEVELOPMENT (AREED) PROGRAMME



SPONSORS

UNEP AND UN FOUNDATION

PROJECT DURATION

May 2000 to date

OBJECTIVE

To facilitate the establishment of sustainable energy enterprises that use clean, efficient, and renewable technologies to meet energy needs of underserved populations

MAIN PROJECT TASKS

- ♦ Provide enterprise development services to entrepreneurs
- ♦ Provide seed and growth capital to entrepreneurs.
- ♦ Explore opportunities for co-financing by other financial institutions
- ♦ Work with financial institutions to explore business opportunities in the energy sector
- ♦ Energy Enterprise related Policy Research and Coordination.

OUTPUTS

- ♦ 14 Successful energy enterprises established
- ♦ Capacity of 250 entrepreneurs built
- ♦ Institutional capacity built within KITE for the delivery of enterprise development services

PARTNERS

- ♦ UN FOUNDATION
- ♦ UCCEE – UNEP Collaborating Centre on Energy and Environment
- ♦ E+Co
- ♦ UNEP

BENEFICIARIES

- ♦ Energy Entrepreneurs
- ♦ Policy makers in the energy sector
- ♦ Local energy services in the rural and peri-urban areas
- ♦ National and international financial agencies



Promoting efficient cook stoves for a clean environment through local enterprise

eCOMMERCE AND RENEWABLE ENERGY (eCARE) PROJECT



Bridging the energy and digital divide in rural Ghana

SPONSOR

United Nations Foundation

PROJECT DURATION

February 2005 – to date

OBJECTIVES

- ♦ To build capacity and provide financial support to small, medium and micro-scale enterprises (SMMEs), enabling them to deliver renewable/clean energy-powered voice telephony, internet connectivity and other ICT products and services to peri-urban and rural customers.
- ♦ To reduce energy-related barriers to the rapid expansion of affordable telecommunications services to rural areas.
- ♦ To work in collaboration with government agencies to create a policy and institutional environment that supports enterprise-led rural ICT service provision and utilization.

MAIN PROJECT TASKS

- ♦ Selection and training of entrepreneurs
- ♦ Installation of Rural Business Centres
- ♦ Provision of support to rural business centres
- ♦ Facilitating collaboration between Government and development stakeholders
- ♦ Provision of 'long term' financing

OUTPUTS

- ♦ 291 Rural Business Centres (RBCs) fully deployed
- ♦ 98 Entrepreneurs trained
- ♦ Fund established for continued development of RBCs on flexible and reasonable terms
- ♦ Provision of enterprise development services to rural entrepreneurs.
- ♦ Expanded GT network offering bulk telecommunications and Internet infrastructure services to local entrepreneurs seeking to operate RBCs rural areas.
- ♦ Established RBCs offering voice telephony, Internet connectivity and a variety of other ICT products and services involving the use of cleaner and/or renewable energy technologies to peri-urban and rural users.
- ♦ National policies and incentives that support the growth of investments in SMEs offering rural ICT and clean energy services are in place.

PARTNERS

- ♦ United Nations Foundation (UNF).
- ♦ United Nations Environment Programme (UNEP)
- ♦ Telenor Management Partners: (TMP)
- ♦ Ghana Telecom (GT);

BENEFICIARIES

- ♦ Policy makers in the energy and ICT sector
- ♦ Ministries, department and government agencies
- ♦ NGO's and community organisations
- ♦ Rural entrepreneurs

ENERGY FOR POVERTY REDUCTION IN AFRICA: ENERGIZING RURAL DEVELOPMENT USING MULTIFUNCTIONAL PLATFORMS – GHANA PROGRAM

(MFP)



Woman entrepreneur using a Sheanut crusher

SPONSOR

Heritage Savings Trust Fund (HSTF) - Government of Japan through United Nations Office for Project Services (UNOPS) – Dakar

PROJECT DURATION

April 2005 – April 2008

OBJECTIVES

- ♦ Provide modern energy for rural communities using the MFP as a decentralised energy source.
- ♦ Facilitate increased income generation and social service activities through enterprise development support and active promotion of productive use applications

MAIN PROJECT TASKS

- ♦ Building capacity of project team, lead NGO and CBOs to act as the core of knowledge networking
- ♦ Facilitate a cross-sectoral rural energy/development stakeholders' network
- ♦ Organisation of national workshops
- ♦ Development of lessons-learnt briefs and case studies/thematic studies
- ♦ Participatory/Enterprise feasibility studies for community selection
- ♦ Installation of 40 Platforms and 1 Demonstration and Training Platform

- ♦ On-the-job training of community-level actors by the CBOs
- ♦ Functional business management training for beneficiary communities
- ♦ Monitoring and Evaluation

OUTPUTS

- ♦ 40 MFPs installed in the Northern and Brong Ahafo Regions
- ♦ 12 Individual and 11 Group Entrepreneurs trained
- ♦ 15 Artisans trained and 8 tooled
- ♦ 3 CBOs trained to support further deployment of MFPs
- ♦ 2 National Networking Workshops held for Rural Development Stakeholders
- ♦ Monitoring and Evaluation and Annual Project Reports produced

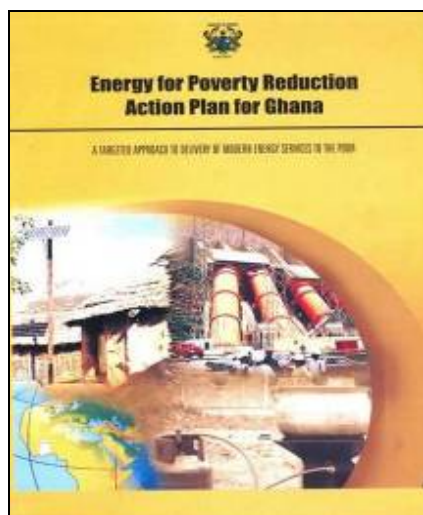
PARTNERS

- ♦ Ministry of Energy
- ♦ United Nations Development Programme – Ghana
- ♦ MFP Regional Programme
- ♦ Community Based Organisations – New Energy, SEND Foundation & Women and Children Support Organisation (WACSO)
- ♦ Ministry of Food and Agriculture (MOFA)
- ♦ Ministry of Women and Children Affairs (MWCA)
- ♦ Ministry of Local Government and Rural Development (MLGRD)

BENEFICIARIES

- ♦ Brong Ahafo Region - 23 communities
- ♦ Northern Region – 17 communities
- ♦ Network of private, technical and commercial service suppliers to MFP-based enterprises
- ♦ National Planning Development Commission (NDPC)

SUPPORT FOR THE COMPLETION OF AN ENERGY FOR POVERTY REDUCTION ACTION PLAN (EPRAP) FOR GHANA THROUGH GLOBAL VILLAGE ENERGY PARTNERSHIP (GVEP)



Cover Page of EPRAP Document

SPONSOR

UNDP

PROJECT DURATION

September 2004 to date

OBJECTIVES

- ♦ To initiate the full-scale implementation of the Global Village Energy partnership (GVEP) at the country-level
- ♦ To support the completion of the Energy for Poverty Reduction Action Plan (EPRAP) for Ghana, by ensuring a broader stakeholder consultation
- ♦ To plug the dearth in detail in the previous Action Plan

MAIN PROJECT TASKS

- ♦ Support the completion of the Energy for Poverty Reduction Action Plan for Ghana (EPRAP), in consultation with the seven main sectors mentioned in the Growth and Poverty Reduction Action Plan

OUTPUTS

- ♦ Development of Energy for Poverty Reduction Action Plan (EPRAP)
- ♦ Development of 11 Project Design Documents (PDDs) on Priority Energy Interventions in support of Ghana's Poverty Reduction Strategy (GPRS I) and Growth and Poverty Reduction Strategy (GPRS II).
- ♦ Creation of Database of Energy Projects in Ghana
- ♦ Establishment of Multi-Donor Forum for the Energy Sector
- ♦ Establishment of a Monitoring and Evaluation Framework for the EPRAP

PARTNERS

- ♦ Ministry of Energy
- ♦ National Development Planning Commission (NDPC)
- ♦ Ministry of Health
- ♦ Ministry of Food and Agriculture
- ♦ Ministry of Education
- ♦ Ministry of Communication
- ♦ Ministry of Trade and Industry (MOTI)
- ♦ The National Board of Small Scale Industries (NBSSI)
- ♦ Community Water and Sanitation Agency (CWSC)
- ♦ Ministry of Science and Environment
- ♦ UNDP Ghana

BENEFICIARIES

- ♦ Policy makers in the energy sector
- ♦ Ministries and related department in the area of energy and rural development
- ♦ National and international agencies for poverty reduction
- ♦ NGO's and community organisations

DEVELOPMENT OF A POLICY WHITE PAPER ON ENERGY ACCESS FOR THE ECONOMIC COMMUNITY OF WEST AFRICAN STATES



Cover page of regional policy paper

SPONSOR

United Nations Office of Project Services (UNOPS)

PROJECT DURATION

Sept, 2005 – March, 2006

OBJECTIVES

- ♦ The objective of this project is to help build the capacities of the respective National Multi-Sectoral Groups (NMGs) to formulate national strategies for providing access to energy services taking into account the priority national poverty reduction strategies of the respective countries

MAIN PROJECT TASKS

- Building the capacities of the respective NMGs to formulate national strategies for providing access to modern energy services.
- Provision of technical support to the respective countries which will include sensitization on the ECOWAS White Paper implementation process and development of national energy access strategies for each country

OUTPUTS

- ♦ Properly constituted and functional NMG. An NMG is not deemed to have

been properly constituted unless its membership consists of at least a representative each of the following priority sectors

- Energy (team leader)
- Economic Planning/PRSP/MDG (Deputy leader)
- Agriculture
- Health
- Education
- Water
- SMEs

- ♦ Detailed action plan and a prioritized work plan covering a 6 month period for the respective NMGs. These two plans would be based on ECOWAS's 5-stepped approach for formulating a national strategy for access to energy services which was approved at the last Regional Multi-sectoral meeting held in Dakar.

- ♦ Clear appreciation and deepened understanding of the ECOWAS initiative/process by all members of the respective NMGs

- ♦ Lessons learnt from Ghana's attempt at mainstreaming energy into their PRSP as well as the methodological approaches used to achieve same shared with the NMGs

PARTNERS

- ♦ United Nations Office of Project Services (UNOPS)

BENEFICIARIES:

- ♦ Policy makers in the energy sector
- ♦ Ministries, departments and Agencies of government.
- ♦ NGO's and community organisations
- ♦ Energy sector practitioners
- ♦ Project Developers
- ♦ Development agencies and organisations
- Civil Society Organisations

DEVELOPMENT & ENERGY IN AFRICA PROJECT (DEA)



SPONSOR

UNEP RISOE Centre /European Union

PROJECT DURATION

May 2005 – October 2007

OBJECTIVES

- ♦ To identify and examine the developmental impacts of energy interventions and actions linked to improving energy access and poverty alleviation
- ♦ To develop and apply an Assessment Framework for evaluating development and poverty impacts of energy interventions
- ♦ To engage in dialogue with energy policy makers and other stakeholders on the basis of the framework, with a view to incorporating these issues in energy policy
- ♦ To use the information obtained to improve on-going and future energy interventions

MAIN PROJECT TASKS

The development of an Assessment Framework, through

- Literature Review
- Cataloguing project experiences of relevant energy projects and interventions in Ghana
- Organisation of National Consultation workshops

- Development and testing the framework through national Case Study.
- Presentation and review of framework with policy makers and stakeholders.

OUTPUTS

- ♦ Catalogue of energy interventions
- ♦ Case study of energy interventions
- ♦ Assessment Framework developed and capacity of 35 people built

PARTNERS

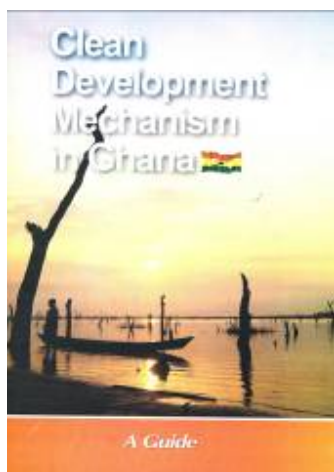
- ♦ Ministry of Energy
- ♦ Energy Commission
- ♦ National Planning Development Commission
- ♦ Ministry of Food and Agriculture
- ♦ Ministry of Women and Children Affairs
- ♦ Ministry of Local Government and Rural Development
- ♦ Private sector and civil society organisations.

BENEFICIARIES

- ♦ Policy makers in the energy sector
- ♦ Ministries, departments and Agencies of government.
- ♦ National and international agencies for poverty reduction
- ♦ NGO's and community organisations
- ♦ Energy sector practitioners
- ♦ Project Developers
- ♦ Development agencies and organisations
- ♦ Civil Society Organisations.

CAPACITY DEVELOPMENT FOR CLEAN DEVELOPMENT MECHANISM (CD4CDM)

PROJECT



Coverpage of the CDM guide

SPONSOR

UNEP Risoe Center (URC)

PROJECT DURATION

August 2005 - February 2007

OBJECTIVES

- ♦ To improve CDM capacity at various levels in Ghana through workshops and real project development.
- ♦ To market Ghana internationally as a CDM project destination by making the CDM approval process transparent.
- ♦ To develop the necessary institutional and human capabilities that allows countries to formulate and implement projects under the CDM.

MAIN PROJECT TASKS

- ♦ Identify and develop a portfolio of CDM projects in Ghana
- ♦ Assist South South North(SSN) in issuing a Request for Submission of Project Identification Notes(PINs) and assist in the design of a set of criteria for PIN approval
- ♦ Assist SSN in review of submitted PINs to select the eight PINs to be rewarded
- ♦ Organize and contribute to the four national workshops and other smaller-

scale workshops implemented under the project

- ♦ Assist SSN in selecting two PINs to be developed into Project Design Documents(PDDs)
- ♦ Develop, in cooperation with SSN, a Sustainable Development Criteria for Ghana's Designated National Authority(DNA's) project approval process
- ♦ Design and maintain a CDM/climate change web site for Ghana
- ♦ In cooperation with SSN, produce a CDM Investors Guide for Ghana

OUTPUTS

- ♦ Capacity of 92 professionals built to develop and implement CDM projects
- ♦ A CDM Investors' Guide developed for Ghana
- ♦ Sustainable Development Criteria for CDM project evaluation in Ghana developed
- ♦ A portfolio of five CDM project PINs
- ♦ Design of a national project approval process
- ♦ CDM website developed for hosting on DNA website

PARTNERS

- ♦ The Environmental Protection Agency (EPA)
- ♦ Energy Commission
- ♦ Ministry of Energy
- ♦ Policy Makers
- ♦ Ghana Investment Promotion Centre

BENEFICIARIES

- ♦ Private Sector Developers
- ♦ Professional organisations with an interest in CDM and climate change
- ♦ Bankers and Investors

KNOWLEDGE NETWORKS FOR SUSTAINABLE ENERGY IN AFRICA PROJECT (KNSEA)



SPONSOR

World Bank Regional Programme for the Traditional Energy Sector (RPTES)

PROJECT DURATION

June 2001 - December 2002

OBJECTIVES

- ♦ To create a knowledge resource base on sustainable energy accessible through the internet
- ♦ To publish on the world wide web of documentation (reports, articles, speeches, etc.) with useful information on African energy issues
- ♦ To improve access to knowledge resources for sustainable energy on the world wide web
- ♦ To facilitate energy policy dialogues and share good practice experiences through communications via the Internet and periodic face-to-face interactions.

MAIN PROJECT TASKS

- ♦ Website Development and Publications
 - Setting up Main Website (WB Server)
 - Publishing Electronic Newsletter
 - Establishing Web Database / Profiles
- ♦ Creation of Knowledge Resource Base
 - Collating Information & Identifying Gaps
 - Packaging Information for the Web & Addressing Gaps
- ♦ Strengthening of Information Technology
 - Assess & address IT Expertise and needs within project partner institutions - ENDA & EDRC; CEEEZ & GERERE

OUTPUTS

- ♦ Database created through
 - the compilation of current publications/case studies produced under the Energy for Sustainable Development in Africa (ESDA) book project
 - statistics on energy production and use
 - performance indicators for energy institutions
- ♦ Website and additional links created to selected websites containing information on sustainable energy and African energy issues
- ♦ KNSEA quarterly Newsletter published
- ♦ Technology (IT) strengthened through the implementation of Information Systems Strategic Plan (ISSP)

PARTNERS

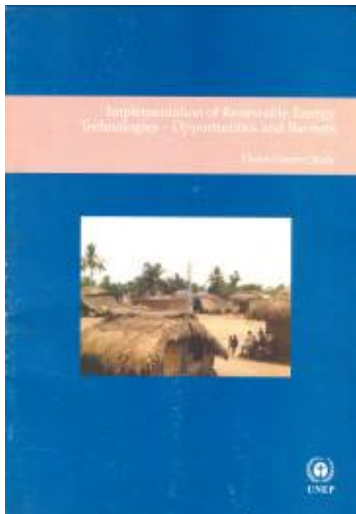
Five African institutions –

- ♦ Centre for Energy, Engineering and Environment (CEEEZ),
- ♦ Energy Development Research Centre (EDRC)
- ♦ ENDA-TM,
- ♦ GERERE, Morocco.
- ♦ The World Bank

BENEFICIARIES

- ♦ Policy makers in the energy sector
- ♦ Private sector developers
- ♦ Researchers

RENEWABLE ENERGY TECHNOLOGIES (RETs) PROJECT



Coverage of RETs report, Ghana country study

SPONSOR

DANIDA

PROJECT DURATION

January 1999 - September 2001.

OBJECTIVES:

- ♦ To improve knowledge, skills, and confidence of project partners to identify situations in which renewable energy technologies can contribute to national energy needs
- ♦ To strengthen institutional capacity for analysis and implementation of RET projects in the participating countries
- ♦ To determine the merits of selected policy instruments (subsidies, tax concessions, duty drawbacks, etc) in enhancing, or possibly inhibiting, the dissemination of RETs;
- ♦ To develop a framework approach for analysing barriers to the wider diffusion of RETs
- ♦ To identify and document the factors that have led to successful diffusion of

RETs in Ghana and to apply these factors to selected number of potential RETs with a view of ensuring their successful implementation

MAIN PROJECT TASKS

- ♦ Desk top studies and literature review
- ♦ Selection of RETs under biomass, solar and small hydro for more detailed analysis.
- ♦ Formation of Advisory Committee and initial information gathering
- ♦ Organisation of national workshops leading to the selection of 8 RETs for detail analysis
- ♦ Field research through interviews and administering structured questionnaires.

OUTPUTS

- ♦ A detailed report presenting the experience of Ghana in the development, utilisation and promotion of Renewable Energy Technologies (RETs)
- ♦ Identification and analysis of key barriers to and opportunities for RETs
- ♦ Outline of detail policy recommendation

PARTNERS

- ♦ UNEP
- ♦ DANIDA (Danish International Development Agency)

BENEFICIARIES

- ♦ Policy makers in the energy sector
- ♦ Renewable energy entrepreneurs

ENERGY USE, ENERGY SUPPLY, SECTOR REFORM AND THE POOR: THE CASE OF GHANA

SPONSOR

ESMAP - World Bank

PROJECT DURATION

November 2003

OBJECTIVES

- ♦ To establish patterns in the way the poor in Ghana are accessing and using energy
- ♦ To identify how changes in the patterns, attributable to energy sector reform and accompanying technological innovations, affect the poor in Ghana
- ♦ To provide a detail overview of the Ghana's energy sector and provide a description of the energy supply chain in Ghana
- ♦ To provide a description of household choice and use of energy in Ghana
- ♦ To provide a description of Ghana's energy sector reform programme and give an assessment of how reform has impacted on the poor in Ghana
- ♦ To evaluate how energy sector reform has impacted or might impact on the choice and use of energy by the poor in Ghana.

MAIN PROJECT TASKS

- ♦ Undertake a desk study of existing studies and survey data and literature review

- ♦ Gather primary data through interviews using semi-structured interview guides to supplement information from desk study with key informants in the Ministry of Energy, the Energy Commission, Public Utilities Regulatory Commission, Tema Oil Refinery, the Oil Companies and other key energy sector institutions.
- ♦ Design a framework for studying the use of energy by households, the supply to those households, and the routes by which supply might be impacted by energy sector reform.

OUTPUTS

- ♦ A detail report establishing the impacts that energy use, energy supply and sector reforms have or are likely to have on poor households in Ghana.
- ♦ A document containing data on how the poor use and chose fuels, and which supply channels for these fuels could be affected by energy sector reforms.

PARTNERS

- ♦ Ministry of Energy
- ♦ ESMAP (World Bank)

BENEFICIARIES

- ♦ Policy makers
- ♦ Researchers
- ♦ Energy sector Practitioners and stakeholders.

RENEWABLE ENERGY AND ENERGY EFFICIENCY PARTNERSHIP (REEEP)



SPONSOR

The UK Foreign and Commonwealth Office

PROJECT DURATION

June 2003 to date

OBJECTIVES

- ♦ To accelerate and expand the global market for renewable energy and energy efficiency technologies by focusing on removing market barriers to energy efficiency and renewable energy use.
- ♦ To roll out collaborative activities aimed at policy and finance frameworks that promote REES.
- ♦ To develop and build partnership for the implementation and financing of Renewable Energy Efficiency Systems (REES)

- ♦ To accelerate the development of renewable energy and energy efficiency technologies in the region.

MAIN PROJECT TASKS

- ♦ Identify and develop strategies in building partnerships for renewable energy and energy efficiency systems.
- ♦ Identify opportunities and gain agreement on collaborative action to accelerate the development of REES in West Africa
- ♦ Organise 2-day regional consultation workshops
- ♦ Prepare of background paper covering REES experiences in 8 West African countries – Burkina Faso, Gambia, Ghana, Mali, Niger, Nigeria, Senegal and Sierra Leone.

OUTPUTS

- ♦ Background paper prepared
- ♦ 2 day consultative workshop organised
- ♦ Workshop Report

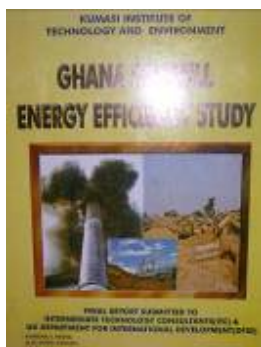
PARTNERS

- ♦ The UK Government

BENEFICIARIES

- ♦ Renewable energy and Energy Efficiency entrepreneurs
- ♦ Other energy sector practitioners and stakeholders.

ENERGY EFFICIENCY IN SAWMILLS PROJECT



Cover page of the Ghana Sawmill Energy Efficiency study report

SPONSORS

Intermediate Technology Consultants (ITC) & Department for International Development (DFID)

PROJECT DURATION

October 1999 to September 2001.

OBJECTIVES

- ♦ To gain a comprehensive understanding of research and work that has been carried out into improving energy efficiency in sawmills, particularly in Ghana
- ♦ To gain initial knowledge of the scope for energy efficiency improvements in the small-scale sawmill industry in Ghana.
- ♦ To identify and understand the relevant technologies and processes for energy efficiency improvements in the wood processing industry
- ♦ To gain a comprehensive understanding of the opportunities and constraints for energy efficiency improvements in the industry
- ♦ To identify the key policy issues necessary to create an enabling environment for the energy efficiency improvements in the industry
- ♦ To identify and understand options that are available for financing of energy efficiency improvements in the industry

MAIN PROJECT TASKS

- ♦ Undertake a desktop research on general energy efficiency practices
- ♦ Undertake field studies of sawmills in the country.
- ♦ Analysis of field data on energy use by sawmills in Ghana

OUTPUTS

A comprehensive report showing

- ♦ An overview of the whole timber sub-sector in Ghana – detailing out forest and wood resources and giving the principal actors and functions of various players in the timber sub-sector
- ♦ Energy efficiency in sawmills - baseline data on energy efficiency options that are available and a review of previous experiences of technical measures identified to have been explored in various timber-processing companies in the country
- ♦ Options available for maximizing recovery rates and utilizing wood residues

PARTNERS

- ♦ Intermediate Technology Consultants (ITC)
- ♦ UK Department for International Development (DFID)

BENEFICIARIES

- ♦ Entrepreneurs in the timber industry
- ♦ Policy makers in the energy sector
- ♦ Utilities

BUNDLING OF SMALL SCALE ENERGY PROJECTS FOR THE CDM PROJECT

SPONSOR

IT Power

PROJECT DURATION

July 2001 - June 2002

OBJECTIVES

- ♦ To determine how small-scale projects can be cost-effectively supported under CDM
- ♦ To determine how the risks associated with developing small-scale projects under the CDM can be reduced.

MAIN PROJECT TASKS

- ♦ Development of criteria for the selection of projects for inclusion in a bundle of small-scale schemes
- ♦ Determine how best to mitigate against the risks which typically discourage investments in small projects and in perceived high risk countries
- ♦ Identifying Parameters that can best be used to identify and formulate projects for bundling on a technology and/or a regional basis
- ♦ Identify and determine how small-scale projects can comply with additional requirements, monitoring and verification, whilst avoiding an

unnecessarily costly bureaucratic burden,

- ♦ Identifying the costs & benefits involved and which bodies will be expected to meet these costs and receive these benefits.

OUTPUTS

- ♦ A report assessing the practicalities, costs, benefits and framework requirements for small-scale projects to be bundled together under the CDM,
- ♦ Production of case studies that demonstrate how small-scale renewable energy and energy efficiency projects can be bundled together to produce attractive CDM investments with low transaction costs,

PARTNERS

- ♦ IT Power

BENEFICIARIES

- ♦ Private Sector Developers
- ♦ Professional organisations with an interest in CDM and climate change
- ♦ Bankers and Investors

IMPACT OF ICTs IN SMEs IN GHANA PROJECT

SPONSOR:

UNU-INTECH University, the Netherlands,

PROJECT DURATION:

April 2001 – October 2003

OBJECTIVES:

- ♦ Investigate the impact and potential of ICTs on the Medium to Small Scale Enterprises (MSEs) of Suame Cluster in Ghana.
- ♦ Investigate the extent to which MSEs use and /or are aware of ICTs
- ♦ Explore the effect of clustering on the ability of MSEs to absorb and utilize ICTs effectively
- ♦ Provide data and analysis that will enable local and national government officials as well as NGOs, public and private sector intermediaries (CIED, TCC, NBSSI etc) to design policies, programmes and support structures.

MAIN PROJECT TASKS AND

- ♦ Develop data and research tools that will support the achievement of project objectives
- ♦ Undertake a field research on the Impact and Potential of ICTs in SMEs

OUTPUTS:

- ♦ A detailed report indicating the knowledge of ICT by MSE's and its impact on their businesses

PARTNERS:

- ♦ UNU-INTECH, The Netherlands
- ♦ MSEs in Suame zone in Kumasi

BENEFICIARIES:

- ♦ National Board of Small Scale Industries(NBSSI)
- ♦ Small and Medium Scale Entrepreneurs

POVERTY AND SOCIAL IMPACT ASSESSMENT (PSIA): ENERGY SECTOR REFORM – ELECTRICITY TARIFFS PROJECT



The PSIA team in a meeting.

SPONSOR

World Bank

PROJECT DURATION

October 2003 - April 2004

OBJECTIVES

The overall objectives of the PSIA on the energy sector were;

- ♦ To assess the effectiveness and implications of using the current electricity subsidy scheme to protect the poor
- ♦ To assess some of the effects of the recent tariff increase on residential consumers, including changes in the mix of fuels being consumed by different customer groups
- ♦ To investigate the affordability of current tariffs and sustainability of cross-subsidies.

- ♦ To propose key indicators, and simple ways of measuring them, to monitor the poverty impact of the energy sector reform program as it moves forward;
- ♦ To build national capacity in PSIA studies.

MAIN PROJECT TASKS

Undertake Analysis of existing information, small-scale quantitative surveys of key groups (not representative on the national scale) and qualitative discussions and key informant interviews

OUTPUTS

- Detailed report showing the results of the analysis.

PARTNERS:

- ♦ RAMBOLL
- ♦ World Bank

BENEFICIARIES:

- ♦ The poor and under – served in rural Ghana.
- ♦ Policy makers and stakeholders in the energy sector.

KUMASI COGENERATION PROJECT



SPONSOR:

Swedish Energy Agency (STEM)

PROJECT DURATION:

July 2002 – October 2002

OBJECTIVES:

The pre-feasibility study established among other things that:

- ♦ Cogeneration using residues of the wood processing industry is feasible and has a great potential for meeting some of the energy requirements of the country.
- ♦ Resource supply is enough to sustain cogeneration plants in the larger sawmills where continuous supply is assured.
- ♦ Kumasi is an ideal location for siting the cogeneration plant considering the fact that about 60% of wood-

processing firms in Ghana are located in Kumasi.

♦

MAIN PROJECT TASKS:

Undertake a feasibility study on the proposed heat and power plant.

OUTPUTS:

A comprehensive report on the feasibility study which proposed a combined heat and power (CHP) plant with an installed capacity of 3.6MWe / 9.3MWth, using a steam turbine technology to be sited at the nucleus of the cluster of sawmills (Kaase) in Kumasi

PARTNERS:

- ♦ AG Timbers Ltd (AGT) Kumasi, Ghana
- ♦ Guinness Ghana Limited
- ♦ Electricity Company of Ghana (ECG)
- ♦ Swedish Energy Agency (STEM)
- ♦ Nykomb Synergetics, Sweden.

BENEFICIARIES

- Entrepreneurs in the timber industry
- Ministry of Energy
- Utilities

ENVIRONMENTAL PROTECTION IMPLICATIONS OF THE ELECTRIC POWER RESTRUCTURING IN GHANA PROJECT

SPONSOR:

UNEP RISOE CENTRE, DENMARK

PROJECT DURATION:

December 1997 – February 1999

OBJECTIVES:

- To analyze the likely implications for the environment of changes in fuel mix for power generation, and
- To evaluate strategies (including identification of alternative environmental regulatory tools/instruments for the industry) to minimize negative environmental impacts of power sector restructuring.

MAIN PROJECT TASKS:

- Examination of electric power generation from renewable energy technologies particularly solar technologies.

OUTPUTS

- Detailed report with information on the results of the examination

PARTNERS:

- UNEP CENTRE, DENMARK

BENEFICIARIES:

- Renewable energy entrepreneurs
- Private sector developers
- Policy makers in the energy sector

MOVING TO EMISSIONS NEUTRAL DEVELOPMENT (MEND) PROJECT

SPONSOR:
DFID KAR

PROJECT DURATION:
August 2000 – April 2002

OBJECTIVES:

- to identify and incorporate poverty alleviation mechanisms within institutional, policy and technical dimensions of partner countries' CDM frameworks;
- to increase awareness of CDM opportunities, participation in steering committees of poverty-focused groups, women's groups, rural and urban development organizations and NGOs;
- to create an enabling environment for inward technology and skills transfers, job and income creation, clean technology uptake and other CDM benefits;
- To facilitate and promote energy/rural development projects, especially biomass, solar and small-hydro; that contribute both to sustainable development and low GHG emission growth paths

MAIN PROJECT TASKS

- Explore CDM project options and priorities which are being considered as possible/probable CDM projects
- Document Country Climate Change Activities with respect to

institutional development, policies and activities;

OUTPUTS:

A detailed report that gives a brief initial Up-to-date CDM country status report, and attempts to give a review of the state of play of CDM and focuses on;

- Socio-Economic indicators in Ghana (population characteristics, poverty levels GDP, investment climate and current policies).
- Sustainable development and its relationship to energy issues and poverty alleviation mechanisms;
- Institutional framework/policy and capacity building initiatives for sourcing of financing and assistance through the CDM for sustainable development and low GHG emission growth paths;
- Initiatives being made to set up a CDM office in Ghana to among others coordinate CDM activities, design, evaluate and monitor CDM projects, etc

PARTNERS:

- DFID KAR

BENEFICIARIES:

- Private Sector Developers
- Professional organisations with an interest in CDM and climate change
- Bankers and Investors

CLIMATE CHANGE PROJECT GHANA PERSPECTIVE



Coverpage of the confronting climate change report.

SPONSOR:

National Environmental Trust (NET)

PROJECT DURATION:

July 1999 - October 2000

OBJECTIVES:

The research was carried out with the overall aim of;

- Bringing a "Southern Perspective" to the US public, media, and policymakers.
- To demonstrate that developing countries are currently implementing voluntary, unilateral climate policies and are ready to

do even more, thereby debunking the notion that developing countries are free-riders.

MAIN PROJECT TASKS:

Undertake a research to clearly prove what Ghana has been doing in fulfilment of its obligations under the United Nations Framework Convention on Climate Change (UNFCCC)

OUTPUTS:

Comprehensive report titled "Confronting Climate Change: Economic Priorities and Climate Protection in Developing Countries"

PARTNERS:

- National Environmental Trust(NET)

BENEFICIARIES:

- Private Sector Developers
- Professional organisations with an interest in CDM and climate change
- Bankers and Investors
- Policy makers in the energy sector

EXPANDED PROVISION OF PUBLIC BENEFITS AS POWER SECTORS IN DEVELOPING COUNTRIES ARE REFORMED

SPONSOR:

International Energy Initiative (iei)

PROJECT DURATION:

June 2001 - May 2002

OBJECTIVES:

Cumulatively and ultimately, the project seeks to develop an in-depth understanding of:

- Power sector reforms in the seven case study countries, including drivers for change, nature of models proposed and/or implemented, stakeholders and decision-makers in the reform process, time period for reforms, reform record so far;
- Public benefit programmes to date, including nature and record of these programmes, and identification of those responsible for implementing/ financing these programmes;
- Actual or anticipated impact of reforms on public benefit programmes, or actual or anticipated impact of public benefit programme priorities on power sector reforms;
- Recommendations on how to advance public benefit programmes in the seven case

study countries, including how to utilise the opportunity presented by power sector reforms to radically, and innovatively advance the public benefits agenda.

- How the results obtained can be placed, successfully, on power sector reform agendas

MAIN PROJECT TASKS:

- Case study reports
- Questionnaires
-

OUTPUTS:

- Case study reports of seven countries
- Comprehensive report outlining the results of the research/study

PARTNERS:

- International Energy Initiative
- International Energy Initiative
- Kumasi Institute for Technology and Environment
- University of Campinas
- International Institute for Energy Conservation
- Pelangi

BENEFICIARIES:

- Policy makers in the energy sector

POWER SECTOR REFORM IN AFRICA: ASSESSING THE IMPACT ON POOR PEOPLE AND INFLUENCING POLICY DECISIONS

SPONSOR:

ESMAP/World Bank

PROJECT DURATION:

July 2003 – June 2004

OBJECTIVES:

- Develop an in-depth understanding of the impact that power sector reforms in Africa are having on the continent's poor people;
- Through drawing best practice, suggest innovative ways of ensuring that power sector reforms improve poor people's livelihoods.

MAIN PROJECT TASKS:

- Developing a methodology and research framework for case study partners.
- Undertaking case study research and analysis according to research framework and methodology
- Analysing case studies and presenting recommendations to policymakers
- Initiating and undertaking a series of outreach and advocacy activities

OUTPUTS:

- Six case study reports – Ghana, Mali, Namibia, South Africa, Tanzania and Uganda.
- A synthesis report, reviewed.
- A website providing project background and research outcomes
- Research material in suitable format to be transformed into regulatory training materials
- Six country specific workshops/seminars, and targeted stakeholder meetings and presentations to disseminate research results.
- Journal articles

PARTNERS:

- University of Cape Town
- ECON Centre for Economic Analysis
- UNEP Collaborating Centre on Energy & Environment

BENEFICIARIES:

- The poor and under – served in Africa
- Policy makers in the energy sector
- Energy sector Practitioners and stakeholders

