PROGRESS REPORT

October 2012

GEF Strategic Programme for West Africa (SPWA)

- Energy Component -

Regional GEF Project on "Promoting Coordination, Coherence, Integration and Knowledge Management" under Energy Component of SPWA

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1 Introduction

The regional GEF project on "Promoting Coordination, Coherence, Integration and Knowledge Management" was approved and began its implementation in 2011 under the Energy Component of the Strategic Programme for West Africa (SPWA)[1]. Approved by the GEF Council in 2008, Strategic Programme for West Africa (SPWA) adopted a programmatic approach to develop a concrete portfolio of renewable energy and energy efficiency projects at the national level in countries of West Africa. In all, twenty-two energy projects (one regional project and twenty-one national level projects) were formulated by the participating GEF Agencies, namely UNDP, UNEP, UNIDO and the World Bank, which are under implementation in the sixteen participating countries, namely Benin, Burkina Faso, Burundi[2], Cape Verde, Chad, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, The Gambia, and Togo.

The regional GEF project, which was developed by UNIDO in partnership with the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), aims at creating synergies and sharing of knowledge and lessons learned between the individual projects. In line with the project objectives, this progress report has been prepared to take stock of the work undertaken thus far under the regional and national level energy projects funded by GEF under the SPWA. The present report also reviews the lessons learned from the experience gained by the national counterpart agencies, partners, and GEF agencies during the project development stage and in the initial stages of implementation. The report highlights the strategic advantages of adopting the programmatic regional approach under the SPWA – Energy Component, and presents key deliverables achieved thus far under the regional project as well as the national projects.

2 Objectives

The aim of the SPWA - Energy Component is to attain significant **global environmental benefits**, increase **energy access** and promote **energy efficiency measures** in the industrial, residential and public sectors in the countries covered under the programme in the area of climate change, keeping in view their regional and national developmental priorities. The main objectives of the Energy Component of this GEF strategic programme are:

- To **adopt a programmatic approach to deepen greater coherence** in the design and implementation of renewable energy and energy efficiency projects at the national level in the countries covered by the SPWA;
- To strengthen policy framework and **scale up renewable energy and energy efficiency markets in the region** through increased private sector investments and by strengthening public-private partnerships;
- To **strengthen local capacity to use renewable energy for productive uses** and catalyze substantial developmental benefits in addition to environmental sustainability; and

[1] Unless provided otherwise, all references to the GEF- SPWA Programme in the present Report pertain to the Energy Component.
[2] Burundi was included under SPWA at the request of the GEF.

- To **engage a regional coordination mechanism** in order to promote greater synergies and exchange of information during the implementation of national level projects.

3 Areas of Intervention

During the initial design phase the following focus areas were prioritized for the SPWA – Energy Component:

1. **Promoting Renewable Energy for Enhancing Access and Supporting Productive Capacities:**
    a. Enhanced access of rural and semi-urban communities to modern, reliable and affordable energy services based on renewable energy
    b. Growth in markets and manufacturing capacities for renewable energy based power generation
    c. Growth in agro-industries, industrial centers and employment opportunities

2. **Promoting Sustainable Energy Production from Biomass:**
    a. Enhanced adoption of modern and sustainable measures and practices in biomass production, conversion and use for modern energy services
    b. Growth in sustainable production and use of biofuels
    c. Growth in new and innovative biomass energy technologies for productive and industrial applications

3. **Promoting Energy Efficiency in Residential and Commercial Buildings and in the Industrial Sector:**
    a. Increased market penetration of energy efficient technologies and practices in residential and commercial buildings
    b. Enhanced adoption and deployment of energy efficient technologies and practices in the industrial sector

4. **Promoting Sustainable Innovative Systems for Urban Transport:**
    a. Innovative transport systems promoted and plans adopted
    b. Enhanced use of low carbon emitting transport modes by urban communities

Based on the feedback received from the key stakeholders and consultations held with member states, a concrete portfolio of renewable energy and energy efficiency projects was developed by the participating GEF Agencies in countries of West Africa.

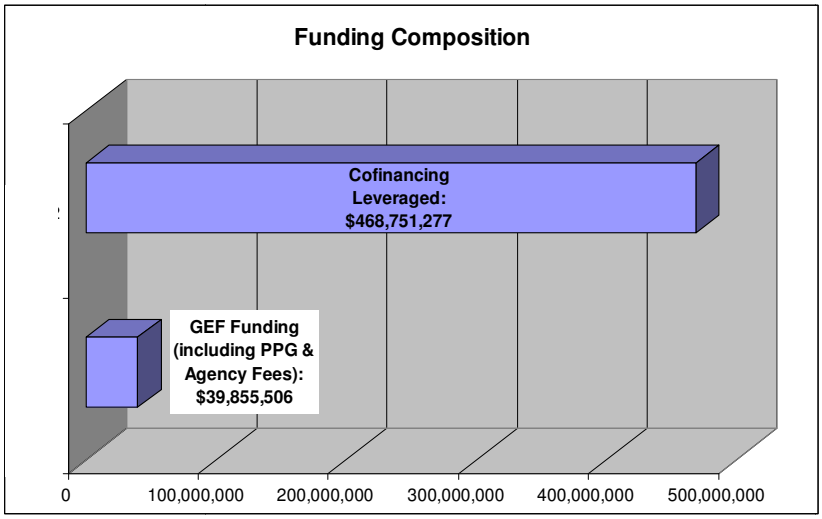
4 Project Portfolio: SPWA - Energy Component

Since its approval in 2008, considerable progress has been achieved under the SPWA – energy component. A **strong portfolio of national level renewable energy and energy efficiency projects has been developed**

by the GEF Agencies. Within sixteen participating countries, **twenty-one country-level projects and one regional project**, **spanning a broad array of themes, technologies, and sectors,** are currently being pursued, predominantly in the early stages of implementation.

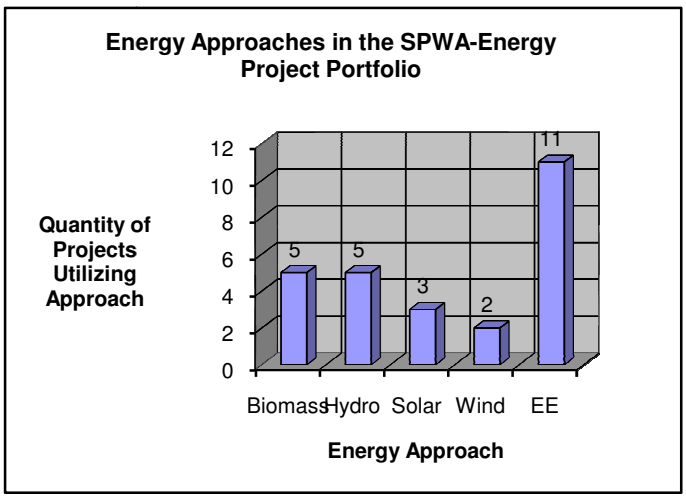
4.1 Overall Funding

GEF has committed funds amounting to $39.86 million for the twenty-two projects under the SPWA - Energy Component ($36.23 million excluding PPGs and agency fees). The GEF financing has helped in leveraging co-financing to the tune of **$468.17 million** from a variety of regional, national, private and public sector partners and institutions. The commitments for the amount of co-financing mobilized represent a significant increase over the $280.61 million indicated at the PIF stage (detailed information on the individual projects can be found in the annex 2 of the report; the co-financing figures represent the most up-to-date commitments all of which have not yet been realized and may be subject to change).



4.2 Technology Focus

Out of twenty-one national level projects, **ten projects focus primarily on promoting renewable energy** technologies and services, and **eleven projects strive to promote energy efficiency** technologies and services. Some projects cover more than one technology or sector and intervene in various areas (e.g. capacity and policy development, knowledge management as well as investment and business promotion).



4.2.1 Renewable Energy Portfolio

Under the GEF SPWA - Energy Component the renewable energy portfolio covers a broad range of technologies for different energy services (e.g. electricity, cooking, and transport): solar, wind, bio-energy, small-scale hydro power as under:

- **Projects focusing on RE based mini-grid systems:**
  - 8 projects focus on promoting renewable energy based mini-grids for rural electrification.

- **Projects coevring biofuels:**
  - UNDP has projects in Mali and Burkina Faso that promote the use of Jatropha as a biofuel source.

- **Projects focsuing on small-scale hydro power:**
  - UNIDO promotes small hydro projects in Sierra Leone, Liberia and Guinea and the World Bank implements one small hydropower porject in Burundi.

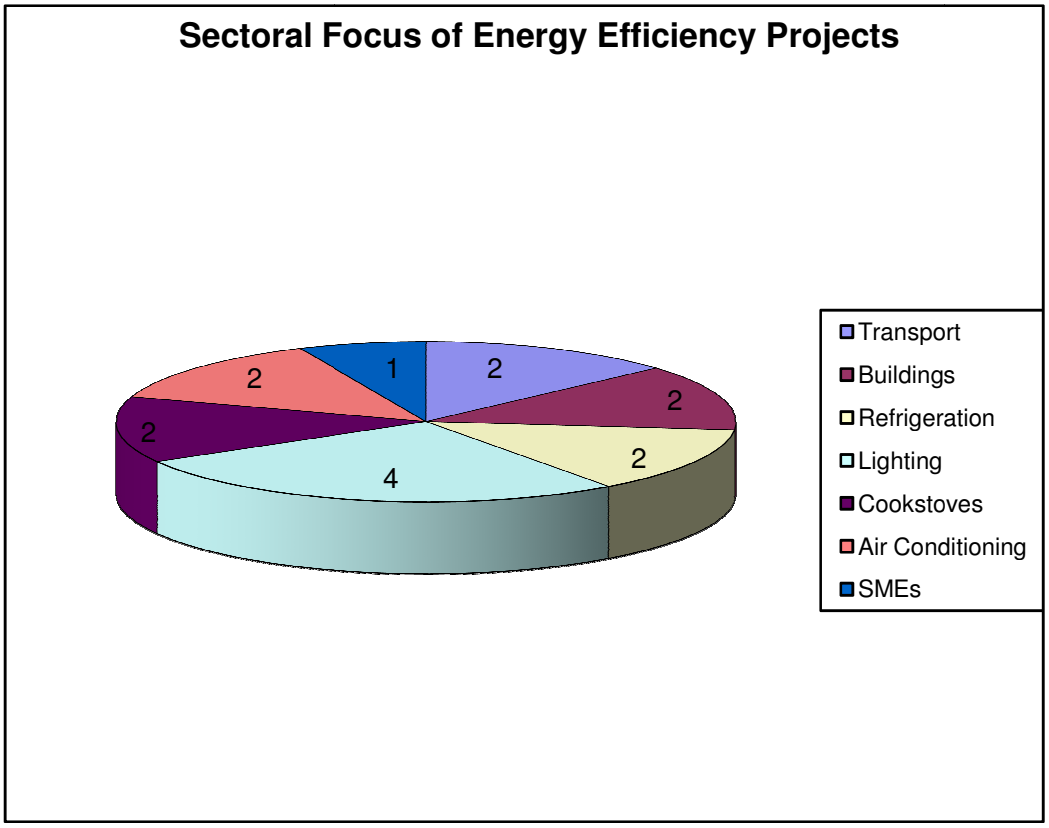
4.2.2 Energy Efficiency Portfolio

Under the GEF SPWA - Energy Component the energy efficiency portfolio covers a broad range of areas and sectors: small and medium-scale industry, transport, lighting, commercial and residential buildings, and electrical appliances.

- **Projects focsuing on the transport sector:**
  - The World Bank projects in Burkina Faso and Nigeria focus on improving energy efficiency in the transport sector.

- **Projects covering the SME Sector:**
  - The UNIDO project in Burkina Faso covers the SME sector.

- **Projects focusing on lighting and electrical appliances:**
  - The UNDP project in Nigeria covers the residential and public sectors through the introduction of Energy Labels and Minimum Energy Performance Standards (MEPS) for new equipment and appliances.
  - The World Bank implements projects in Burundi, Benin and Togo to promote efficient lighting.
  - UNEP executes a project on efficient public lighting in in Côte d'Ivoire.



4.3 Progress

In 2012, nine projects have entered the implementation phase. Eight other projects are in implementation since 2011 or earlier. Out of the twenty-one projects, three projects are yet to begin implementation, which is planned to commence before the end of 2012. The projects in the implementation phase have conducted or are in the process of conducting their inception workshops and have established Project Management Units (PMUs). The matrix given below provides in brief the current status of all twenty-two projects.

Country	Project	Current Progress	Implementation Start Date
Benin (World Bank)	**Promoting EE Lighting**	• The preparation of the initial contract for the supply of the 15,000 compact fluorescent lamp bulbs is in progress (CFL). (The pilot phase was signed in 2011, but issues with supplier commitment stalled the process. Evaluation for the second bid for the total of 350,000 CFLs is underway.) • The preparation of the bid document for the acquisition of test and labeling equipment for the lamps is also in progress.	April 2010
Burkina-Faso (UNDP)	**Promotion of Jatropha Curcas as a Resource of Bioenergy**	• The project has just begun its implementation.	October 2012
Burundi (World Bank)	**Energy Efficiency in Public Lighting**	• The project has just begun implementation of activities on the ground. Securing co-financing commitments took more time than anticipated.	October 2012
Cape Verde (UNIDO)	**Promoting Market-based Development of Small and Medium-Scale RE Systems**	• Inception Workshop was organized and the project Steering Committee is established. • Project manager was recruited and TORs for the contracting services of consultants to assist in the development of a RE strategy for small and medium scale projects have been finalized • The implementation of identified demonstration projects will be launched soon. • Training on financial structuring of RE projects was undertaken.	May 2012
Chad (UNIDO)	**Promoting RE-based Mini-Grids for Rural Electrification and Productive Uses**	• The competitive bid process for the selection of a contractor for construction and commissioning of solar photovoltaic based mini-grid is ongoing. • Preparation of the Inception Workshop is in progress.	May 2012

Côte d'Ivoire (UNIDO)	**Promoting RE-based Mini-Grids in Rural Communities for Productive Uses**	• The TF agreement has been submitted to the government for signature. • Financial packaging of co-financing committed under the project is under finalization.	May 2012
Ghana (UNDP)	**Promoting of Appliance EE and Transformation of the Refrigerating Appliances Market**	• Energy efficiency standards for domestic refrigerators have been adopted and are enforced by both Energy Commission and the Ghana Standard Authority. • The testing, certification, labeling and enforcement mechanisms for the new energy efficiency regulation are in place. • A national awareness campaign on appliance energy efficiency rating labeling has been prepared. • Pilot Refrigerator Rebate and Exchange Scheme were launched on 19 September 2012. • Procurement for the used appliances collection and disposal facilities has been initiated.	July 2011
Liberia (UNIDO)	**Multi-Purpose Mini-Hydro Infrastructure for Energy and Irrigation**	• The Inception Workshop and first meeting of the project steering committee have been organized. • The consulting activities are underway, including preparation of an environmental impact assessment report and holistic incorporation of gender mainstreaming. • Project management unit (PMU) is being established.	June 2012
Mali (UNDP)	**Promotion of the Production and Use of Jatropha Oil as a Sustainable Biofuel**	• The project team has been recruited and the PMU is being established.	March 2012

Nigeria **(UNIDO)**	**Mini-Grids based on RE Sources to Augment Rural Electrification**	• The Inception Workshop was held in August 2012. • The tender document for power plant is under preparation. • The study on feasibility of the mini-grid is ongoing. • The special-purpose generation company was established. • The acquisition of approvals from the local regulatory authorities is ongoing.	November 2011
Guinea **(UNIDO)**	**Promoting Development of Multi-Purpose Mini-Hydro Power Systems**	• The study on the feasibility of the Keno small-hydro system has been finalized. • Mobilization of the additional financial resources by the government and UNIDO is in progress in order to implement the option 2.1 MW selected by the government. • The Inception Workshop is being organized.	May 2012
Senegal **(UNDP)**	**National Greenhouse Gas Reduction Programme through EE in the Built Environment**	The project will begin its implementation shortly.	November 2012
Sierra-Leone **(UNIDO)**	**Promoting Mini-Grids based on Small Hydropower for Productive Uses**	• The Inception Workshop and the first meeting of the Project Steering Committee were organized. • The consulting activities are underway, including preparation of environmental impact assessment report and gender mainstreaming components. • Project management unit (PMU) and operational management unit are being established at the national and district level. • In August 2012, a high-level meeting was held to reinforce the commitment from the Government of Sierra Leone and secured co-financing from OFID and EBID. Furthermore, stakeholder consultations were held with the relevant private sector players, civil society, and members of the local community to ensure their cooperation under the project.	August 2012

The Gambia (UNIDO)	**Promoting RE-based Mini-Grids for Productive Uses in Rural Areas**	• 450 kW grid-connected wind generator was installed and put into operation. • Draft of Electricity Sector Plan and Renewable Energy Law is being finalized. • Training and awareness raising programmes for the policy-makers and private sector were organized. • Connection of 450 kW wind turbine is in progress.	July 2011
Niger (UNDP)	**Integration of GHG Emission Reductions in Country's Rural Energy Service Access Programme**	• The project team has been recruited.	September 2012
Togo (World Bank)	**Efficient Lighting programme**	• Training for government/implementing agency officials was organized. • Several kilometers of drainage network were rehabilitated. • An initial tranche of 15,000 bulbs supplied by the vendor has been successfully used to test the market and also marketing activities around the introduction of energy efficient bulbs in Togo have been undertaken. The remaining 385,000 bulbs are scheduled for delivery in December 2012. • Consultancy activities are underway for designing the awareness campaign and media materials. • The Laboratory equipment for testing CFL is still to be acquired, with bid documents currently under preparation.	September 2009
Côte d'Ivoire (UNEP)	**Promoting Energy Efficiency in Public Lighting**	• Signing of project cooperation agreement between MME and UNEP is awaited.	November 2012

Nigeria **(World Bank)**	**Improving Urban Transport Network in Nigeria**	• The project, following some initial readjustments, became fully operational in October 2011. • Co-financing from l'Agence Française de Développement (AFD) became effective March 2012, and since then procurement of the civil works for the BRT expansion has been proceeding apace, and is nearly complete. Construction is expected to begin within the next few months. • Activities to support the BRT public consultation, communication, and media strategies, as well as upgrading and rationalization of the bus system will launch once construction begins. • Study launched to assess the 2/3 wheel industry and its evolution, which is expected to inform the design of activities to raise awareness and promote the use of public transportation.	May 2011
Nigeria **(UNDP)**	**Promoting EE in the Residential and Public Sector in Nigeria**	• A total of 1 million compact fluorescent lamps were distributed in residential and public buildings across Nigeria by the Energy Commission of Nigeria, leading to peak reduction of 38 MW of electricity. • The project launched a unique end-use metering campaign across six geo-political states of Nigeria to better assess the current level of efficiency of appliances used in Nigeria. • Market data have been collected & analyzed to assess the range of energy efficiency on today's Nigeria appliance market, allowing setting a solid baseline in electricity related GHG emissions. • Standard Organization of Nigeria is working with Project Team to develop energy efficiency standards for selected appliances – lighting, air conditioners and refrigerators in Nigeria. • A National Energy Efficiency Policy that will set a roadmap for integrating energy efficiency into national programmes and projects is being developed with implementing partners. • An awareness campaign has been launched and the capacity of the relevant stakeholders is being enhanced to meet the objectives of the project.	September 2011

Burkina-Faso (UNIDO)	**Promoting EE Technologies in the Beer Brewing Sector in Burkina-Faso**	• The Project Management Unit (PMU) was established. • A draft project work plan was prepared. • National Coordination Committee with relevant partners (GIZ, SNV, etc.) was created at UNIDO's initiative. • 3 focus geographical areas/provinces were identified. • Financing facility for women beer brewers and improved cook stove manufacturers under development with the Pan African Bank and a local financial institution has been established. • Cluster diagnostic/ potential to select 2 high beer brewer concentration areas for cluster building and development is undergoing. • Development of training material for carbon financing is in progress. • The first Steering Committee is planned for 15 November 2012.	June 2012
Burkina-Faso (World Bank)	**Ouagadougou Transport Modal Shift in Burkina-Faso**	• The project has begun implementation and the inception meeting for stakeholder consultations was held in June 2012. • Procurement work for goods/equipment underway and bidding under evaluation. • ToRs for consultancies under preparation to initiate studies before end of year.	December 2011

5 Regional Coordination under the SPWA - Energy Component

The regional GEF project was developed by UNIDO in partnership with the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE). It aims at creating an enabling policy and institutional environment for coordination, coherence, integration and knowledge management among the national level projects designed by various GEF agencies in close cooperation with the national counterpart agencies**.**

During the initial SPWA design phase, UNIDO worked closely with the ECOWAS Commission and key partners to ensure their buy-in for the programmatic approach adopted under the SPWA. To strengthen the regional level institutional framework, ECREEE was set up in 2010 as the nodal regional level institution for promoting renewable energy (RE) and energy efficiency (EE) policies and markets in West Africa by the ECOWAS Commission and key partners such as the Governments of Austria and Spain, and UNIDO. The Centre has been closely involved in the design and implementation of the regional project under the SPWA – Energy Component.

The regional project primarily aims at ensuring coordination and coherence, and allows for an umbrella framework that maximizes the likelihood of successful national level interventions being scaled-up and equipped with the required resources and capacity to reach the tipping points necessary for new renewable energy and energy efficiency technology pathways to take hold in the region. Specifically, the regional project foresees four key interventions:

- Establishment of an institutional mechanism at the regional level to oversee coordination, and strengthen cooperation, coherence and integration among national level energy projects, main stakeholders and key institutions;
- Formulation of renewable energy and energy efficiency polices and their implementation at the regional and national level;
- Establishment of the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX), a regional information and knowledge management system for strengthening database management, exchange of information and documentation of best practices;
- Organization of high-level as well as technical meetings to build local capacities and facilitate public-private partnerships for the mainstreaming of renewable energy and energy efficiency into national level country frameworks and promoting energy markets in the region.

5.1 Regional Institutional Mechanism

The GEF SPWA-Energy Component Steering Committee, as foreseen in the regional project, has been embedded in the ECREEE Governance Structure (Executive Board/Technical Committee). The process envisages participation of GEF Operational Focal Points and the GEF Agencies in these meetings in the context of the co-ordination of the GEF SPWA-Energy Component. The mechanism involves review of progress reports of all GEF projects under the SPWA by the steering committee once in a year.

5.2 Strengthening the Policy and Regulatory Framework

Since its inception, the GEF-SPWA programme (jointly with ECREEE and strategic partners) was able to facilitate encouraging developments in the sustainable energy sector at the national and regional level in countries of West Africa.

Pioneering countries such as Ghana, Cape Verde and Senegal have made considerable progress in formulating and implementing renewable energy and energy efficiency policies, laws, standards and incentive schemes to attract investments. **Cape Verde** adopted a renewable energy policy which aims at a 50% share of renewable energy in the overall electricity mix by 2020. The country passed a renewable energy law which opens up the market for independent power producers and adopted a renewable energy investment plan.

In 2012 **Ghana** passed a renewable energy bill and feed-in-tariff. **Senegal** aims at a renewable energy share of 15% in the electricity mix and approved a renewable energy law in 2010. The country is currently developing a feed-in-tariff system. Other countries have launched similar processes (e.g. facilitated through the GEF-SPWA project in Gambia). Moreover, first **promising major investments in the grid-connected renewable energy market** were made in the ECOWAS region in 2010/11. This includes the commissioning of a 25.5 MW grid-connected bundled wind project and 7.5 MW grid-connected PV projects in Cape Verde in 2010/11. With support of the GEF-SPWA a 0.8 MW grid-connected wind plant was installed in Gambia.

In line with objectives of the regional project for coordination of the SPWA-Energy Component, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in partnership with the Global Environment Facility (GEF), UNIDO and the Global Forum for Sustainable Energy (GSFE) is organizing a high level forum in Accra, Ghana in October 2012 where Ministers of the ECOWAS region will map out a concrete action plan and **adopt policies on Renewable Energy, Energy Efficiency, Small-Scale Hydro Power Programme and Bioenergy Strategy Framework**. This will lay the foundation in moving towards achieving the overarching aim of the SPWA- Energy Component to attain significant global environmental benefits, increase energy access and promote energy efficiency measures in the industrial, residential and public sectors in the countries covered under the program in the area of climate change keeping in view their regional and national developmental priorities.

5.3 Renewable Energy and Energy Efficiency Policies

As a policy response to the rising energy security concerns, continued lack of access to energy services and the need for climate change mitigation the Economic Community for West African States (ECOWAS) has taken a pioneering role in the promotion of sustainable energy technologies**.** The West African Power Pool (WAPP) and its 2011 Master Plan aim at the creation of a regional electricity market by 2020/25. The expansion of electric generation capacity derives primarily from large hydro resources and secondarily from natural gas. The ECOWAS/UEMOA White Paper on access to energy services for populations in rural and peri-urban areas, adopted in 2006, foresees increased access to energy services

and that at least 20% of new investments in electricity generation should originate from locally available renewable resources.

In 2011, in line with the SPWA objectives, ECREEE jointly with strategic partners and UNIDO launched the development of the ECOWAS policies on Renewable Energy and Energy Efficiency. **The finalized policies include minimum targets and scenarios for renewable energy and energy efficiency and a broad range of measures, standards and incentives to be implemented at regional and national levels.** Some of the salient features of the Renewable Energy and Energy Efficiency policies are listed below:

ECOWAS Renewable Energy Policy (EREP):

- The share of renewable energy (incl. large hydro) in the total electricity mix of the ECOWAS region will increase from 32% in 2010 to 35% in 2020 and 48% by 2030.
- The share of new renewable energy such as wind, solar, small scale hydro and bioelectricity (excl. large hydro) from non existence in 2010 will increase to around 10% in 2020 and 19% by 2030. These targets translate into an additional 2.425 MW renewable electricity capacity by 2020 and 7.606 MW by 2030.
- To provide universal access to energy services it is envisaged that around 75% of the rural population will be served through grid extensions and around 25% by renewable energy powered by mini-grids and stand-alone hybrid systems by 2030.

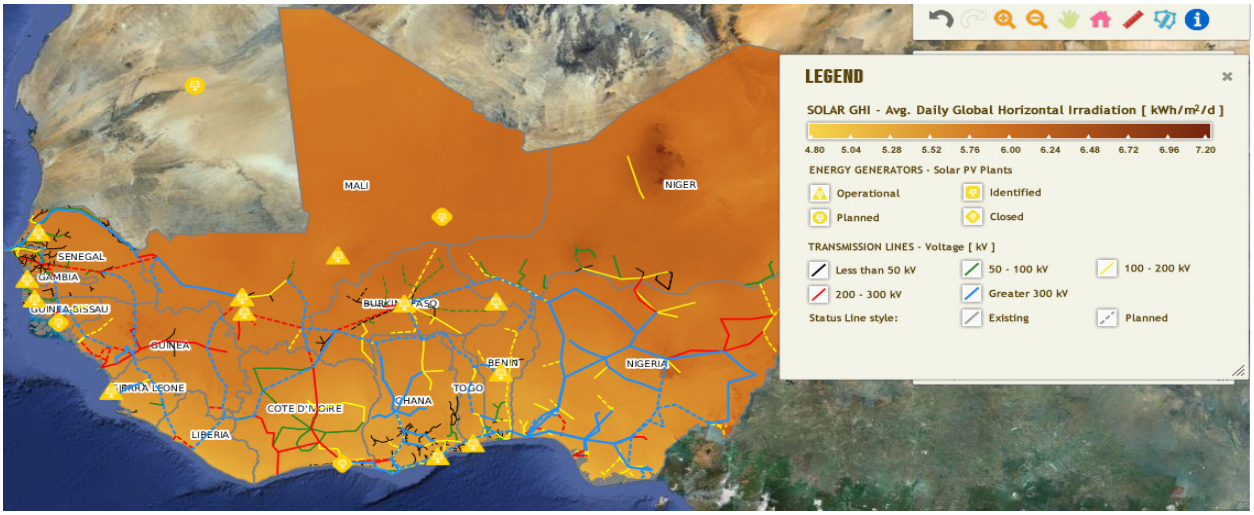
ECOWAS Energy Efficiency Policy (EEEP):

- by 2013, create the institutional basis for five priority regional initiatives, with the following concrete objectives:
  - **lighting**: phase out inefficient incandescent bulbs by 2020;
  - **electricity distribution:** reduce average losses in electricity distribution from the current level of 16% to the world standard level of 7%, by 2020;
  - **cooking:** achieve universal access to safe, clean, affordable, efficient and sustainable cooking for the entire population of ECOWAS, by 2030;
  - **standards and labels**: establish an ECOWAS Technical Committee for Energy Efficiency Standards and Labelling, and adopt initial region-wide standards and labels for major energy equipment by end 2014;
  - **finance**: create instruments for financing sustainable energy, including carbon finance, by the end of 2013;
- by 2016, implement measures that free 2000 MW of power generation capacity: the equivalent of creating forty virtual EE power plants, with a capacity of 50 MW each, available to power development, serving new users and new needs

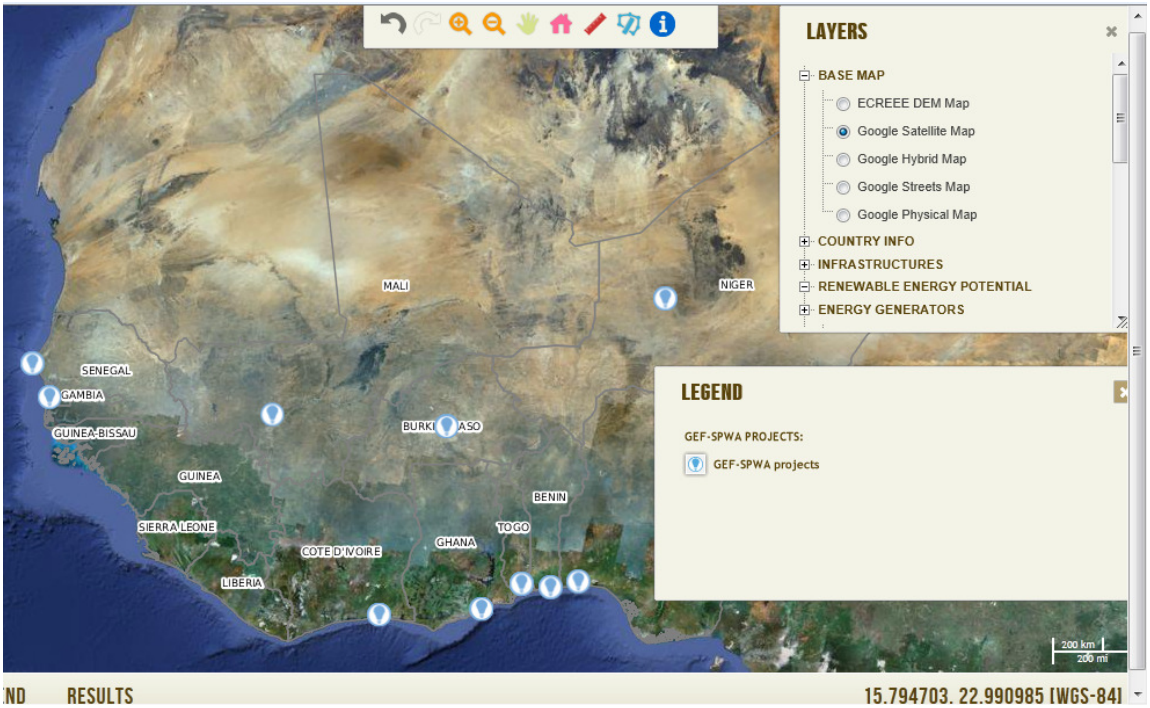
5.4 ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX)

The ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX) has been designed by ECREEE with technical assistance of UNIDO under the regional GEF SPWA project. The online-portal provides decision makers, project developers, investors and other stakeholders with tailored information and planning strategies. It will boost knowledge management, networking, advocacy and strengthening of capacities on renewable energy and energy efficiency.

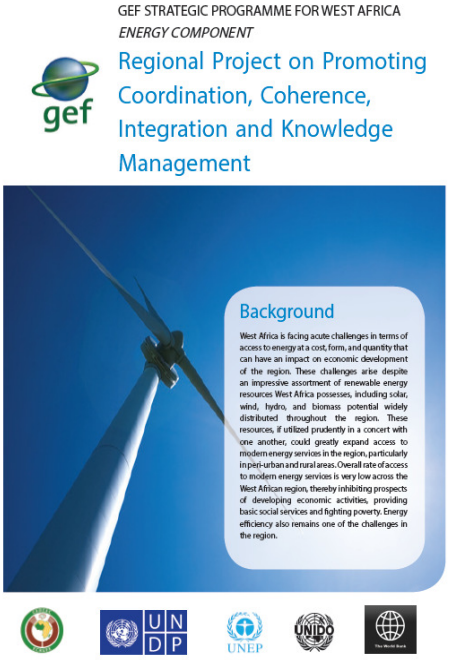
The ECOWREX is also built around a streamlined, state-of-the-art web platform that includes fully integrated, Google Earth-based resource and project maps, capacity building tools, and marketplace mechanisms to link together key energy actors and promote collaboration between financiers, project developers, government officials, and other stakeholders. A comprehensive library of reports, studies, policies, and resource assessments is also included in the Observatory website. Full connectivity to other websites, organizations, and documents involved in the SPWA - Energy Component is also included.



The ECOWREX **also includes a map showing all the GEF-SPWA energy projects.** The lessons learnt and other relevant documentation on the SPWA will be accessible through the ECOWREX in future.



5.5 Awareness - Raising and Advocacy



A number of promotional materials and mechanisms have been designed to support dissemination of information regarding the GEF SPWA - Energy Component:

- Under the Regional Project, a fact sheet has been prepared for all 22 GEF SPWA- Energy Component projects providing information about their objective, planned activities and proposed outcomes.

- The first regional level Ministerial meeting to promote high policy-level cooperation, knowledge sharing and coherence among the countries involved in the SPWA - Energy Component projects will be held during the High Level Forum in Accra.

- ECREEE has organized four regional technical workshops on small-scale hydro (Monrovia, Liberia), bioenergy (Bamako, Mali), solar (Dakar, Senegal) and financial structuring of sustainable energy projects (Accra, Ghana) for policy makers and experts in the region.

- The ECOWREX will showcase updates on all GEF SPWA-Energy Component projects and has links to all advocacy documents such as the project fact sheets, regional and national ECOWAS renewable energy and energy efficiency policy documents. ECREEE is undertaking several regional renewable energy resource assessments.

6 Programmatic Approach: Early Lessons

Experience from designing and implementing the SPWA - Energy Component clearly indicates that the programmatic approach is a very useful and versatile umbrella mechanism that facilitates partnerships around **a common strategic objective at the regional level** as well as optimizes the utilization of resources at the regional / national levels. Continued engagement of the GEF Secretariat, GEF Agencies and Cooperating Partners at the national level such as civil society, project beneficiaries, and government and private sector stakeholders is crucial to maximizing the positive impacts and legacy of the programmatic approach. It is evident that the role of a regional institution such as ECREEE is pivotal for policy formulation, capacity building and cooperation amongst projects under implementation at the national and regional levels, and achievement of the desired results on the ground. While programme implementation is still in its early stages, some emerging trends and challenges are summarized below:

- **Initial Delays at the Country Level:** Some countries that are hosting a GEF project for the first time face unforeseen delays in putting things together even though there is complete technical support provided by the concerned GEF Agency and political support extended by the GEF focal point and the line ministries. Securing stakeholders' commitment takes longer time in countries that are hosting GEF projects for the first time.

- **Coherent, Consistent and Conducive Policy and Regulatory Frameworks**: Regional and National level policy and regulatory frameworks are crucial to the successful dissemination of renewable energy and energy efficiency in the region. The GEF SPWA seeks to strengthen and develop these frameworks but in countries where these are still under development, the implementation of key components under the project is inevitably delayed.

- **Mobilization of Co-Financing:** In many countries, the relatively small potential sources of financing make it difficult to secure large chunks of committed funds for co-financing. Moreover, regional financial institutions are often not active in the field of renewable energy and energy efficiency necessitating additional efforts in identifying sources of co-financing that are receptive to the thematic focus of the projects.

- **Regional Collaboration and Cohesion:** The diverse energy needs, multiple stakeholders and complex policy and institutional challenges throughout the West African region underscore the unique opportunities afforded by increased collaboration, coherence, and coordination amongst country-level approaches to renewable energy and energy efficiency technologies and markets, and is a primary concern of the SPWA - Energy Component, particularly the Regional GEF project.

- **Technology Transfer and Adaption:** There is a noticeable degree of policy inertia in many of the countries of the region, particularly with respect to new or modern renewable energy and energy efficiency technologies. Over time, however, evidence of increasing buy-in on the part of country stakeholders has been witnessed - a trend likely to continue as the projects move further into the implementation stage. This is clearly reflected in the projects being developed under the GEF 5 replenishment cycle.

- **Capacity Building:** Local, national and regional capacities are critical to successful implementation of the projects and such capacities can be incrementally built through workshops, trainings, and knowledge management activities that are already underway as key components of many of the projects. ECREEE is playing a very critical role in building capacities at the regional / national level in countries of West Africa.

- **Ownership:** The ECOWAS commission has exhibited a very strong ownership of the entire process to promote GEF energy projects at the regional / national level in countries of West Africa. The timing of establishment of ECREEE shows the importance of local ownership and demand-driven approaches that are so crucial to ensure success on the ground.

7 Future Perspectives of the GEF - SPWA

The GEF SPWA and its project portfolio at the national/regional level are now in the early stage of implementation. In the coming year 2012- 2013 the projects will focus on strengthening activities in the following key areas of intervention:

1. Policy, legal and regulatory frameworks to develop/strengthen national RE and EE policies.
2. Technology transfer and adaptation to build local manufacturing capacities
3. Capacity building through workshops and targeted training approach (“train the trainers”)
4. Awareness-raising and advocacy to scale up markets of RE and EE in the region
5. Financing and investments for RE and EE technologies and markets.

Moreover, concrete regional programmes and initiatives are suggested by ECOWAS to be implemented in cooperation with different partners the following years:

- The ECOWAS Small-Scale Hydro Power Programme
- The ECOWAS Renewable Energy Facility (EREF)

- The ECOWAS High Performance Distribution Initiative
- The ECOWAS Standards and Labeling (S&L) Initiative
- The ECOWAS Initiative for Industrial Energy Efficiency
- The ECOWAS Bioenergy Programme
- The ECOWAS Sustainable Cooking Initiative
- The ECOWAS Industrial Energy Programme

8 ANNEX 1: SPWA Project Overview

GEF ID	Agency	Country	Focal Area	Title	GEF cycle		Type	Status
UNDP:								
3699	UNDP	Mali	Climate Change	Promotion of the Use of Agrofuels from the Production and Use of Jatropha Oil in Mali	GEF - 4	RE	Medium Size Project	Under implementation since March 2012
3794	UNDP	Nigeria	Climate Change	Promoting Energy Efficiency in Residential and Public Sector in Nigeria	GEF - 4	EE	Full Size Project	Under implementation since September 2011
3796	UNDP	Niger	Climate Change	Integration of Greenhouse Gas Emission Reductions in Niger's Rural Energy Service Access Program	GEF - 4	RE	Full Size Project	Under implementation since September 2012
3881	UNDP	Ghana	Climate Change	Promoting of Appliance Energy Efficiency and Transformation of the Refrigerating Appliances Market in Ghana (under West Africa Energy Program:3789)	GEF - 4	EE	Full Size Project	Under implementation since July 2011
4073	UNDP	Burkina Faso	Climate Change	Promotion of Jatropha Curcas as a Resource of Bioenergy in Burkina-Faso	GEF - 4	RE	Full Size Project	Under implementation since October 2012
4095	UNDP	Senegal	Climate Change	National Greenhouse Gas Reduction Programme through Energy Efficiency in the Built Environment	GEF - 4	EE	Medium Size Project	Under implementation since November 2012
UNEP:								

3876	UNEP	Côte d'Ivoire	Climate Change	Promotion of Energy Efficiency Lighting in Public, Commercial and Residential Buildings (under West Africa Energy Programme: 3789)	GEF - 4	EE	Medium Size Project	Under implementation since November 2012
UNIDO:								
4285	UNIDO	Burkina Faso	Climate Change	Promoting Energy Efficiency Technologies in Beer Brewing Sector in Burkina Faso	GEF - 4	EE	Medium Size Project	Under implementation since June 2012
3922	UNIDO	Gambia	Climate Change	Promoting Renewable Energy Based Mini grids for Productive Uses in Rural Areas in The Gambia	GEF - 4	RE	Full Size Project	Under implementation since July 2011
3923	UNIDO	Cape Verde	Climate Change	Promoting Market-Based Development of Small to Medium-Scale Renewable Energy Systems in Cape Verde.	GEF - 4	RE	Full Size Project	Under implementation since May 2012
3937	UNIDO	Sierra Leone	Climate Change	Promoting Mini grids Based on Small Hydropower for Productive Uses in Sierra Leone	GEF - 4	RE	Full Size Project	Under implementation since August 2012
3943	UNIDO	Nigeria	Climate Change	Mini grids based on Renewable Energy (Small-Hydro and Biomass) Sources to Augment Rural Electrification	GEF - 4	RE	Full Size Project	Under implementation since November 2011
3944	UNIDO	Liberia	Climate Change	Installation of Multi-Purpose Mini-Hydro Infrastructure (for Energy & Irrigation)	GEF - 4	RE	Full Size Project	Under implementation since June 2012
3958	UNIDO	Guinea	Climate Change	Promoting Development of Multi-Purpose Mini-Hydro Power Systems	GEF - 4	RE	Medium Size Project	Under implementation since May 2012
3959	UNIDO	Chad	Climate Change	Promoting Renewable Energy-based Mini grids for Rural Electrification and Productive Uses	GEF - 4	RE	Full Size Project	Under implementation since May 2012

4005	UNIDO	Côte d'Ivoire	Climate Change	Promoting Renewable Energy-Based Grids in Rural Communities for Productive Uses	GEF - 4	RE	Medium Size Project	Under implementation since May 2012
4178	UNIDO	Regional	Climate Change	Promoting Coherence, Integration and Knowledge Management under Energy Component of SPWA	GEF - 4		Medium Size Project	Under implementation since 2011
WB:								
2876	World Bank	Burkina Faso	Climate Change	Ouagadougou Transport Modal Shift	GEF - 4	EE	Medium Size Project	Under implementation since December 2011
3827	World Bank	Nigeria	Climate Change	Nigeria Urban Transport	GEF - 4	EE	Full Size Project	Under implementation since May 2011
3874	World Bank	Benin	Climate Change	Benin Energy Efficiency Programme	GEF - 4	EE	Full Size Project	Under Implementation since April 2010
3880	World Bank	Togo	Climate Change	Togo Efficient Lighting Programme (under West Africa Energy Programme: 3789)	GEF - 4	EE	Full Size Project	Under implementation since September 2009
4133	World Bank	Burundi	Climate Change	Energy Efficiency in Public Lighting and adoption of small hydro power	GEF - 4	EE	Full Size Project	Under implementation since October 2012

9 ANNEX 2: Overview of SPWA - Energy Component Projects

9.1 Benin: Promoting Energy Efficient Lighting

Implementing Agency: World Bank
(GEF – US$ 2 million[3]; Co-financing – US$ 2.35 million)

The project in Benin aims at improving access to modern energy services by introducing standards and labels for light bulbs and air-conditioners, and diffusing efficient light bulbs to households through a bulk procurement scheme. The project promotes energy efficiency culture through consumer education, development of institutional capacity and awareness-raising among major stakeholders. The objective is to enhance energy efficiency awareness of consumers by the means of (i) diffusion of information and education, (ii) institutional capacity building of key players, (iii) policy and regulatory framework strengthening, and (iv) technical capacity building for operation and maintenance of the system.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary national and international initiatives. Highlights include:

- The energy sector is one of the priority areas identified by the Government of Benin to achieve its overall development target. The Government has prepared the Policy and Strategy Document for the Development of the Electricity Sector that provides a long-term vision and the strategy for the country by 2025. The overall energy strategy can be summarized as follows:
  - (i) strengthening the legal and institutional framework;
  - (ii) ensuring reliable electricity supply to support economic activities, achieve the national energy security and an efficient energy delivery system with an optimal energy resource mix;
  - (iii) increasing energy access to population through new power generation plants, regional interconnection and rural electrification;
  - (iv) promoting private investments in the power sector by creating an enabling market environment for private sector participation; and
  - (v) promoting energy efficiency in the residential, industrial, commercial and institutional sectors. Actions initiated by the Government for the implementation of the strategy that target energy efficiency include:
    - The RESUCE Project of 1995 for reducing energy expenses in public buildings. The project has raised awareness on how to reduce electricity wastage in the public sector, realized more than 40 energy audits in public buildings, and installed battery banks for power factor correction and electricity bill validation.
    - The reform of the electricity sector through the adoption of the Electricity Code 2007, including formal establishment of the Electricity Regulatory Authority.
    - The creation of the Benin Agency for Rural Electrification and Energy Conservation (ABERME) in 2004 as an executing agency for rural electrification and promotion of energy efficiency.

[3] Including PPG and agency fees

- In 2004, the Government of Benin obtained a US$ 45 million loan from the World Bank to implement the Energy Services Delivery Project (ESDP) to increase access to modern energy in urban, peri-urban and rural areas. Under this project, an Energy Efficient Unit has been set up within the Energy Directorate at the Ministry of Energy and Water to carry out energy efficiency projects in the public sector. The previous energy audits realized under the RESUCE project were validated and a number of demonstration projects will be implemented. Moreover, the ESDP project is financing the development of an energy efficiency code for public buildings to ensure application of best practices in the buildings sector.
- Built on the work undertaken under the ESDP, the World Bank is currently financing the Increased Access to Modern Energy Project (IAME) that aims at improving the operational efficiency of the transmission and distribution system as well as increasing access to electricity.
- Furthermore, the developments of standards for energy efficient light bulbs will be coordinated with other similar activities in the region. Caution will also be taken to create synergies between the Togo project, the GEF global project on efficient lighting and the GEF's West Africa Energy Program regarding the development of standards and testing facilities.

Current progress:

- The preparation of the Initial contract for the supply of the 15,000 compact fluorescent lamp bulbs is in progress (CFL) (the pilot phase was signed in 2011, but issues with supplier commitment stalled the process. Evaluation for the second bid for the total of 350,000 CFLs is underway.)
- The preparation of the bid document for the acquisition of test and labeling equipment for the lamps is also in progress.

Activities	Timeframe	
CEO Endorsement (FSP)	May	2009
Implementation Start	April	2010
Mid-term Evaluation	June	2013
Project Closing Date	June	2015

9.2 Liberia: Multi-Purpose Mini-Hydro Infrastructure for Energy and Irrigation

Implementing Agency: UNIDO
(GEF – US$ 2 million[4]; Co-financing – US$ 4 million)

The overall goal of the project is to remove the institutional, technical, policy and economic barriers to the promotion of mini hydro power for productive applications in Liberia. It also aims to reduce GHG emissions from fossil based power by accelerating the development of mini hydro resources. The main objective is to develop the market environment for improving access to mini hydro-based modern energy services and productive uses in rural areas of the country. The UNIDO-GEF intervention aims to demonstrate the viability of mini hydro power and establish policy guidelines, institutional linkages, responsibility within the government, the private sector and local community through an integrated approach focusing on: (i) the strengthened institutional capacity at national and local levels for implementation of a mini hydro power system and local distribution grid; (ii) access to electricity in rural areas for household electrification and productive enterprises through mini hydropower; (iii) the establishment of a Renewable and Rural Energy Agency that is capable of fulfilling its mandate, and local energy enterprises that promote and sustain MHP systems; and (iv) and an enabled policy and regulatory framework facilitating faster growth of mini hydro power for improved electricity access.

The proposed project will establish a 'run of the river' hydropower station with a capacity of 1MW at Mein River in Bong County and use the process 'learning-by-doing' and building local capacity to reach an estimated 30 percent of households in Suakoko town (i.e.350 households) and 15% in the rural areas of Suakoko district (i.e. about 1800 households). It is also estimated that the project would bring electricity from hydro power to various institutions such as government buildings, small and medium enterprises, and commercial buildings. The project will also review the existing regulatory framework and formulate recommendations to strengthen the framework, particularly on the tariff structure, which is essential to promote private sector involvement in rural electrification. The project is expected to lay the foundation for a market environment for mini hydro-based renewable energy in Liberia, and will have a significant demonstration effect.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary domestic initiatives, initiatives of the international partners, and those of UNIDO. Highlights include:

- The Government is encouraging assistance and support from the donor community, financial institutions and INGOs to develop its energy sector. Lessons learned from similar projects that are being developed in the country and existing projects in other neighboring countries such as Sierra Leone (Bumbuna– 50 MW, Guma– 2.4 MW and Bo – 4 MW) could contribute to the success of this project and therefore, all relevant projects will be reviewed to ensure maximum coordination.
- Further, a synergy can be created with the USAID supported energy infrastructure development programme to augment electricity access in the country. The USAID LESSP project is working with UNIDO and co-financing 1 MW project to stimulate off-grid hydro power development in Liberia.
- At the regional level, the project will attempt to coordinate with similar projects implementing national market transformations to promote the uptake of mini grids powered by renewable energy (Cape Verde, Côte d'Ivoire, Chad, The Gambia, Guinea, Liberia, Nigeria and Sierra Leone), through the GEF-funded SPWA-Energy Component. This regional harmonization and coordination will be undertaken through the Economic Commission of West African States (ECOWAS), of which Liberia and all the other countries are members. Since ECOWAS has a focus on promoting renewable

[4] Including PPG and agency fees

energy among its members, it is by far the most suited regional level institution to organize the coordination between the GEF projects. Through ECOWAS, policies and strategies to promote market-based renewable powered mini grids will progressively be expanded, through the recently set up ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), to all countries in the region.

- This hydro power project may take advantage of the regional coordination project managed by UNIDO and contribute to fulfill the objective of Medium-Sized Projects (MSPs). The project will therefore liaise with these specific regional activities - being undertaken by ECREEE, under the umbrella of the GEF Programmatic Energy project for West Africa and led by UNIDO. Integrated programmes in such regions and countries will be well-studied and their status and linkage with the proposed project will be closely reviewed.

Current progress includes:

- The inception workshop and steering committee were organized.
- The consulting activities are underway, including preparation of an environmental impact assessment report and holistic incorporation of gender mainstreaming.
- Project Management Unit (PMU) is being established.

Activities	Timeframe	
CEO Endorsement/Approval	March	2012
Implementation Start	June	2012
Mid-term Evaluation	December	2013
Project Closing Date	May	2016

9.3 Sierra Leone: Promoting Mini Grids based on Small Hydropower for Productive Uses

Implementing Agency: UNIDO
(GEF – US$ 2 million[5]; Co-financing – US$ 30 million)

The overall goal of the project is to remove the institutional, technical, policy and economic barriers to the promotion of small hydro power for productive applications (SHP) in Sierra Leone. The effort is to reduce GHG emissions from fossil based power through accelerated development of the small hydro resources and a market based approach in promoting SHP. The UNIDO/GEF intervention aims to demonstrate the viability of small hydro power and establish policy guidelines, institutional linkages within the government, private sector and local community through an integrated approach focusing on strengthened institutional capacities at various levels. The focus is put on (i) the planning and implementation of SHP based mini grids projects for enhancing electricity supply and productive applications, (ii) enhanced public - private partnerships investments and stakeholders' acceptance of viability of SHP based mini grid projects; (iii) local expertise and knowledge enhanced for SHP based mini grids (installation, operation and maintenance), their financing and productive use; and (iv) development of conducive policy and regulatory framework for renewable energy projects.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary initiatives developed domestically, by other international partners, or by UNIDO. Highlights include:

- The Government is encouraging assistance and support from the donor community, financial institutions and INGOs to develop its energy sector. The Government promises all its support needed to develop such projects in the country. Lessons learned from similar projects that were developed at Bumbuna (50 MW), Guma (2.4 MW) and Bo (4 MW) could contribute to the success of this project, and therefore all relevant projects will be reviewed to ensure maximum coordination with them.
- Further, a possible synergy can be created between this project and the EU supported infrastructure development programme in the country, which plans to develop the electricity sector in the country to build grid infrastructure. During the stakeholder consultations, the EU expressed its support for the SHP project, including developing the grid network for evacuation of power.
- At the regional level, the project will attempt to coordinate with similar projects implementing national market transformations to promote the uptake of mini grids powered by renewable energy (Cape Verde, Côte d'Ivoire, Chad, The Gambia, Guinea, Liberia, Nigeria and Sierra Leone), through the GEF-funded Programmatic Approach on Access to Energy in West Africa. This regional harmonization and coordination will be undertaken through the Economic Commission of West African States (ECOWAS), of which Sierra Leone and all the other West African countries are members. Since ECOWAS has a focus on promoting renewable energy among its members, it is by far the most suited regional institution to organize the coordination between these GEF projects. Through ECOWAS, policies and strategies to promote market-based renewable powered mini grids will progressively be expanded, through the recently set up ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), Cape Verde, to all countries in the region.
- This micro and small hydro power project may take advantage of the regional coordination project managed by UNIDO and contribute to fulfill the objective of MSP. The project will be therefore linked to these specific regional activities undertaken by ECREEE, under the umbrella of the GEF Programmatic

[5] Including PPG and agency fees

Energy project for West Africa and led by UNIDO. Integrated programmes in such regions and countries will be well-studied and their status and linkage with the proposed project will be closely reviewed.

Current progress includes:

- The inception workshop and steering committee were organized.
- The consulting activities are underway, including preparation of environmental impact assessment report and gender mainstreaming components.
- Project Management Unit (PMU) and Operational Management Unit (OMU) are being established at the national and district level.
- In August 2012, a high-level meeting was held to reinforce the commitment from the Government of Sierra Leone and secured co-financing from OFID and EBID. Furthermore, stakeholder consultations were held with the relevant private sector players, civil society, and members of the local community to ensure their cooperation under the project.

Activities	Timeframe	
CEO Endorsement/Approval	February	2012
Implementation Start	August	2012
Mid-term Evaluation	June	2014
Project Closing Date	December	2016

9.4 Burkina-Faso: Promotion of Jatropha Curcas as a Resource of Bioenergy

Implementing Agency: UNDP
(GEF – US$ 1.5 million[6]; Co-financing – US$ 15 million)

The main goal of this project in Burkina-Faso is to facilitate the removal of barriers to the sustainable production and utilization of Jatropha Curcas oil as an affordable alternative to diesel or petrol products. As a co-benefit, the project will significantly contribute to rural development through the promotion of a decentralized production of Jatropha oil and an environmentally-friendly private investment that respects social and sustainability criterions. The effort is to increase the number of Jatropha plantations, installations of Jatropha oil production units as well as the number of Jatropha oil production facilities owned by rural organizations. This will be achieved through (i) facilitation of rural stakeholder ownership of Jatropha oil production (ii) strengthening R&D Capacities on Jatropha oil and utilization and its initial scale up (iii) establishment of a strategy and framework for the development of Jatropha oil as a sustainable agro fuel and (iv) removal of barriers to private investments in this bioenergy resource.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary initiatives developed domestically, by other international partners, or by UNIDO. Highlights include:

- UNDP/GEF project on Jatropha promotion is under implementation in Mali and lessons learned will be shared in regards to the project in Burkina-Faso.
- The Multi-functional platform program, coordinated by the Regional Program Energy Poverty (PREP) and funded by UNDP is developed to promote agro fuel promotion.
- At the national level, a document on the framework for the development of the agro fuel industry was prepared by the Ministry of Energy and covers agricultural policy and other sectoral policy aspects. In addition, the International Institute of Water and Environmental Engineering (2IE) has been closely involved in the formulation of a national strategy.
- At a community level, Larlé Naaba Tigré, a traditional chief, has promoted Jatropha plantations. In 2008, he launched an information campaign targeted at farmers in 45 provinces of Burkina and the distribution of 22.5 tons of seeds originating from Mali, Ghana, Togo and Burkina Faso and 340,000 seedlings to be grown over about 48,000 hectares. He was joined by 67,000 producers residing in 1,333 villages, to which he distributed a million seedlings and 17.5 tons of seeds in 2009, or the equivalent of 38,270 hectares. In 2010, the association distributed 500,000 seedlings, 400,000 cuttings and 4 tons of seeds.
- In terms of the complementary activities run by the companies, Agritech is an agro-industry company whose objective is to optimize the promotion of all the industry's products and by-products (electricity production, development of Jatropha oil cake and cotton stems as fuels). It announced in 2008 that its objective was to exploit 200,000 hectares of Jatropha in Burkina Faso. Also, Genèse has a program focused on Jatropha oil in dual-carburetion generators (up to 100 KVA) installed in villages of less than 3,000 inhabitants.

Current progress includes:

- The project is yet to start.

[6] Including PPG and agency fees

Activities	Timeframe	
Work Programme for Full-Size Project	January	2010
CEO Endorsement/Approval	September	2012
Implementation Start	October	2012
Mid-term Evaluation	October	2014
Project Closing Date	October	2016

9.5 Togo: Promoting Energy Efficient Lighting

Implementing Agency: World Bank
(GEF – US$ 2 million[7]; Co-financing – US$ 2.29 million)

The overall goal of this project is to introduce energy efficiency and quality standards through consumer education and bulk procurement scheme. The project will result in greenhouse gas emission reduction from the energy saved by using efficient equipment. The project is part of GEF West Africa Energy Programme, focusing on practical interventions demonstrating the technical and economic viability of promising renewable energy and efficient energy technology. The project in Togo aims at introducing standards and labels for light bulbs and increasing the use of energy efficient bulbs in households. Enhanced energy efficiency will be achieved through (i) technical and managerial capacity building of public agencies (ii) development and implementation of media communication and increase of public awareness about energy efficient lights (iii) efficient lighting distribution for households. Furthermore, (iv) label and official standards will be designed, (v) a legal framework will be developed, and (vi) a national testing facility will be built to achieve the pre-set goals.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary initiatives developed domestically and by other international partners. Highlights include:

- The Government is retrofitting a 16-MW thermal plant and has built a new fuel oil based power plant in Lomé. New investments in thermal generation are planned to cover at least 30% of the national electricity needs in a first step and 80% of the domestic demand in a second step, which is planned to be completed by 2010.
- The Energy Directorate at the Ministry of Energy has identified energy efficient lighting in households as an important measure to reduce energy and power demand, especially in the Lomé Region where the maximum consumption and demand are recorded.
- The World Bank is financing the Emergency Infrastructure Rehabilitation and Energy Project (EIREP), which among other things targets the improvement of Togo's electricity distribution system. The energy component of the project consists of rehabilitation of Medium Voltage/Low Voltage distribution stations and network supplying social, economic, education and health centers. The project will principally target Lomé and surroundings where approximately 80% of electricity supplied is being consumed. The Togo GEF efficient lighting project is a sub-component of the Togo EIREP and focuses on removing key barriers to energy efficiency in the country through the development of standards and labeling, the promotion of energy efficient equipment and creating a supportive legal and institutional framework.
- The development of standards for energy efficient light bulbs will be also coordinated with other similar activities in the region. Caution will also be taken to create synergies between the Togo project, the GEF global project on efficient lighting and the GEF West Africa Energy Programme regarding the development of standards and testing facilities.

Current progress includes:

- Training for government/implementing agency officials was organized.
- Several kilometres of drainage network were rehabilitated.
- An initial tranche of 15,000 bulbs supplied by the vendor has been successfully used to test the market and also undertake marketing activities around the introduction of energy efficient bulbs in Togo. The remaining 385,000 bulbs are scheduled for delivery in December 2012.

[7] Including PPG and agency fees

- Consultancy activities are underway for designing the awareness campaign and media materials.
- The Laboratory equipment for testing CFL is still to be acquired, with bid documents currently under preparation.

Activities	Timeframe	
CEO Endorsement (FSP)	May	2009
Implementation Start	September	2009
Mid-term Evaluation	December	2012
Project Closing Date	December	2013

9.6 Senegal: National Greenhouse Gas Reduction Programme through Energy Efficiency in the Built Environment

Implementing Agency: UNDP
(GEF – US$ 1.1 million[8]; Co-financing – US$ 7.9 million)

The main goal of this project is to develop energy efficient practices for building construction in the commercial and residential sectors in Senegal. The project is designed to (i) demonstrate energy efficiency in construction techniques and building materials, (ii) develop a Building Code incorporating thermal and energy efficiency aspects, (iii) strengthen institutional, economic and policy framework as well as local capacity for an effective implementation of the Code, and (iv) strengthen technical capacity of construction stakeholders.

This project will launch the process for collaboration between project owners, professionals (architects, banks, insurers, etc.) and the administration by creating a suitable and favorable framework for enhancing energy efficiency in existing and new buildings. The project has been developed in coordination with other initiatives in the country. There are a number of complementary initiatives developed domestically, or by international partners. Highlights include:

- Several multilateral and bilateral agencies (including Agence Française de Développement, German Cooperation Agency (GTZ), the present Delegation the European Union) have already supported or intend to provide policy, technical and financial support to the Government of Senegal to develop a comprehensive policy for promoting a more energy efficient building sector, both residential and commercial. The project will build on the achievements and un-completed work of ENERBAT and on international best practices in the promotion of energy efficiency in the construction sector. The Ministry of Construction, the Ministry of Energy (Department of Energy Efficiency) and the Ministry of Environment have decided to collaborate and coordinate a national multi-year programme to promote energy efficiency in new construction through the implementation of a thermal Building Code. The present project will provide the institutional support in the three ministries involved.

- The Government of Senegal is pursuing a policy initiative to (i) improve the quality of imported products, (ii) to ensure that goods rejected by other countries are not dumped on the domestic market and (iii) to ensure that best engineering practices in infrastructure construction, industry and agriculture are brought to the country. As part of its National Energy Policy (August 2002), it has also established the goal of: (i) “ensuring the importation of the more energy-efficient equipment and machinery”; (ii) “promoting R&D activities in energy conservation and efficiency, including the development and manufacture of energy-efficient equipment and machinery; and (iii) “promoting public awareness about the benefits of improved energy efficiency.”

Current progress includes:

- The project is starting in November 2012.

[8] Including PPG and agency fees

Activities	Timeframe	
CEO Endorsement/Approval	September	2012
Implementation Start	November	2012
Mid-term Evaluation	November	2014
Project Closing Date	October	2017

9.7 Nigeria: Mini Grids based on Renewable Energy (Small-Hydro and Biomass) Sources to Augment Rural Electrification

Implementing Agency: UNIDO
(GEF – US$ 3 million[9]; Co-financing – US$ 12 million)

The project aims at promoting renewable energy, mainly in the form of small hydropower and biomass based mini grids as viable options for augmenting the rural electrification and productive uses in Nigeria. The demonstration of viable and sustainable renewable energy based mini grid projects will enable the Government to further establish an appropriate policy and regulatory framework and contribute to the development of a market environment for increased private sector investment programmes. Given the country's resource endowment, the project will focus on promoting two SHP mini grid demonstration projects with a capacity of 0.5 MW and a biomass mini grid project of 2 MW capacity, as both have huge potential for scaling up in the country. The project is designed to provide support in creating an enabling policy and market environment for the attainment of the targets set for renewable energy, including the policy, regulatory and institutional framework and financing issues for setting up mini grids; capacity-building; as well as public awareness-raising. The project is also expected to

(i) redesign the institutional framework leading to human and institutional capacity building at all levels to achieve the scientific, engineering and technical skills and infrastructure relevant for the design, development, fabrication, installation and maintenance of RE based mini grids, and

(ii) the development of manufacturing capabilities in a critical mass of scientists, engineers, and economists for the design and effective functioning of the necessary institutional framework.

The project will complement the ongoing policy thrust to promote national projects and programmes on rural electrification as it has been developed in coordination with other initiatives in the country. There are a number of complementary initiatives developed domestically, or by international partners. Highlights include:

- The project complements the efforts of the UNDP-supported Renewable Energy Master Plan, and World Bank projects such as development of the off-grid lighting using cassava waste, the Nigeria National Energy Development Project to improve the efficiency of transmission and distribution lines, or the Aba 120 MW gas co-generation power plant.
- At the regional level, great emphasis is put on the coordination of the project with several other similar projects focusing on national market transformations and promotion of the uptake of mini grids powered by renewable energy (Cape Verde, Côte d'Ivoire, Chad, The Gambia, Guinea, Liberia, Nigeria and Sierra Leone) through the GEF-funded Programmatic Approach on Access to Energy in West Africa. This regional harmonization and coordination will be undertaken through ECOWAS (the Economic Commission of West African States), of which Nigeria and all the other countries are members. As ECOWAS focuses on promoting renewable energy among its members, it is by far the most suited regional institution to organize the coordination and harmonization between these GEF projects. Through ECOWAS, policies and strategies to promote market-based RE powered mini grids will progressively be expanded to all countries in the region. The present project will therefore liaise with these specific regional activities under the umbrella of the GEF Programmatic Energy programme for West Africa led by UNIDO.

Current progress includes:

- The inception workshop was held in August 2012.

[9] Including PPG and agency fees

- The power plant tender document is under preparation.
- The study on feasibility of the mini grid is ongoing.
- The special-purpose generation company has been established.
- The acquisition of approvals from the local regulatory authorities is ongoing.

Activities	Timeframe	
CEO Endorsement/Approval	November	2011
Implementation Start	November	2011
Midterm Evaluation	October	2013
Project Closing Date	October	2015

9.8 Niger: Integration of Greenhouse Gas Emission Reductions in Country's Rural Energy Service Access Programme (PRASE)

Implementing Agency: UNDP
(GEF – US$ 2 million[10]; Co-financing – US$ 3.7 million)

Niger's Rural Energy Service Access Program (Programme Rural d'Accès aux Services Energétiques - PRASE) is a comprehensive and ambitious national strategy to provide access to energy services in all rural communities throughout the country. The present project builds on the process of systematic favoring of low-carbon solutions in every component of the first phase. The project introduces an innovative institutional model to deliver and maintain access to sustainable energy services through Energy Service Operators (ESO). PRASE proposes to address these issues through a comprehensive approach based on a common definition of energy access targets and the means to achieve them by all actors. PRASE can be used as a reference national energy access programme as it has been defined under the aegis of the ECOWAS White Paper for access to rural energy services. It is housed by the Ministry of Mines and the Environment (MME), under the supervision of the National Multi-sectoral Energy Committee (CNME). It covers all 213 rural communes in Niger and it will be implemented in stages, with the first phase covering 20 communes. The UNDP/GEF intervention directly helps to ensure that environmental impact considerations were included in all training and target definitions.

To a certain degree, the structure of PRASE itself ensures that the chosen targets are consistent with national and local needs by using a participative process at a national and local level to define the said specific project targets.

Current progress includes:

- The project team has been recruited.

Activities	Timeframe	
CEO Endorsement/Approval	May	2012
Implementation Start	September	2012
Mid-term Evaluation	September	2014
Project Closing Date	August	2017

[10] Including PPG and agency fees

9.9 Mali: Promotion of the Production and Use of Jatropha Oil as a Sustainable Biofuel

Implementing Agency: UNDP
(GEF – US$ 1.1 million[11]; Co-financing – US$ 5.8 million)

The objective of the programme is to develop and promote a sustainable model for the production and use of Jatropha oil at the national level. It aims at significantly contributing to rural development through the promotion of decentralized Jatropha oil production that complies with environmental and social sustainability criteria. The project also attempts to prevent any possible competition between biofuel promotion and food production. The project is designed to (i) remove barriers to private investment by setting up and implementing an appropriate regulatory framework, (ii) elaborate a strategy for the development of Jatropha oil as sustainable biofuel based on valid national and regional experience, (iii) improve Research & Development activities in order to remove technical barriers to the development of Jatropha oil production at national level, (iv) remove barriers for a buy-in by rural stakeholders of Jatropha oil production, and (v) promote Jatropha oil among the population as a high quality national energy resource.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary national and international initiatives. Highlights include:

- At the national level, there is a real impulse for the promotion of Jatropha in this sector based on more than 20 years of experience:
    - For many years the Malian Government has been actively committed to the development of a national agrofuel strategy. Currently, the Malian Government invests about 1 billion CFA (2 MUSD) in the development of agrofuels at national level through various initiatives.
    - With the creation of a national agency (Agence Nationale du Développement des Biocarburants - ANADEB) specifically responsible for coordinating the national strategy for agrofuels promotion in 2009, the government demonstrated its will to harmonize all private and public initiatives for the development of the agrofuel sector.
    - There are many craft oil mills in the rural areas and their activity could be redirected to agrofuel production upon provision of an efficient system for monitoring their working conditions and product quality.
    - The mobilization of resources from international carbon markets can give a strong impulse to the development of this sector by securing income.

- The project was initiated in consultation with the main participating national institutions (ANADEB, Ministry of Energy, Ministry of Agriculture, training and research institutions) and stakeholders (Jatropha networks, NGOs), after a project inception workshop and various individual meetings aiming to list current barriers faced, and the activities of high priority that need to be to be commenced in order to ensure achievement of objectives. Various partners (institutions, NGOs, private investors) expressed their interest in being involved in the implementation of the programme following a thorough analysis of the activities that can be carried out in synergy.
- The project complies with the UNDP mandate particularly due to the great importance it gives to capacity building, training of Jatropha sector stakeholders, as well as the effort to reinforce the capacity of decision-makers. The reinforcement of the regulatory framework and organs responsible for its implementation, and the communication actions towards the public aiming to

[11] Including PPG and agency fees

promote sustainable development can also be considered as being in accordance with the UNDP mandate.

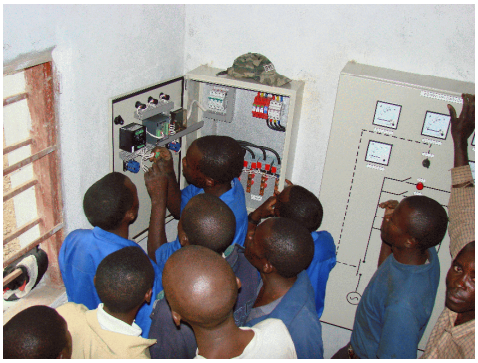
Current progress includes:

- The project team has been recruited.

Activities	Timeframe	
CEO Endorsement/Approval	September	2011
Implementation Start	March	2012
Mid-term Evaluation	November	2013
Project Closing Date	October	2015

9.10 Republic of Guinea: Promoting Development of Multi-Purpose Mini-Hydro Power Systems

Implementing Agency: UNIDO
(GEF – US$ 1 million[12]; Co-financing – US$ 1.5 million)



The project aims at removing the barriers to the promotion of a market approach for the development of multi-purpose mini grids powered by small hydropower facilities. The project will help to meet the growing need for irrigation as well as the need for access to electricity in rural areas, which is currently met or to be met by fossil fuels. This will be done mainly by (i) training skilled and knowledgeable technicians and public officers; (ii) raising awareness about the appropriate technologies and using the best practices to maximize effectiveness; and (iii) putting in place policies encouraging the involvement of the private sector and providing access to innovative and smart financial mechanisms supporting mini-hydropower based grids in rural areas.

The project will establish 2-3 demonstration pilot sites in off-grid isolated communities and implement the pilots through the learning-by-doing approach and by strengthening local capacities. The pilots will also be used for increasing awareness about appropriate technologies for rural electrification among different actors and stakeholders (financial institutions, the private sector, service providers, local governments, etc.). The project will also review the existing policy and regulatory frameworks, and formulate recommendations on how to strengthen this framework so that there is more effective promotion of investments by the private sector.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary national and international initiatives. Highlights include:

- This project will closely link up to and build synergy with the GEF-financed IBRD/IDA's Decentralized Rural Electrification Project. The latter project, which is currently under implementation, aims at improving access to electricity in the country's rural areas by testing the relevant institutional, financial and delivery mechanisms. It is providing technical assistance to BERD and has created a fund of long-term credit for renewable energy based rural electrification systems. Furthermore, it assists private providers in identifying and setting up electricity services in rural areas. The proposed project can benefit from synergies with this project by developing mini-hydropower based demonstration projects that could attract private stakeholders with the potential of being beneficiaries of the fund; it will also focus on different regions.
- At the regional level, the project is coordinated and harmonized with several similar projects implementing national market transformations to promote the uptake of mini grids powered by renewable energy (Cape Verde, Côte d'Ivoire, Chad, The Gambia, Liberia, Nigeria, and Sierra Leone) through the GEF-funded Programmatic Approach on Access to Energy in West Africa. This regional harmonization and coordination is undertaken through ECOWAS, of which Guinea and all the other countries are members. As ECOWAS focuses on promoting renewable energy among its members, it is by far the most suited regional institution to organize the coordination and harmonization between these GEF projects. Through ECOWAS, policies and strategies to promote market-based renewable energy powered mini grids will progressively be expanded to all countries in the region. The present project therefore liaises with these specific regional activities under the umbrella of the above-mentioned GEF energy programme for West Africa led by UNIDO.

[12] Including PPG and agency fees

Current progress includes:

- The study on the feasibility of the Keno small-hydro system has been finalized.
- Mobilization of the additional financial resources by the government and UNIDO is in progress in order to enable the option 2.1 MW selected by the government.
- Upon sufficient mobilization of funds the inception workshop will be organized.

Activities	Timeframe	
CEO Endorsement/Approval	April	2012
Implementation Start	May	2012
Project Closing Date	February	2016

9.11 Ghana: Promoting Appliance Energy Efficiency and Transformation of the Refrigerating Appliances Market

Implementing Agency: UNDP
(GEF – US$ 2 million[13]; Co-financing – US$ 4.4 million)

The project seeks to improve the energy efficiency of refrigeration appliances in Ghana through the introduction of energy efficiency standards. It also aims to demonstrate replicable and scalable equipment turn-in and replacement programmes that replace inefficient and environmentally damaging appliances with more efficient and environmentally friendly models. By removing the barriers that currently inhibit the adoption of efficient refrigeration appliances the project will allow Ghanaian households and businesses to reduce their energy expenditures while improving quality of life. Estimated annual energy savings will range from 30% to 50%, depending on the success rate of market transformation incentives and programs. This will be achieved through (i) strengthening of structures and mechanisms for implementation of appliance energy efficiency standards and labels, (ii) adopting national testing certification, labeling and enforcement mechanisms (iii), training of professionals dealing with appliances and education campaigns targeting consumers, (iv) establishing refrigerating appliance test facilities and used appliance disposal/collection facilities, (v) developing efficiency programme evaluation and monitoring capacity, and (vi) conducting refrigeration appliance rebate and exchange programmes throughout Ghana, distributing at least 50,000 efficient appliances.

The project has been developed in coordination with other initiatives in the country. Highlights include:

- The Standards Organization of Nigeria is already cooperating with the Ghana Standards Board (GSB), its counterpart in Ghana, on a number of standard-related issues. The project will set minimum energy performance standards (MEPS) for domestic refrigerators, air-conditioners, and compact fluorescent lamps. It is anticipated that the testing facilities being developed in such projects could be used by all manufacturers and importers in the region. Under this scheme, it is possible that an appliance certified in one country could be recognized and used by neighboring countries.

- A strong basis exists to encourage regional cooperation to share experiences, lessons, know-how, facilities and baseline data. Sharing of information and experiences will help to create a harmonized EE S&L scheme with enhanced import controls for the ECOWAS region and possibly for Africa as a whole. ECOWAS established the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE) in November 2009. Based in Praia, Cape Verde, the newly established center of excellence intends to promote some regional coordinated activities on energy efficiency policy, and appliance standards and labels.

- The project team welcomes the possibility offered by the GEF-UNIDO coordination and intends to benefit from the regional GEF Strategic Programme for West Africa (GEF-SPWA). Lessons learnt from this project will be shared with other GEF projects in Nigeria, Côte d'Ivoire, Benin, and Togo and with colleagues in Tunisia, South Africa and Kenya.

- The project will liaise with other GEF projects under development and implementation within the GEF-SPWA. The project will contribute as well as benefit from activities currently being developed by ECREEE, and will directly link with the project on Promoting Energy Efficiency in the Residential and Public Sector in Nigeria and another on EE building codes in Senegal. The project

[13] Including PPG and agency fees

will also benefit from the knowledge shared by other UNDP-GEF projects on capacity building, codes and investment for access to electricity in Sub-Saharan African rural areas.

Current progress includes:

- EE standards for domestic refrigerators have been adopted and are enforced by both the Energy Commission and the Ghana Standard Authority.
- The testing, certification, labeling and enforcement mechanisms for the new EE regulation are in place.
- A national awareness campaign on appliance EE-rating labeling has been prepared.
- Pilot Refrigerator Rebate and Exchange Scheme was launched on 19 September 2012.
- Procurement for the used appliances collection and disposal facilities has been initiated.

Activities	Timeframe	
CEO Endorsement/Approval	May	2011
Implementation Start	July	2011
Mid-term Evaluation	January	2013
Project Closing Date	June	2014

9.12 The Gambia: Promoting Renewable Energy based Mini Grids for Productive Uses in Rural Areas

Implementing Agency: UNIDO
(GEF – US$ 2 million[14]; Co-financing – US$ 4 million)

The project is designed to offer a systematic approach to removing market barriers to investments in renewable energy based mini grids in rural areas of The Gambia. Since agriculture is the mainstay of the Gambian economy, the pilot renewable energy based mini grids will be linked to agricultural activities. Wherever possible and subject to availability of renewable energy resources locally, the pilot projects will replace existing fossil fuel powered generators. In addition, the possibility of hybrid systems will be explored to increase reliability of the power supply.

During the project, lessons learned from running the pilot projects will be disseminated widely as part of an awareness-raising campaign. The private sector in particular will be targeted since a broader and accelerated scaling up of renewable energy based mini grids in rural areas across the country can only be achieved if it is led by private sector stakeholders. Building on this, the project will create a market environment conducive to a wider adoption of renewable based mini grids in rural areas, and renewable energy technologies in general. To create the enabling conditions for a market-led growth in renewable energy mini grids, the project will establish the necessary legal and regulatory framework for the renewable energy sector, providing clear guidelines and protection of potential market players in the sub-sector.

The project has been developed in coordination with other national, regional and international initiatives in the country. Highlights include:

- A National Biogas Programme was jointly developed by the Department of State for Agriculture and the World Bank in order to raise awareness about biogas in the country. Whereas the National Biogas Programme principally focused on biogas at the household level in specific regions i.e. Banjulinding, North Bank and Western Regions, this project will adopt an integrated and nation-wide approach that will focus on biogas digesters on a larger scale, i.e. in institutions like hospital, schools, slaughter houses. Furthermore, the project will focus on households that were not covered under the National Biogas Programme to avoid competition for resources.
- A joint project between the National Water and Electricity Company (NAWEC) and a private company for an 18 MW municipal electricity generation plant powered by waste from a dumpsite in Tujereng village, 30 kilometres south of Banjul is also instructive in the design of the strategy for this project.
- A national project focusing on the promotion of ethanol cook stoves at the household level provides a good lesson in terms of mobilising the private sector, local manufacturing capacity on renewable energy technologies etc.
- The African Development Bank funded Renewable Energy Study of The Gambia, which produced detailed feasibility studies on solar energy and wind energy mini grid applications in rural areas in The Gambia. The feasibility studies from will be used in selecting and designing the pilot projects to be implemented under this project. Furthermore, the investment strategy for renewable energy based mini grids that will be produced by this project will build on the outcomes of the above-mentioned study.
- UNIDO is also leading the process of establishing the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE). The overall aim of the Centre is to develop and implement regional projects and programmes that seek to establish and operationalize renewable energy and energy efficiency markets in the region. Therefore, this institution will naturally have a symbiotic relationship with

[14] Including PPG and agency fees

the GEF regional programme. It is foreseen that some of the activities of this project will be coordinated with the activities of the regional Centre.

Current progress includes:

- 450 kW grid-connected wind generator was installed and put into operation.
- Draft of Electricity Sector Plan and Renewable Energy Law is being finalized.
- Training and awareness-raising programmes for policy-makers and private sector were organized.
- Connection of 450 kW wind turbine is in progress.

Activities	Timeframe	
CEO Endorsement	July	2011
Implementation Start	July	2011
Mid-term Evaluation	January	2013
Project Closing Date	June	2014

9.13 Côte d'Ivoire: Promoting Renewable Energy based Mini Grids in Rural Communities for Productive Uses

Implementing Agency: UNIDO
(GEF – US$ 1 million[15]; Co-financing – US$ 3.9 million)

The project is expected to remove institutional, technical, knowledge, and awareness-related barriers to the promotion of a market approach for the development of mini grid connected renewable energy systems to meet the growing need of access to electricity in rural areas, which is currently mostly met by fossil fuels.

This will be achieved through
(i) Developing institutional capacity and raising awareness
(ii) Strengthening the policy and regulatory framework
(iii) Establishing renewable energy based mini grid facilities and knowledge transfer
(iv) Knowledge sharing.

The project has been developed in coordination with other initiatives in the country. Highlights include:

- At the regional level, the project will be coordinated through ECOWAS with several similar projects implementing market transformations to promote the uptake of mini grids powered by renewable energy such as those run in Cape Verde, Chad, The Gambia, the Republic of Guinea, Liberia, Nigeria, or Sierra Leone.
- The GIZ (German Agency for International Cooperation) is also carrying out a programme on Rural Economic Development, which aims at increasing the income of agricultural and non-agricultural businesses. A synergy will be sought with this project, as the primary focus is to ensure that the income-generating aspect is ensured.
- At the national level, the possibility of coordination also exists with regard to the village water system programme for the provision of potable water to rural communities.

Current progress includes:

- The TF agreement has been submitted to the government for signature.
- The Government request to BOAD to co-finance the project for USD $3 million is pending.

Activities	Timeframe	
CEO Endorsement/Approval	April	2012
Implementation Start	May	2012
Project Closing Date	February	2014

[15] Including PPG and agency fees

9.14 Chad: Promoting Renewable Energy based Mini Grids for Rural Electrification and Productive Uses

Implementing Agency: UNIDO
(GEF – US$ 2 million[16]; Co-financing – US$ 1.8 million)

This project seeks to reduce institutional, technical and financial barriers so that a better understanding of the potentials of renewable energy resources is achieved and sustainable pathways to valorizing these resources are promoted with the involvement of the private sector.

The project aims at promoting renewable energy based mini grids in order to increase the rate of access of the peri-urban and rural populations to electricity while replacing fossil energies. This is to be achieved through an integrated approach that combines substantial capacity building and learning-by-doing with technical assistance interventions at the policy and demonstration project level.

Primary target beneficiaries of the project are energy policy-making and implementing institutions, primarily the Ministry of Oil and Energy and Directorate of Energy, potential energy generators (managers and engineers), rural energy users, training institutes, energy professionals and service providers as well as the financial sector. The project will work with the national stakeholders and counterparts, led by the Directorate of Energy, Ministry of Oil and Energy, and with national and international experts.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary national and international initiatives. Highlights include:

- At the regional level, it will be coordinated and harmonized with the other projects implementing national market transformations to promote the uptake of mini grids powered by renewable energy in Cape Verde, Côte d'Ivoire, Gambia, Liberia, Nigeria, and Sierra Leone. This regional harmonization and coordination will be undertaken through ECOWAS, of which Chad and all the other participating countries are members. Through ECOWAS, policies and strategies to promote market based RE powered mini grids will progressively be expanded to all countries in the region. The present project will therefore liaise with these specific regional activities under the umbrella of the GEF Programmatic Energy Programme for West Africa led by UNIDO.
- The UN Office for the Coordination of Humanitarian Affairs (OCHA) expressed its interest in the installation of mini grids in rural areas for productive uses. The approach of the OCHA is based on social mobilization around the development of productive activities in order to accelerate the reintegration of populations in their respective villages, following the displacements caused by violence and the war in Darfur. The OCHA intervenes in localities of East Chad, Abeche and Goz Beida, and in Gore, where refugees live or move in the process of reintegration into their villages.
- As the common strategic framework for the operational activities of the UN system, the United Nations Development Assistance Framework (UNDAF) has set five axis of intervention. The proposed project will contribute to the axis of environmental preservation, development of basic social services (rural electrification is identified specifically as falling under this category), and sustainable management of natural resources.
- The European Union together with the Chadian Government and the Economic Community of Central African States (ECCAS) are financing a project for the connection of 12,500 additional households in the peri-urban areas around the capital N'djamena. The primary source of energy is thermal power from the Djarmaya power station. The project is focusing on increasing thermal

[16] Including PPG and agency fees

generation capacity and extending the grid. The Directorate of Energy, the main counterpart of the GEF proposed project, is coordinating this EU project. Close cooperation with this project and its outputs will be sought, among others, to gather relevant data and information on the grid coverage and medium and long-term planned grid extension. This will contribute to sites selection for replication and investment in the PV based mini grids project portfolio of the proposed GEF project.

- The technical capacity built within the framework of the EU project – solar water pumping - together with the practical operational experience will be of great value to the GEF proposed project. In addition, synergies will be built and exchange of lessons learned on community level operation and management sought whenever applicable.
- In addition, the European Union has assisted the Government to formulate a draft energy strategy plan for the development of the energy and electricity sub-sectors with significant involvement of the private sector. The proposed GEF project, in close cooperation with the European Union, is to build on the outcome of the energy strategy plan and will strive to ensure that a RE energy policy framework for rural electrification is duly considered. In addition, it will seek harmonization of output and avoid risk of activities overlapping.

Current progress includes:

- The competitive bid process for the selection of a contractor for construction and commissioning of a solar PV mini grid is ongoing.
- Preparation of the inception workshop is in progress.

Activities	Timeframe	
CEO Endorsement/Approval	April	2012
Implementation Start	May	2012
Midterm Evaluation	July	2013
Project Closing Date	November	2014

9.15 Cape Verde: Promoting Market based Development of Small and Medium Scale Renewable Energy Systems

Implementing Agency: UNIDO
(GEF – US$ 2 million[17]; Co-financing – US$ 7 million)

The overall goal of this project is to create market conditions for the development of small to medium scale renewable energy systems in Cape Verde. The project is designed to achieve this objective by (i) demonstrating technical feasibility and commercial viability of the systems, (ii) consolidation of legal and regulatory frameworks, and (iii) institutional capacity building to support the development of the system. The project will be coordinated with other initiatives in the country.

Highlights include:

- Synergy is sought with the following projects: (i) EU funded RECIPES, which seeks to contribute to the implementation of renewable energy in developing countries, (ii) UNDESA project on Implementing New Technologies for Sustainable Development in Small Island Developing States, and (iii) World Bank project on energy and water sector reform.
- At the regional level, UNIDO is leading the process of establishment of the ECOWAS Regional Center for Renewable Energy and Energy Efficiency. The overall aim of the Center is to coordinate regional projects that seek to establish renewable energy and efficiency systems. UNIDO will cooperate with the Center in implementing of some activities such as institutional capacity building and the establishment of the regulatory framework.

Current progress includes:

- The construction of two pilot projects is in progress.
- Training programmes for entrepreneurs were organized.

Activities	Timeframe	
CEO Endorsement/Approval	April	2012
Implementation Start	May	2012
Mid-term Evaluation	August	2013
Project Closing Date	February	2015

[17] Including PPG and agency fees

9.16 Burundi: Promoting Energy Efficiency in Public Lighting and supporting adoption of Small Hydro Power

Implementing Agency: World Bank
(GEF – US$ 2 million[18]; Co-financing – US$ 23.3 million)

The project objective is to develop and adopt selected policy frameworks for energy efficiency and selectively improve the energy efficiency of households and buildings in Bujumbura city. The project will result in GHG emission reductions from the energy saved through the use of energy efficient equipments.

Project activities to achieve this goal evolve around (i) rehabilitation of the transmission and distribution network, (ii) preparation of pre-feasibility and feasibility studies of small-sized hydro power plants, (iii) improving the revenue collection, and (iii) focusing on the bulk procurement of CFLs and an initial awareness raising campaign.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary national and international initiatives. Highlights include:

- The World Bank is financing the multi-sectoral Water and Electricity Infrastructure Project since 2008, which targets investments to improve the reliability of Burundi's electricity generation as well as transmission and distribution systems. The Burundi GEF energy efficiency project will contribute to the removal of key barriers to energy efficiency in the country through the promotion of energy efficient equipment, awareness raising, technical assistance, and the development of a supportive legal and institutional framework.
- The World Bank is financing the Emergency Energy Project (EEP) since 2010, which among other things targets investments to improve the reliability of Burundi's electricity generation, transmission and distribution systems. World Bank projects are principally targeted to Bujumbura city and surroundings where approximately 95% of electricity supplied is being consumed.
- The development of regulations, policies, application guidelines and standards for energy efficient light bulbs and other equipment will be coordinated with other similar activities in the Africa region. Lessons learned from implementing energy efficiency projects in Senegal, Benin, and Togo under the GEF Strategic West Africa Energy Programme are reflected in the project design. Moreover, the proposed project will build on the results of GEF's Efficient Lighting Initiative (1999-2009), which focused on the reduction of GHG emissions through the transformation of the global market toward efficient lighting technologies and accelerated phase-out of inefficient lighting.
- Synergies will be created with the GEF-UNDP Standards and Labeling Programme in Kenya (2009-2015), in particular with regards to policies, standards and labeling schemes. The Burundian national standardization institute will be part of the project steering committee for the proposed project. A project coordinator, as part of the management team of the UNDP-GEF Standards and Labeling Programme in Kenya and the EAC (2009-2015), will ensure coordination between regional and national regulatory work and provide assistance to assess the replication potential of policies, regulations, and standards for Burundi. The national standardization institute will also benefit from training and capacity building activities under the proposed project.

Current progress includes:

- The project is ready and expected to begin implementation of activities on the ground by October 2012.

[18] Including PPG and agency fees

Initial delay in the project preparation phase owing to setbacks in the co-financing commitments is anticipated at the conceptualization stage.

Activities	Timeframe	
CEO Endorsement (FSP)	February	2012
Implementation Start	October	2012
Mid-term Evaluation	June	2013
Project Closing Date	June	2014

9.17 Burkina Faso: Ouagadougou Transport Modal Shift

Implementing Agency: World Bank
(GEF – US$ 1 million[19]; Co-financing – US$ 3.6 million)

The objective of this project is to improve the efficiency of travel by testing, on a small-scale basis, measures designed to encourage users to forego individual modes of transport in favor of collective transport on Line 3 of the SOTRACO public transport buses and contribute to the preparation of a clear institutional environment for urban transport. The key outcome indicators to be used to track project implementation of the project are: (i) existence of a well-defined institutional framework and clear strategy enabling a shift from individual to public transport, (ii) access to public transport and efficiency improvement thereof through reducing traffic congestion and air pollution, and (iii) strengthened capacity and increased awareness in stakeholders and transport institutions to improve transport efficiency.

By creating such an environment for the sustainable development of the urban transport system in Ouagadougou, the project proposed with GEF financing will contribute to a more environmentally sustainable urban transport system. The project will bring sustained environmental benefits for the population and includes assistance in the areas of institutional assessment and strengthening, policy and strategy work, capacity building, and pilot investments for a shift in use of transport mode. A further benefit of the project is an improved urban environment through a reduction of gasoline consumption and related ambient air pollutants.

For Burkina Faso, the efficiency of transport is essential for economic development and growth. In the urban sector and mainly in Ouagadougou, there are several initiatives intended to improve urban life conditions. Highlights include:

- Under IDA financing, there are no physical road works initiatives, but IDA has funded an urban project from 1998 to 2005 which aimed to improve the transport conditions in the urban area. This project has contributed in building urban road sections in Ouagadougou and Bobo Dioulasso. In addition to this closed project, IDA is currently financing a capacity building project for the six main cities, including Ouagadougou, and another operation is dealing with the central administration capacity building for five ministries (excluding the ministries in charge of transport and environment). Other initiatives are underway in the city such as (i) the peri-urban project with its outlying road system component, supported by the French Development Agency, (ii) the construction of three interchanges funded by Japan, China and Libya and (iii) the support to SOTRACO for the supply of 100 buses and technical assistance funded by the Netherlands Development Cooperation and the government of Burkina Faso. The peri-urban project, funded by the French Development Agency, is to contribute towards the opening up of the peri urban areas of Ouagadougou and allow sub urban populations an easy access to the town center. The project was initiated by the municipality of Ouagadougou following a study on the “marketing survey in Ouagadougou” from which it was established that the peri-urban population of Ouagadougou is willing to contribute to the effort of amelioration of living conditions. The

[19] Including PPG and agency fees

expressed needs of areas for improvement are (i) drainage to avoid housing flood, (ii) the linkage of peri-urban area to the center of the town. (iii) Access to potable water.

- For the interchanges**,** they are built to increase the fluidity of the traffic in Ouagadougou and mainly at the main crossings section where there are many conflicts between roads users. The interchanges are located at the outgoing roads intersections to help in the management of traffic coming from the international corridors (Ghana, Togo, Côte d'Ivoire and Benin) and the internal traffic in Ouagadougou.
- Regarding the support to SOTRACO, the purpose of the project is to increase the capacity of the company in order to create the necessary economies of scale for a sustainable business through investments and to improve the maintenance systems and the management of the company with technical assistance. The project consists of the supply of 100 VDL Jonckheere buses, a new workshop, spare parts for 10 years and a 2-year capacity development programme. The total investment including TA is estimated to be USD 21 million.
- The project management agency will liaise frequently with the other stakeholders and implementation agencies to share information on project implementation progress. At the donor's side, consultations will be held between the Technical Steering Committee, the Africa Region Transport Unit (AFTTR), the French Development Agency, the Netherlands Development Cooperation, and other donors involved in the subsector to coordinate programmes in urban transport. As the project will work on furthering the policy dialog, the involvement of the different stakeholders will be ensured so as to have a shared view on the sector development. The existing donor coordination framework in the transport sector will be used during the project implementation phase.

Current progress includes:

- The project has begun implementation and the inception meeting for stakeholder consultations was held in June 2012.
- Procurement work for goods/equipment underway and bidding under evaluation.
- ToRs for consultancies under preparation to initiate studies before end of 2012.

Activities	Timeframe	
CEO Endorsement (MSP)	March	2010
Implementation Start	December	2011
Project Closing Date	June	2014

9.18 Burkina Faso: Promoting Energy Efficiency Technology in the Beer Brewing Sector

Implementing Agency: UNIDO
(GEF – US$ 0.5 million[20]; Co-financing – US$ 0.73 million)

The project aims at promoting energy efficient industrial cook stoves in the beer brewery sector in Burkina Faso. The stoves in question are traditionally made. They consist of 4 canaris or pots of 80 to 100l capacity that are positioned on four supports and sealed with fresh clay. The project consists of four main components: (i) improving the design of cook stoves to achieve optimum fuel efficiency, (ii) stimulating market demand for improved cook stoves through carrying out private sector development initiatives, (iii) upgrading the institutional capacity to develop and implement programmes of activities to support the deployment of improved cook stoves through carbon financing and particularly through the voluntary carbon market and, (iv) establishing a project management unit to monitor the implementation of the project on the ground.

The project has been developed in coordination with another initiative in the country:

- The German Development Agency (GIZ) is implementing a project entitled Foyers Améliorés au Burkina Faso (FAFASO). The project targets four geographical regions: Ouagadougou, Bobodioulasso, South West and the East. The project targets the dissemination of energy efficient stoves utilized for domestic and commercial operation. It caters to three types of stoves: (a) metal stoves, (b) ceramic stoves and (c) large stoves for beer brewers. Only the last type is of direct relevance to the proposed GEF project. FAFASO ensures the sustainability of the project through engaging and extensively training the producers of the cook stoves on energy efficient designs to ensure that they are capable of working independently after the completion of the project. For that purpose, around 130 masons have been trained on the production of energy efficient clay stoves for the miller beer producers. Between 2008 and 2012, 890 Dolos were furnished with the improved cook stoves. The GIZ project does not use the subsidy approach to reduce the selling price of the stoves. The project focuses on training on the construction and maintenance of the cook stoves and raising awareness on the benefits of their improvement. To ensure consistency with the ongoing initiative by GIZ and avoid distorting the business model employed through the FAFASO project, the proposed GEF project will also opt to implement a non-subsidy approach. Instead it will promote indirect subsidies to help establish the market for energy efficient cook stoves through product promotion, training of masons and creating public awareness on the benefits of improved cook stoves. In order to clearly identify impacts of each project and avoid duplication, the proposed project will focus on areas not covered through the GIZ project including Center West, Center East, Boucle de Mouhoun, Centre South, Plateau Central and Center North. These regions have been prioritized by the Ministry of Environment for the intensity of millet beer production and the quality of the stoves that are traditionally used.

Current progress includes:

- The Project Management Unit (PMU) was established.
- A draft project work plan was prepared.
- National Coordination Committee with relevant partners (GIZ, SNV, etc.) was created at UNIDO's initiative.

[20] Including PPG and agency fees

- Three focus geographical areas/provinces were identified.
- Financing facility for female beer brewers and improved cook stove manufacturers under development with the Pan African Bank and a local financial institution has been established.
- Cluster diagnostic/ potential to select 2 high beer brewers' concentration areas for cluster building and development is undergoing.
- Development of training material for carbon financing is in progress.
- The first Steering Committee is planned for November 15, 2012.

Activities	Timeframe	
CEO Endorsement/Approval	April	2012
Implementation Start	June	2012
Project Closing Date	May	2014

9.19 Côte d'Ivoire: Promoting Energy Efficiency in Public Lighting

Implementing Agency: UNEP
(GEF – US$ 1 million[21]; Co-financing – US$ 2.9 million)

The Energy Efficiency in Public Lighting Project is intended to address the barriers to widespread utilization of energy efficient lighting systems in Côte d'Ivoire. It is aimed at contributing to the realization of the country's sustainable development objectives and its goal in reducing GHG emissions in the energy sector. It will specifically focus on the promotion of energy efficient products such as linear fluorescent lamps, Compact Fluorescent Lamps (CFLs), high intensity discharge (HID) lamps, ballasts for linear fluorescent lamps (low loss electromagnetic and electronic lamps), and high-efficiency lighting. The project will accelerate integration of EE lighting promotion projects to the energy efficiency and conservation programmes of the Ministry of Energy, enhance private sector involvement and appreciation of the benefits of EE lighting, and ensure that environmental impacts associated with the widespread use of EE lighting are mitigated. The project objectives will be achieved with the implementation of specific barrier removal programmes that will involve: (1) updating of energy efficiency policies, standards and guidelines on lighting applications; (2) institutional and technical capacity building; (3) consumer education and information dissemination; (4) development and implementation of appropriate financing mechanisms; and (5) mitigating environmental impacts of the widespread utilization of EE lighting. UNEP will ensure that appropriate external and internal arrangements will be made with regard to the execution of the project and that the activities under the project will be properly coordinated with the "Global Market Transformation for Efficient Lighting" project.

The project has been developed in coordination with other initiatives in the country. There are a number of complementary national and international initiatives. Highlights include:

- At the regional level the project will work closely with the following organizations: UEMOA Energy Commission whose mandate is to coordinate the implementation of the Common Energy Policy; l' Institut de l'Energie et de l'Environnement de la Francophonie, through its international Energy Efficiency Programme (PRISME); the World Bank's energy efficient lighting projects in Benin and Togo as proposed under the GEF West Africa Energy Programme.
- It will also share information and findings with energy efficient lighting projects planned in other countries in West Africa including Benin, Ghana, Guinea, Mauritania, Nigeria, and Togo and participate in regional meetings. Particular arrangements, including the possible involvement of ECOWAS, will be developed during the PPG phase. With regard to the establishment of standards and labelling, a regional approach will be pursued through participation in the proposed regional energy efficiency project being developed by UNIDO, which envisages the establishment of a subcommittee on standards. Also, the feasibility of establishing a regional energy efficiency laboratory and regional training and code certification programmes will be assessed during the PPG phase.
- At the national level the project will liaise and work closely with the following stakeholders and those to be identified during the PPG phase: Ministry of Energy and Mines is willing to support the wide dissemination of high-performance lighting products to help CIE meet the increasing energy demand; Ministry of Environment is the key governmental body involved in the formulation and implementation of national environmental and climate change policies. The project will work closely with the relevant

[21] Including PPG and agency fees

environmental agencies and institutions to promote the national energy-efficient lighting project; Ministries of Industry, Commerce and Interior have also expressed interest to collaborate in the implementation of this project. The project will help the national standards organization (CODINORM) to come up with updated standards which are fully in line with international best practices.

- Other stakeholders interested in the project include: the African Development Bank, through its upcoming Demand-Side Management Programmes in selected West African countries; Electricity utility expressed its interest to implement pilot projects to disseminate high-performance lighting products; professional organizations; the Ivorian Chamber of Commerce and Industry whose members are involved in the development of new business opportunities have also expressed interest to collaborate in the design and implementation of the National Lighting Initiative to speed up the development of energy-efficient products nationwide.

Current progress includes:

- Signing of project cooperation agreement between MME and UNEP is awaited.

Activities	Timeframe	
Agency Approval Date	May	2012
Implementation Start	November	2012
Mid-term Evaluation	April	2014
Project Closing Date	October	2015

9.20 Nigeria: Promoting Energy Efficiency in the Residential and Public Sector

Implementing Agency: UNDP
(GEF – US$ 3 million[22]; Co-financing – US$ 7.1 million)

The main objective of this project is to improve the energy efficiency of several types of end-use equipment from the residential and public sector in Nigeria (refrigeration appliances, air conditioners, lighting, electric motors and fans) through the introduction of appropriate energy efficiency policies and measures, such as Standards and Labels (S&L) and demand-side management programmes. The project will strengthen the regulatory and institutional framework, develop monitoring and enforcement mechanisms, provide training to appliance and equipment professionals, and launch a public outreach campaign. This is to be achieved through: (i) capacity enhancement of all relevant stakeholders at the national level regarding the concept, nature and potential of energy efficiency in the residential and public sector; (ii) development of new energy efficiency legal requirements for a series of end-use equipment; (iii) training of professional stakeholders and public outreach activities and enforcement of the new energy efficiency legislation; and (iv) promotion of energy savings lamps.

The project has been developed in coordination with other initiatives in the country:

- The UN Common Country Assessment (2001) emphasized the need to make the production mechanism and processes of industries in the country more environmentally friendly and efficient towards further reducing Nigeria's contribution to GHG emissions in the context of sustainable poverty reduction. In responding to the global call to assist developing nations to attain the MDGs, the UN Development Assistance Framework for Nigeria (2002 – 2007) is focused on the promotion of resource conservation, as well as R&D advancement and transfer of appropriate technology, including energy technologies, for sustainable environmental management.
- In the current Country Programme, UNDP resources have been allocated to supporting the national Energy and Environment for Sustainable Development Programme. The main elements of UNDP's strategic approach include (i) strengthening capacity for the integration of energy and environmental concerns into development planning, policies and programmes; (ii) strengthening capacity to develop and implement a national renewable energy master plan; (iii) building partnerships between governments, private donors, and non-governmental organizations for resource mobilization to promote environmental sustainability for poverty reduction, including promotion of a public-private initiative for widespread adoption of renewable energy technologies. The implementation of this programme will positively complement the proposed project activities.
- The envisaged market transformations of end-use equipment (appliances, lighting, etc.) target traded goods that are partially locally produced and imported. Equipment evolves around a regional market, throughout West and Central Africa. The design of energy efficiency standards and labels (S&L) will be considered at national and regional levels. The regional level approach requires coordination and harmonization between several GEF market transformation projects in the region (Benin, Togo, Ghana, Côte d'Ivoire, Nigeria, Senegal, and Mauritania). ECOWAS - whose headquarters are located in Abuja - is by far the most

[22] Including PPG and agency fees

suited regional institution to organize the coordination between the various GEF projects. Through ECOWAS, the S&L provision will progressively be expanded to all countries in the region. The present project will therefore liaise with the specific regional S&L activities under the umbrella of the GEF Programmatic Energy project for West Africa led by UNIDO. Provisions to undertake this coordination will be part of the coordination mechanism of the programme as envisaged in the PFD. UNDP will provide the technical and policy assistance based from its experience in S&L implementation around the world.

Current progress includes:

- A total of 1 million compact fluorescent lamps were distributed in residential and public buildings across Nigeria by the Energy Commission of Nigeria, leading to peak reduction of 38 MW of electricity.
- The project launched a unique end-use metering campaign across six geo-political states of Nigeria to better assess the current level of efficiency of appliances used in Nigeria.
- Market data have been collected and analysed to assess the range of energy efficiency in Nigeria's current appliance market, allowing for the setting of a solid baseline in electricity related GHG emissions.
- The Standard Organization of Nigeria is working with the Project Team to develop energy efficiency standards for selected appliances – lighting, air conditioners and refrigerators in Nigeria.
- A National Energy Efficiency Policy that will set a roadmap for integrating energy efficiency into national programmes and projects is being developed with implementing partners.
- An awareness campaign has been launched and the capacity of relevant stakeholders is being enhanced to meet the objectives of the project.

Activities	Timeframe	
CEO Endorsement/Approval	February	2011
Implementation Start	September	2011
Mid-term Evaluation	March	2013
Project Closing Date	September	2015

9.21 Nigeria: Improving the Urban Transport Network

Implementing Agency: World Bank
(GEF – US$ 5 million[23]; Co-financing – US$ 325 million)

The underlying project objective is to improve the capacity to manage the transport sector in the Lagos metropolitan area and enhance efficiency of the public transport network, through improving urban accessibility and transport affordability through a combination of traffic engineering measures, management improvements, regulation of the public transport industry, and expansion and enhancement of the BRT system. In so doing, the underlying project may already help mitigate GHG emissions by enhancing the performance of public transport, and increasing accessibility.

In the transport sector there is no other related initiative in Nigeria.

Current progress includes:

- Following some initial readjustments, the project became fully operational in October 2011.
- Co-financing from l'Agence Française de Développement (AFD) became effective in March 2012, and since then procurement of the civil works for BRT expansion has been proceeding apace and is nearly complete. Construction is expected to begin within the next few months.
- Activities to support the BRT public consultation, communication, and media strategies, as well as upgrading and rationalization of the bus system will launch once construction begins.
- A study has been launched to assess the 2/3 wheel industry and its evolution, which is expected to inform the design of activities to raise awareness and promote the use of public transportation.

Activities	Timeframe	
CEO Endorsement (FSP)	November	2009
Implementation Start	May	2011
Mid-term Evaluation	March	2013
Project Closing Date	June	2015

[23] Including PPG and agency fees

10 ANNEX 3: ECREEE at a Glance

Since 2010 the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the first regional RE&EE promotion agency in Sub Saharan Africa, has been operational under the leadership of ECOWAS. It was created by the ECOWAS Ministers of Energy with the support of the Governments of Austria and Spain, and key technical assistance was provided by UNIDO under its GEF-SPWA mandate. The Centre acts as an independent body but within the legal, administrative and financial framework of ECOWAS.

The Centre is also executing partner in the renewable energy project in Cape Verde.

ECREEE aims at the following objectives, which fully coincide with the SPWA:

- promote sustainable development in West Africa by improving access to modern energy services, energy security and climate change mitigation through the use of RE&EE.
- create an enabling environment for regional RE&EE markets by removing various barriers for the dissemination of green energy technologies and services.

In line with the SPWA, the activities of ECREEE contribute to:

- the improvement of energy security, energy access and mitigation of negative environmental externalities of the energy system in the ECOWAS region.
- the fulfillment of the objectives of the UN Sustainable Energy for All Initiative (SE4ALL)
- the furtherance of the WAPP Master Plan Scenario which aims at doubling the regional electric generation capacity by 2025 (additional 10.000 MW) primarily through large hydro and gas.
- the implementation of the ECOWAS White Paper on energy access, which foresees that at least 20% of new investments into rural electrification should originate from locally available renewable resources.

The Centre executes and supports activities, programmes and projects in the scope of the following four areas:

a. Tailored policy, legal and regulatory frameworks
b. Capacity development and training
c. Knowledge management, awareness-raising, advocacy and networks
d. Business and investment promotion

The institutional structure of the Centre creates opportunities for GEF-SPWA. The structure is as follows:

- the Secretariat
- the Executive Board (EB)
- the Technical Committee (TC)
- the National Focal Institutions (NFIs) in the 15 ECOWAS countries

The **ECREEE Secretariat** is based in the capital of Praia, Cape Verde, and operates in all three ECOWAS languages (English, French, and Portuguese). It is run by a small multinational team of West African and international full-time staff (e.g. of UNIDO).

The Centre is governed by an **Executive Board (EB) and a Technical Committee (TC),** which usually meet twice a year. The EB is the highest decision making body providing strategic guidance and approving the annual work plans, progress reports and financial statements of the Centre. The technical guidance is provided by the Technical Committee (TC). The TC has the role of reviewing major technical documents and reports for submission to the EB. If necessary the TC reviews projects to be funded by ECREEE resources and recommends their approval by the EB. **It is suggested that the GEF-SPWA Steering Committee, which is foreseen in the regional project, will be embedded in the ECREEE Governance Structure (Executive Board/Technical Committee).** In future, GEF representatives will be invited to these meetings in the context of the co-ordination of the GEF-SPWA. The progress reports of the SPWA will be reviewed by the EB and TC.

ECREEE has established a **network of National Focal Institutions (NFIs)** and interlinks the Secretariat with all ECOWAS Member States. The NFIs were nominated by the ECOWAS Ministers of Energy, the Ministry itself, or a related agency taking responsibility. The activities of the Centre are executed in cooperation with the NFIs or other entities of the public and private sector. The Secretariat implements the activities and elaborates the annual work plans and status reports and presents the documents for review and approval to the EB and TC. **Synergies can be created as the NFIs are in many cases also responsible for the implementation of the GEF-SPWA energy projects.**

Institutional Structure of ECREEE and the GEF-SPWA Steering Committee