

**ECREEE Regional Workshop:**

# **Accelerating Universal Energy Access Through the Use of Renewable Energy and Energy Efficiency**

Mensvic Hotel, Accra, Ghana 24 – 26 October 2011



## **Workshop Concept Note**

Website: <http://energy4all.ecreee.org>

**The Workshop contributes to the:**



**2012 INTERNATIONAL YEAR OF  
SUSTAINABLE ENERGY  
FOR ALL**



## 1. Summary

To accelerate the achievement of the Millennium Development Goals (MDGs) by 2015 the ECOWAS Commission adopted Decision A/DEC.24/01/06 on the ECOWAS/UEMOA Regional White Paper on Access to Energy Services for Populations in Rural and Peri-urban Areas in 2006. The implementation process was supported by UNDP with support of the Government of France and the Austrian Development Cooperation (ADC).

After five years of implementation, the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) in cooperation with the UNDP Regional Programme for Poverty Reduction (UNDP PREP) are organizing a regional expert workshop on the white paper process. At the background of the newly adopted UN Goals on Universal Access to Energy Services by 2030 the workshop will take stock of the achievements so far and will discuss the possible contribution of renewable energy and energy efficiency solutions to accelerate the implementation process of the White Paper. The workshop will also feature the launch of important ECREEE projects such as the ECOWAS Regional Renewable Energy Policy, the ECOWAS Regional White Paper on Energy Efficiency, the Supporting Energy Efficiency for Access in West Africa (SEEA-WA) Project and the ECOWAS Regional Wind and Solar Assessment.

With the Workshop, ECREEE contributes to the achievement of the UN Millennium Development Goals (MDGs), the UN Goal on Universal Access to Clean, Affordable Energy by 2030 and the international agreements to reduce GHG emissions to keep the global average temperature rise below two degrees Celsius. The Workshop is a direct contribution of ECOWAS to the 2012 International Year of Sustainable Energy For All. The workshop results and deliverables will be presented in a side event at the RIO+20 United Nations Conference on Sustainable Development. The Workshop will bring together representatives of the Ministries Energy, Environment and Finance of ECOWAS member states, government agencies, regional and international organizations, academia, business and industry, civil society and financial institutions in the field of renewable energy.

Workshop Languages: presentations and discussions would be in English, French and Portuguese (simultaneous interpretation will be provided).

Further information and updates on the workshop programme will be made available at: <http://energy4all.ecreee.org> (deadline for online-registration: 1<sup>st</sup> October 2011 for funded experts and 14<sup>th</sup> for the rest of participants).

## 2. Introduction

### a. The ECOWAS White Paper Process and Renewable Energy and Energy Efficiency

In West Africa, about 60% of the populations live in rural areas. With less than 10% having access to electricity and clean cooking fuels, rural populations face a major challenge for their development. They face the impossible challenge of modernizing their main activity—agriculture—via irrigation, processing and preserving of agricultural products and healthy environment for cooking especially for the women.

The rural and indeed the urban and peri-urban populations essentially use traditional biomass for fuel, such as firewood or charcoal. With modest incomes, they lack access to other energy sources such as cooking gas. In addition, rural households are extremely inefficient in their usage of natural energy resources, consuming four to five times more energy for the same task as in the developed world. Deforestation and desertification resulting from usage of firewood has negative environmental consequences.



Access to potable water, basic health services and quality education is often lacking. In effect, the lack of refrigeration does not permit an effective vaccination program and the burden of household and agricultural chores leaves little time for education especially the women and the girl-child. The absence of modern sources of energy contributes greatly to ongoing poverty and illiteracy.

The needs of rural electricity consumers are different from those of urban consumers. Given the important imbalance in access to electricity between urban and rural settings and the predominance of rural populations, a determined national and regional approach is required.

The ECOWAS Region has made some progress in recent years in reforming their electricity sectors. As the success of the reforms must in the end be measured by satisfying the needs of the masses, there must inevitably be a component devoted to rural populations. However, despite the modest progress made in reforming the electricity sectors, this has not matched the anticipated the improvements and expansion of service in the urban areas. The situation in the rural areas and peri-urban areas for electricity services remain basically the same or with little improvement for most countries of the region.

In an effort to undertake the challenges of energy access, especially in the rural and peri-urban populations, a Regional Policy on Access to Energy Services for Rural and Peri-urban Populations in the ECOWAS Region was elaborated called the ECOWAS /UEMOA White Paper. The Regional Policy was developed jointly by ECOWAS and UEMOA with the technical and financial support of UNDP PREP, the Government of France and the Austrian Development Cooperation (ADC). The Policy has as global objective, by 2015, to ensure access to modern energy services to at least half the population living in rural and peri-urban areas. The Regional Policy, which includes a Regional Action Plan is structured around four themes of actions for the region, detailed below:

- a) Building capacities of public and private actors and developing methodologies;
- b) Help raise loans and finance from the private sector for projects aimed at extending energy services to rural and peri-urban areas;
- c) Exchanging and disseminating sub-regional experiences of supplying energy services in rural and periurban areas (knowledge management); and
- d) Promotion of local production of energy goods and services

The four (4) themes of actions defined in the Regional Action Plan are estimated to require US\$231.9 million for implementation, over a 10-year period. The common Investment Programme that the Region intends to promote and develop based on the Regional Action Plan, is composed of three (3) specific regional investment programmes:

- a) Access to modern domestic fuels for cooking for all rural and peri-urban populations;
- b) Access to productive services, in particular motive power, to increase productivity and access to modern social services in rural areas; and
- c) Access to electricity services.

The Investment Programme is estimated to cost US\$52 billion over a period of 10 years. This represents US\$16 per inhabitant, or 4.3% of the regional GDP. The policy document foresees also that at least 20% of new investments in electricity generation in rural and peri-urban areas should originate from renewable sources. Action line 2 on investment promotion foresees the establishment of an RE&EE investment and innovation fund which raises funding for at least 200 demonstration projects and support local manufacturing and service companies. Recently, the ECREEE established the ECOWAS Renewable Energy Facility which launched its first call for proposals in May.



## b. History of ECREEE

As a policy response to the rising energy security concerns, continued lack of access to energy services in rural areas and the need for climate change mitigation the ECOWAS Energy Ministers established the first regional renewable energy and energy efficiency promotion agency in Sub Sahara Africa. As a part of the ECOWAS White Paper Process, the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) was launched on 6<sup>th</sup> July 2010 in Praia, Cape Verde, with support of the ECOWAS Commission, the Austrian Development Cooperation (ADC), the Spanish Agency for International Development Cooperation (AECID), the United Nations Industrial Development Organization (UNIDO) and the Government of Cape Verde.

The ECREEE Secretariat, based in Praia, Cape Verde, works through an established network of National Focal Institutions (NFIs) covering all ECOWAS countries: Benin, Burkina Faso, Cape Verde, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

The Centre focuses primarily on activities and projects with regional impact or national projects which demonstrate high potential for scaling-up or regional replication. It supports activities in urban as well as peri-urban and rural areas. The Centre takes an important role in mainstreaming renewable energy and energy efficiency into the white paper process for rural and peri-urban areas. ECREEE supports all other forms of sustainable energy options but operates only in the scope of the following technology solutions:

- All appropriate and sustainable renewable energy and energy efficiency technologies.
- This includes also partly renewable energy based hybrid systems and mini-grids.
- Biofuel projects which prove to be sustainable.
- Liquid Petroleum Gas (LPG) cooking projects are eligible due to their high relevance for low-income population groups.

The Centre operates according to the planning and management matrix of its Business Plan. The overall objective of ECREEE is to contribute to the sustainable economic, social and environmental development of West Africa by improving access to modern, reliable and affordable energy services, energy security and reduction of negative energy related externalities (e.g. local pollution, GHG emissions) through the dissemination of RE&EE technologies and services. The specific objective of ECREEE is to create favorable framework conditions for RE and EE markets by supporting activities directed to mitigate existing technical, legal, institutional, economic, financial, policy and capacity related barriers. The Centre undertakes key activities in the scope of seven result areas which directly respond to these barriers:

RESULT AREA 1: Effective regional RE&EE promotion agency is created and efficiently managed

RESULT AREA 2: Funds for RE&EE programs and projects mobilized and implemented

RESULT AREA 3: Effective partnerships/networks in the RE&EE sectors created and executed

RESULT AREA 4: Tailored RE&EE policy, legal and regulatory frameworks created and executed

RESULT AREA 5: RE&EE Capacities are strengthened and applied

RESULT AREA 6: RE&EE Knowledge base, awareness raising and advocacy strengthened

RESULT AREA 7: RE&EE Business and Investment Promotion

Specifically, the Center performs the following functions and offers the following services:

- Provide a coherent RE&EE policy and strategy framework for the ECOWAS region and facilitate implementation on national levels;
- Coordinate, develop and execute regional key programs and projects with other implementing partners and mobilize funding (participate in call for proposals, fund raising campaigns);



- Operate as key entry point for the implementation of international funding to mitigate climate change in the energy sector (such as the Global Environment Facility (GEF), U.N. and the World Bank);
- Provide co-funding for demand-driven programs, projects and initiatives executed by the private and public sector or civil society in the region (through call for proposals and tenders); Think tank, lobbying agent, knowledge and advisory platform for RE&EE in West Africa and international;
- Networking agent and organization of conferences, forums and workshops;
- Facilitator for north-south and south-south cooperation and partnerships for knowledge and technology transfer;

### **c. Renewable Energy and Energy Access Situation in West Africa**

#### **Low Rates of Energy Access**

The ECOWAS region is characterized by a very low overall access rate to modern energy services especially in the rural and peri-urban areas, thereby inhibiting prospects of developing economic activities, providing basic social services and fighting poverty. The region has some of the lowest modern energy consumption rates in the world with average electricity consumption of 88kWh/capita compared to the continental and global averages of 563 and 2596kWh/capita respectively. Household access to electricity across the region is about 20% but wide differences exist between the access rates in urban areas that average 40% while rates in rural areas range between 6% and 8%. There are significant electricity and overall energy pricing inequalities within countries i.e. between rural and urban areas and between countries. Access to modern fuels for motive power and electricity in rural areas is particularly low since there are no decentralized energy systems in place. At household level, access modern cooking fuels such as LPG or other cleaner cook stoves are quite low. In seeking to address the region's energy challenges, ECOWAS with its partners established ECREEE as a regional response to create conducive environment for deployment of renewable energy and energy efficiency services to increase energy access especially in the rural and peri-urban areas. .

#### **Capacity at Human and Institutional Levels**

There is limited or lack of capacities in almost all aspects of RE programmes to enhance the abilities of relevant personnel and institutions within the member states to effectively and efficiently deliver energy services. Without the necessary capacities, it would be impossible to implement investment programmes and projects. ECREEE, in collaboration with its donor partners, would be conducting an assessment of institutional and human capacities within the Region to develop a capacity building modules that would facilitate the implementation of RE&EE programmes and projects for energy access.

#### **Awareness Campaign Data/Information**

The Region is among groupings of countries where information and data on resources, experts and institutions are lacking. Information is vital for strategic planning and implementation across the entire socio-economic spectrum. There is urgent need to address this critical issue, if the Centre and the region would make any headway in its mandate. Within the framework of addressing these issues, ECREEE, with the support of UNDP PREP, is financing the regional programme on data collection and management within the member states.

#### **Investments in Renewable Energy and Energy Efficiency**

Notwithstanding the abundant RE resources within the ECOWAS region, it is generally acknowledged that there is limited budgetary allocation or financial support for renewable energy in almost all member state. It is however apparent that without major investments in sustainable energy frameworks and infrastructure in the Region and in the rural and peri-urban areas, the regional energy access, energy security and climate objectives cannot be achieved simultaneously in the forthcoming decades. Major investments are required to enhance the development of the renewable energy and energy efficiency markets in the ECOWAS region.



The themes for energy access using RE&EE and its implementation hinge on the establishment of clear-cut policy framework on renewable energy which is generally absent in most ECOWAS Member States. In this vein, ECREEE is developing a policy for renewable energy that should be in harmony with national energy plans. The policies would be backed by legislation and standards and codes. Coherent, consistent and conducive policy and regulatory frameworks are central to the successful deployment of renewable energy and energy efficiency technologies for increasing energy access in the region.

### 3. Objectives of the Regional Workshop

The workshop will:

1. review the energy access situation in the region and the potential of renewable energy and energy efficiency technologies towards the attainment of the White Paper targets;
2. review capacities and methods in the region to improve measurement of energy access and energy poverty in the region.
3. define and adopt regional intervention strategies/road map for the application of renewable energy and energy efficiency technologies for increasing access to energy services towards the attainment of the White Paper targets.
4. The workshop will feature also the launch of the following ECREEE projects:
  - a. Supporting Energy Efficiency for Access in West Africa (SEEA-WA) Project and the development of the ECOWAS Regional White Paper on Energy Efficiency
  - b. Development of the ECOWAS Regional Policy on Renewable Energy under the Africa-EU Renewable Energy Cooperation Programme
  - c. The ECOWAS Regional Wind and Solar Assessment

The workshop will also discuss

- a. the current energy access status using renewable energy and energy efficiency markets in the ECOWAS region in terms of successes and failures and take lessons
- b. issues covering policy frameworks and quality standards, capacity development, investment mechanisms, and awareness raising.
- c. intervention areas for the energy access programme especially in the rural areas using renewable energy and energy efficiency; and
- d. the technologies, applications, market potentials and investment opportunities for increasing energy access within the region.

### 4. Participants

Participants will be drawn from:

- Ministries of Energy and Finance of ECOWAS member states
- Regional and International Organisations
- Bilateral and Multilateral Partners
- Financial institutions
- Major Renewable Energy Programmes
- Research and Development institutions
- Utilities and Rural Electrification Agencies
- Private Sector and
- Civil Society



## 5. Expected Results

The expected results of the workshop are as follows:

1. the energy access situation and various energy access options available especially utilization of renewable energy and energy efficiency technologies is reviewed; and
2. regional intervention strategies using renewable energy and energy efficiency for increasing access to energy in the region and thereby contributing to the White Paper implementation is defined and adopted.

## 6. Date and Venue:

- a. Date: 24 – 26 October 2011
- b. Venue: MENSVIC Hotel, Accra, Ghana

## 7. Sponsors and Supporters



Austrian  
Development Cooperation



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