



ECREEE Regional Workshop:

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

Mensvic Hotel, Accra, Ghana 24 – 26 October 2011



Summary of the Roadmap of the ECOWAS Renewable Energy and Energy Efficiency Access Programme (EREAP)

Draft 1



Introduction

The energy systems of ECOWAS are facing the interrelated challenges of energy access, energy security and climate change mitigation and adaptation. The ECOWAS region continues to be characterized by low access to modern, affordable and reliable energy services by its population and thus having obvious implications for efforts geared towards poverty-eradication, the provision of basic social services, and the attainment of the Millennium Development Goals (MDGs) by 2015.

Amidst these growing challenges member states continue to face in the provision of efficient and sustainable energy services to improve the socio-economic well-being and to achieve the Millennium Development Goals (MDGs) by 2015, the Twenty-ninth Summit of the Authority of Heads of States and Government of ECOWAS, in January 2006, took Decision A/DEC.24/01/06 adopting the ECOWAS/UEMOA Regional Policy on Access to Energy Services for Populations in Rural and Peri-urban Areas for Poverty Reduction in line with achieving the Millennium Development Goals (MDGs) in Member States (the ECOWAS White Paper on Access to Energy Services).

The ECOWAS/UEMOA White Paper on a regional policy on access to energy services for populations in rural and peri-urban areas reflects an increasing drive for integrated energy markets in the region and hence justifies a regional approach in developing the renewable energy and energy efficiency sectors. For example, the ECOWAS/UEMOA White Paper foresees that at least 20% of new investments in electricity generation in the region will be driven by renewable resources. Action line 2 of the white paper called for the establishment of an innovation fund to co-fund at least 200 RE&EE pilot projects and to provide assistance to companies.

Within the implementation framework of the White Paper, and 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 61st Session of ECOWAS Council of Ministers in Ouagadougou, Burkina Faso adopted Regulation C/REG.23/11/08 on November 23, 2008. This paved the way for the establishment of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE). On 6 July 2010, the official inauguration of the ECREEE Secretariat took place with support of the Austrian and Spanish Governments and technical assistance of UNIDO. The event marked the completion of the six-month preparatory phase and the official launch of the operational phase of the Centre.

The Vision of ECREEE is to contribute to the sustainable social, economic, and environmental development of West Africa by improving access to modern, reliable and affordable energy services, energy security and reduction of energy related GHG emissions and climate change impacts on the energy systems. The specific objective of ECREEE is to create favourable framework conditions and an enabling environment for renewable energy and energy efficiency markets to increase energy access by supporting activities directed to mitigate existing barriers. These activities include policy development, capacity development, knowledge management and awareness, investment and business promotion.

The ECOWAS Renewable Energy and Energy Efficiency Access Programme

ECREEE works in urban as well as peri-urban and rural areas. Due to the high relevance of RE&EE technologies and services for rural areas, the Centre will implement a special ECOWAS Renewable Energy and Energy Efficiency Access Programme:

- The programme will give special emphasis to the access agenda in the rural and peri-urban areas and will also consider important cross-cutting issues such as gender and human rights.



- Small-scale installations, mini-grids and off-grid solutions to support productive uses in rural and peri-urban areas are given priority. Large-scale applications will be only considered if they prove to have a strong added value for rural electrification (grid extension).
- The programme will have six intervention lines: 1.) improved policy and institutional frameworks, 2.) enhanced capacities, 3.) knowledge management and data collection, 4.) financing mechanisms and business models, 5.) applied research and development, and 6.) south-south and north-south technology know-how transfer and experience sharing

The programme will contribute to the objectives of the ECOWAS White Paper on Energy Access in Peri-Urban and Rural Areas, the MDGs and the UN Goals for Universal Energy Access by 2030. It is also a concrete contribution of ECOWAS to the 2012 Year for Sustainable Energy for All and the Rio+ Conference in Brazil in June 2012.

Specific Objectives of the RE&EE Energy Access Road Map

As an initial step to develop the ECOWAS Renewable Energy and Energy Efficiency Access Programme, a road map was discussed and adopted at the workshop. The adopted road map is expected to be translated into a detailed programme of activities with implementation plan and time frame.

It was against this background that ECREEE in collaboration with UNDP-PREP organized the regional workshop "Accelerating Universal Energy Access Through the Use of Renewable Energy and Energy Efficiency", from 24 to 26 October 2011 in Accra, Ghana.

The workshop:

1. reviewed the energy access situation and various energy access options available especially utilization of renewable energy and energy efficiency technologies; and
2. explored the various intervention programmes and activities from the various presentations within the region and the recommendations made; and
3. defined and adopted regional intervention strategies for using renewable energy and energy efficiency for increasing access to energy in the region and thereby contributing to the White Paper implementation.
4. discussed and adopted the road map of the ECOWAS Regional Renewable Energy and Energy Efficiency Access Programme.
5. The workshop also featured 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 brought together more than 130 representatives of the ministries of 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 and energy efficiency.

Key Issues of the Roadmap

The key issues to be addressed include:

1. Policy frameworks (policy, legal and regulatory frameworks (including standards)
2. Establishment of the ECOWAS Observatory for Renewable Energy and Energy Efficiency for networking, knowledge sharing and data collection



3. Appropriate renewable energy solutions and potential for increasing universal energy access through these networking
4. Capacity building and training
5. Financing mechanisms, fund mobilization and business models
6. Effective monitoring and evaluation (M&E) mechanisms.

1. Policies and Standards

At the regional level, policy and regulatory frameworks should be developed and adopted by the member states as an ECOWAS renewable energy protocol (e.g. regulations, codes, quality standards).

In line with the regional policy framework being developed for regional and national levels, this should include:

- Regional and national policies;
- Legislations and regulations including the introduction of standards and codes for equipment/buildings and services;
- Development of regional and national targets for RE&EE penetration;
- Introduction of incentives for widespread adoption and utilization such as Feed-In-Tariffs, waiver of import duties on RE&EE equipment and devices;
- Dissemination of policy framework documents for awareness creation.

2. ECOWAS RE&EE Observatory for Networking and Knowledge-Sharing

For effective and efficient deployment of (RE&EE) applications in the region, there is need to conduct full resource assessment of all renewable energy resource potential. In addition to the resource assessment, there is need to add value to this information by developing individual RE resource maps that should be outcomes of the resource assessments and sharing the information and data to a wider network through the establishment of a Clean Energy Observatory. Various tools can be used for investment decision-making including Geographical Information System (GIS). This tool will provide the optimal technology and sizes of renewable energy & energy efficiency installations to be implemented at specific sites. In this process, the following activities will be undertaken:

- Establishment of a comprehensive baseline data on RE&EE within the region and put in place a mechanism for monitoring the progress of RE&EE development and updating the database;
- Conduct a comprehensive resource assessment of all RE resources in the region and
- stocktaking (data collection) of EE programmes and activities
- Publish all the necessary information and data on the Observatory for information dissemination for effective decision making for both policy makers and investors for the region;
- provision of information and data on public and private institutions/individuals for networking. This process has already started with ECREEE collecting information voluntarily through our stakeholder forms

3. Appropriate Renewable Energy and Energy Efficiency Technologies, Measures, Services and Technology Transfer

The region has significant renewable energy resources that are yet to be exploited for the purpose of providing energy services to its citizens. To this end, the use of all the resources available would effectively assist in providing the energy services needed in the region.

Among the broad range of already available renewable energy technologies and services in the market, the identification and selection of the most appropriate least-cost option to



serve the various sectorial energy service needs of different target groups is crucial (e.g. private households, companies, industry, low-income and high-income).

The Road map will take into account the different energy realities and needs of rural, peri-urban and urban areas and will support demand-driven and not technology-driven solutions. Economic justification, including social and environmental sustainability of the different renewable energy technology options should be carried out.

To this end, the following activities will be undertaken:

- Use of appropriate modern RE&EE services that are efficient and cost-effective;
- Use of modern bioenergy for productive uses as a priority, as opposed to only for social services;
- Incorporate modern biofuels in successful Multi Functional Platforms (MFPs);
- Increase the use of highly efficient and clean stoves and alternative fuels to reduce the high dependence on fuel wood harvested from the natural forest. Among the alternative clean fuels to be promoted are LPG for cooking fuel in the urban, rural and peri-urban areas, as a clean and efficient cooking fuel substitution;
- Promote local manufacture of RE&EE components and parts and also ensure availability of spares and components for sustainability of systems;
- Involvement of the local populations, with special consideration to gender and the rural areas, investments in the industry as a priority for job creation and income generation is essential.
- RE&EE technologies for energy access initiatives should include hybrid plants and either on or off-grid.

4. Capacity Building and Education

For technology transfer to be sustainable, it is important that skilled human resources at the local level are put in place for the manufacturing, installation and maintenance of RE&EE technologies. To this end, successful RE&EE projects to increase energy access would incorporate the following approaches:

- build the capacities required to devise harmonised policy and institutional frameworks through public institutions, local and regional authorities, public and private operators, financial institutions, civil society organisations, and consumer groups.
- comprehensive education and training programs. Different levels of skilled human resources are needed: university, technical, continuous training and training of illiterates especially women in the rural areas for sustainability;
- Professional and on-the-job training
- Technical and specialised skilled training for component manufacturing, including operation, maintenance and repair;
- create greater awareness at different levels about the RE&EE energy access initiatives;
- Establishment of formal studies in academic institutions in the region and also for the general public;
- Establish innovative education and capacity building schemes such as e-learning.

5. Financing Mechanisms, Fund Mobilization and Business Models

RE&EE require innovative and tailored funding mechanisms and schemes, especially for rural and peri-urban applications. The rationale is that the RE&EE components continue to be marginalised and not given the needed attention, as compared to other conventional energy resources. These include subsidies and subventions, financial guarantee funds, and participation of international and local financial institutions.



The financing schemes and mechanisms/tools include:

- micro-finance and start-up subsidies;
- loans, grants, assets, private equity and venture capital, or a combination of these options;
- Private and public financing;
- Mobilising local resources through individual or community savings and credit schemes;
- Financing mechanisms like green funds, carbon funds, , etc;
- National governments should demonstrate commitment to accelerating access to energy services through budgetary support including financing for RE&EE in the rural and peri-urban areas;
- Creation of financial guarantee schemes for investments in RE&EE particularly in the rural and peri-urban areas since renewable energy projects are considered as high risk investment by financing institutions and therefore reduce these risks;
- Strengthen the already established ECOWAS Renewable Energy Facility (EREF) in order to continue co-financing local RE&EE projects as a way of increasing energy access and building capacities of local businesses.
- Economic and financial analysis of RE&EE access projects in the region for small and medium size investment.

Time Line

These key issues are expected to be implemented within the next five years.

The road map contributes to the:

