

ECREEE at a glance www.ecreee.org

ECOWAS Regional Centre for Renewable Energy and Energy Efficiency



Regional Centre for Renewable Energy and Energy Efficiency
Centre Régional pour les Energies Renouvelables et l'Efficacité Energétique
Centro Regional para Energias Renováveis e Eficiência Energética
www.ecreee.org

1 Background

On 12 November 2007, ECOWAS organized a conference on Peace and Security in Ouagadougou, Burkina Faso. The **Ouagadougou Declaration** highlighted the need for regional cooperation in various sectors. In the energy sector, the declaration articulated the need to establish a ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE).

The foundation for the Centre was laid with **Regulation C/REG.23/11/08 of the 61st Session of ECOWAS Council of Ministers in Ouagadougou**, Burkina Faso, on November 23, 2008. ECREEE is a specialized ECOWAS Agency which acts as an independent body but within the legal, administrative and financial framework of ECOWAS rules and regulations.

In November 2009 the ECOWAS Commission established ECREEE with support of the Austrian Development Cooperation (ADC), the United Nations Industrial Development Organization (UNIDO) and the Government of Cape Verde. The Spanish International Development Agency (AECID) joined the initiative and supports the project activities of ECREEE.

2 Governance Structure

The ECREEE secretariat is based in Praia, Cape Verde. The Government of Cape Verde provides office space and infrastructure. This includes also training facilities for capacity building programs facilitated by the Centre.



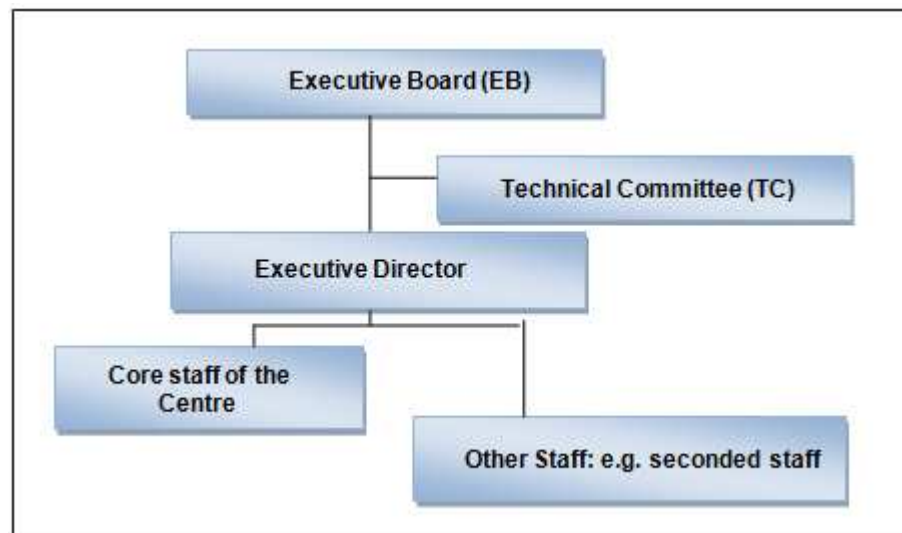
The secretariat operates with a **small team of full time staff** and will carry out most of its activities in cooperation with national institutions and the private sector in the West African region. The Centre will undertake **calls for cooperation partners** regionally and internationally. The working languages of the Centre are English, French and Portuguese.

The ECREEE secretariat is **headed by the Executive Director**, Mr. Mahama Kappiah, former Head of the ECOWAS Energy Division for Energy Access and Renewable Energy.



The Centre is **governed by an Executive Board (EB) and a Technical Committee (TC):**

- As the **highest decisions making body the Executive Board (EB)** meets on a yearly basis to provide strategic guidance and approve the work plan and progress reports. The EB will also oversee the management and operations of ECREEE. The EB is chaired by a representative from the ECOWAS Commission.
- The **technical guidance for ECREEE is provided by the Technical Committee (TC)**. The TC has the role of reviewing major technical documents and reports for submission to the EB. The TC is also responsible for technical review of projects to be funded by ECREEE resources and is recommending their approval by the EB. The TC meets twice a year.



Executive Board (EB):

- Representative of the ECOWAS Commission (Chair)
- Executive Director of ECREEE
- Rotating representative of the ECOWAS Energy Ministers
- UNIDO representative
- Expert from each contributing donor
- Renewable Energy/Energy Efficiency expert from the ECOWAS region

Technical Committee (TC):

- Executive Director of ECREEE (Chair)
- Representative of the ECOWAS Commission
- Rotating technical expert from ECOWAS Member States
- Representative from each contributing donor
- Professional staff of the Centre
- Expert of energy associations or enterprises in the region
- Representative of energy related civil society

Planned staff for the Secretariat (mostly from the ECOWAS region)

- Executive Director of ECREEE
- Renewable Energy and Energy Efficiency Expert
- Biomass Energy Expert
- Energy Policy and Capacity Building Expert
- Information & Communications Technology Officer
- Business Development and Investment Specialist
- Finance and Administration Officer
- Other support staff (secretary, receptionist, driver, logistics assistant)
- International seconded staff

3 Regional Response to the Interrelated Challenges in the Energy Sector

The proposal to establish ECREEE is a necessary **regional response to the specific needs of ECOWAS Member States** as expressed in national and regional policies. It is also responding to international energy and climate policy decisions.

It is acknowledged that without **major investments in sustainable energy frameworks and infrastructure** in West Africa the regional energy access, energy security and climate objectives cannot be achieved simultaneously in the forthcoming decades.

Apart from being a low-carbon solution, renewable energy (RE) systems can increase access to modern, affordable and reliable energy services, improve energy security and support the region's economic and social development in an environmentally benign manner. RE systems are especially effective if they are combined with energy efficiency (EE) measures which are usually available at low cost.

3.1 *RE&EE Potentials and Barriers*

West Africa can rely on **a wide range of untapped RE&EE potentials in various sectors**. The RE potentials are significant but unevenly distributed in the region. So far, West African countries do not take full advantage of their RE&EE potentials due to various technical, financial, economic, institutional, legal and capacity related barriers. Moreover, the inter-state energy trade in the region is minimal so far.

Selected RE potentials in the ECOWAS region:

- A total of 23,000 MW of hydroelectric potential is concentrated in five of the 15 Member States, of which only 16% has been exploited.
- There is good potential for all forms of bioenergy. Traditional biomass is already the main source of energy for the poor majority and accounts for 80% of total energy consumed for domestic purposes.
- There are also considerable wind, tidal, ocean thermal and wave energy resources available in some ECOWAS countries.
- The region has vast solar energy potential with very high radiation averages of 5 to 6 kWh/m² throughout the year.



3.2 Value Added through ECREEE

ECREEE assists to overcome the mentioned barriers for RE&EE development and tries to create an enabling environment for the establishment of regional RE&EE markets in West Africa. In this regard ECREEE cooperates with other national and regional institutions and the private sector in the ECOWAS region (e.g. centres of excellence, WAPP, EREER). ECREEE can play an important role in scaling up innovative approaches at the regional level.

4 Vision, Mission and Objectives of ECREEE

The ECREEE vision and mission is guided by the energy policy decisions of ECOWAS. The adopted ECOWAS/UEMOA White Paper on access to energy services in rural and peri-urban areas in West Africa provided a clear vision regarding the role of energy services for the achievement of the Millennium Development Goals (MDGs) particularly and socio-economic development in general. The White Paper expresses ambitious numerical targets for access to modern cooking fuels, to motive power for productive activities and to electricity. The important role of RE&EE in future investments was highlighted in the policy document.

4.1 Vision and Mission

Based on the Business Plan for ECREEE, the “Study on the Regional Agency for Energy Access (RAEA)” and the White Paper’s proposal to establish the RAEA, the ECREEE vision and mission statements were formulated as follows:

Vision Statement

To improve energy security, increase access to modern, affordable and reliable energy services and support the region’s economic and social development in an environmentally benign manner through the promotion and use of renewable energy and energy efficient technologies in ECOWAS member states.

Mission Statement

In line with the vision statement above and the Plan of Action on access to modern energy services set forth in the White Paper, the Mission Statement for ECREEE has been formulated as follows:

- To lead and coordinate the implementation of the ECOWAS/UEMOA regional action plan and White Paper on energy access for increasing access to energy services by promoting the use of renewable energy resources;
- To improve energy security by promoting energy efficient technologies in ECOWAS member states;
- To contribute to achievement of the MDGs in West Africa by making available to at least half of the people in the region, access to modern energy services using RE&EE technologies.
- To enable the ECOWAS energy sectors to take advantage of Carbon Finance and the Clean Development Mechanism (CDM).



4.2 Overall and Specific Objectives

ECREEE is aiming at the following **overall and specific goals**:

Overall Goal

The overall goal of ECREEE is to contribute to the achievement of the MDGs in West Africa by providing at least half of the people with access to modern energy services using renewable energy and energy efficient technologies and services.

Specific Goal

Lead and coordinate activities in the plan of action of the ECOWAS/UEMOA White Paper on energy access that focus on RE&EE technologies and services.

5 Activities of ECREEE

The Centre supports activities and tries to mobilize funds for the creation of regional renewable energy and energy efficiency markets. The activities of ECREEE aim at the creation of an enabling environment and favorable framework conditions for the widespread usage of RE&EE technologies. Five thematic programs of ECREEE are proposed to address the challenges and barriers to market penetration of RE&EE technologies and services in the region. The five thematic programs can be described as follows:

- Tailored Policy Frameworks and Quality Standards
- Facilitate Capacity building
- Advocacy, Awareness Raising, Knowledge Management and Networking
- Implementation of Renewable Energy Programs and Projects
- Implementation of Energy Efficiency Programs and Projects

5.1 Tailored Policy Frameworks & Quality Standards

The Centre will be involved in providing support for national bodies that are responsible for prioritizing, planning and establishing appropriate policy and regulatory frameworks to ensure affordable access to energy, energy efficiency and renewable energy technologies and services. ECREEE also intends to stimulate the private sector in developing and implementing RE&EE technologies and services projects in the region. Another issue is the setting up of firm and realistic RE&EE portfolio standards both for the member states and the region. There is the need to put in place national and regional policies that require certain percentages of annual electricity and thermal energy use to be covered by renewable energy sources. The introduction of regional and national RE&EE quality technology standards will be facilitated by the Centre.

5.2 Capacity Building

The introduction of innovative RE&EE technologies requires the development of technical skills. There remains a continuing shortage of qualified personnel in the RE&EE markets of the ECOWAS region, in both the public and private sectors. Technical knowledge is needed to build a critical mass of policy analysts, economic managers and engineers who will be able to manage all aspects of RE&EE technologies and services development in the region. Trained manpower capable of designing, developing, manufacturing, installing and maintaining RE&EE technologies is a prerequisite for their successful implementation. Human, institutional and corporate capacity building in RE&EE is therefore required for the realization and sustenance of the goals and objectives of the Centre. This is also required to sustain the scientific, engineering and technical skills relevant for the design, development, fabrication, installation and maintenance of RE&EE technologies.

5.3 Advocacy, Awareness Raising, Knowledge Management and Networking

Awareness of the opportunities offered by RE&EE technologies and services is low among both public and private sector stakeholders in West Africa. The general perception is that renewable energy is not yet a mature technology (applicable to a wide market), is only suited for a niche market and only viable if heavily subsidized. Similar perceptions are existing with regard to energy efficiency technologies and measures. There is a need for information dissemination on RE&EE resources, technology availability, benefits and opportunities to the general public – directed to users as well as investors. The Centre will make use of advocacy and public awareness strategies in this regard.

5.4 Implementation of Renewable Energy Programs and Projects

To facilitate the widely dissemination of RE technologies throughout the region, the Centre will develop and implement concrete programs and projects that seek to create the necessary policy, regulatory and investment environment at national and regional levels. These activities will take into account the different energy needs and realities of urban and rural areas in West Africa.



The issue of RE financing will play a prominent role in ECREEE activities. Scientific studies and experience of the private sector have shown that the main obstacle for the development and implementation of RE investment projects is often not their technical feasibility, but the non-availability of low-cost and long-term financing. This problem is complicated by the existing competition among renewable and non-renewable energy projects for limited funds and is compounded by unfavorable macro-economic conditions.

The Centre, in collaboration with private companies will identify ways of financing renewable energy projects in urban and rural areas. Tailored financing schemes, models (e.g. feed in tariffs) and tools (e.g. for project appraisal) will be developed to ensure that RE technologies and services are provided to the consumer (including the very poor) at affordable prices and that the nascent renewable industry continues to grow and remain sustainable. In this regard the Centre will also facilitate the development and implementation of innovative commercial and non-commercial RE demonstration projects with good potential for up-scaling. For such projects ECREEE will try to mobilize additional carbon funds (e.g. CDM) and co-funding (grants and loans) from bilateral and multilateral donors.

5.5 Implementation of Energy Efficiency Programs and Projects

In order to address the challenges confronting efficient energy utilization in the region and fully harness the opportunities of increased EE, the Centre will develop and implement programs and projects to stimulate and promote the use of energy-efficient appliances and practices: energy-saving technology in industries, urban and rural households, commercial and public buildings and energy efficient transport systems and paths - in order to reduce energy consumption, reduce the emission of green house gases and reduce energy costs for consumers. Products under this program shall include application of compact fluorescent lamps, and the development of standards for refrigerators and air conditioners.

Other activities that will be implemented include:

- Develop pilot projects in selected locations in ECOWAS Member States to demonstrate the savings and benefits from the use of energy efficient equipment in urban and rural areas;
- Create a platform for knowledge exchange and sharing of experiences among Member States and develop a capacity building and training program for representatives of the region in the field of EE and Demand Side Management (DSM);
- Develop regional appliance efficiency standards and equipment labelling;

6 Target Beneficiaries

The main target beneficiaries of the activities, programs and projects of the Centre shall consist primarily of RE&EE market players and enablers in the ECOWAS region. More specifically, the following stakeholders will benefit from the ECREEE activities:

- Policy makers in energy and related sectors: as a result of the project will have better capacity to develop, implement and operationalise policies, strategies that are conducive to the dissemination of renewable energy and energy efficiency technologies in the ECOWAS.
- Energy service companies will benefit from a closing of the technology gap in the renewable sector and thereby attract more Foreign Direct Investments (FDIs).
- Policy makers will benefit from a reduction of future costs created by the impact of global warming and other ecological catastrophes caused by the excessive use of outdated energy technologies.
- The private sector such as small and medium enterprises (SMEs), entrepreneurs, equipment manufacturers, project developers financing institutions: as a result of the project will be trained on various aspects including renewable energy project identification, development, implementation, fund mobilization, equipment manufacturing etc.
- National institutions charged with promoting renewable energy and energy efficiency will benefit from the project through targeted training programs that include regional equipment standards and performance labelling schemes, policy implementation etc.
- Policy makers, private sector, national institutions: will benefit from the project through awareness raising programs on renewable energy and energy efficiency.
- Research institutions, universities, private sector, civil society organizations: as result of the project will benefit from research programs of the ECREEE.
- National standards organizations and import control outfits
- Ultimately, the greater population of the ECOWAS region will benefit from increased access to modern, reliable and affordable energy services.

7 ECREEE and GEF Activities

During the fourth replenishment period, the Global Environment Facility (GEF) adopted the GEF Strategic Program for West Africa (GEF SPWA) that has an energy component funded by a GEF grant amounting to US\$ 45 million. Under the GEF SPWA, each ECOWAS member state accessed GEF grants to implement renewable energy and energy efficiency projects. In line with the mandate of ECREEE, i.e leading and coordinating activities to promote renewable energy and energy efficiency programmes and projects in ECOWAS region, the Centre will naturally become a focal institution for the GEF program. In particular, the Center will play a central role in promoting coherence, integration and knowledge management components of the SPWA. In this connection, discussions are underway among GEF, UNIDO and the Center with the perspective to agree on a collaborative framework on the current and future GEF projects in West Africa.

8 Supporting Partners

In November 2009 the Commission of the Economic Community for West African States (ECOWAS) established ECREEE with support of the Austrian Development Cooperation (ADC), the United Nations Industrial Development Organization (UNIDO) and the Government of Cape Verde. The Spanish International Development Agency (AECID) joined the initiative and supports the project activities of ECREEE.



Austrian
Development Cooperation





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