Project Document for the establishment and first operational phase of the

ECOWAS Renewable energy Facility (EREF)

For peri-urban and rural areas (2011 to 2016)

www.ecreee.org

- Proposal for the Execution of Action line 2
  of the ECOWAS/UEMOA White Paper on Energy Access and the ECOWAS
  Renewable Energy Policy (EREP)
Imprint
Project Document of ECOWAS Renewable Energy Facility (EREF)
Contributors: Mahama Kappiah (ECREEE), Martin Lugmayr (ECREEE-UNIDO), Bah Saho (ECREEE), Ibrahim Soumaila (ECREEE), Aminata Fall (ECREEE), Elayo Hyacinth (ECREEE), David Vilar (ECREEE), Jansenio Delgado (ECREEE), Eder Semedo (ECREEE), Nicola Bugatti (ECREEE)

Update: 05.29.14

Contact
ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)
Achada Santo Antonio, 2nd floor, Electra Building
C.P. 288, Praia, Cabo Verde
E-Mail: info@ecreee.org
Tel: +238 2604630, +238/2624608
http://www.ecreee.org

EREF is supported by
## TABLE OF CONTENTS

1. ABBREVIATIONS 4
2. SUMMARY OF PROJECT DOCUMENT 5

3. BACKGROUND AND SITUATION ANALYSES 10
   3.1 Energy Situation and Challenges in West Africa 10
   3.2 RE&EE Situation and Opportunities in West Africa 11
   3.3 Alignment with ECOWAS policies 11
   3.4 Alignment with international policies 13

4. EREF OBJECTIVES, RESULTS, ACTIVITIES AND BENEFICIARIES 14
   4.1 Objectives 14
   4.2 Beneficiaries 14
   4.3 Activities - The Financing Windows of EREF 14
   4.4 Result 1: Preparatory Phase of EREF (2010 to 2011) 14
   4.5 Result 2: Financing Window on Investment promotion 15
   4.6 Result 3: Financing Window on Business Development 15

5. EREF MANAGEMENT AND ORGANIZATIONAL STRUCTURE 16
   5.1 ECREEE Executive Board 16
   5.2 EREF Technical Committee 17
   5.3 ECREEE Secretariat and EREF Project Team 18
   5.4 ECREEE National Focal Institutions 19

6.-execution, appraisal and monitoring framework 20
   6.1 Call for Proposals Guidelines 20
   6.2 Appraisal Framework 21
       6.3 Monitoring and Evaluation Framework 22

7. TIME SCHEDULE AND INDICATIVE EREF BUDGET (2011-2016) 23
   7.1 Time Schedule 23
   7.2 Indicative EREF budget between 2011 and 2016 23

8. ANNEXES 25
   8.1 Logical Framework Matrix of the EREF 25
## 1. ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECREEE</td>
<td>ECOWAS Centre for Renewable Energy and Energy Efficiency</td>
</tr>
<tr>
<td>ECREEE-SEC</td>
<td>Secretariat of ECREEE</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism</td>
</tr>
<tr>
<td>CER</td>
<td>Certified Emission Reduction</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community for West African States</td>
</tr>
<tr>
<td>EE</td>
<td>Energy Efficiency</td>
</tr>
<tr>
<td>EREF</td>
<td>ECOWAS Renewable Energy Facility</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse Gas Emissions</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>NFI</td>
<td>National Focal Institutions</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-Private Partnership</td>
</tr>
<tr>
<td>RE</td>
<td>Renewable Energy</td>
</tr>
<tr>
<td>WAPP</td>
<td>West African Power Pool</td>
</tr>
<tr>
<td>EB</td>
<td>Executive Board</td>
</tr>
<tr>
<td>TC</td>
<td>Technical Committee</td>
</tr>
</tbody>
</table>
2. SUMMARY OF PROJECT DOCUMENT

Proposal for the Establishment and Execution of the ECOWAS Renewable Energy Facility (EREF) for West Africa in peri-urban and rural areas

Introduction

The following project document aims at the establishment of the ECOWAS Renewable Energy Facility (EREF) which is managed by the Secretariat of the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) based in Praia, Cabo Verde. The Facility is established with initial support of the Austrian Development Cooperation (ADC), the Spanish Agency for International Development Cooperation (AECID) and key technical assistance of the United Nations Industrial Development Organization (UNIDO). The Facility is open to other donor partners and is seeking further support for future call for proposals. EREF is part of the annual work plans of ECREEE and fully integrated in its governance structure.

What is EREF

In the initial stage, EREF provides grant co-funding for small and medium sized renewable energy and energy efficiency (RE&EE) projects and businesses in rural and peri-urban areas. The Facility provides non-reimbursable grants through regular demand driven competitive call for proposals. During its first phase of operation (2011 to 2016), the EREF will test and sharpen its funding policy and find its comparative advantage in the West African market. In the second phase (2016 to 2020) the EREF will broaden its portfolio of financial instruments and support schemes (e.g. micro credits).

Relevance of EREF

- With the Facility, 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 Facility was selected to be implemented as priority action under the ECOWAS framework of the UN Initiative for Sustainable Energy for All (SE4ALL).

- The EREF refers directly to the objectives and action plan of the ECOWAS/UEMOA White Paper on Energy Access in Peri-urban and Rural Areas and to the targets set in the ECOWAS Renewable Energy Policy (EREP) and the ECOWAS Energy Efficiency Policy (EEEP). The White Paper foresees 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. EREP foresees an increase on the share of the rural population served by off-grid renewable energy solutions to 22% by 2020. EREF also contributes to Result Area 7 of the ECREEE Business Plan which aims at business and investment promotion.

- EREF responds to the urgent need for additional RE&EE investments in peri-urban and rural areas of West Africa and the lack of national financing instruments and limited international donor support. Most of the financing available at international levels is not exclusively focused on small and medium sized renewable energy solutions in rural and peri-urban areas.

- The proposal for EREF is aligned with the Paris Declaration on Aid Effectiveness which calls for a strengthening of local ownership, capacities and increased use of local country systems to implement development aid. ECREEE has the official ECOWAS mandate and a comparative advantage in the area of RE&EE in West Africa. The experience accumulated through the management of EREF will further strengthen the capacities of the ECREE Secretariat and create synergies to the annual work plans of the Centre. Best practices and lessons learned from the executed EREF projects will be disseminated through the ECREEE network and the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX). In the second phase, the experiences and lessons learned from EREF will be transferred to the ECOWAS countries which should lead to the adoption of national financing mechanisms.

- The Facility creates a win-win situation and opens up opportunities for North-South and South-South technology and knowledge transfer. Regular forums on different RE&EE aspects, services and technologies will create an enabling business environment and a cooperative platform between
technology companies and institutions of other continents and West African counterparts. The proposed EREF is also aligned with the objectives of the Africa-EU Energy Partnership (AEEP) and the priority activities of the Africa-EU Renewable Energy Cooperation Programme.

Objectives, Results and Beneficiaries of EREF

- The **overall objective** of the Facility is to contribute to the sustainable development in rural and peri-urban areas of West Africa through increased deployment and usage of reliable and affordable RE&EE technologies and services. The **specific objective** of EREF is to create a favourable investment and business environment which leads to accelerated deployment and use of RE&EE technologies and services in peri-urban and rural areas of West Africa.

- EREF activities will **result in the mitigation of existing financial barriers** for the development and execution of small- and medium sized RE&EE investments and businesses. The capacities, knowledge base and market access ability of local RE&EE technology and service companies will be enhanced. Networking, knowledge exchange and awareness raising on RE&EE business opportunities in peri-urban and rural areas will be facilitated.

- The **direct beneficiaries** of EREF are project developers, companies and institutions directly involved in the execution of projects funded by EREF. The **final beneficiaries** are the energy end-users particularly in peri-urban and rural areas benefiting from modern, reliable and affordable energy services and finally also the global community through the reduction of GHG emissions.

Activities - The Financing Windows of EREF:

The EREF fund will **make available grants for two financing windows** in the first operational phase. Under windows 1 and 2 the ECREEE-SEC will undertake regular demand-driven competitive call for proposals. The technical focus and eligibility requirements for the calls can be modified easily according to the actual needs and interest of the beneficiaries or donor partners (e.g. only solar projects or mini-grids). Eligible applicants will be in most cases private companies, municipalities, NGOs and cooperatives. The following financing windows are established:

- **Financing Window 1 - Investment Promotion**: This window supports investment promotion activities for small and medium-sized RE and related EE projects in peri-urban and rural areas of West Africa. EREF is providing risk capital for project development through the co-funding of (pre-) feasibility studies and other pre-investment related activities (e.g. potential assessment, measurements). Moreover, EREF supports project developers to mobilize further funding for the execution of these projects (e.g. loans, mezzanine, carbon finance). Under this window EREF will also co-fund the installation and execution of pro-poor demonstration projects and programs for rural communities with potential for regional scaling-up. Best practices and lessons learnt from the executed projects will be collected and disseminated through the EREF network.

- **Financing Window 2 - Business Development**: This financing window will undertake regular call for proposals to support business development activities and capacity building for local RE&EE technology and service companies (e.g. on- and off-grid solutions, decentralized systems). The establishment of innovative north-south and south-south business to business partnerships (e.g. Europe, Brazil) between RE&EE companies will be co-funded. Networking, knowledge exchange and awareness raising on RE business opportunities will be facilitated through the organization of RE&EE forums, workshops and the elaboration of market studies.

During its second operational phase **from 2020 on EREF might include other innovative financing schemes (e.g. micro-credits, concessions)** in its portfolio. In this regard EREF will undertake a feasibility study on innovative financing options for RE&EE solutions in peri-urban and rural areas in the ECOWAS region. In the meantime the ECREEE-SEC will try to create linkages to existing RE&EE loan instruments and banks (e.g. ECOBANK, KFW, AFD). Projects developed under the EREF grant component could benefit from credit lines.

Management and Governance Structure:

The Facility will be managed **under the leadership of the ECREEE-SEC, based in Praia, Cabo Verde, with key technical support of UNIDO.** EREF is governed by the ECREEE Executive Board (EB) and the EREF Technical Committee (TC). The ECREEE-SEC will be responsible for the administration of the program (e.g. secure funds, measurements).
project cycle management, appraisal and quality assurance of supported projects, financial accountability). EREF will benefit fully from the established ECREEE network of NFIs in all ECOWAS countries. The undertaken calls for proposals are promoted by the National Focal Institutions (NFIs). The bodies have the following composition and functions:

- **The Executive Board (EB)** of ECREEE provides strategic guidance, releases the global annual budget to the EREF and ensures synergies to the other activities of ECREEE. The funds released to the EREF are subject to the approval by the Executive Board and are part of the annual work plans of ECREEE. The Executive Board of ECREEE meets on an annual basis. Further information on the composition and structure of the Board can be found in the ECREEE brochure.

- **The EREF Technical Committee (EC)** of ECREEE meets usually after the application process of an EREF call for proposals. The Committee approves the grant funding to the individual EREF projects on the basis of the recommendations of the EREF project management team and adjusts the funding policy for the next call. The Committee consists of the donor partners and ECREEE staff.

- **The specialized EREF project management team** is based at the ECREEE Secretariat in Praia, Cabo Verde. ECREEE in cooperation with the National Focal Institutions (NFIs) is responsible for the day to day management and administration of the EREF project cycle.

**Appraisal and Monitoring Framework of EREF:**

ECREEE executes the call for proposals in accordance with the **developed financing guidelines, project document templates and appraisal policy**. A set of project templates and evaluation sheets was developed for quality assurance. The ECREEE Secretariat in cooperation with the NFIs evaluates the received proposals according to the established appraisal criteria and draws up a short-list with the best proposals (this might need also the assistance from an external evaluator). The short-list will be sent to the EREF Technical Committee for consideration and approval. Donor partners might do their own assessment and give recommendations on individual projects. Finally, the EREF Technical Committee will approve co-funding for some of the projects.

For the appraisal of the proposals ECREEE usually applies the following **evaluation criteria:**

- Relevance of Project (20 points)
- Overall Project Objective(s) and Impact (20 points)
- Specific Objectives and Effectiveness (20 points)
- Feasibility and Efficiency of Project (20 points)
- Sustainability and potential for regional replication or scaling-up (20 points)

Upon approval by the EREF Technical Committee the successful applicants will be notified and the ECREEE Grant Contract for Co-Funded Projects (can be downloaded from the website) will be signed by ECREEE and the (lead-)applicant (the Grant Beneficiary). Further details on the general execution conditions can be found in the contract template and the annexes. The EREF grant project cycle can be described as in the graph below.

ECREEE and its EREF project team monitors the project progress and ensures effective project cycle management for the provided grants. After the effective date ECREEE will execute payments to the Beneficiary according to the payment schedule set out in the annex of the signed contract. Further payments are released by ECREEE in accordance with the payment schedule and on the basis of written progress reports provided by the Beneficiary.
Figure 1: EREF Organizational Structure

**EREF Executive Board**
- See Organizational Chart of ECREEE

**EREF Technical Committee**
- Technical experts of donor partners
- Technical experts of ECREEE (EREF Project Manager, other ECREEE staff)
- Additional technical evaluators (if decided)

**ECREEE Secretariat**
- EREF Project Manager
- Administrative and expert staff
- Other ECREEE staff

**Other local, regional and international financiers**
(e.g. loan, mezzanine)

**National Focal Points**
- Cabo Verde
- The Gambia
- Ghana
- Togo
- Guinea-Bissau
- Niger
- Nigeria
- Benin
- Guinea
- Sierra Leone
- Senegal
- Liberia
- Mali
- Burkina Faso
- Côte d'Ivoire

**Target Groups**
(project developers, SMEs, civil society)

**Call for Proposals**

**Positive economic, social and environmental impacts**

**Final Beneficiaries in West Africa**

- Strategic Guidance and approval of annual EREF budget
- Approval of funding & operational framework
- Execution of EREF (administration, call for proposals, project cycle management, project appraisal, quality assurance, monitoring and evaluation, loan finance for investment phase of projects)
Figure 2: EREF project cycle for call for proposals under financing window 2 and 3
3. BACKGROUND AND SITUATION ANALYSES

3.1 Energy Situation and Challenges in West Africa

The ECOWAS Renewable Energy Facility (EREF) responds to the energy challenges of the region. The energy system of West Africa is facing the interrelated challenges of energy access, energy security and climate change mitigation and adaptation:

- Lack of access to modern, affordable and reliable energy services and the interrelated negative social and economic impacts for the majority of the population are the main drivers behind the establishment of EREF. Overall access rate to modern energy services is very low across the West African region 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.

- 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. Household access to electricity across the region is about 20% but wide chasms exist between the access rates in urban areas that average 40% while rates in rural areas range between 6% and 8%. At household level, access to LPG or kerosene averages a mere 5%. Wood fuel is currently the primary or only source of energy for the majority of the population in West Africa but the use is generally very inefficient.

- This unfolding scenario has obvious implications for efforts geared towards spurring socio-economic activities, attracting much needed foreign investment, poverty-eradication, the provision of basic social services, and the attainment of the Millennium Development Goals (MDGs). The absence of modern forms of energy, such as electricity, liquid fuels and gas, affects productivity, employment, communications, health-care and education, especially for women and children.

- The gap between energy demand and supply, the increasing dependence on thermal energy production, fluctuating fossil fuel prices and lack of regional energy trade are a threat for the energy security of West Africa. Over 60% of the community’s electricity generation capacity running on oil. As a result, the recent unprecedented escalation of oil prices has had a devastating effect on the economies in the region. Against this background, the National Power Companies faces enormous challenges in providing quality energy services to populations that are currently being serviced and expand coverage to other areas, especially rural and peri-urban.

- The performance of the West African power sector over the years has been unsatisfactory. Despite implementing power sector reforms aimed at stimulating private sector participation and liberalization, National Power Companies (utilities) in the region has not been able to attract any significant private investment. In fact, the National Power Companies have continued to be under-capitalized and charging rates below cost, and hence have not been able to access financial markets for upkeep and expansion projects.

- The global concern of increasing GHG emissions and accelerating global warming and climate change is another challenge. Root causes behind the climate change are the modern world dependence on fossil fuels, increasing energy demand, and at the same time the degrading capacity of forests to absorb atmospheric carbon. The negative environmental impacts of traditional energy production at local level and the global concerns regarding increasing GHG emissions and accelerating global warming and climate change are another challenge. West African countries and their energy sectors are highly affected by the causes of climate change (temperature rise, extreme weather events and droughts). Adaptation measures and climate change impacts will have to be taken into account in energy planning (especially renewable energy).
3.2 RE&EE Situation and Opportunities in West Africa

- 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 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. These technologies provide more people access to energy services thus boosting economic development and supporting eradication of poverty, especially in rural areas. Renewable energy based economic development is in many cases more sustainable as it relies on local energy sources, creates local employment opportunities and prevents negative environmental externalities of the energy system (GHG emissions, local environmental impacts). RE systems are especially effective if they are combined with energy efficiency (EE) measures which are usually available at low cost.

- Apart from significant fossil fuel resources 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:
  - 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.

- 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. Past efforts to develop renewable energy in Africa have generally focused on removing barriers and much more still needs to be done. However, the sufficient good lessons learned from projects implemented across the continent and other regions of the world abound which can be instructive in defining a more proactive, concerted and region-wide effort to scale up the deployment of renewable energy technologies in the region.

- Most ECOWAS Member States do not have a clear-cut policy on renewable energy. As a result, renewable development follows an ad hoc path, with little recourse to national energy plans, which are rarely available or out of date and inadequate. Limited support for renewable energy is further demonstrated by low budgetary allocations seen in most countries. Emphasis is placed on the petroleum and power sectors, which supply a small portion of the population, at the expense of renewable which can assist in reaching a wider proportion of the population.

- Coherent, consistent and conducive policy and regulatory frameworks are central to the successful dissemination of renewable energy in the region, yet such frameworks are generally absent. A clear direction and leadership from the government in the form of policies and regulations is generally missing. Without these, it is difficult for the private and industrial sectors to operate effectively and expand their investments in the development and use of renewable energy in the region. Renewable programs are therefore unlikely to register significant development and dissemination without supportive government policies and regulations and their effective implementation backed by the requisite budgetary allocations.

3.3 Alignment with ECOWAS policies

The proposal for the establishment of EREF reflects the increased drive towards regional approaches in addressing the region’s development challenges. The energy sector in West Africa is spearheading these efforts as demonstrated with the creation of the West African Power Pool (WAPP) and the West African Gas Pipeline (WAGP). In 2006, ECOWAS/UEMOA adopted the White Paper on regional policy on access to energy services for populations on rural and peri-urban areas. These initiatives reflect an increasing drive for integrated energy markets in the region and hence justify a regional approach in developing the renewable energy and energy efficiency sectors.
In continuity with this regional policy the **ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)** was established by Regulation C/REG.23/11/08 of the 61st Session of ECOWAS Council of Ministers in Ouagadougou, Burkina Faso, on November 23, 2008. 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 Cabo Verde. The Spanish International Development Agency (AECID) joined the initiative and supports the project activities of ECREEE.

The **Vision of ECREEE** is to improve energy security, increase access to modern 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. The proposal to establish ECREEE was 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.

ECREEE aims at the establishment of regional renewable energy and energy efficiency markets by supporting various activities to mitigate existing barriers on different levels and sectors. ECREEE activities include policy development and quality assurance, capacity building, the design and usage of tailored financing mechanisms and appraisal tools, awareness raising and the implementation of demonstration projects with potential for regional scaling-up. In this regard ECREEE cooperates with the private sector and other national, regional or international institutions (e.g. WAPP, ERERA, IRENA, UNIDO, REEEP). Most of the activities are implemented in cooperation with the nominated Focal Institutions (NFIs) of ECREEE in each ECOWAS Member State. More information on the ECREEE strategy is available on [www.ecreee.org](http://www.ecreee.org) and the ECREEE brochure.

The proposal for the establishment of the ECOWAS Renewable Energy Facility responds directly to the objectives and action plan of the ECOWAS/UEMOA White Paper on Energy Access in Peri-urban and Rural Areas, and to the targets set in the ECOWAS Renewable Energy Policy (EREF) and the ECOWAS Energy Efficiency Policy (EEEP). The ECOWAS/UEMOA White paper envisages that at least 20% of new investments in electricity generation will be driven by local and renewable resources, in order to achieve self-sufficiency, reduced vulnerability and sustainable environmental development in keeping the regional plan. The action line on investment promotion **foresees the establishment on an investment and innovation fund** for renewable energy (RE) and energy efficiency (EE) which raises funding for at least 200 demonstration projects and support for local manufacturing and service companies. EREP foresees an increase on the share of the rural population served by off-grid renewable energy solutions to 22% by 2020.
3.4 Alignment with international policies

EREF responds to the need for additional investments in renewable energy services, infrastructure and capacities in peri-urban and rural areas of West Africa and the so far limited support in these areas. Only a small part of the international support is devoted to the energy sectors in Sub Saharan Africa. An even smaller part is explicitly directed to renewable energy and energy efficiency in peri-urban and rural areas of West Africa. The majority of the projects are focused on large hydropower rather than the so called “new renewables”.

The proposal for EREF is aligned with the Paris Declaration on Aid Effectiveness which calls for a strengthening of local ownership, capacities and increased use of local country systems to implement development aid. ECREEE has the official ECOWAS mandate and a comparative advantage in the area of RE&EE in West Africa. The experience accumulated through the management of EREF will further strengthen the capacities of the ECREEE Secretariat and create synergies to the annual work plans of the Centre. Best practices and lessons learned from the executed EREF projects will be disseminated through the ECREEE network and the ECOWAS Renewable Energy and Energy Efficiency Observatory (ECOWREX). In the second phase, the experiences and lessons learned from EREF will be transferred to the ECOWAS countries which should lead to the adoption of national financing mechanisms.

The Facility creates a win-win situation and opens up opportunities for North-South and South-South technology and knowledge transfer. Regular forums on different RE aspects, services and technologies will create an enabling business environment and a cooperative platform between technology companies of Europe, USA or others and West African counterparts. The proposed EREF is also aligned with the objectives of the Africa-EU Energy Partnership (AEEP) and the priority activities of the EU-Africa Renewable Energy Cooperation Programme. Synergies to the yearly organized ECOWAS Investment & Business Forums and EU-Africa Business Forums can be created. EREF builds on already existing initiatives (such as the EU Energy Facility, the activities of the EU Partnership Dialogue Facility, bilateral energy activities of EU countries, implementation of the white paper).
4. EREF OBJECTIVES, RESULTS, ACTIVITIES AND BENEFICIARIES

4.1 Objectives

The **overall objective** of the Facility is to contribute to sustainable development in rural and peri-urban areas of West Africa through increased deployment and usage of reliable and affordable RE&EE technologies and services. It addresses the challenges of energy poverty, energy security and energy related global and local environmental impacts in an integrated way and from a regional perspective.

The **specific objective** of the EREF is to create a favourable investment and business environment which leads to accelerated deployment and use of RE&EE technologies and services in peri-urban and rural areas of West Africa.

EREF activities will **result in the mitigation of existing financial barriers** for the development and execution of small- and medium sized RE&EE investments and businesses. The capacities, knowledge base and market access ability of local RE&EE technology and service companies will be enhanced. Networking, knowledge exchange and awareness raising on RE&EE business opportunities in peri-urban and rural areas will be facilitated.

The **activities** implemented and co-funded by EREF are described in the chapter on the EREF financing windows.

4.2 Beneficiaries

The **direct beneficiaries** of EREF are project developers, companies and institutions directly involved in the execution of projects funded by EREF. The **final beneficiaries** are the energy end-users particularly in peri-urban and rural areas benefiting from modern, reliable and affordable energy services and finally also the global community through the reduction of GHG emissions.

4.3 Activities - The Financing Windows of EREF

The EREF fund will **make available grants for two financing windows** in the first phase (2011 to 2016). Under windows 1 and 2 the ECREEE-SEC will undertake regular demand-driven competitive call for proposals. The technical focus and eligibility requirements for the calls can be modified easily according to the actual needs and interest of the beneficiaries or donor partners (e.g. only solar projects or mini-grids). The eligibility and evaluation criteria will be explained in the funding guidelines and may vary from call to call.

In the logical framework of the EREF project document the financing windows contribute to two result areas:

- Financing window 1: Investment Promotion falls under Result 2
- Financing window 2: Business Development falls under Result 3

During its second operational phase from **2020 on EREF might include other innovative financing schemes (e.g. micro-credits, concessions)** in its portfolio. In this regard EREF will undertake a feasibility study on innovative financing options for RE&EE solutions in peri-urban and rural areas in the ECOWAS region. In the meantime the ECREEE-SEC will try to create linkages to existing RE&EE loan instruments and banks (e.g. ECOBANK, KFW, AfDB). Projects developed under the EREF grant component could benefit from credit lines.

4.4 Result 1: Preparatory Phase of EREF (2010 to 2011)

The preparatory phase aims at the successful establishment of EREF through detailed planning and preparation activities (see also budget requirements).

**Activities under Result 1 include:**

- Develop the EREF project document
- Develop the project document templates and appraisal policy and sheets
- Validation workshop with partners and National Focal Institutions (NFIs);
- Fund raising
- Recruitment of Project Manager
- Prepare the funding guidelines for the first call for proposals
- Constitute the EREF bodies
4.5 Result 2: Financing Window on Investment promotion

This window supports investment promotion activities for small and medium-sized RE and related EE projects in peri-urban and rural areas of West Africa. EREF is providing risk capital for project development through the co-funding of (pre-) feasibility studies and other pre-investment related activities (e.g. potential assessment, measurements). Moreover, EREF supports project developers to mobilize further funding for the execution of these projects (e.g. loans, mezzanine, carbon finance). Under this window EREF will also co-fund the installation and execution of pro-poor demonstration projects and program for rural communities with potential for regional scaling-up. The ECREEE-SEC will undertake regular call for proposals; Eligible applicants will be private companies, municipalities, private companies, NGOs and cooperatives. The participation of local project partners is obligatory. Best practices and lessons learnt from the executed projects will be collected and disseminated through the EREF network.

Activities under Result Area 2 include:

- Innovative financing mechanisms for investment promotion of small and medium-sized RE&EE projects in peri-urban and rural areas offered.
- Pre-feasibility and feasibility studies (on-grid and off-grid) and related pre-investment activities (potential studies, measurements) for projects in peri-urban and rural areas co-funded;
- Installation and execution of pro-poor RE&EE demonstration projects in peri-urban and rural areas with potential for regional up-scaling in West Africa co-funded; this includes also the more efficient use of rural biomass and charcoal for cooking and its substitution through more efficient and cleaner solutions (e.g. biogas, biofuels, LPG).
- Development, dissemination and implementation of sustainable pilot projects to showcase RE technologies as viable alternatives to develop business oriented initiatives.
- Close relations with local, regional and international financiers and investors to raise funding for the execution and up-scaling of developed EREF projects are established.
- CDM and carbon finance in the financial structuring of projects considered.
- Regional documentation of supported RE&EE projects established.

4.6 Result 3: Financing Window on Business Development

This financing window aims at the strengthening of the capacities, knowledge base and market access ability of local RE&EE technology and service companies. As concrete outputs, this financing window will undertake regular call for proposals to support business development activities and capacity building for local RE&EE technology and service companies (e.g. on- and off-grid solutions, decentralized systems). Through its activities the EREF will support companies to develop business plans and find their place in the market. The establishment of innovative north-south and south-south business to business partnerships (e.g. Europe, Brazil) between RE&EE companies will be co-funded. Networking, knowledge exchange and awareness raising on RE business opportunities will be facilitated through the organization of RE&EE forums, workshops and the elaboration of market studies.

Activities under Result 3 include:

- Business development activities for local RE&EE companies are co-funded (e.g. elaboration of business plan, market studies)
- Technical and business training for local companies (e.g. SMEs) to provide reliable RE&EE goods and services in peri-urban and rural areas in the ECOWAS region (e.g. on- and off-grid solutions, decentralized systems) co-funded.
- The establishment of north-south and south-south business-to-business partnerships of RE&EE companies co-funded (e.g. Europe, Brazil);
- Business and technical forums and seminars on different RE&EE aspects and innovative approaches are organized and facilitate regional and north-south and south-south cooperation.
- Regular updated national and regional studies on RE&EE market opportunities in peri-urban and rural areas are elaborated and disseminated to decision makers and public sector officials;
- Experience exchange among RE project developers in the region established;
- Networking platform for project developers and financial institutions established;
5. EREF MANAGEMENT AND ORGANIZATIONAL STRUCTURE

The Facility will be managed under the leadership of the ECREEE-SEC, based in Praia, Cabo Verde, with key technical support of UNIDO. EREF is governed by the ECREEE Executive Board (EB) and the EREF Technical Committee (TC). Detailed information on the governance structure can be found in the EREF project document. The ECREEE-SEC will be responsible for the administration of the program (e.g. project cycle management, appraisal and quality assurance of supported projects, financial accountability). EREF will benefit fully from the established ECREEE network of NFIs in all ECOWAS countries. The undertaken calls for proposals are promoted by the National Focal Institutions (NFIs). The bodies have the following composition and functions:

- The Executive Board (EB) of ECREEE provides strategic guidance, releases the global annual budget to EREF and ensures synergies to the other activities of ECREEE. The funds released to EREF are subject to the approval by the Executive Board and are part of the annual work plans of ECREEE. The Executive Board of ECREEE meets on an annual basis. Further information on the composition and structure of the Board can be found in the ECREEE brochure.

- The EREF Technical Committee (EC) of ECREEE meets usually after the application process of an EREF call for proposals. The Committee approves the grant funding to the individual EREF projects on the basis of the recommendations of the EREF project management team and adjusts the funding policy for the next call. The Committee consists of the donor partners and ECREEE staff.

- The specialized EREF project management team is based at the ECREEE Secretariat in Praia, Cabo Verde. ECREEE, in cooperation with the NFIs, is responsible for the day to day management and administration of the EREF project cycle.

5.1 ECREEE Executive Board

The ECREEE Executive Board (see governance structure of ECREEE) will, based on the recommendations of the Technical Committee:

- Approve the EREF annual work plan and global budget for calls (including the allocation of funds between the EREF financing windows and for EREF operations)
- Approve the EREF annual progress report and financial report
- Approve the audits (including selection of external auditors)
- Agree on amendments to the Project Document
- Approve the invitation of new donor partners to EREF
- Provide policy guidance and propose new approaches.
- Facilitate partnerships between Europe and West Africa in RE & EE on political levels

The ECREEE Executive Board meets usually twice a year.
5.2 EREF Technical Committee

The TC provides the technical guidance and ensures quality assurance of EREF. It will usually meet upon request or after the finalization of the appraisal process. Members are:

- Technical experts of the ECREEE-SEC (e.g. project manager, experts)
- Technical experts of other donor organizations (if decided)
- External reviewers/evaluation consultants
The Technical Committee has the following functions:

- Discuss the EREF annual progress report and work plan and give recommendations to the Executive Board;
- Overseeing and monitoring of the performance of the EREF management and the achievement of the program results;
- Coordinate the activities of EREF by giving guidance to the ECREEE secretariat to meet regional and national level priorities;
- Participating in the selection of the Project Manager and other EREF related staff;
- Guide and supervise the work of the ECREEE secretariat and EREF project team;
- Review the annual EREF work plan and related budget and give recommendations to the EB;
- Look for a balance between financing windows in the selection of co-funded projects; look for geographical and technology balance;
- Evaluate project proposals of the call for proposals according to the ECREEE quality and appraisal framework and select the best projects for co-funding; recommend adjustments to the criteria for project evaluation;
- Approval of projects in accordance with the non-objection principle
- Approval of funding guidelines for a call of proposals
- Approve significant changes on activities, time schedule, budget allocation, expenses in projects under execution following a request by project implementers;
- Discuss and decide on the themes for forums, capacity development workshops and other events supported by EREF;
- Promote innovative approaches for building up partnerships between European and West African companies in the RE & EE sectors;

5.3 ECREEE Secretariat and EREF Project Team

The ECREEE-SEC has been identified as the host and executive partner of EREF. UNIDO will technically assist the Secretariat. The ECREEE-SEC is responsible for the operational management of the EREF grant fund. It will act as administrator of the financial grant resources provided for EREF, and it will provide office facilities.

A specialized EREF project team will be set up in the ECREEE secretariat for the preparatory phase and later on for the execution of EREF. A project manager and additional expert and administrative staff (see job descriptions in the annex) will be recruited for an initial three-year period. The project manager will work closely with the NFIs of ECREEE. The project manager has the responsibility to ensure efficient Management and Supervision, including the EREF project staff. The project manager will also coordinate with governmental institutions, partners, and external counterparts.

The key functions of the ECREEE secretariat and the EREF project team are as follows:

**Administrative Tasks and Responsibilities**
- Organize and facilitate the meetings of the Executive Board and the Technical Committee.
- Organize thematic forums and workshops
- Act as secretary in the EB and TC meetings.

**Management Tasks and Responsibilities**
- Plan and suggest to the TC studies and surveys that are considered necessary in order to achieve the EREF’s objectives as well as training activities. This includes hiring of the necessary consultancies, as well as monitoring, control and supervision of the results.
- Verify achievement of EREF goals
- Mediate problems among project partners in sharing work and/or budget items while preparing the project proposal
- Arrangement of long-term follow-up

**Financial Tasks and Responsibilities**
- Monitor the administrative and financing execution of the EREF.
- Manage additional financial resources, in order to increase the available resources to execute the Partnership
Project management Tasks and Responsibilities
- Ensure effective project cycle management of co-funded projects (see the Figure).
- Facilitate the drafting and signing of contracts for project execution.
- Monitor the implementation of projects and other activities financed by EREF.

Reporting Tasks and Responsibilities
- Draft and implement EREF information dissemination plan.
- Compile the information provided by the ECREEE national focal institutions about the progress of EREF.
- Elaborate periodical reports about the progress of the Partnership’s program including an analysis of results achieved and proposals for modifications if necessary to achieve the objectives of EREF.

General Tasks and Responsibilities
- Suggest improvements to enhance the quality of project appraisal, implementation and monitoring capacities of EREF and ECREEE national focal institutions;
- Support the national focal institutions;
- Provide information to the national focal institutions;
- Compile information about similar programs and projects that are being executed or proposed in the region;
- Develop and maintain a contact network with EREF members, collaborators and relevant stakeholders, in order to make public and to promote the achievements in the renewable energy field;
- Assure the optimal use of information technologies (website management, communication with others members of the Partnership, etc.);
- Oversee that cross cutting issues are taken into account in all programme activities;
- Perform additional functions defined by the Executive Board.

5.4 ECREEE National Focal Institutions

The role of the ECREEE NFIs is to guide the development and the activities of the Partnership’s projects in their respective countries, according to the needs and requirements of the environmental and energy policies. The NFIs are the link between project implementers in the different countries and the ECREEE-SEC. The focal institutions are designated to represent their country in the Technical Committee. The EREF administrative and management budget includes some funds to be used to support the activities of the NFIs (meetings, travel costs) to ensure efficient operations and strengthening of their capacity.

The NFIs have the following functions:
- Facilitate national discussion on RE and energy efficiency and EREF
- Oversee coordination of EREF activities in their respective countries.
- Represent EREF at the national level.
- Act as the national counterpart to the EREF project team in the ECREEE secretariat
- Inform the Executive Board about the necessities and the activities requirements in their country.
- First quality appraisal of received project proposals of EREF calls for proposals; check whether they are in line with national development plans and policies and strategies, and legislation.
- Disseminate information on EREF in the country and encourage identification and development of projects with the support of the ECREEE secretariat.
- Supervise, with the support of the ECREEE secretariat, the progress of the EREF projects in their countries;
6. EXECUTION, APPRAISAL AND MONITORING FRAMEWORK

Under financing windows 1 and 2 EREF will undertake regular call for proposals in the West African region. The calls are promoted by the NFIs of the ECREEE–SEC and are opened for proposals from the private sector and civil society.

6.1 Call for Proposals Guidelines

For every call the ECREEE-SEC will develop financing guidelines which are subject for approval by the EREF Technical Committee. The technical focus and eligibility criteria might vary from call to call. Detailed application and approval procedures, project cycles, appraisal criteria and forms for implementing partners can be found in the annexes of the final project document. The following guidelines will apply for all calls:

- The participation of West African partners in the proposed projects is a precondition for co-funding from EREF.
- Project proposals can be presented by one applicant alone or by a group of applicants (assignment of one lead applicant).
- EREF is only co-funding and expects that applicants bring in their own financial means and/or in-kind contributions. The quantity of co-funding contributions and shown ownership of West African partners increase the chances of project proposals to be selected.
- The table below indicates the geographic and technical framework for EREF calls.

### Table 1: Geographic and technical eligibility criteria of the EREF

<table>
<thead>
<tr>
<th>Eligible Countries</th>
<th>Eligible Applicants</th>
<th>Eligible Technical Solutions (projects usually cover more than one option)</th>
</tr>
</thead>
</table>
| Benin, Burkina Faso, Cape Verde, Cote D’Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo, Regional (covers more than one country listed above) | Government institutions (ministries, electrification agencies, municipalities) | Renewable Energy:  
- Renewable Energy (multi-focus)  
- Biomass (e.g. improved stoves for cooking, power generation)  
- Bio-fuels (e.g. Biodiesel, Bioethanol)  
- Biogas  
- Waste-to-Energy  
- Geothermal Energy  
- Hydroelectric Power (medium, small, micro, pico)  
- PV (e.g. grid/off-grid, SHS, lighting, pumping, desalination)  
- Solar thermal (water heating, CSP, cooling, process heat, solar cooking and drying)  
- Wind Energy (e.g. off/on-grid, on- and off-shore, small and large, water pumping, desalination etc.)  
- Wave, tidal and ocean thermal  
- Hybrids (indicate sources)  
- Mini-Grids  
- Storage systems (batteries, hydrogen) |
| | Private, public or public-private companies (e.g. SMEs, ESCOs, utilities) | Energy Efficiency:  
- Sustainable transport  
- Efficient appliances  
- Building efficiency  
- Cleaner production  
- Transmission  
- Energy conservation and management |
| | Individual consultants and project developers (registered as company) | Other focus:  
- LPG for cooking |
| | Universities, schools, research centres, NGOs and cooperatives | |
| | | |
6.2 Appraisal Framework

The ECREEE Secretariat in cooperation with the NFIs evaluates the received proposals according to the established appraisal criteria and draws up a short-list with the best proposals (this might need also the assistance from an external evaluator). The short-list will be sent to the EREF Technical Committee for consideration and approval. Donor partners might do their own assessment and give recommendations on individual projects. Finally, the EREF Technical Committee will approve co-funding for some of the projects. The approval process can be done either in a physical meeting or by e-mail. For some calls a two-stage application process might be applied (concept notes and full proposals). The technical appraisal may suggest modifications for the project idea, work plan, management or budget. The EREF appraisal team will try to keep a balance between countries and technologies.

For the appraisal of the proposals ECREEE usually applies the following evaluation criteria:

- Relevance of Project (20 points)
- Overall Project Objective(s) and Impact (20 points)
- Specific Objectives and Effectiveness (20 points)
- Feasibility and Efficiency of Project (20 points)
- Sustainability and potential for regional replication or scaling-up (20 points)

Figure 4: EREF project cycle management for call for proposals
6.3 Monitoring and Evaluation Framework

Upon approval by the EREF Technical Committee the successful applicants will be notified and the ECREEE Grant Contract for Co-Funded Projects (can be downloaded from the website) will be signed by ECREEE and the (lead)-applicant (the Grant Beneficiary). Further details on the general execution conditions can be found in the contract template in the annex. The EREF grant project cycle can be described as in the graph above.

ECREEE and its EREF project team monitors the project progress and ensures effective project cycle management for the provided grants. After the effective date ECREEE will execute payments to the Beneficiary according to the payment schedule set out in the annex of the signed contract. Further payments are released by ECREEE in accordance with the payment schedule and on the basis of written progress reports provided by the Beneficiary.

The progress reports and the final report are provided by the Beneficiary according to the reporting schedule in the annex of the contract. Progress reports shall be sent not later than 30 days after completion of the project period and the final report shall not be submitted later than 60 days after termination of the project activities. Further payments can be only done on the basis of positively evaluated progress reports. For short-term projects (e.g. feasibility studies, trainings) a final report will be sufficient, in longer term projects mid-term reports shall be provided.

For the written progress reports (either in English, French or Portuguese) the Beneficiary will use the available ECREEE template (can be downloaded from the website). The reports shall have a section on the general project progress and a separate financial section on the implementation progress of the Grant Amount and the overall project. The financial section shall include (as attachments) copies of invoices/receipts or time records for personnel costs and a bank statement of the account. The copies must be legible, particularly regarding such information as delivery date, recipient, reference to the Project, due amount and currency used. In addition to the electronic version of the financial documentation, the original invoices shall be sent to the ECREEE Secretariat by post.

Since the Grant Amount provided by EREF is relatively small (max. 200.000 EUR) usually no external project evaluation and audit will be undertaken. The submission and evaluation of the final report is considered as sufficient. However, ECREEE reserves the right to request an external evaluation or audit for some of the EREF projects. The costs will be covered by a separate evaluation and audit budget of ECREEE and do not have to be included into the project budget. The selection of evaluators and auditors is subject to approval by ECREEE. Usually the evaluation will occur immediately after completion of project outputs. Project Impact Assessments and Audits will be undertaken at a time communicated to the Beneficiary two weeks in advance.

ECREEE shall have the right to supervise the progress of the project throughout the entire contractual duration and reserves the right to carry out monitoring visits at any time agreed with the Beneficiary upon reasonable notice being given. The visits will be done either by the ECREEE Secretariat, the respective NFIs or monitoring consultants. The Beneficiary shall keep records and documentation necessary for verifying whether the funds have been used according to the requirements of the Contract and its annexes.
7. TIME SCHEDULE AND INDICATIVE EREF BUDGET (2011-2016)

7.1 Time Schedule

The first phase of the EREF is planned to be implemented between 2011-2016

<table>
<thead>
<tr>
<th>Activity</th>
<th>Month</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1</td>
<td>1st draft of project document elaborated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2</td>
<td>Comments of partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.3</td>
<td>Final design of project document</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.2</td>
<td>Cooperation agreement with donors signed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.3</td>
<td>EREF project team recruited and relocated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.4</td>
<td>First call for proposals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.2 Indicative EREF budget between 2011 and 2016

The budget need to implement the first phase of EREF amounts to EUR 9,2 million between 2011 and 2016. This would allow the to undertake an annual call for proposal. For administration purposes, the EREF’s budget is divided into three main areas: (a) Costs of Project Operations (e.g. call for proposals, trainings, forums), (b) Costs for Monitoring and Evaluation (e.g. TC meetings, evaluation consultants, monitoring travels), as well as (c) Costs of Management and Administration. A detailed budget breakdown can be found on the next page.
### Table 2: Indicative Overall Budget of EREF in million EUR (2011 to 2016)

<table>
<thead>
<tr>
<th>Activities</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Total EREF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 Preparatory phase</strong> (e.g. final project document, validation workshop, travel costs)</td>
<td>200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200,000</td>
</tr>
<tr>
<td><strong>1.2 EREF Operational budget for call for proposals</strong></td>
<td></td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>7,500,000</td>
</tr>
<tr>
<td><strong>1.3 EREF Monitoring and Evaluation Budget</strong> (e.g. appraisal consultants, travel)</td>
<td></td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>750,000</td>
</tr>
<tr>
<td><strong>1.4 Management and administration costs</strong></td>
<td></td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>750,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>200,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>9,200,000</td>
</tr>
</tbody>
</table>

### Table 3: Indicative budget for management and administration (10%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Project Manager</td>
<td>80,000</td>
<td>80,000</td>
<td>80,000</td>
<td>80,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Project Assistant</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Admin Assistant</td>
<td>20,000</td>
<td>20,000</td>
<td>20,000</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Office Equipment and Running Costs (e.g. telephone)</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>TOTAL EUR</strong></td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
</tr>
</tbody>
</table>
8. ANNEXES

8.1 Logical Framework Matrix of the EREF

<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions/Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To contribute to sustainable economic, social and environmental development in peri-urban and rural areas of West Africa through increased deployment and use of reliable and affordable renewable energy technologies and services.</td>
<td>• No. of households, companies and public service institutions with access to modern, reliable and energy services based on renewable energy solutions</td>
<td>• National statistics and energy balances</td>
<td>N.A.</td>
</tr>
<tr>
<td>• To contribute to the achievement of the MDGs and the objectives of the ECOWAS/UEMOA white paper, the ECOWAS Renewable Energy Policy (EREP), the ECOWAS Energy Efficiency Policy (EEEP), the Millennium Development Goals (MDG’s) and the international and regional GHG mitigation goals.</td>
<td>• Proportion of the total energy production &amp; consumption in the region from RE</td>
<td>• Regional statistics and energy balances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Renewable Energy’ share in overall electricity mix</td>
<td>• National and regional policy and strategy papers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decreased diesel consumption through substitution of generators or replacement through hybrid systems</td>
<td>• Stakeholder questionnaires</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decreased reliance of households on traditional biomass, charcoal and related indoor pollution effects.</td>
<td>• Regional statistics from ECOWAS, WAPP and countries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reduced monthly spending for energy services and enhanced ability to pay</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decreased soil degradation and GHG emissions saved</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Achada Santo Antonio
2nd Floor, Electra Building
Praia – Cabo Verde, C.P. 288

Project Document of the ECOWAS Renewable Energy Facility (EREF)

Tel: +238 2604630
info@ecreee.org
www.ecreee.org

25/32
<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions/Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Objectives / Outcomes</td>
<td>SPECIFIC OBJECTIVES / OUTCOMES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The improved investment and business environment leads to accelerated deployment and use of renewable energy technologies and services in peri-urban and rural areas of West Africa.</td>
<td>• 20% of new investments in electricity generation in peri-urban and rural areas covered by RE (ECOWAS/UEMOA white paper objective)</td>
<td>• National statistics and energy balances</td>
<td>• Key stakeholders show and maintain interest in their countries, or at least don't object EREF;</td>
</tr>
<tr>
<td></td>
<td>• More than 200 demonstration projects co-funded by EREF (ECOWAS/UEMOA white paper indicator)</td>
<td>• Regional statistics and energy balances</td>
<td>• National development of policies and legal frameworks for energy continues and creates a favourable environment for renewable energy – based on international trends and climate change imperatives.</td>
</tr>
<tr>
<td></td>
<td>• No. of competitive RE&amp;EE manufacturers and service companies established with EREF support (ECOWAS/UEMOA white paper indicator)</td>
<td>• National and regional policy and strategy papers</td>
<td>• International Financiers and Investors keep interested in supporting RE&amp;EE projects.</td>
</tr>
<tr>
<td></td>
<td>• No. of RE&amp;EE projects developed, executed and maintained with EREF support</td>
<td>• Monitoring reports and evaluations EREF projects</td>
<td>• Participating countries keep on the track of peaceful development.</td>
</tr>
<tr>
<td></td>
<td>• Energy produced and population served through projects of the EREF</td>
<td>• Workshop reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• EERED share of newly installed energy services provided by RE by country (areas, households etc.)</td>
<td>• Specific surveys and studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Avoided GHG emissions as a consequence of EREF projects</td>
<td>• Reporting to stakeholders and feedback from stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Energy saved in EREF EE projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outputs / Results</td>
<td>Intervention logic</td>
<td>Objectively verifiable indicators</td>
<td>Sources of verification</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>-----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>RESULT 1: FINANCING WINDOW - PREPARATORY PHASE</td>
<td>Agreement on final project document reached, validation workshop held, funding for the EREF secured and initial project staff recruited and relocated.</td>
<td>First call for proposal initiated</td>
<td>project document, donor agreements, contracts</td>
</tr>
<tr>
<td>RESULT 2: FINANCING WINDOW – INVESTMENT PROMOTION FOR SMALL AND MEDIUM-SIZED RE&amp;EE PROJECTS</td>
<td>Financial barriers for small- and medium sized RE&amp;EE solutions in peri-urban and rural areas are mitigated.</td>
<td>Total investments in RE&amp;EE projects by ECOWAS country leveraged through pre-investment activities of EREF (feasibilities, potential studies etc.). Number of (pre)feasibility studies which reach financial close and lead to implementation. Leverage effect of invested grants in relation to total leveraged investments (in %). Volume of funding raised from local and international financiers. No. of follow-up activities on the basis of funded investment related studies (e.g. potential studies, measurements).</td>
<td>Monitoring reports and evaluations EREF projects, Reports of NFIs, Workshop reports, Specific surveys and studies, Reporting to stakeholders and feedback from stakeholders</td>
</tr>
<tr>
<td>Intervention logic</td>
<td>Objectively verifiable indicators</td>
<td>Sources of verification</td>
<td>Assumptions</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------</td>
<td>-------------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| RESULT 3: FINANCING WINDOW - BUSINESS DEVELOPMENT AND KNOWLEDGE MANAGEMENT | • Capacities, knowledge base and market access ability of local RE&EE technology and service companies are strengthened. | • No. of RE&EE manufacturers and service companies established with EREF support  
• No. of north-south and south-south technology partnerships established with EREF support  
• No. of participants in EREF forums and training workshops  
• No. of participants which make direct use of obtained knowledge in trainings  
• No and quality of disseminated market studies and RE&EE information by the EREF (web sites, libraries, resource centres)  
• No. of subscribers and downloads of provided EREF information  
• Data actively used by companies and public officers for strategy development | • Monitoring reports and evaluations EREF projects  
• Workshop reports  
• Annual reports of companies  
• Specific surveys and studies  
• Reporting to stakeholders and feedback from stakeholders  
• National and regional policy and strategy papers | • Key stakeholders show interest in their countries; |

<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITIES: FINANCING WINDOW PREPARATORY WORK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>Project document finalized</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td>Funding agreements with donor partners signed</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td>Validation workshop with NFIs organized</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td>Recruitment of EREF staff</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>
### ACTIVITIES: FINANCING WINDOW: INVESTMENT PROMOTION FOR SMALL AND MEDIUM-SIZED RE&EE PROJECTS

<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-feasibility and feasibility studies (on-grid and off-grid) and related pre-investment activities (potential studies, measurements) for projects in peri-urban and rural areas co-funded;</td>
<td>No. of projects co-funded</td>
<td>Monitoring reports and evaluations EREF projects</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td>No. of received proposals</td>
<td>Report of financiers and investors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of (pre)feasibility studies which reach financial close and lead to implementation.</td>
<td>Specific surveys and studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-funding received (total &amp; percentage)</td>
<td>Reporting to stakeholders and feedback from stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leverage effect of invested grants in relation to total leveraged investments (in %).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of follow-up activities on the basis of funded investment related studies (e.g. potential studies, measurements).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation and execution of pro-poor RE&amp;EE demonstration projects in peri-urban and rural areas with potential for regional up-scaling in West Africa co-funded; activity includes also the more efficient use of rural biomass and charcoal for cooking and its substitution through more efficient and cleaner solutions (e.g. biogas, biofuels, LPG).</td>
<td>No. of projects co-funded by ECOWAS country</td>
<td>Monitoring reports and evaluations EREF projects</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td>No. of projects successfully executed and maintained</td>
<td>Report of financiers and investors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy produced and population served through projects of the EREF</td>
<td>Reporting to stakeholders and feedback from stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social, economic and environmental benefits for population</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy saved in EREF EE projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy saved with EREF projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GHG emission avoided</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Activities: Financing Window Business Development and Knowledge Management

<table>
<thead>
<tr>
<th>Activities</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
</table>
| *New viable approaches, technologies and mechanisms for RE&EE solutions suitable for rural areas and regional scaling-up are identified, tested and demonstrated in practice.* | *No. of studies and pilot projects supported*  
*No. of pilot projects successfully executed*  
*Number of approaches applied in practice*  
*No. of viable pilot projects and approaches which have led to investment.*  
*No. of pilot projects replicated* | *Monitoring reports and evaluations EREF projects*  
*Report of financiers and investors*  
*Specific surveys and studies* | *N.A.* |
| Business development support and training for local companies (e.g. SMEs) to provide reliable and affordable RE&EE goods and services in peri-urban and rural areas (e.g. on- and off-grid solutions, decentralized systems) are co-funded. | *No. of local businesses for RE&EE manufacturing, installation and services supported*  
*No. of new viable business and jobs created*  
*Volume of investment in start-up businesses leveraged through grant support*  
*Sales of supported companies*  
*No. of businesses replicated in the region*  
*No. of participants trained in workshops*  
*No. of participants which make direct use of obtained knowledge* | *Monitoring reports and evaluations EREF projects*  
*Reports from trade organizations & balance sheets of companies*  
*Specific surveys and studies*  
*List of Participants*  
*Workshop evaluations* | *Identification of key stakeholders for workshops*  
*Active participation of participants* |
<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The establishment of north-south and south-south business-to-business partnerships of RE&amp;EE companies co-funded (e.g. Europe, Brazil);</td>
<td>• No. of north-south partnerships supported and maintained&lt;br&gt;• No. of south-south partnerships supported and maintained&lt;br&gt;• Volume of investment in leveraged through grant support of EREF&lt;br&gt;• Sales of supported companies&lt;br&gt;• Local value-added created&lt;br&gt;• Technology and know-how transfer intensity</td>
<td>• Monitoring reports and evaluations&lt;br&gt;EREF projects&lt;br&gt;• Reports from trade organizations &amp; companies&lt;br&gt;• Specific surveys and studies</td>
<td>N.A.</td>
</tr>
<tr>
<td>• Business and technical forums and seminars on different RE&amp;EE aspects and innovative approaches are organized and facilitate regional and north-south and south-south cooperation.</td>
<td>• No. of forums, events and workshops organized&lt;br&gt;• No. of local and international experts participated&lt;br&gt;• Presentations given in forums/seminars&lt;br&gt;• Networking website established and functioning; number of visitors at the site;</td>
<td>• Monitoring reports of EREF&lt;br&gt;• Reports&lt;br&gt;• Lists of Participants&lt;br&gt;• Specific surveys and studies&lt;br&gt;• Reporting to stakeholders and feedback from stakeholders</td>
<td>N.A.</td>
</tr>
<tr>
<td>• Networking platforms to exchange RE&amp;EE information and lessons learned of projects supported by the EREF are established.</td>
<td>• No. of studies conducted in participating countries (with EREF support)&lt;br&gt;• No. of subscribers and downloads&lt;br&gt;• Data used by companies and public officers for strategy development&lt;br&gt;• No. of regional forums/thematic workshops organized&lt;br&gt;• No. of participants in regional forums/workshops (public-private-NGO)&lt;br&gt;• Website established and functioning, number of visitors at the site</td>
<td>• Monitoring reports of EREF&lt;br&gt;• Reports&lt;br&gt;• To be completed</td>
<td>N.A.</td>
</tr>
</tbody>
</table>
Contact
ECREEE Secretariat
Achada Santo Antonio
C.P. 288, Praia, Cabo Verde
Tel: +238 2604630, +238 2624608
E-mail: info@ecreee.org
Web: www.ecreee.org