

## Independent mid-term evaluation

Preparatory and first operational phase of  
the ECOWAS Regional Centre for  
Renewable Energy and Energy Efficiency  
(ECREEE)

ADA / AECID / ECOWAS/ UNIDO

UNIDO project Nos. XP/RAF/10/016, YA/RAF/10/002, YA/RAF/09/021,  
YA/RAF/12/003, YA/RAF/09/001, UE/RAF/09/028



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

This evaluation was conducted in collaboration with:



# **UNIDO EVALUATION GROUP**

## **Independent mid-term Evaluation**

### **Preparatory and first operational phase of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)**

**ADA / AECID / ECOWAS/ UNIDO**

UNIDO project Nos. XP/RAF/10/016, YA/RAF/10/002, YA/RAF/09/021,  
YA/RAF/12/003, YA/RAF/09/001, UE/RAF/09/028



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
Vienna, 2014

Distr. GENERAL

ODG/EVA/13/R.15

February 2014

Original: English

This evaluation was managed  
by the responsible UNIDO  
project manager with quality  
control by the Evaluation Group

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization, nor of the Austrian Development Agency, nor of the Spanish Agency for International Development Cooperation, concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of company names and commercial products does not imply the endorsement of UNIDO.

The views and opinions of the team do not necessarily reflect the views of the Governments of Austria, Spain or of other countries visited in the course of the evaluation, nor of UNIDO.

This document has not been formally edited.

# **Acknowledgements**

The evaluation team would like to acknowledge the many and diverse contributions made to this evaluation. We are particularly thankful to staff of ADA, and of the AECID, staff of UNIDO at Headquarters, to staff and consultants at the ECREEE Secretariat in Cape Verde, to officers and staff from government agencies in the countries visited during the mission, the NGO's, and private sector that participated in this evaluation, and to managers/owners, volunteers and staff involved with the different projects visited.



# Contents

List of acronyms and abbreviations .....	v
West African Economic and Monetary Union .....	vi
Glossary of evaluation terms .....	viii
Executive summary .....	ix
1 Introduction .....	1
1.1 Scope of the evaluation .....	1
1.2 Information sources and availability of information .....	2
1.3 Methodological remarks and validity of the findings .....	3
1.3.1 Documentary sources .....	3
1.3.2 Theory of Change Analysis of the Programme .....	4
1.3.3 Interviews with stakeholders, staff, experts and counterparts .....	4
1.3.4 Counterpart and expert survey .....	4
1.4 Project summary (Preparatory and first operational phase) .....	5
1.5 Intervention logic – An evolving process .....	8
2 Regional and project context .....	9
2.1 Introduction .....	9
2.2 Energy policies in the ECOWAS region .....	9
2.3 Positioning of the project .....	13
2.4 Counterpart organization(s) .....	16
3 Project planning .....	18
3.1 Project identification .....	18
3.2 Project formulation .....	20
3.3 Analysis of the underlying intervention theory .....	21
3.4 Funds mobilization .....	23
4 Project implementation .....	24
4.1 Financial implementation .....	24
4.2 Management .....	25
4.3 Reaching for outputs – Synthetic overview of a growth process .....	28
4.3.1 Preparatory phase .....	28
4.3.2 First operational phase .....	29
4.3.2.1 2010 Work plan .....	29
4.3.2.2 2011 Work plan .....	31
4.3.2.3 2012 Work plan .....	32
4.3.2.4 Business plan for the first operational phase: 2011 to 2016 .....	33
4.4 Making a difference – Outputs, outcomes and (attainable) impacts .....	33
4.5 Funds mobilization .....	34
5 Assessment .....	35
5.1 Relevance .....	35
5.2 Ownership .....	40
5.3 Efficiency .....	42
5.4 Effectiveness .....	44
5.5 Sustainability and impact .....	62

6	Issues with regard to a possible next phase .....	64
6.1	Assessment .....	64
6.2	Recommendations .....	64
7	Recommendations.....	65
8	Lessons learned .....	70
	Annex A – List of interviewees.....	74
	Annex B – Terms of reference for the MTE .....	78
	Annex C – Summary of regional and global energy policy initiatives .....	143
	Annex D – Questionnaire for counterparts and expert survey .....	149



# List of acronyms and abbreviations

ACP	African Caribbean and Pacific
ADA	Austrian Development Agency
ADEME	Agence de l'environnement et de la maîtrise de l'énergie
AECID	Spanish Agency for International Development Cooperation
BAT/BEP	Best available techniques and best environmental practices
BP	Business Plan
CILSS	Permanent Inter State Committee for Drought Control in the Sahel
CNE	Centre National de l' Energie Solair et des Energies Renouvelables in Mali
SOLER	
CO2	Carbon dioxide
CPH	Combined Heat and Power
EB	Executive Board
EBID	Bank for Investment and Development
ECOWAS	Economic Commission of West African States
ECOWREX	ECOWAS Regional Observatory
ECREEE	ECOWAS Centre For Renewable Energy and Energy Efficiency
EE	Energy Efficiency
EEEP	ECOWAS Energy Efficiency Policy
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency of Ghana
EREF	ECOWAS Renewable Energy Facility
EREI	ECOWAS Renewable Energy Investment Initiative
EREP	ECOWAS Renewable Energy Policy
ERERA	ECOWAS Regional Electricity Regulatory Authority
ESMAP	Energy Sector Management Assistance Programme (World Bank)
ET	Evaluation Team
EVA	UNIDO Evaluation Group
EUEIPDF	EU Energy Initiative Partnership Dialogue Facility
GBEP	Global Bioenergy Partnership
GEF	Global Environment Fund
GFSE	Global Forum for Sustainable Energy
HQA	Headquarters Agreement
IFC	International Finance Corporation
IMS	Information Management Systems
IPF	Indicative Planning Figure

IREC	WAEMU Regional Initiative for Sustainable Energy
IRENA	International Renewable Energy Agency
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
LFA	Log Frame Analysis
M&E	Monitoring and evaluation
MoU	Memorandum of Understanding
MTE	Mid-term Evaluation
NCU	National Coordinating Unit
NFI	National Focal Institutions
NGO	Non-governmental organization
NMG	National Multisectoral Group
NIP	National Implementation Plan
PFAN	Private Financing Advisory Network
PIR	Project Implementation Report
PPA	Power Purchase Agreement
PRSPs	Poverty Reduction Strategy Papers
PV	Photovoltaic technology
PVP	Plant Variety Protection
RAEA	Regional Agency for Energy Access
RCEII	Regional Clean Energy investment Initiative
RCU	Regional Coordinating Unit
RE	Renewable Energy
RECP	Resource Efficient and Cleaner Production
REN-21	Renewable Energy of the 21 Century
RO	Regional Office
RWB	Regional White Book
SAIS	School of Advanced International Studies of the Johns Hopkins University
SE4All	Sustainable Energy for All
SEE-WA	Self Employed Women's Association
SHC	Solar Heating and Cooling
SPWA	Strategic Programme for West Africa
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TC	Technical Committee
TOC	Theory of Change
TOR	Terms of Reference
UEMOA	West African Economic and Monetary Union
USAID	United States Agency for International Development

UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
WAFCEF	West Africa Forum on Clean Energy Financing
WAPP	West African Power Pool
WB	World Bank
WP	Work Plan

## Glossary of evaluation terms

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the development objectives of an intervention were or are expected to be achieved.
Efficiency	A measure of how economically inputs (through activities) are converted into outputs.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Intervention	An external action to assist a national effort to achieve specific development goals.
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances.
Logframe (logical framework approach)	Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives) also called RBM (results based management) principles.
Outcomes	The achieved or likely effects of an intervention's outputs.
Outputs	The products in terms of physical and human capacities that result from an intervention.
Relevance	The extent to which the objectives of an intervention are consistent with the requirements of the end-users, government and donor's policies.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed.
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.

# Executive summary

---

## Purpose and methodology

This mid-term evaluation (MTE) covers ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) activities for the period December 2009 to December 2012, and focuses on the inputs provided through ADA, AECID, UNIDO and the ECOWAS Commission directly to ECREEE. It was carried out from May to July 2013 and follows ADA/AECID/UNIDO jointly agreed evaluation guidelines and policies aiming to ensure accountability for the achievement of the project through assessment of the continued relevance of objectives and planned outcomes, and of the outputs produced and outcomes achieved, as compared to those planned. The objective of the MTE is to verify the prospects for development impact and sustainability, and the efficiency of implementation (quantity, quality, cost and timeliness of inputs and activities). This MTE provides guidance in the form of recommendations to various stakeholders (including the project management team) and draws lessons learned at this stage of the project.

The evaluation team leader liaised and kept informed UNIDO staff associated with the project and consulted the UNIDO Evaluation Group (EVA) on logistic and/or methodological issues. ADA, AECID, and UNIDO Field Offices in the visited ECOWAS countries (Burkina Faso, Cape Verde, Ghana, Nigeria, and Senegal) provided support for the evaluation mission.

The scope of this evaluation is limited to assessing the role that contribution from ADA, AECID, UNIDO and the ECOWAS Commission played in helping ECREEE to build up the institution and complete the first operational phase of the Centre, and to achieve its vision and objectives.

The key issues addressed by the evaluation were the relevance and alignment of the projects objectives and outcomes, the effectiveness of the outputs produced and, outcomes that have been, or are likely to be achieved, the impact and sustainability of the project, in particular as regards potential for development of the market for ECREEE services and, factors affecting the results (key project internal factors, external factors, project coordination and management, project identification and formulation).

## Methodological remarks and sources of information

The methodology applied by the evaluation team was based on a desk review of available documentation and analysis of the existing theory of change, interviews

with stakeholders, staff, experts and counterparts, field visits in five selected ECOWAS countries (Cape Verde, Nigeria, Senegal, Burkina Faso and Ghana).

The evaluators consider that documentary information, as well as information collected in the field, provided them with sufficient evidence to allow for the establishment of a baseline for the project. Sources of information were sufficient to verify and document the progress and constraints encountered during the evaluation. Data and information derived from the interviews are assessed as qualitatively satisfactory and this was verified through comparison of figures from different sources and through crosschecked interviews with relevant actors in an independent way, showing that respondent's views and contributions were in full agreement.

## **Project summary**

The project's main objective is to prepare and operate the ECREEE whose stated *raison d'être* is to "seek to promote markets for renewable energy (RE) and energy efficiency (EE) technologies and services in the ECOWAS region", ultimately "contributing towards increasing access to modern energy services and improving energy security in ECOWAS Member States thereby supporting the region's economic and social development in an environmentally benign manner".

The specific objective of ECREEE is to create favorable framework conditions for regional RE&EE markets by supporting activities directed to mitigate existing technology, financial, economic, business, legal, policy, institutional, knowledge and capacity related barriers. Four (4) result areas and outputs were expected to be in place at the end of the project's implementation cycle, including: an effective regional RE&EE promotion agency created and financial sustainability reached; tailored policy, legal and regulatory frameworks; strengthened and applied capacities, strengthened knowledge management, awareness raising, advocacy and; networks and business/ investment promotion.

While the technical potential for RE resources is considered high in most ECOWAS countries, the region is still faced with significant barriers for the development of commercially driven and sustainable RE markets, however the impediments and deficiencies to be addressed tend to be similar across the ECOWAS member countries.

The Centre has systematically sought to align its activities with those of existing stakeholders, programmes, projects and initiatives in the RE&EE sectors so as to avoid duplication. For this, it took into account the important regional context of ECOWAS country members, which are already home to a significant number of international and local stakeholders, active in one or more of the areas covered by ECREEE's Mission Statement.

ECREEE has avoided competing with national institutions and has instead positioned itself to play the much-needed regional coordinating role. As ECREEE's core mission is to promote regional projects and programmes in RE & EE, it follows that the Center must develop strategic partnerships with the relevant regional and international organizations to leverage knowledge, capacities, resources etc.

The ECREEE Project identification took into account many lessons learned during the first phase of the implementation of the ECOWAS Regional White Paper. These include the broadening of national stakeholders involved in increasing and/or accelerating the Access to Energy Services (AES) to sectors other than energy, the analysis of the existing capacities to guarantee AES in the ECOWAS region and the capacity building needs assessment for AES for various stakeholders. The design process also took into account lessons learned on Climate Change issues and ongoing programmes/projects, particularly within the GEF cluster on RE and EE in the ECOWAS region, recognizing the need to remove incremental costs linked to upfront institutional, legal or financial barriers when comparing RE/EE and fossil fuels projects. The new financial opportunities offered through the UNFCCC, the Kyoto Protocol, etc. for the Climate Change concerns are clearly reflected in the project formulation.

The design of the ECREEE incorporated a consultative process and the project document establishing the preparatory and first operational phases followed a logical framework approach. This approach facilitated the coherence and rigorous intervention logic of the project. Moreover, the long-term framework contained in the Business Plan defines measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix, in which targets are set for each of the established indicators, per result area. The Theory of Change (TOC) developed in the MTE outlines the outcomes and the respective drivers and assumptions, which must be in place for the project to meet its results and achieve eventual impacts. These assumptions include efficient funds mobilization by ECREEE for a progressively greater share of the revenues currently supported by the ECOWAS Commission, member state voluntary contributions and fee-for-service and investment interest.

ECREEE has been established as a specialized agency of the ECOWAS, acting as an independent body - within the legal, administrative and financial framework of the ECOWAS' rules and regulations (including staff, procurement and financial regulations) – and its legal status, governance structure and mission statement are defined in the HQ Agreement signed between Cape Verde and the ECOWAS Commission in 2010.

The Status Report on the Preparatory Phase shows that the implementation phase and the logical framework have evolved along with the successful funds mobilization results in 2010 and 2011. The overall expenditure rate for the project

can be considered low at mid-term, having achieved an overall expenditure level of 30.8%. A more detailed analysis shows contributions from ECOWAS, UNIDO including funding from the Austrian Development Cooperation and the Spanish International Cooperation and Development Agency respectively at, 70%, 50% and 14%.

The very dynamic and rapidly evolving process of creating and setting up ECREEE has required the adaptation and refocusing of the initially contemplated Result Areas and Outputs, to reflect the realities that the institution is facing in the delivery of the expected results. A synthetic overview of the project growth process has been necessary to verify that outputs, outcomes and (attainable) impacts have, or can be reached.

## **Preparatory phase**

The immediate objectives of the Preparatory phase (first 6 months) were set out as “the preparation of the Operational phase” with four (4) expected outcomes linked to three main outputs, and this was further adapted and extended to reflect the entry of the AECID as a partner. The new log frame prepared further to this was approved by the first meeting of the Executive Board with four outputs including (1) Host country and institution agreement finalized and office facilities established and operational, and training facilities identified; (2) Initial staff recruited; (3) Establishment of the internal structures and proceedings of ECREEE initiated, and; (4) Official opening of the Centre and initiation of the strategic steering process for the Operational Phase. It is these outputs against which progress has been measured in the MTE.

## **First operational phase**

The First Operational phase of the ECREEE aimed to: “Operationalize RE & EE markets in the ECOWAS region”. The expected outcomes for this phase were: Policy frameworks and quality assurance; Capacity building for market players and enablers; Knowledge management and communications; Promoting investments in RE & EE projects, and; Fund Mobilization. These outcomes included 12 specific outputs, in addition to fund mobilization (described as a continuous and crosscutting activity).

From 2010 to 2012, three Work Plans (WP) and one Business Plan (BP) were designed for this first Operational Phase. The 2010 WP includes 7 principal result areas, covering administrative aspects and operational activities for a total of 13 outputs. The 2011 WP of ECREEE was formally adopted on 28 January 2011 further to the review carried out by the Technical Committee, which held its first meeting on 27 January. The 2012 WP of ECREEE was formally adopted on 21



October 2011. The number of result areas in this last WP were reviewed and reduced from 14 to 7, showing an evolution and adaptation to the realities and responses expected of ECREEE, a maturation of sorts, reflected in the reorganization of the Result Areas and grouping of outputs. And finally in April 2012, a BP (2011 to 2016) for the First Operational Phase was adopted, including five result areas.

This BP defines measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix. However, for the purposes of this mid-term evaluation, and as stated in the above-mentioned BP, the ET measures progress against the activities as they are defined in the annual approved WP's, focusing in particular on the 2012 one, which provide a short-term planning framework incorporating projects and activities to be executed by the Secretariat in a given year. However, the ET found that this adaptability mechanism appears to have benefited the project, as it has helped to ensure that deliverables are adapted to the needs of the countries, and are realistic.

## Project assessment

The assessment of the project was based not on the expected outcomes/outputs as described in the original Project Document, but as “updated and extended to reflect the initial key activities and the involvement of the AECID contribution”. This allowed for a more accurate assessment to be carried out given that activities implemented, and expected outputs, have evolved, when compared to the initial project document.

The overall assessment of the ET for the evaluated criteria is summarized below:

	Relevance	Ownership	Efficiency	Effectiveness	Sustainability and Impact
ECREEE	Very high	High to Very high *	Highly satisfactory	Highly satisfactory	Highly likely

\* Overall ownership result, the exception being for some NFI's (see 6.2)

## Relevance and ownership

Overall, the evaluation team considers the relevance of this project to be very high. During the interviews the ET was able to assert that the NFIs consider the relevance of this institution to be very high. For the donor agencies, the relevance was also expressed as being very high, with ECREEE representing, for example, the “biggest project for West Africa”. For the UNIDO Energy and Climate Change Branch, the relevance was also assessed as very high. Based on the success in

West Africa, UNIDO has been requested by SADC and EAC to establish similar centers in Southern and Eastern Africa. Moreover, the establishment of ECREEE has to be considered as part of the energy component of the GEF Strategic Program for West Africa (SPWA), which is coordinated by UNIDO since 2008.

The evaluation mission assessed different levels of ownership among visited countries. There is still a low awareness of some NFIs about ECREEE, therefore a low sense of ownership. At regional level ownership is considered as very high, for example at ECOWAS. In fact, ECREEE is now considered as the ECOWAS's arm for RE & EE (i.e. all RE & EE matters are to be institutionally referred to ECREEE) and ECREEE will be funded from the core operational budget of ECOWAS.

The evidence suggests that ownership is constrained by (a) an unclear understanding as to what the NFI's responsibilities are, vis-à-vis ECREEE/country and; (b) a lack of effective coordination mechanisms between NFIs and national stakeholders, and/or formal relationship between different NFIs.

## **Efficiency and effectiveness**

The efficiency of the project has been assessed by the ET as being highly satisfactory with outputs having been delivered, either on target or ahead of time, in an effective and efficient manner. The overall effectiveness of the implementation of the Preparatory and, First Operational Phases has been determined by the ET to be Highly Satisfactory.

The ET considers that addressing the evolving nature of a nascent institution by refining its objectives as it grows is a positive decision – even if in this case it has meant that 3 iterations of a log frame have been developed - and contributes to the effective monitoring of the progress.

The ET assessed the effectiveness of actions as very satisfactory under the Result Area of an “Effective Regional RE&EE Promotion Agency created and efficiently managed”. However, it is important to note that the ET considers that it is highly likely that the current capacity of this institution will not allow it to respond to the level of demands placed on it, at least in an effective and timely manner (see comment on EREF below, for example), if the structure is not adapted, in line with additional responsibilities, and as newly identified funding sources are made available.

The ET took note that two regional policy documents (ECOWAS Renewable Energy Policy (EREP) and Energy Efficiency Policy (EEEP) and the capacity building activities are considered to have been effective and successful, and the ECOWEX web based information system launched. The ET assessed the effectiveness of actions under this Result Area as Highly Satisfactory. The

higher-end comment regarding the results of work undertaken in the area of “strengthening and applying Capacities” is indicative of the overall success of the institution. In general the perception is that the establishment of ECREEE has facilitated “many meetings with other like-minded organizations” and, most importantly has allowed for “the creation of a debate space to open up the field”.

Overall the ET, based on material collected during the interviews, can conclude that there is a high degree of satisfaction with the training activities put in place by ECREEE. Actions under the result area of “Knowledge Base, Awareness Raising and Advocacy Strengthened” are also assessed as effective and highly satisfactory.

As for the Result area of “Business and Investment Promotion”, the ET noted that the response to the initial EREF call for proposals by far surpassed the expectations – and very nearly the response capacity – of the ECREEE Secretariat and its partners. While the Fund provides links to the private sector, with ECREEE bringing in the technical expertise on one side, and access to potential financial partners on the other, the ET is of the opinion that the level of engagement will be improved by initially appointing at least one person to deal with these investment activities, on a full-time basis, at the Secretariat.

## **Sustainability and impact**

The fact that ECREEE staff will be included in an exercise to streamline the organization and will be considered as staff of ECOWAS provides strong arguments in favor of the continued sustainability of this initiative. Additionally, the fact that ECREEE is considered as the ECOWAS arm for issues related to RE&EE, with all such matters institutionally referred to it also reinforces this point. Also, upon review of the funding commitments received by the Center, it is considered likely that it will be financially stable throughout the second Operational Phase.

## **Main recommendations**

### **Recommendation 1: Supporting continued success**

Ensure that the management structure of ECREEE is adapted to the upcoming challenges. Capacity gaps should be identified and an organizational strategy to adapt the institutional structure to address these should be put in place, including plans to enhance the capacities of the staff as well as the National Focal Institutions (NFIs).

### **Recommendation 2: Strengthening the links**

There is a need to strengthen the functional link between the ECREEE, other initiatives, ECOWAS directorates, partners and UNIDO.

The need for additional human resources/enhanced organizational setting to strengthen this capacity should be assessed.

### **Recommendation 3. Going further**

ECREEE has successfully attracted donors and built a network of focal Institutions in member countries and, given its AES specificity (through renewable energy and energy efficiency), it should actively collaborate with the NMG's.

### **Lessons learned**

The relevance, support and sense of ownership for ECREEE was confirmed in all countries visited. Part of the success of the institution derives from the ECOWAS Commission offloading part of its mandate to a newly created institution, based on a strong and clearly defined institutional linkage to ECOWAS, a solid regional institution with sufficient “absorptive capacity”, a clear political mandate from its member states to promote RE & EE and, a budget to fund the ECREEE Secretariat. It is this “patronage” of ECREEE that makes the technical support from UNIDO and donors effective and relevant.

# 1 Introduction

---

The evaluation followed UNIDO evaluation guidelines and policies and was carried out as an independent mid-term evaluation (MTE). These guidelines were discussed and adopted by other partners ADA, AECID and ECOWAS as meeting their respective evaluation requirements. UNIDO staff associated with the projects was kept informed and regularly consulted throughout the evaluation process. The evaluation team leader liaised with the UNIDO Evaluation Group (EVA) on logistic and/or methodological issues.

The UNIDO evaluation guidelines and policies aim to ensure accountability for the achievement of project through assessment of the continued relevance of project objectives and planned outcomes, the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact and sustainability, the efficiency of implementation (quantity, quality, cost and timeliness of inputs and activities). This MTE provides guidance in the form of recommendations to various stakeholders (including the project management team) and draws lessons learned at this stage of the project.

The Independent Mid Term Evaluation of this UNIDO Project was included as part of its design, and the final version of the Project Document (September 2009) indicates that, in line with UNIDO's procedures, a mid-term review of the project will be conducted during the first operational phase.

This mid-term evaluation covers ECREEE activities for the period December 2009 to December 2012, with particular focus on the inputs provided through UNIDO, ADA, AECID and the ECOWAS Commission directly to ECREEE for the institutional build-up of the Centre and its first operational phase.

The evaluation was carried out from May to July 2013 by a team comprised of Mr. Cristobal Vignal (International Consultant and Team Leader) and Mr. Souleymane Diallo (International Consultant) acting as a Regional Consultant from one of the ECOWAS countries hired through an open international competitive bidding process.

UNIDO Field Offices in the visited ECOWAS countries (Burkina Faso, Cape Verde, Ghana, Nigeria, Senegal) provided support for this evaluation mission.

## 1.1 Scope of the evaluation

As per the ToR's, the scope of this evaluation is limited to assessing the role that contributions from ADA, AECID, UNIDO and ECOWAS Commission have played in helping ECREEE to achieve its vision and objectives, in line with the initial

project document, Business Plan, Work Plans and MOU between ECOWAS Commission and AECID.

The main issues addressed by the evaluation team were the following:

- Relevance and alignment of the projects objectives and outcomes;
- Effectiveness of the outputs produced and, outcomes that have been, or are likely to be, achieved;
- Impact and sustainability of the project, in particular as regards potential for development of the market for ECREEE services;
- Factors affecting the results such as key project internal factors, external factors, project coordination and management, project identification and formulation.

## **1.2 Information sources and availability of information**

Information sources used for the assessment consisted of official project related documents, presentations by experts, progress reports, products; interviews with key players (see Annex B).

The documents were provided by UNIDO headquarters and, by ECREEE Secretariat staff, and were accessible and made available in a timely manner to the Evaluation Team (ET).

These documents included measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix of ECREEE, with targets set for each of the established indicators per result area (see project log frame). As well, the annual status reports monitoring the implementation of the work plans and report on the achievements in the different result areas of the Business Plan provided valuable information.

Interviews were conducted with key stakeholders from Cape Verde, Senegal, Nigeria, Ghana, Burkina Faso, as well as with staff of the Austrian development agency (ADA), the Spanish Agency for International Development Cooperation (AECID – Agencia Española de Cooperación Internacional para el Desarrollo, in Spanish) UNIDO (headquarters), and the ECREEE Secretariat. Interviews were also conducted with members of NGOs and academia, as well as the private sector. Furthermore an online survey of ECREE counterpart institutions was conducted and information gathered was analyzed and is presented in this report.

### **1.3 Methodological remarks and validity of the findings**

The methodology for the assessment applied by the evaluation team was based on:

- A review of project documents, progress reports etc.
- Interviews with the project manager and staff at UNIDO headquarters, personnel associated with project management, staff of the Secretariat, project beneficiaries and key players from NGOs, staff of academic centers.
- Field visits to confirm progress of the project, outputs and eventual outcomes.

The evaluators consider that documentary information, as well as information collected in the field, provided them with sufficient evidence to allow for the establishment of a baseline for the project. Sources of information were sufficient to verify and document the progress and constraints encountered during the assessment. Data and information derived from the interviews are assessed as qualitatively satisfactory and this was verified through comparison of figures from different sources and through crosschecked interviews with relevant actors in an independent way, showing that respondent's views and contributions were in full agreement.

In addition, information obtained allowed the ET to verify that progress to date corresponds to the activities, outputs and eventual outcomes as set out in the logical framework of the project. This also allowed the ET to verify that progress is measured by the indicators, as defined in the logical framework.

#### **1.3.1 Documentary sources**

A desk review of numerous documents was carried out as a first step of the assignment and the documentary sources included the following:

- ECOWAS-UNIDO-ADA initial project document;
- ECREEE Business Plans;
- Annual work plans and progress reports;
- Minutes of meetings of the Steering Committee and the Executive Board and Financial Documents;
- Generated technical project and workshop reports, technical documents from subcontractors (EREFs and corresponding terms of reference);
- ECREEE Project documents (e.g. ECOWAS Renewable Energy Facility, ECOWAS Small Scale Hydropower Programme);
- Strategies and policies on renewable energy and energy efficiency in general and in ECOWAS region in particular;

- Strategies and programmes of other development cooperation agencies active in this field and in the region and other regions.

### **1.3.2 Theory of Change Analysis of the Programme**

The existing theory of change (TOC) as per the original project document has been analyzed and compared with implementation results to determine if the project was implemented in line with the original design and logical framework.

The actual TOC is assessed for logical coherence and validity i.e. to determine if the assumptions were correct, if any were missing and, if the link between outputs- outcomes and impact was logically coherent.

### **1.3.3 Interviews with stakeholders, staff, experts and counterparts**

The list of interviewees that was prepared in advance provided the opportunity to satisfactorily verify that the views and experiences of all relevant stakeholder categories work appropriately included (men/women, project/program staff and project/program participants, beneficiaries and non-beneficiaries, implementing agencies, and funders).

Semi-structured interviews took place with the following:

- ECOWAS Commission, ECREEE staff and key staff of other stakeholders, UNIDO project manager, UNIDO Technical Assistant to ECREEE & Director of Energy and Climate Change Branch;
- Beneficiaries and local counterparts in five selected ECOWAS<sup>1</sup> countries (the selection of countries to be visited was made by ECREEE's Technical Committee and Executive Board (meetings of 1-2 November 2012) and included Cape Verde, Nigeria, Senegal, Burkina Faso and Ghana;
- Selected representatives of organizations active in the field of renewable energy and energy efficiency in the ECOWAS region.

### **1.3.4 Counterpart and expert survey**

A web survey was carried out to triangulate findings from the desk review, review of TOC and interviews and to capture the opinion of the national stakeholders in the ECOWAS countries that the ET was not able to visit regarding the project and

---

<sup>1</sup> 15 West African countries constitute ECOWAS; these are: Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo.



its anticipated impact. The questionnaire used to carry out this counterpart and expert survey is presented as Annex D.

#### Project summary (Preparatory and first operational phase)

Project number and title:	(see table below)
Thematic area code:	E&E
Starting date:	September 2009
Duration:	3, 5 years (42 months)
Project site:	Praia, Cape Verde
Counterpart:	ECOWAS Commission
Executing agency: (UNIDO)	United Nations Industrial Development Organization
Project Inputs:	UNIDO €2,192,850 (Incl. €1,800,000 from ADA <sup>2</sup> ) ECOWAS €1,802,000
Total:	€4,154,350 (including 10% support costs)

The projects main objective is to prepare and operate the ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREE), as per the Project Document, now customarily referred to as ECREEE). The stated objective of the Centre will be to “seek to promote markets for renewable energy and energy efficiency technologies and services in ECOWAS<sup>3</sup>”.

Ultimately, the project aims to “contribute towards increasing access to modern energy services and improve energy security in ECOWAS Member States thereby supporting the region’s economic and social development in an environmentally benign manner”.

The project is to be implemented in a period of 42 months - a first six-month preparatory phase, followed by a first operational phase of 36 months - with initial focus being placed on “funds mobilization; policy and quality assurance; capacity building, knowledge management and communications and promoting investments in renewable energy and energy efficiency projects and programmes”.

---

<sup>2</sup> ADA is the Austrian Development Agency whose contribution is managed by UNIDO, whilst the ECOWAS Commission contribution is managed by ECREEE

<sup>3</sup> Project Document – Final 28 October 2009

	<b>Intervention logic</b> <sup>4</sup>
<b>Overall objective/ Development goal/Impact</b>	<i>To contribute to the sustainable economic, social and environmental development of West Africa by improving access to modern, reliable and affordable energy services, energy security and reduction of energy related GHG emissions and climate change impacts on the energy system.</i>
<b>Specific Objective/ Outcome(s)</b>	<i>The specific objective of ECREEE is to create favourable framework conditions for regional RE&amp;EE markets by supporting activities directed to mitigate existing technology, financial, economic, business, legal, policy, institutional, knowledge and capacity related barriers.</i>
<b>Result areas and outputs</b>	<ul style="list-style-type: none"> <li>• RESULT AREA 1: Effective regional RE&amp;EE promotion agency created and financial sustainability reached</li> <li>• RESULT AREA 2: Tailored policy, legal and regulatory frameworks created and implemented</li> <li>• RESULT AREA 3: Capacities strengthened and applied</li> <li>• RESULT AREA 4: Knowledge management, awareness raising, advocacy and networks strengthened</li> <li>• RESULT AREA 5: Business and investment promotion</li> </ul> <p><b><u>Activities:</u></b> <i>The activities to be implemented by the Centre across the different result areas are defined in the annual work plans, which are subjected to approval by the Executive Board. The Centre undertakes mainly software interventions, which will lead to investment into hardware.</i></p>

In November of 2009 the project included ECOWAS, the ADA and UNIDO as partners. In December 2009, the Spanish Agency for International Development Cooperation (AECID – Agencia Española de Cooperación Internacional para el Desarrollo, in Spanish) joined as a partner and contributed €7,000,000 and an additional €410,000 subsidy for a resident Coordinator. As explained more in detail in the following section, the entry of AECID into the project coming on board, brought not only funding but also a of the expansion of existing priorities and a new set of priorities which had to be reflected in the intervention logic of the project.

Given the successful completion of the preparatory phase of the Centre, AECID provided a seconded expert from mid 2010 directly to ECREEE (channeling

---

<sup>4</sup> Terms of Reference for the Mid-Term Evaluation

funds through ECOWAS). AECID's contribution covers a 5-year period (up to December 2014) and brought the total available core funding to ECREEE of o €11, 6 million, as can be seen from the table below:

**Core funding: December 2009 – December 2012**

Project No.	Title	Donor	Total allotment (in EUR)	Disbursements (in EUR)
XP/RAF/10/016 YA/RAF/10/002 YA/RAF/09/021 (Operationally completed)	Preparatory and first operational phase of secretariat of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)	UNIDO - Regular Program of TC, Regular Budget	20,000/ 230,000/ 3,250	20,462/ 221,699/ 3,250
YA/RAF/12/003	Preparatory and first operational phase of secretariat of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)	UNIDO - Regular Budget	175,000	82,437
UE/RAF/09/028/ Contract 2599-00/2009 Proj.No:103130	Preparatory and first operational phase of secretariat of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)	Austrian Development Agency (ADA) committed 1.8 million €	1,800,000	1,800,000
YA/RAF/09/001	Establishment of the secretariat of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) - preparatory assistance	UNIDO - Regular Budget	20,224	20,224
International Cooperation Subsidy No. 2448/09	Support for the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)	Spanish Agency for International Development and Cooperation (AECID)	7,000,000	990,000
ECOWAS Commission	Preparatory and first operational phase of secretariat of the ECOWAS the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)	ECOWAS Commission	1,802,000	1,200,000
Total			11,050,474	4,338,072

In addition, ECREEE and its core partners mobilized approximately €6 million co-funding from different sources for specific projects and activities (workshops and trainings). See table below:

### Other Funding Sources

Partner and nature of agreement	Nature of Agreement	Funding (in EUR)	Starting date / running period
European Commission (different instruments)	ACP-EU Energy Facility, RECP, BIZCLIM grants	approx. 2.0 million	2011 to 2014
USAID	Consultancy services	approx. 0.8 million	2011 to 2012
GEF-UNIDO projects	Implementing Agency	approx. 2.0 million (excl. co-funding)	2012 to 2015
IRENA	Agreement on Capacity Building; conference support;	approx. 0.6 million	2012 to 2014
Others (e.g. ADEME, ESMAP, UNDP, GBEP, other UNIDO projects, GFSE, IPF)	Various modalities	approx. 0.5 million	2010 to 2012
<b>Total</b>		<b>approx. 5.9 million</b>	<b>2010 to 2015</b>

At present it is reported that ECREEE is cooperating with a range of donor and technical partners on a project-by-project, or activity-by-activity basis.

#### 1.4 Intervention logic – An evolving process

The coming on board of AECID to the list of donors was reflected in the ECREEE Work Plan for the first Operational Phase of 2010, 2011 and led to the development of a long-term planning framework for the period 2011 to 2016. This new and overarching strategic Business Plan substitutes the initial planning framework of the Project Document, which covered only the contributions of ECOWAS, UNIDO and the ADA. In addition, the new common framework enabled the easy integration of new developing partners coming on board.

The annual Work Plans, which are also subject to approval by the Board, provide a short-term planning framework, which incorporates projects and activities to be executed by the Secretariat in a given year. The defined activities contribute to the achievement of the performance indicators and goals of each result area<sup>5</sup>. These are dynamic documents and the first one prepared by the Secretariat includes a particularly important indication regarding the nature of these documents as it states that it was drafted to “reflect a realistic approach based on the operational capacity of the Secretariat” and that “it should be considered as flexible, constituting neither totally fixed targets nor a limit, but a guide”.

---

<sup>5</sup> Terms of Reference for the MTE

## 2 Regional and project context

---

### 2.1 Introduction

ECREEE was established in the context of the interrelated challenges of energy access, energy security and climate change mitigation and adaptation, which are intertwined with ECOWAS's economic and social priorities such as:

- Energy poverty and its consequences for local economies and social development, which are projected to remain the predominant challenge for West Africa through to 2030;
- Energy security as it affects economic growth and industrial development, namely the reality of energy vulnerability, fuel price volatility and system unreliability;
- The likely effects of mitigation and adaptation costs of climate change;
- Energy as a carrier for developing other sectors, i.e. the recognition of the importance of integrating energy into development policies to promote sustainable and rural development, for example;
- Energy and gender issues, given that in order to lift the income levels of poor families and communities, energy policies and projects must be targeted to reach those who are most in need.

### 2.2 Energy policies in the ECOWAS region

As a specialized agency of the ECOWAS Commission with a public mandate to promote regional renewable energy (RE) and energy efficiency (EE) markets, ECREEE can facilitate the creation of an enabling environment, by mitigating various barriers for the dissemination of green energy technologies and services.

As for the RE/EEI specific framework, the ECOWAS member states have adopted ambitious regional policies, committing themselves to harmonize national energy legislation, to increase the autonomy of energy supply and to significantly raise the level of access to modern energy services. In order to achieve these goals, various policy initiatives and programs have been developed in the ECOWAS region.

*The Common Energy Policy* covers the introduction of an integrated energy planning system, the promotion of RE and the speeding up of the connection of interlinked systems for electricity grids in cooperation with ECOWAS.

*The ECOWAS Energy Protocol*<sup>6</sup> is a legal text formalizing the juridical framework of enterprises in the energy sector. It was designed as a guarantee for foreign direct investments in the energy sector. The adoption and ratification of this convention is an eligibility criterion for access to the World Bank Facility for the West African Power Pool (WAPP).

*The White Paper* (recalled in the Regional Context) aims to provide energy access to at least half of the population living in rural and peri-urban areas by 2015. It has formulated three major specific objectives: (i) the reinforcement of regional integration, (ii) the promotion of coherent, institutional and political frameworks for improved access to energy services in the ECOWAS region and (iii) the development of coherent energy programs with focus on poverty reduction. Within its specific objectives, the White Paper focuses on capacity building of private and public actors, the enhanced availability of soft loans, grants and private sector funds for energy services in rural or peri-urban areas, the improved exchange, promotion and dissemination of sub-regional experiences in view of energy services and the promotion of local energy production and energy services.

*The West African Power Pool (WAPP)* aims at the integration of national electricity grids in a number of West African countries (i. e. Nigeria, Benin, Togo, Ghana, Côte d'Ivoire, Niger, Burkina Faso and Mali) by building up more than 5,600 km of interconnection lines. The medium- to long term goal is to guarantee the citizens of ECOWAS member states a stable and reliable electricity supply at affordable costs. In order to reach this goal, the framework conditions of national energy markets within the ECOWAS region need to be harmonized.

*The West African Gas Pipeline* aims to strengthen the energy supply through a gas pipeline system. Based on natural gas imports from Nigeria, it is planned that Combined Heat and Power (CHP) plants in Benin, Ghana and Togo (total capacity of 3,000 MW) will be supplied via a 678 km gas pipeline network.

At national level, despite the fact that many countries have already adopted a National RE Strategy and have RE dedicated institutions (see Annex C), all national RE markets are mainly dominated by informal practices because of the absence of standards and policy enforcement texts and empowered bodies. Impediments and deficiencies to be addressed tend to be similar across the ECOWAS member countries and they include:

---

<sup>6</sup> ECOWAS ENERGY PROTOCOL A/P4/1/03

- ✓ Higher upfront costs of RE as compared to fossil fuels, lack of financing facilities,
- ✓ Lack of local experts and skilled staff (financial, technical and administrative area) and limited production capacity for technical installations & equipment (market players)
- ✓ Lack of capacity by market enablers i.e., policy makers regulators
- ✓ Weak institutional structures (energy services in rural areas and peri-urban areas)
- ✓ Bureaucratic and legal barriers (lack of tax incentives and feed-in-tariffs)
- ✓ Little interest to diversify the existing energy mix and the energy supply structure
- ✓ Lack of strategic planning and coordination in the energy sector and energy markets
- ✓ Fragmented and small markets

Therefore, while the technical potential for RE resources is considered high in most ECOWAS countries, the region is still faced with the above significant barriers for the development of commercially driven and sustainable RE markets.

The specific framework conditions on EE for the project are summarized in the country and synthesis stock taking reports of the SEEWA-WA project.<sup>7</sup> According to these reports,

1. *On legal and regulatory framework in EE:* Eight (8) countries have institutions in EE (Benin, Burkina, Cape-Verde, Cote d'Ivoire, Ghana, Mali, Niger, Senegal) but only two (2) have EE Legislative Instruments
2. *On EE standards and labels:* seven countries have functional certification center (Burkina Faso, Cape-Verde, Cote d'Ivoire, Ghana, Gambia, Mali, Senegal) but only two countries have standards and labels (4 in Ghana and 1 in Senegal)
3. *On EE financial incentives and structures,* four (4) countries have measure to suppress taxes on EE appliance (Cape -Verde, Gambia, Ghana, Senegal), four (4) countries have measure to suppress taxes on energy saving appliances: Cape Verde, Gambia, Ghana, Senegal; two (2) countries have EE import measures (Ghana, Senegal). However, in terms of standards and labels in the ECOWAS region, only Ghana has practical experience in the development and implementation of energy labels for lighting and refrigeration.

---

<sup>7</sup> "SEEWA-Stock taking country-reports and "The Baseline Report for the Production of ECOWAS Regional Energy Efficiency Policy Document (ECREEE/ENDA Energy Programme)"

Therefore, similarly to the RE issue, ECOWAS' vast potential for energy savings is underexploited. Impediments and deficiencies of this specific framework conditions to be addressed by the project in order to build a sound EE policy in ECOWAS countries include:

- Lack of or insufficient political will to implement a bold energy efficiency policy with institutional, legal and regulatory frameworks;
- Lack of capacity to mainstream gender in energy policies and programs;
- Lack of information on the EE potential (issue of the availability of reliable data);
- Lack of capacities and competencies to carry out energy audits;
- Lack or weakness of public-private partnerships in energy efficiency;
- Failure or lack of IEC towards all stakeholders including the private sector and decision makers;
- Lack of coordination between different actors: governments, private sectors, users.
- 

The ECREEE context also includes the recent regional and global energy policy initiatives, institutions and strategy frameworks<sup>8</sup>, some of which are mentioned below for the role they could play in the implementation of the RE/EE programmes in the ECOWAS sub-region:

- The ECOWAS White Paper on a Regional Policy for Increasing Access to Energy Services in Peri-Urban and Rural Areas by 2015
- WAEMU-IREN initiative for sustainable energies
- The UN Sustainable Energy for All (SE4ALL) Initiative
- The WAPP Revised Master Plan for an integrated regional power market
- CILSS initiatives on PV and traditional biomass
- The International Renewable Energy agency (IRENA)

ECREEE operates within the above mentioned framework conditions for RE and EE in the ECOWAS region.

---

<sup>8</sup> Please refer to Annex C for a summary of these Initiatives and Strategies



## 2.3 Positioning of the project

All ECOWAS countries have an Energy policy document, several RE/EE programmes and training institutions (see list at annex 10.3.7). But one can assess the weakness of policy frameworks and programmes for RE/EE, despite several ongoing initiatives in these areas. ECREEE is positioned to address the need for a more institutionalized regional capacity leading the process to remove all barriers recalled above towards AES (Access to Energy Services). The visibility of the process is supposed to be attractive to investment programmes funding necessary to AES (resource mobilization).

RE/EE policies, strategies and legal frameworks at the country and regional levels do exist. But apart from Ghana where the Renewable Energy law was adopted by the parliament and Niger where a law on renewable energy has been formulated, the other West African countries don't have any explicit regulation/legislation neither for RE in general or EE. A number of countries (Benin, Ghana, Mali, Niger, Nigeria, Senegal, and Togo) have formulated national RE strategies or a Renewable Energy Master Plan, but the operational stage has not yet started.

Existing RE/EE Markets and Business in West Africa are still weak and dominated by a very fast growing informal sector, mainly on solar energy and EE in the household energy sub-sector. The manufacturing capacity is low and quite new. There is no structured RE/EE market in the region.

In addition, lack of coordinated approaches, in terms of policies and regulation across countries has in some cases led to policy initiatives in one country destroying nascent markets in the next country. This is particularly true in smaller countries that have economies that are closely inter-twined like the UEMOA. As an example, given the interlinked nature of markets across borders, a program to subsidize a product like CFLs in one country can result in a budding market in the next country being destroyed, as the price distortion could result in cheap imports.

Many national initiatives were undertaken by research centers (Centre National de l'énergie Solaire in Niger; CNESOLER Centre National de l'Energie Solaire et des Energies Renouvelables in Mali. LESEE in Burkina Faso), but one, the former Regional Center for Solar Energy (CRES - Centre regional de l'énergie solaire, based in Bamako, Mali) was developed in the past at the regional level (CILSS/CEAO). The mission of the CRES was to coordinate research on solar energy in West Africa. Although the CRES was dissolved in 1994, there are ongoing discussions on a possible process to reactivate it.

It is worth mentioning the Regional Solar Energy Program (PRS Programme regional solaire), which aimed to multiply solar pumping within the region. PRS is a region-wide project implemented by the Inter-State Committee to combat drought in the Sahel (CILSS).

The lack of appropriate policies and business environment also constrained and restricted the dissemination of RE in ECOWAS countries. The success of comprehensive policy frameworks for the promotion of RE elsewhere – such as RE feed-in tariffs or incentive instruments like tax reliefs – can be observed in more and more countries, for example in European countries (Germany, France, etc.) and has only recently been approved in Ghana. Such experiences revealed the significance of adequate policy frameworks for favorable market conditions. Investments in RE markets, in particular by the private sector, very much depend on the existence of these national or regional framework conditions, incentives and financing options on the one hand, but also on sufficient transparency and knowledge about these conditions, which are thus part of the bottleneck for the deployment of RE.

Up to date and accurate information and data availability are important prerequisites for the development of RE/EE energy markets and a broader dissemination of commercial activities – particularly in markets where information is scarce and where framework conditions are under transition.

All this state of RE/EE development in the ECOWAS region, ECREEE is positioning itself as a necessary regional entity, which could play a key role in promoting RE/EE in the national and regional energy mix.

ECREEE has undertaken SWOT analyses that revealed the strengths and weaknesses of the regional institution and defined the comparative advantage and value added of the Centre for the development of the RE&EE markets in West Africa. ECREEE already positions itself more as a regional RE&EE promotion agency rather than an implementer on micro- and grass-root level initiatives.

West Africa is already home to a significant number of international and local stakeholders that are active in one or more of the areas encompassed in ECREEE's Mission Statement. Therefore, it is desirable for ECREEE to seek to align its activities with those of existing stakeholders, programmes, projects and initiatives in the RE&EE sectors so as to avoid wasteful duplication of effort. But also equally important for ECREEE to avoid competing with national institution and play the much needed regional coordinating role.

For the purposes of analysis, these institutions may be grouped under the rubrics of non-governmental organizations (NGOs), academic institutions, government and multilateral agencies and businesses. Many of these institutions have long histories; in the case of some academic institutions, their origins date back more than 150 years.

In addition, most of these organizations are active in a limited number of areas relevant to ECREEE, and in some instances, their primary focus is collateral to that of ECREEE's mandate to work on RE and EE. In general, in a majority of the

ECOWAS countries, an organizational framework that takes into account access to energy services using RE and EE exists in the energy sector (Ministry of energy, agencies, companies...)

There is a large spectrum of Donors and Private Sector entities trying to conclude PPA type conventions with reference to RE , In the Electricity sector in particular; there are numerous attempts (in almost all ECOWAS country members), to sign MOUs with utilities or Ministries of Energy in order to invest in Clean Energies and share the avoided GHGs. These include the multilateral institutions, such as the World-Bank, African Development Bank and the IFC, which have a physical presence in the region, as well as a large number of NGOs, businesses and other organizations that do not, but they have links and networks with local organizations, or they manage programs with local partners and are otherwise actors in the RE and EE sectors.

Prior to the establishment of ECREEE, these initiatives were dealing with a weak enabling environment on RE and EE in the ECOWAS member countries. ECREEE is now acting more as a promotion agency and performs up to the level of program/project development, fund raising, oversight, quality assurance as well as coordination, monitoring and evaluation of project/program implementation. Part of the challenge appears to be that market enablers like policy makers and regulators are not aware of how to deal or negotiate RE projects, which points to the fact that capacity building needs exist on both sides. This has been confirmed in at least one case (The Gambia) where further to a training session, the government invited ECREEE staff to help to train officials on how to determine feed-in tariffs..

Indeed, ECREEE is in a position fostering the idea that cooperation with ECREEE can and will lead to broader engagement with donors, based on provision of quality services and successful project implementation. As such, ECREEE should act as a platform for expanding options for other organizations, and it can facilitate this role by serving as a clearinghouse of information on regional organizations (this objective should be supported by having the Observatory collect information on such organizations). In addition, while ECREEE should avoid becoming a competitor to private sector companies (by performing work such as feasibility studies), it can engage in certain activities for limited periods to have a 'demonstration' effect in the marketplace.

ECREEE is now also positioned to be the main institution involved in the implementation of the ECOWAS Regional White Book (RWB).

At a more specific level, ECREEE's mission contributes to several goals of the ECOWAS Regional Strategic Plan 2011–2015:

- Promote Infrastructural Development and a Competitive Business Environment

- Improve Business Environment for a Competitive Private Sector,
- Strengthen the support for and the development of economic and technological infrastructure such as transportation, water, power, energy, telecommunication and ICT'
- 'Promote provision of efficient, reliable and competitive energy sources to Member States through the common exploitation of traditional and alternative energy sources' and
- 'Promote rural access to affordable energy in the region'.

The ET assessed as satisfactory the analysis done in the ECREEE's business plan 2011-2016 recapitulating it's positioning: "in light of the foregoing review of organizations active in various aspects of the RE and EE sector in West Africa, ECREEE enjoys several, clearly discernible comparative advantages and could come to develop several more. Among others:

- ECREEE's two-tiered architecture makes it a truly regional organization; its structure includes ECREEE's presence at the national level through the NFIs appointed directly by the Ministers of Energy. The NFI assures a dense network relationship at the country level
- The already implemented activities tend to prove that ECREEE is an organization that can (1) serve as a catalyst for regional dialogue on a range of issues critical to the development of a RE and EE sector in West Africa; (2) provide a forum for personal and institutional exchanges on policymaking, best practice in policy implementation, technology deployment, project implementation and business opportunities; (3) demonstrate how to implement programmes and projects while at the same time fostering the development of this capacity throughout the region; and (4) serve as a West African institution with skills and capacities in the RE and EE space that enable it to support national, regional and international institutions.
- ECREEE has already begun addressing the needs identified here. The success of workshops and conferences already held confirms that there is keen interest within West Africa in conducting and sustaining a dialogue on policy issues and accelerating the pace of exchanges.

## **2.4 Counterpart organization(s)**

The final beneficiaries of ECREEE activities are the people benefiting from the energy services provided through RE&EE. During implementation of activities and projects, the ECREEE Secretariat cooperates with a wide range of local and international RE&EE partners and stakeholders (direct beneficiaries).

ECREEE is enabled to enter into contracts for specific projects or assignments with different private/public entities or individuals, as well as co-funding

agreements with local and international donor partners to finance its activities and/or specific projects in the region (UNDP, UNEP, ESMAP, etc). Through these activities, ECREEE aims to stimulate the RE&EE market in the region.

ECREEE has increased the number of its technical partners in West Africa as well as in other parts of the world. The partnerships strengthen the Centre's implementation power, facilitate know-how and technology transfer to West Africa, and foster the exchange of experience. ECREEE envisages signing cooperation agreements (e.g. MoUs) with at a number of institutions and organizations

The strategy of ECREEE has been to pursue the establishment of partnership and cooperation frameworks to assure the maximum support of ECREEE's activities and also to obtain a leverage effect to attract funding to implement renewable energy and energy efficiency in the West African region.

ECREEE's core mission is to promote regional projects and programmes in RE & EE, with most of the implementation being done by public and private actors at national level. It follows that the ECREEE must develop strategic partnerships with the relevant regional and international organizations to leverage knowledge, capacities, resources etc. Potential actors and partners include regional banks and multilateral donor agencies, as well as nontraditional fund raising prospects; Actors in the public, private and NGO sectors in the area of energy; Mass media groups organizations and associations, as well as research and training institutions.

## 3 Project planning

---

### 3.1 Project identification

In 2006 the ECOWAS/UEMOA adopted the White Paper for a Regional Policy for “Increasing access to energy services for populations in rural and peri-urban areas in order to achieve the Millennium Development Goals” (the White Paper) and initiated a study to establish the Regional Agency for Energy Access (RAEA). The processes to develop the White Paper and RAEA involved detailed consultations with all stakeholders at local, country, regional and international levels,

Based on the White Paper’s goal for improving energy access in West Africa, the ECOWAS planned to establish a West African ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREEE), and the design of ECREEE built on these processes, especially the outcomes of the consultations<sup>9</sup>. The specific goal of the center was to provide a platform for leading and coordinating the implementation of the ECOWAS Regional White Paper on Energy Access, focusing on RE and also on Energy Efficiency (EE). This was to be facilitated through the center’s four major activities: funds mobilization, policy and capacity development, knowledge management and communications and the demonstration of RE/EE technologies.

This institutional arrangement was intended to ensure coordination between the Member States, the ECOWAS Secretariat and the WAEMU Commission and confirmed the need for a more institutionalized regional capacity to lead the process. The visibility of the process is attractive to investment programmes funding necessary to AES (resource mobilization).

The Ouagadougou Declaration, adopted at the ECOWAS Conference for Peace and Security on 12 November 2007 in Burkina Faso, articulated the need to establish a regional centre to promote RE&EE. During the conference, the Austrian Minister for European and International Affairs and UNIDO pledged support for the creation of such an agency. In 2008 the 61st Session of ECOWAS Council of Ministers adopted the regulation C/REG.23/11/08 and gave the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) a legal basis<sup>10</sup>.

---

<sup>9</sup> Project document

<sup>10</sup> ECREEE Business Plan – First Operational Phase 2011 - 2016

ECREEE's mandate is aligned with the broader strategic goals of ECOWAS Vision 2020. It seeks to realize directly two of the components of this vision, namely: (1) 'A region that anchors its development on sustainable development, including agricultural and mineral resource development strategy, and on planned agricultural and industrial strategies; a region that develops its infrastructure and makes services accessible to its citizens and enterprises.' (2) 'A region that conserves its environment and resources, promotes modes of equitable and sustainable development in economic, social and environmental fields; a region which brings its contribution to bear on resolution of the common problems and challenges confronting the planet.'

The ECREEE Project identification took into account many lessons learned during the first phase of the implementation of the ECOWAS Regional White Paper. These include:

- The broadening of national stakeholders involved in increasing and/or accelerating the Access to Energy Services (AES) to sectors other than energy. This was done by putting in place in ECOWAS member countries National Multisectoral Group (NMGs) and thematic sub-groups. This multi-sectoral approach helped to free energy from the stranglehold of "energy specialists" by involving more end-use sectors. This involvement should begin at the design and planning stages and continue through to the implementation and monitoring of programmes in end-use sectors, hence the relevance of NMGs. In fact, these Groups constitute a framework for exchange and consultation which brings together representatives from Ministries of Energy and all other sectoral Ministries (health, education, agriculture, water supply, industrial development, NGOs, local authorities etc.) It also emphasized the need to support ECOWAS Member States in the process of consolidation of a viable institutional and organizational environment;
- The analysis of the existing capacities to guarantee AES in the ECOWAS region and the capacity building needs assessment for AES for various stakeholders, including decision makers or high officials (Ministers/ Directors; etc.), those working in the energy sector, for integration of AES into processes such as planning and elaboration of programmes and projects. This helped the project to identify institutional and human capacities for future collaboration at an early stage.

ECREEE Project identification also took into account lessons learned on Climate Change issues and ongoing programmes/projects, particularly within the GEF cluster on RE and EE within the ECOWAS region. This include mainly:

- The recognized need to remove upfront institutional, legal or financial barriers seen as incremental costs when comparing RE/EE and fossil fuels projects.
- The new financial opportunities offered through the UNFCCC, the Kyoto Protocol, etc.

### **3.2 Project formulation**

Two documents permit to describe the project formulation: the ECOWAS Regional White Paper and the study to establish the Regional Agency for Energy Access (RAEA), the precursor of ECREEE. This references the fact that “this project is an elaborate regional approach arrived at taking into consideration the needs of individual ECOWAS Member States as expressed in national and regional policies such as the White Paper, national development plans such as Poverty Reduction Strategy Papers (PRSPs), the process of designing the RAEA, detailed consultations with selected stakeholders in each country, and the outcomes of the validation meeting organized by UNIDO”.

As indicated in the project document, the main target beneficiaries of the activities/programmes/projects of the Centre consist primarily of renewable energy and energy efficiency market players and enablers in the ECOWAS region:

- Policy makers in energy and related sectors.
- Private sector like small and medium enterprises (SMEs), entrepreneurs, equipment manufacturers, project developers financing institutions.
- National institutions charged with promoting renewable energy and energy efficiency.
- Regulators, utilities and grid operators.
- The greater population in the ECOWAS region.

The study to design the ECREEE was done through a consultation process. However, the actual project document establishing the preparatory phase and the first operational phase built on the previous study and used a logical framework approach to design the project document.

As an important financial opportunity, the GEF concerns are also clearly reflected in the project formulation.

The logical framework approach facilitates coherence and rigorous intervention logic for the project, particularly if this approach involves all stakeholders. The process to involve stakeholders and validate the proposal included the following:



- Consultative workshop held with experts during the International Conference of Renewable Energy in Africa in Dakar, Senegal.
- Validation workshop held in Vienna 6 months later.
- Presentation of the proposal to meeting of Energy Ministers in Guinea Bissau.

### **3.3 Analysis of the underlying intervention theory**

The long-term framework contained in the Business Plan defines measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix, in which targets are set for each of the established indicators per result area.

The Theory of Change (TOC) outlines the following outcomes, and the respective drivers and assumptions, which must be in place for the project to meet its results and achieve eventual impacts. - Government policy and resource commitments to facilitate penetration of RE and EE and encourage and sustain the emerging markets; - introduction and enforcement of policies and standards at the regional level; -capacity building at all levels, including but not limited to: policy makers, private sector, and staff of support institution centers and agencies; - Increased awareness in the region through training, information and knowledge dissemination, information management systems, and networking. The threats include weak capacity/responsiveness, regulatory enforcement barriers, inadequate private sector involvement and co-financing. Although at this stage of the life of the project it is too early to speak of impacts, these will however be measurable in future through indicators of penetration of renewable energy and energy efficient technologies in the region.



Objective	Expected Outcomes?	What key drivers and assumptions that are responsible for delivery (or non-delivery) of results	What are the risks or threats that will prevent results / impacts	What has happened since the intervention(s) ended, or still needs to happen, to achieve impacts?	What was the strategy ultimately aiming to achieve? – IMPACTS
To promote markets for renewable energy and energy efficiency technologies and services in ECOWAS, contributing towards increasing access to modern energy services and improved energy security in ECOWAS Member States thereby supporting the region's economic and social development in an environmentally benign manner	Policy, legal and regulatory frameworks in place to sustain the markets for RE/EE technologies and services Regional equipment standards and labeling scheme developed Policy makers from RE/EE as well as from non-energy sectors and, private sector representatives have been trained and are operational Staff of RE/EE support institutions centers and agencies have the capacity to implement and enforce regionally agreed equipment standards and equipment labeling scheme Staff from utilities/oil companies trained to integrate RE based power systems/biofuels into existing energy supply infrastructure. ECREEE offers RE&EE training programmes and charges fees. Increased awareness on RE/EE exists in the region Information and knowledge are regularly disseminated Information management system established Networking is taking place regularly	ID: ECOWAS is committed and continues to support and facilitate development approval of policy documents  ID: Countries are committed to enforce policies and regulations  ID: institutions and agencies have the capacity to implement and enforce standards and equipment labeling schemes  ID: there is a high level of awareness on benefits by stakeholders and a high uptake of RE/EE concepts in member countries  A: ECREEE will be considered as an indispensable partner  A: there will be a well-established need for additional training  A: existing capacities can be sustainably augmented/adapted to support and facilitate implementation	Lack of political commitment by the host country  Geographical location of the host country  Lack of government commitment to enforce policies and regulations  Poor responsiveness / capacity of national focal institutions  Lack of continued donor/government/private sector financing hinders achievement of financial sustainability / Independence of the institution	ECREEE Secretariat needs to be strengthened to deliver on its mandate  The recently approved policies need to be put in place and enforced  Standards and equipment labeling schemes need to be developed, approved, implemented and enforced	There is an accelerated and market based dissemination of renewable energy and energy efficient technologies and services in the ECOWAS region

### **3.4 Funds mobilization**

At present, ECREEE's revenue base is comprised of grants awarded by bilateral and multilateral institutions, as well as the ECOWAS Commission, to support ECREEE's core operating costs as well as specific programme costs. The evolution of the Centre over time will be paralleled by a shift in the types of revenue that the organization receives and generates.

Over time, the composition of revenue will diversify, with a progressively greater share of revenues falling under budgetary support from ECOWAS Commission, member state voluntary contributions and fee-for-service and investment interest categories. Within the grant category, there will also be some diversification, as ECREEE secures support from new donors from both the bilateral/multilateral category as well as from private foundations and corporations.

## 4 Project implementation

The status report on the Preparatory Phase shows that the implementation phase has evolved along the successful fund mobilization in 2010 and 2011. The logical framework changed accordingly and many soft activities and projects were launched. This is stated in the status report “as follows: *“ECREEE succeeded in sustaining its financial base for its initial program and project activities through its active fund raising activities...”*”

The overall indicative budget for 2010 to 2015 amounts currently to around 11 million euro (7 million euro Spain, 1.8 million euro ECOWAS Commission, 1.8 million euro ADA, 0.6 Million euro UNIDO).

### 4.1 Financial implementation

#### ECREEE core funding from December 2009 to date

Project No.	Title	Donor	Total allotment (in EUR)	Disbursements
XP/RAF/10/016, YA/RAF/10/002, YA/RAF/09/021 (Operationally completed)	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	UNIDO - Regular Program of TC, Regular Budget	20,000/ 230,000/ 3,250	20,462/ 221,699/ 3,250
YA/RAF/12/003	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	UNIDO - Regular Budget	175,000	82,437
UE/RAF/09/028 Contract 2599-00/2009 Proj.No:103130	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	Austrian Development Agency (ADA)	1,800,000	1,800,000
YA/RAF/09/001	ESTABLISHMENT OF THE SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY - PREPARATORY ASSISTANCE	UNIDO - Regular Budget	20,224	20,224
International Cooperation Subsidy 2448/09	SUPPORT FOR THE ECOWAS REGIONAL CENTER FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	Spanish Agency for International Development and Cooperation (AECID)	7,000,000	990,000

Project No.	Title	Donor	Total allotment (in EUR)	Disbursements
ECOWAS Commission	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	ECOWAS Commission	1,802,000	1,200,000
<b>Total</b>			11,050,474	4,338,072

As can be seen from the graph and table below, the overall expenditure rate for the project can be considered low at mid-term, having only achieved an overall expenditure level of 30.8%. However a more detailed analysis reveals that UNIDO including funding from the Austrian Development Cooperation contributions are close to a 55% level and ECOWAS almost at 70%. Expenditure regarding the grant provided by the Spanish International Cooperation and Development Agency stands, at this stage, slightly above 14%.

## 4.2 Management

The ECREEE (ECOWAS Centre for Renewable Energy and Energy Efficiency) was established in December of 2008 by the 61<sup>st</sup> ordinary session of the Council of Ministers of the ECOWAS, held in Ouagadougou. The Secretariat of the Centre was established in Praia, Cape Verde and formally inaugurated by His Excellency the Prime Minister of Cape Verde and the President of the ECOWAS Commission on 6 July 2010.

The first Meeting of the Executive Board of the Centre took place on 6 July 2010 and led to the approval of the 2010 Work Plan – covering the period of July to December 2010.

The first meeting of the Technical Committee took place on 27 January 2011, and was followed by the second Board Meeting of the Centre on 28 January 2011 during which the 2011 Work Plan - covering the period of January to December 2011 - was formally adopted.

ECREEE is a specialized agency of the ECOWAS acting as an independent body - within the legal, administrative and financial framework of the ECOWAS rules and regulations – and its legal status, governance structure and mission statement are defined in the HQA signed between Cape Verde and the ECOWAS

Commission<sup>11</sup> in 2010. The Centre adheres to staff, procurement and financial regulations of ECOWAS.

The institutional structure of the Centre includes: the Secretariat based in Praia, Cape Verde; the 9 member<sup>12</sup> Executive Board (EB) the highest decision-making body of ECREEE, which provides strategic guidance; the Technical Committee (TC)<sup>13</sup> providing guidance to the EB and Secretariat; and, the National Focal Institutions (NFIs<sup>14</sup>) in the 15 ECOWAS member states.

The evaluation team observed, in the case of the crosscutting issue of gender balance, that the composition of the EB requires that no less than two members be female and that of the TC requires three members to be female.

Finally, the Secretariat – staffed by a lean multinational team of West African and international full-time professionals, with AECID and UNIDO providing seconded experts as part of their technical assistance – implementing the activities and elaborating the annual work plans, and status reports, for review and approval of the TC and EB. Most of the activities of the Centre are executed in cooperation with the NFIs or other entities of the public and private sector.

The current organizational structure of the ECREEE Secretariat is shown in the diagram below:

---

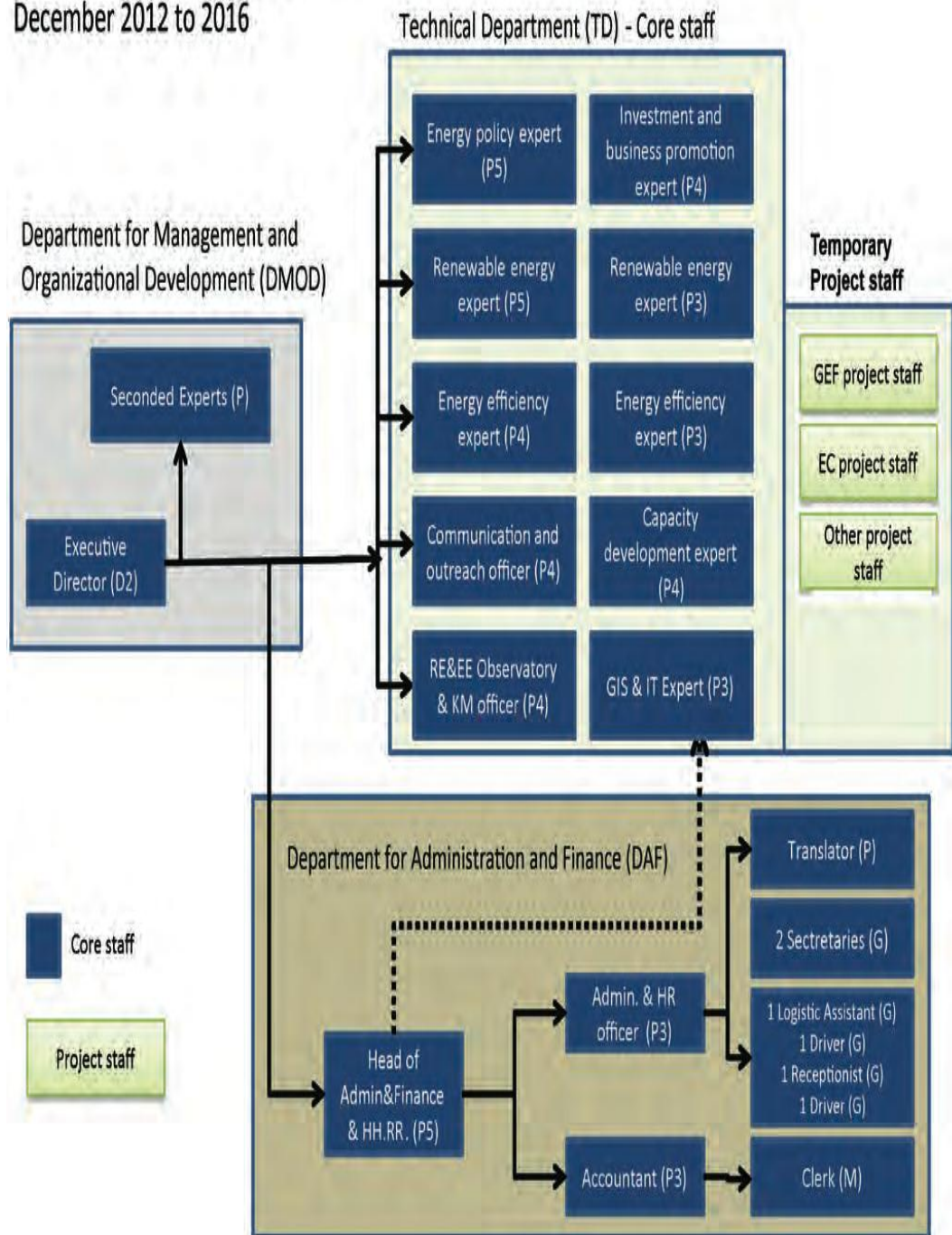
<sup>11</sup> As per enabling Rule PEC/ER/1/01/11 adopted by ECOWAS that defines the institutional structure of the Centre and delegates' day-to-day management and decision-making authorities to the bodies and the Centre's Executive Director

<sup>12</sup> 3 representatives from the ECOWAS Commission (Commissioners for Infrastructure; for Administration and Finance; and the Director for Legal Affairs); 1 representative each from ECOWAS Energy Ministers and Environment Ministers; 3 representatives from Donor or Multilateral Agencies; 1 Energy Expert from the ECOWAS Region; and the Executive Director of ECREEE.

<sup>13</sup> 3 representatives from the ECOWAS Commission (Energy, Environment, Private Sector Department); 2 representatives from the ECOWAS Member States (Energy, Environment); 1 representative from each contributing donor; 1 representative each from regional Energy Enterprises/the private sector, from Energy Training/Research Institutions/NGOs, from WAPP and ERERA, from ECOWAS Bank for Investment and Development (EBID) or the ECOWAS; staff from ECREEE.

<sup>14</sup> The network of NFIs was established to serve as a liaison between the Secretariat and the Energy Ministries of ECOWAS Member States.

ECREEE Organizational Chart  
December 2012 to 2016



## 4.3 Reaching for outputs – Synthetic overview of a growth process

### 4.3.1 Preparatory phase

The Project Document describes the role of the ECREEE as that of promoting market based adoption of renewable energy and energy efficiency technologies and services in ECOWAS member states through funds mobilization, policy and capacity development, and knowledge management and communications, and investment projects/ programmes, including business ventures and manufacturing, at national and regional levels.

The immediate objectives of the Preparatory phase (first 6 months) were set out as “*the preparation of the Operational phase*”. The initially expected outcomes of this phase were stated in the Project Document as being:

- UNIDO Technical Assistant and Executive Director are recruited and relocated.
- Business plan and first year work plan of the ECREEE are finalized and approved as necessary.
- Regional workshop to validate and launch the activities of the ECREEE is organized.
- Agreement between the ECOWAS Commission and the Government of Cape Verde as host country for ECREEE is signed and designated offices of the ECREEE are fully furnished as appropriate.

The immediate objectives and outcomes were linked to the following three major outputs:

- Output 1: UNIDO TA and Executive Director are recruited;
- Output 1.2: Establish host country and institution agreements and office installation;
- Output 1.3: Business plan and work plan for first operational phase validated and approved.

It is important to note that the above stated expected outputs were adapted and extended<sup>15</sup> to reflect the entry of the AECID as a partner. The new log frame prepared further to this was presented and approved by the first meeting of the Executive Board and includes the following 4 outputs against which progress will be measured in chapter 6, below:

---

<sup>15</sup> Adapted and extended version of the log frame in the Project Document - Status Report on the Preparatory Phase of ECREEE (Dec 2009 – Dec 2010)



- Output 1.1: Host country and institution agreement finalized and office facilities established and operational; training facilities identified;
- Output 1.2: Initial staff recruited;
- Output 1.3: Initiate the establishment of the internal structures and proceedings of ECREEE;
- Output 1.4: Official opening of the Centre and initiation of strategic steering process for the operational phase.

### **4.3.2 First operational phase**

The First Operational phase of the ECREEE aimed to: *“Operationalize renewable energy and energy efficiency markets in the ECOWAS region so as to increase access to modern energy services and improve energy security through regional projects and programmes focusing on the market environment and the needs of market enablers and players in the areas of policy, capacity, awareness and knowledge and investment”*.

The expected outcomes for this phase were:

1. Policy frameworks and quality assurance;
2. Capacity building for market players and enablers;
3. Knowledge management and communications;
4. Promoting investments in renewable energy & energy efficiency projects;
5. Fund Mobilization.

These outcomes included 12 specific outputs, in addition to fund mobilization, described as a continuous and crosscutting activity<sup>16</sup>.

#### **4.3.2.1 2010 Work plan**

During the first meeting of the EB (July 2010) there was an agreement to adapt the log frame of this newly founded institution to allow it to better respond to the demands and challenges faced. Based on the approval from the EB, the Secretariat was tasked with the preparation of this adapted log frame for the Preparatory and First Operational phases. This first Work Plan states that it was drafted to “reflect a realistic approach based on the operational capacity of the Secretariat” and that “it should be considered as flexible, constituting neither totally fixed targets nor a limit, but a guide”. The 2010 Work Plan includes 7 principal result areas, covering administrative aspects and operational activities for a total of 13 outputs as per below:

---

<sup>16</sup> UNIDO-ADA-ECOWAS Project Document final 28 October 2009

- **Result Area 1 – Management, Administration and Staffing**
  - Output 1.1: effective execution of HQ agreement; purchase of further office and training equipment; operational training facilities
  - Output 1.2: consolidate internal structures and procedures of the secretary; build up and operational network of NFI's; strengthen internal knowledgebase and capacities
  - Output 1.3: consolidation of staff capacities and procedures
  - Output 1.4: consolidate strategic management and financial planning
- **Result Area 2 – Fund Raising, Program and Project Development and Execution**
  - Output 2.1: adequate core funding to empower ECREEE to fulfill its RE&EE mandate in West Africa is raised from public and private sectors
  - Output 2.2: regional project preparation and implementation are facilitated and adequate funding is mobilized
- **Result Area 3 – Effective Partnerships and Networks**
  - Output 3.1: effective partnerships and networks with institutions in the field at regional and international level are established and sustained
- **Result Area 4 – Tailored Policy, Legal and Regulatory Frameworks and Quality Standards**
  - Output 4.1: regional policy and regulatory framework for RE&EE is proposed
- **Result Area 5 – Capacity Development**
  - Output 5.1: policymakers, technical and financial experts are trained in financial and economic appraisal of RE&EE programs and projects
  - Output 5.2: policymakers and technical experts are trained on RE&EE policy and legal aspects
- **Result Area 6 – Advocacy, Awareness Raising and Knowledge Management**
  - Output 6.1: effective mechanisms and platforms for dissemination of RE&EE information and services to key stakeholder groups and experts are established
  - Output 6.2: RE&EE data collection and dissemination of related services and knowledge products in the region
- **Result Area 7 – Promoting Investment and Demonstration Programs and Projects**
  - Output 7.1: innovative demonstration projects with potential for regional scaling up are developed and implemented

#### **4.3.2.2 2011 Work plan**

The 2011 Work Plan of ECREEE was formally adopted at the second Executive Board meeting on 28 January 2011 further to the review carried out by the Technical Committee, which held its first meeting on 27 January.

- **Result Area 1: Effective Regional RE&EE Promotion Agency Created and Efficiently Managed**
  - o Output 1.1: Strategic management and steering
  - o Output 1.2: Staffing and capacities
  - o Output 1.3: Administrative and financial procedures
  - o Output 1.4: Office infrastructure and maintenance
- **Result Area 2 – Funds for RE&EE Programs and Projects Mobilized and Implemented**
  - o Output 2.1: Core funding to empower ECREEE to fulfill its mandate is raised
  - o Output 2.2: Fund mobilization through program and project development and execution
- **Result Area 3 – Effective Partnerships and Networks in the RE&EE Sectors Created and Implemented**
  - o Output 3.1: Effective partnerships and networks with institutions on regional and international level are established and sustained
  - o Output 3.2: Effective network mechanisms are created and sustained
- **Result Area 4 – Tailored Policy, Legal and Regulatory Frameworks Created and Implemented**
  - o Output 4.1: A regional policy and regulatory framework for renewable energy and energy efficiency is developed
  - o Output 4.2: A regional policy and regulatory framework for renewable energy and energy efficiency is implemented
- **Result Area 5 – Capacities are Strengthened and Applied**
  - o Output 5.1: Capacity needs assessed and regional strategy for capacity development developed and executed
  - o Output 5.2: Policymakers, technical and financial experts are trained in different aspects of RE&EE
- **Result Area 6 – Knowledge Base, Awareness Raising and Advocacy Strengthened**
  - o Output 6.1: Baseline information on RE&EE resources, investments, policies and contacts are collected and processed
  - o Output 6.2: Information and data services are offered and knowledge products disseminated
- **Result Area 7 – Business and Investment Promotion**
  - o Output 7.1: Innovative demonstration and investment projects with potential for regional scaling up are developed and implemented

- Output 7.2: Innovative RE&EE business and business-to-business partnerships established.

#### **4.3.2.3 2012 Work plan**

The 2012 Work Plan of ECREEE was formally adopted at the fourth Executive Board meeting on 21 October 2011. This shows an evolution and adaptation to the realities and responses expected of ECREEE, a maturation of sorts, reflected in the reorganization of the Result Areas and grouping of outputs.

The number of result areas in this work plan has been reviewed and reduced. Result Area 3 on Networks and Partnerships has been merged with Result Area 6 on Knowledge Management and the number of key programs has been reduced from 14 to 7.

- **Result Area 1: Effective Regional RE&EE Promotion Agency Created and Efficiently Managed**
  - Output 1.1: Strategic management and steering
  - Output 1.3: Administrative and financial procedures
  - Output 1.4: Office infrastructure and maintenance
  - Output 1.2: Staffing and capacities
- **Result Area 2 – Funds for RE&EE Programs and Projects Mobilized and Implemented**
  - Output 2.1: Core funding to empower ECREEE to fulfill its mandate is raised
  - Output 2.2: Fund mobilization through program and project development and execution
- **Result Area 3 – Tailored Policy, Legal and Regulatory Frameworks Created and Implemented**
  - Output 3.1: A regional policy and regulatory framework for renewable energy and energy efficiency is developed
  - Output 3.2: A regional policy and regulatory framework for renewable energy and energy efficiency is implemented
- **Result Area 4 – Capacities are Strengthened and Applied**
  - Output 4.1: Capacity needs assessed and regional strategy for capacity development developed and executed
  - Output 4.2: Policymakers, technical and financial experts are trained in different aspects of RE&EE
- **Result Area 5 – Knowledge Base, Awareness Raising and Advocacy Strengthened**
  - Output 5.1: Baseline information on RE&EE resources, investments, policies and contacts are collected and processed
  - Output 5.2: Information and data services are offered and knowledge products disseminated

- Effective Partnerships and Networks in the RE&EE Sectors Created and Implemented
- **Result Area 6 – Business and Investment Promotion**
  - Output 6.1: Innovative demonstration and investment projects with potential for regional scaling up are developed and implemented
  - Output 6.2: Innovative RE&EE business and business-to-business partnerships established.

#### **4.3.2.4 Business plan for the first operational phase: 2011 to 2016**

And finally in April 2012 the ECREEE EB approved the Business Plan for the First Operational Phase: 2011 to 2016, who's stated overall objective is: “to contribute to the sustainable economic, social and environmental development of West Africa by improving access to modern, reliable and affordable energy services, energy security and reduction of energy related externalities (GHG, local pollution)”.

This Business Plan 2011 to 2016 includes the following five result areas:

- **Result Area 1:** Effective regional RE&EE promotion agency created and financial sustainability reached
- **Result Area 2:** Tailored policy, legal and regulatory frameworks created and implemented
- **Result Area 3:** Capacities strengthened and applied
- **Result Area 4:** Knowledge management, awareness raising, advocacy and networks strengthened
- **Result Area 5:** Business and investment promotion

The 2011 to 2016 Business Plan is an overarching strategic document, which provides a long-term planning framework for the period 2011 to 2016. It defines measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix. However, for the purposes of this mid-term evaluation, and as stated in the above-mentioned business plan, the evaluation team will measure progress against the activities as they are defined in the annual approved Work Plans, focusing in particular on the 2012 one, which provide a short-term planning framework incorporating projects and activities to be executed by the Secretariat in a given year.

## **4.4 Making a difference – Outputs, outcomes and (attainable) impacts**

Given the very dynamic and evolving process related to the creation of an institution such as ECREEE, it is no surprise that there has been an adaptation

and refocusing of the initially contemplated Result Areas and outputs to reflect the realities that the institution is facing in the delivery of the expected results. This adaptability mechanism appears to have benefited the project, as it has helped to ensure that deliverables are adapted to the needs of the countries, and are realistic.

## **4.5 Funds mobilization**

Funds mobilization is a continuous and cross-cutting activity of the ECREEE (see details in the project document). The financial long-term sustainability is an important aspect in this context.

## 5 Assessment

---

The assessment of the project presented in the following chapter was based not on the expected outcomes/outputs as described in the original Project Document, but as “updated and extended to reflect the initial key activities and the involvement of the AECID contribution”<sup>17</sup>. This allowed for a more accurate assessment to be carried out given that activities implemented, and expected outputs, have evolved, when compared to the initial project document.

	Relevance	Ownership	Efficiency	Effectiveness	Sustainability and Impact
ECREEE	Very high	High to Very high	Highly satisfactory	Highly satisfactory	Highly likely

\* Overall ownership is considered High to Very high, the exception being for some NFI's (see 6.2).

### 5.1 Relevance

Overall, the evaluation team considers the relevance of this project to be **very high**.

As regards the ECOWAS commission, relevance is considered very high. The Commission has provided the requisite support to ensure the Secretariat's successful start-up. It has in addition empowered the Centre by recognizing it as a key institution in the renewable energy and energy efficiency sectors. It actively participates in the Executive Board and Steering Committee (The Chair of the SC is the ECOWAS Commission Director of Finance + other participants including the Director of Private Sector) and has facilitated deliberations of relevant matters about this institution, resolving issues in an efficient manner. It has also financed activities as was shown above.

The evaluation team did not have the opportunity to visit all 15 ECOWAS member states. The following assessment regarding the relevance to the member states is based on information gathered during the field visits, as well as through the electronic survey. As can be seen below, the survey was mailed electronically to 230 contacts, of which 56 provided complete answers (a response rate of 24.3%).

---

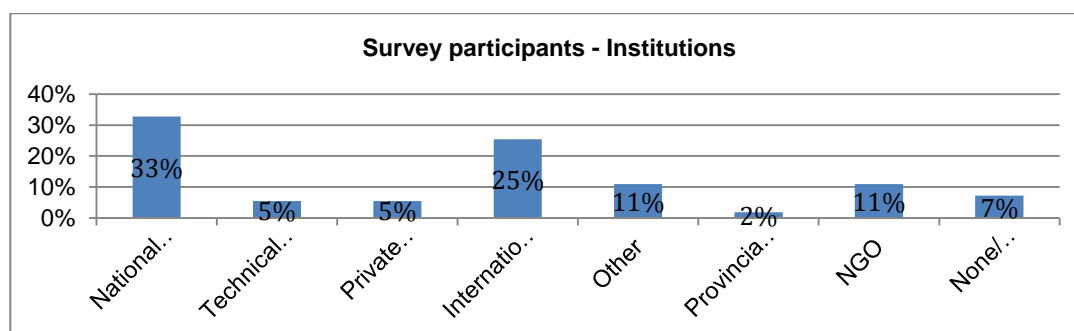
<sup>17</sup> Adapted and extended version of the log frame in the Project Document - Status Report on the Preparatory Phase of ECREEE (Dec 2009 – Dec 2010)

<b>Portuguese</b>					
<b>- Overall</b>					
	No of contacts in list	Questionnaires sent (contacts with correct e-mail addresses)	Full responses	Responses not completely filled out	Overall response rate (replies/questionnaires sent)
Total	74	68	13	6	<b>19.1%</b>
-					

<b>English</b>					
<b>- Overall</b>					
	No of contacts in list	Questionnaires sent (contacts with correct e-mail addresses)	Full responses	Responses not completely filled out	Overall response rate (replies/questionnaires sent)
Total	116	97	21	14	<b>21.6%</b>
-					

<b>French</b>					
<b>- Overall</b>					
	No of contacts in list	Questionnaires sent (contacts with correct e-mail addresses)	Full responses	Responses not completely filled out	Overall response rate (replies/questionnaires sent)
Total	75	65	22	9	<b>33.8%</b>
-					

The following diagram provides a graphic overview of the distribution of respondents per sector:





The first point of contact for ECREEE in the member countries is the National Focal Institutions (NFI). During the interviews the ET was able to assert that the NFIs consider the relevance of this institution to be very high. In the case of the host country in particular ECREEE was described as a center that “they feel a part of”, having participated in the setup and being regularly involved with. ECREEE is considered as a major partner, reinforcing the national and international credibility of renewable energy and energy efficiency projects, and attracting potential investors. An added benefit of this partnership is provided through the expertise of the technical staff, which has been solicited in support of development of GEF projects using the results of some of the pilot project as examples.

The Government of Cape Verde confirmed this institution to be very relevant, to the country’s ambitious goal of achieving 50% renewable energy in 2020. In terms of outputs, the regional policies are described as “very good” with some of the more positive aspects being the linking of different countries and sharing of knowledge, which leads to “very beneficial” cross-fertilization and facilitates debate (informed opinions).

The presence of the Secretariat has raised the profile of the issue locally, not only as regards projects, but also in terms of exchange of ideas, and although the host country would like to see this profile raised even more, it understands that for logistical purposes it cannot host all of the meetings of the institution. The current arrangements and collaboration are described as very satisfactory and the host country receives invitations and has access to experts.

There is a very high degree of formality conferred to the establishment of this institution, which required modifications of the country’s laws in order for signature of the Headquarters Agreement to be possible<sup>18</sup>. The country has not only provided facilities in which the institution is currently lodged (also providing and paying for a residence for the Executive Director) as well as the equipment and furnishings necessary for its operation<sup>19</sup>, but it has donated land and is currently in the process of constructing a brand-new building next to the Technical Training Institute<sup>20</sup> in which the Secretariat will be housed permanently. This will no doubt help address the only comment regarding possible improvements received by the ET, which concerns the fact that the country estimates they could be more interactions between technicians (cross

---

<sup>18</sup> This Agreement confers diplomatic status to the employees of the Secretariat.

<sup>19</sup> As the Secretariat is now fully furnished and equipped, the host country at this stage only covers rent.

<sup>20</sup> This Institute is being financed under an agreement between the country and Luxembourg.

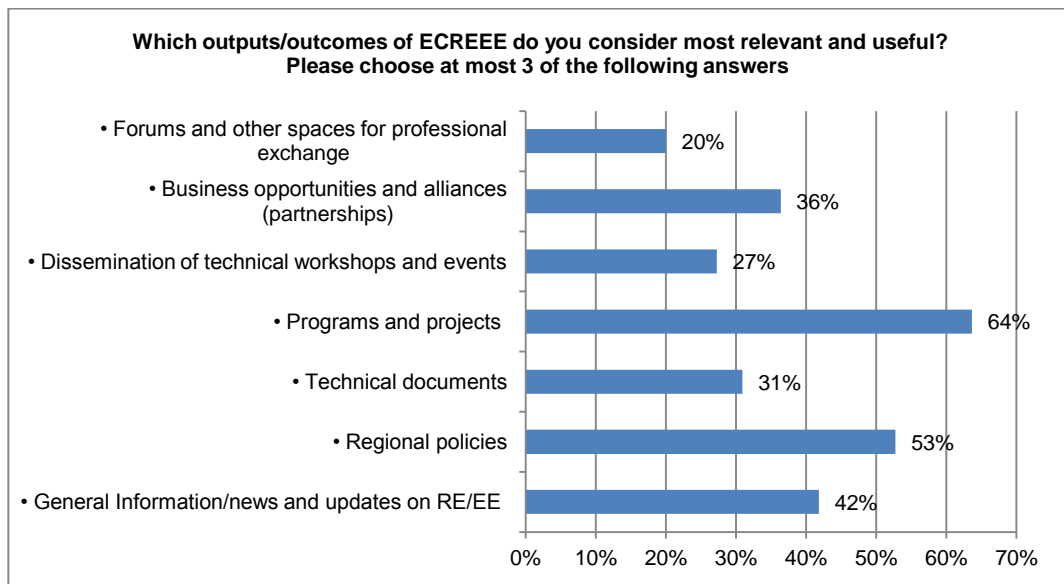
fertilization), as they would like to see this become a reference regional training center.

It is important to point out that the fundamental design of ECREEE - i.e., that there be no investments in buildings and vehicles from the start – contributed to making this ECREEE an ECOWAS institution rather than a UNIDO Center. This allowed it to focus from the beginning on providing services to ECOWAS member states, and on fund mobilization, for projects, from the very beginning

For the donor agencies, the relevance was also expressed as being very high, with ECREEE representing, for example, the “biggest project for West Africa”. One agency in particular expressed that it was “satisfied with the project development” had “ample opportunity to comment on the drafts”, and that “comments had been taken into consideration satisfactorily”. Although the ET determined that the early stages reporting mechanisms were described as “not 100% satisfactory”, issues appear to have been sorted out to the satisfaction of all involved.

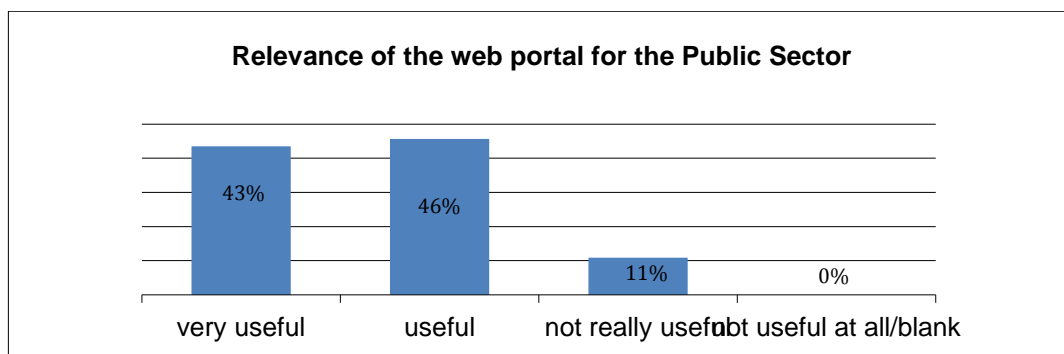
For the UNIDO Energy and Climate Change Branch, the relevance can be expressed as very high. Based on the success in West Africa, UNIDO has been requested by SADC and EAC to establish similar centers in Southern and Eastern Africa. Moreover, the establishment of ECREEE has to be seen as part of the energy component of the GEF Strategic Program for West Africa (SPWA), which is coordinated by UNIDO since 2008. Under the program a portfolio of twenty-two national and regional renewable energy and energy efficiency projects is under implementation (GEF grant of \$39.86 million and around \$468 million of co-funding). The establishment of local regional capacities to coordinate and ensure knowledge management throughout the executed GEF-SPWA activities was foreseen in the program concept. Since the establishment of ECREEE in 2010, the center has been gradually involved in the implementation and coordination of the GEF-SPWA.

As can be seen from the diagram below, which is based on the survey results, respondents consider the specific relevance of outputs and outcomes to be highest for programs and projects, followed by regional policies and general information on RE/EE.



Regarding in particular the relevance of the Web portal of ECREEE, 25% of respondent's answer that they had never used the portal and 13% said they had used it once. 42% have used this a few times and 20% report using it frequently. The relevance of the web portal is rated by almost 90% of respondents having used it as being high (very useful 43%, useful 46%).

The high demand of other international organizations (e.g. UN, IRENA, SE4ALL, EU) to cooperate with ECREEE, as well as its presence at international climate and energy policy conferences demonstrates the relevance of ECREEE on international levels. In the meantime ECREEE is an important counterpart to implement certain activities of different international organizations (e.g. IRENA RE Readiness Assessment, UNEP Lighting Initiative). The centre is also seen as important local partner for project submissions to increase the chances to get a project through.



## 5.2 Ownership

The evaluation mission assessed different levels of ownership among visited countries and at regional level. Ownership is high in Cape Verde where the evidence is spread over all stakeholders, making ECREEE a strong partner for RE and EE issues. Ownership is also high in Nigeria and Ghana with numerous collaborative examples and Inter-ministerial Committee on RE & EE (IMCREE) put in place. ECREEE is seen as a platform created for West Africa to find solutions in harnessing RE and EE. However, most countries requested to reinforce this ownership by including NFIs at some stage of the review process.

There is still a low awareness of some NFIs about ECREEE, therefore a low sense of ownership, mainly generated by the difficulty to keep a continued trend of collaboration when changes occur in national institution (example institutional transition in the Energy sector in Senegal and Burkina Faso).

As expressed by many stakeholders, the future is seen as a better formalization of the role of NFIs, national coordination mechanism and collaborative procedures with ECREEE. This could lead to a strengthened sense of ownership.

At regional level ownership is considered as very high, for example at ECOWAS. In fact, ECREEE is now considered as the ECOWAS's arm for RE & EE (i.e. RE & EE matters are to be institutionally referred to ECREEE) and ECREEE will be funded from core operational budget. This said, it was reported to the ET that in its early days they used to have difficulties for example when sending quarterly allocation requests to ECOWAS, as familiarity with the institution was low. The audit department is even reported as not having being "aware of the existence of the institution", however these "growing pains have been overcome" and reportedly "all of these issues are a thing of the past". Momentum has been generated over the last three years and they are now "treated like any other ECOWAS institution". The overall level of awareness and general appreciation of the work of ECREEE by its main stakeholders<sup>21</sup> is summarized in the table below:

---

<sup>21</sup> As assessed by the ET through desk review, interviews during field mission and online survey.

	Policy Makers	Private Sector (SMEs)	National Institutions responsible for RE & EE	Universities	NGOs	Women Associations
Funds mobilization	Recognition of ECREEE effectiveness	To be improved	Satisfied with EREF	Satisfied	Satisfied with EREF	Satisfied with EREF
Policy and quality assurance	Satisfied with Studies	Norms and Labeling for level playing field to be put in place	Satisfied, awaiting follow up	Satisfied	Limited awareness	Limited awareness
Capacity Building	Satisfied with workshops and specialized trainings	Satisfied with workshops and specialized trainings	Satisfied with workshops and specialized trainings	Highly satisfied with training and collaborative activities	Satisfied with workshops and specialized trainings	To be improved
Knowledge Management and Communication	Would like to see strengthened communication & collaborative processes	Limited awareness	Communication & collaborative processes to be improved	Concerned about long term commitment strategy	Information system through NFI to be improved	Information system through NFI to be improved
Promoting investments in RE & EE	To be improved	Waiting for EREF and EREIN to deliver concrete results	Awaiting concrete results	Foresee linkages with R&D and collaborative opportunities	-	-

When replicating this type of institutional set up in other regions, it would be beneficial to ensure that relevant stakeholders are involved and meet early on in the process. Initial groundwork should include wide circulation of information, awareness campaigns, etc.

The evidence suggests that ownership is constrained by (a) an unclear understanding as to what the NFI's responsibilities are vis-à-vis ECREEE/country and (b) a lack of good coordination mechanisms between NFIs and national stakeholders, and/or formal relationship between different NFIs.

It was noted that the projects approach was from the beginning geared toward high ECOWAS ownership of ECREEE. The support provided was geared towards the building up of the institution's internal capacities as well as the technical program - but the donors stayed in the background. As regards UNIDO in particular, the broader support was limited to the first operational phase, and during the second operational phase it will act more as a project partner of ECREEE. Still some targeted institution building support could be provided.

### 5.3 Efficiency

The efficiency of the project has been assessed by the ET as being **highly satisfactory** with outputs having been delivered, either on target or ahead of target, in an effective and efficient manner. The ET has not been able to document any cases of inefficient implementation and all funds were received and expended as planned.

<b>Distribution per program (01/12 to 12/12)</b>		
		<b>in (EUR)</b>
Management & Admin	953,000	13.7%
Communication and Technical Cooperation	570,000	8.2%
RE Policy development	1,745,000	25.1%
Capacity Development	730,000	10.5%
Observatory	1,110,000	16.0%
Investment and Demons Projects	1,450,000	20.9%
Project support	387,563	5.6%
Subtotal 1	6,945,563	100.0%

<b>Distribution per Result Area (01/12 to 12/12)</b>		
		<b>in (EUR)</b>
<b>RESULT AREA 1:</b> Effective regional RE & EE promotion agency created and efficiently managed	1,113,000	16.0%
<b>RESULT AREA 2:</b> Funds for RE & EE programs and projects mobilized and implemented	25,000	0.4%
<b>RESULT AREA 3:</b> Tailored policy, legal and regulatory frameworks created and implemented	1,745,000	25.1%
<b>RESULT AREA 4:</b> Capacities are strengthened and applied	730,000	10.5%
<b>RESULT AREA 5:</b> Knowledge base, awareness raising and advocacy strengthened	1,540,000	22.2%
<b>RESULT AREA 6:</b> Business and Investment Promotion	1,792,563	25.8%
<b>Subtotal 1</b>	6,945,563	100.0%

ECREEE revenue base consists of grants awarded by multilateral and bilateral institutions as well as the ECOWAS commission. At present these funds reach the ECREEE Secretariat from different sources, with ECOWAS transferring these directly to its Regional Centre, AECID transferring through the ECOWAS, and ADA transferring to the Secretariat via UNIDO, for reasons explained below. Whereas the monies from the ECOWAS Commission go directly to the Secretariat, UNIDO acts as an intermediary between ADA and ECREEE as explained below. Although this does not affect the efficiency per se, it seems that at this stage it is not possible for the accounting unit to capture the funds on an actual basis (source), but rather only regarding amounts actually received. This creates a problem in terms of reporting given that ECREEE has access to monies that are not reflected in its financial statements. The ET was told that this situation represents a potential bottleneck and has in some instances increased processing times.

Although a breakdown of the “monies in the basket” has been requested “numerous times”, it would appear that at this stage all such requests for information are centralized through the program management team at HQ. The system could be improved by establishing direct communication lines between UNIDO headquarters accounting personnel and the Secretariat and facilitating training sessions for key staff, such as what is being implemented by the ECOWAS Commission, which brought in ECREEE administration personnel for a 2-week induction course in processes and systems. As well, in-house administrative training sessions should be organized for all professional staff to facilitate the work of the financial unit.

Regarding procedures and standards in terms of procurement, the ECOWAS Council is expected to approve a Tender Code in mid-2013 and at this stage, ECREEE is working to align existing accounting procedures with this new Code

(draft has been circulated). ECREEE has established an internal procurement committee. Contracts over 20.000 Euros are subject to a public tender.

The ECOWAS as a whole is currently working on phasing in the SAP system and it is expected that this will be rolled out to ECREEE in late 2013 or early 2014<sup>22</sup>. Considering that UNIDO headquarters have recently completed the similar process, it could be beneficial to ensure that training for key staff of ECREEE takes place as soon as possible to facilitate a smooth transition.

The support of the core partners ADA, AECID, ECOWAS and UNIDO is described as having been essential for the establishment and first operational phase of ECREEE and, the Evaluation Team noted that even though technically they are all donors, their roles and modus operandi are different.

ADA funds are channeled to ECREEE via UNIDO, and this is due to the requirement for the ADA to partner with an existing institution<sup>23</sup> with defined structures, a fully functional management team and administrative mechanisms. The modalities of this collaboration are clearly stipulated in the UNIDO-ECOWAS-ADA Project Document of 2009. Based on the successful first operational phase ADA will provide its funds directly to the centre during the second phase.

The ET was not made aware of any issues regarding the modality employed by the AECID (i.e. transfer of funds in a lump sum) for these to be managed by the ECOWAS (per terms set in MOU), nor of any inefficiencies related to the use of these funds.

UNIDO acts as a technical assistance provider and partner and ensures activities are implemented in agreement with its own procedures and rules. In particular UNIDO provided a technical expert to assist the Executive Director of the new Centre to develop and put in place the internal structure, procedures and to initiate programs.

## 5.4 Effectiveness

The overall effectiveness of the implementation of the Preparatory and, First Operational phases has been determined by the ET to be **Highly Satisfactory**, as detailed below.

As has been explained before, for practical management, budgeting and monitoring purposes, a programme-result area/output matrix was developed and has been approved by the EB. This allowed ECREEE to bundle interrelated

---

<sup>22</sup> Initial target date was 2011 (Evaluation notes)

<sup>23</sup> Evaluation notes



activities in key programmes. The Secretariat indicated in its 2012 Implementation Report that “programme/activity logic ensures effective budgeting according to the activity IDs as well as easier management and progress monitoring”.

The ET considers that addressing the evolving nature of a nascent institution by refining its objectives as it grows, is a positive decision – even if in this case it has meant that 3 iterations of a log frame have been developed - and contributes to the effective monitoring of the progress. This said, it would be desirable – for monitoring and evaluation purposes – if this current iteration could be followed through for the first operational phase (until 2016) in order to ensure that progress can be accurately measured against indicators as approved by the EB in this Work Plan.

Finally, in order to be able to compare the results (effectiveness) with the outputs as initially presented in the 2012 Work Plan, it is essential to understand that the number of Result Areas has been reviewed and reduced (from 6 to 5 – Result Areas 6 and 3 were merged), as well, Output 2.1 was merged into Result Area 1, and main Program Areas have been reduced from 14 to 7<sup>24</sup>.

For the MTE of the ECREEE, the assessment was carried out against outputs presented in the 2012 Work Plan Implementation Report approved by the EB in 2013, which incorporates changes as regards the approved 2012 Work Plan. It is important to note that although the review of outputs is as comprehensive as possible, for reasons of brevity, the ET did not specifically cite the extremely large number of studies, assessment reports, nor all the training material prepared by ECREEE staff and/or consultants, which were systematically used for the capacity building activities.

Finally, although it is considered highly likely that utilization of the outputs will significantly contribute to the realization of medium term outcomes and eventual impacts, at this stage in the life of the project, and for the purposes of the MTE, it is not possible to carry out a comprehensive analysis. This will be more appropriately addressed in the final evaluation.

### **Result Area 1 – Effective regional RE&EE promotion agency created and efficiently managed**

**Summarized outputs** are reported, as presented in the approved Implementation Report of 2012, in support of this Area:

---

<sup>24</sup> These Programme Areas now include: Administration, Capacity Building, Communications, Investment, Observatory, Policy, Programs.

The **IT system** of the Secretariat is up and running and **additional equipment** has been purchased (IP address, router, laptops, cabinets, etc.); a **Document Management System** has been implemented; a new **accounting system is operational**; Secretariat **Staff** has been recruited (for a total of 23, including project assistants under SEEA-WA and GEF projects and 6 internships) and **trained** (procurement and administration courses); **EB Meetings** have been prepared and have taken place in a regular way, the seventh one in May 2013; **Partnerships have been strengthened** in particular with the European Union initiatives, Teri and the GEF, and components of the regional GEF SPWA coordination project were subcontracted to ECREEE; **Increased presence/visibility** at regional/international conferences and events (PR/promotional materials prepared, newsletter, brochures, website redesigned, connection to the Observatory, linkages with local/regional media, etc.); **NFI capacity building** meeting held; **National actions to increase visibility** organized/participated in/co-funded.

The ET assessed the effectiveness of actions under this Result Area as **Very Satisfactory**.

The ET was informed and received evidence to confirm that during the period covered by this evaluation the Secretariat was not only established but increased its capacity to develop and implement the different project components. This is documented in correspondence between the ECREEE Secretariat and UNIDO HQ offering an update on the status of activities, as well as in reports on the preparatory phase<sup>25</sup>. These document issues relative to setting up of the Secretariat, (staffing, set up, communication materials, HQ agreement<sup>26</sup>), initiation of relationships with international technical Partners as well as preparation of proposals (in response to a call from the EU energy facility), preparation of workshops, etc. It is also during this period that a change of Strategy is proposed to address the planned transfer of the coordinating functions of the Unido/GEF energy component of the GEF West Africa Program to the Secretariat. In order to allow the Secretariat to address these new responsibilities, it is argued that additional staff is required, and given that the international expert (recruited by UNIDO) is assisting the Director, it is proposed to replace this position, with professional staff from the West African region. In the course of the interviews the ET was informed that UNIDO HQ had agreed to this proposal.

Although the evaluation team was able to confirm that the internal structures and procedures of the Secretariat were established, implemented and the institution is

---

<sup>25</sup> Letter to UNIDO on change of staff strategy – 9 March 2010, as well as Status Report on Implementation of the Preparatory Phase

<sup>26</sup> Supported by co-financing put in place by the host country of an estimated €100,000 (evaluation notes)

functioning at maximum capacity, it was noted that there are currently a high number of direct reporting lines to the ED. This was verified through interviews and review of documentation, and it was reported that this situation, on occasion, has created bottlenecks in his absence (“the ED signs everything”), as there is no mechanism in place to delegate full authority to an Officer in Charge position. The ET is of the opinion that the current administrative structure of the Secretariat should be reviewed and that reporting lines should be developed and established to strengthen the response capacity of the institution, this would also include the establishment of a formal Management Team with clear responsibilities and regular meetings.

As well, the ET found that capacity to systematically move ECREEE forward is not guaranteed and that, as will be shown in the following chapters (see EREF and EREI, below), the laudable success of the institution will likely lead to a considerable increase in work demands placed on its staff. The ET considers that it is likely that the current response capacity of this institution will not allow it to respond to these demands in an effective and timely manner, if the structure remains the same.

In addition, flagship programs are currently entering into their active phases and are rapidly being scaled up, leading to demands being placed on staff, on data management and processing, as well as on security of the information contained within the systems. This increased workload stemming from a rapidly growing project portfolio and expanding demands is making apparent an in house capacity gap for planning and implementation. The project document was expecting this situation at Operational phase two (Year 4 to Year 6) but this has clearly happened earlier than planned.

It was also reported that although initially mechanisms had been put in place to periodically update staff on progress of all units, as the institution has grown, these have not been maintained. It is considered that this is the result of an increased workload, and travel, leading to prolonged absences from the office of project managers.

Although all IT systems are currently operational, an issue of concern that was raised during the field visits relates to the security and stability of the ECREEE Secretariat’s network. There is awareness of this issue at management level, however it is noted that in particular the firewall must be strengthened to ensure the confidentiality of the documents that are made available to the institution, but also as well as in terms of capacity to ensure stored data is secure. In addition, backup systems are not presently available in case of equipment failure (backup servers).

The ET noted that the Communications unit is in place since Aug 2011, however and even if promotional and informational materials have been prepared for

distribution “to increase the visibility of the institution”, the role of this unit will need to be strengthened further. This is required not only in order to be able to cope with the increasing flows of information that ECREEE activities will generate internally, but also to promote the visibility of the institution in the regional and international arena by showcasing achievements and challenges.

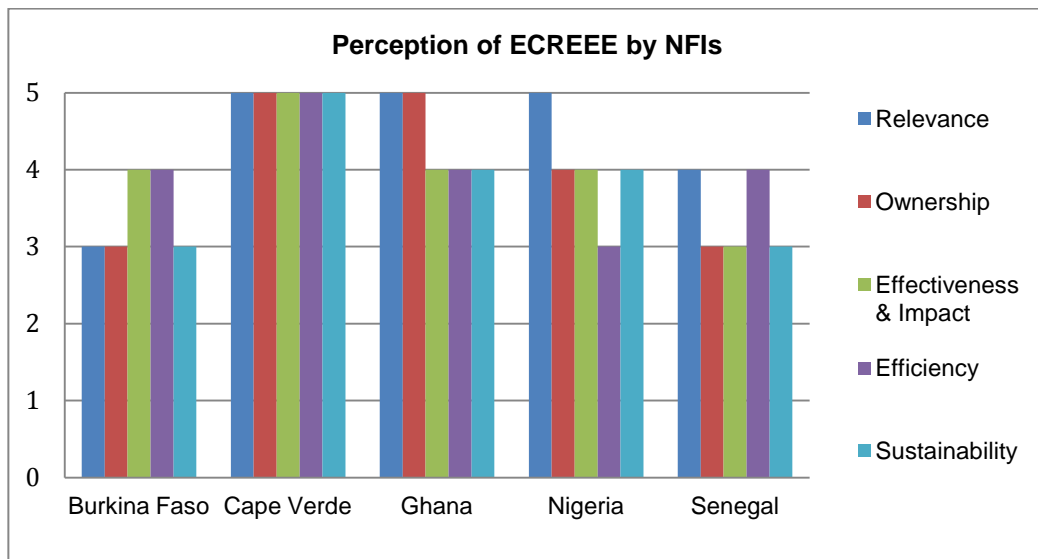
As regards the National Focal Institutions (NFI), the ET was able to verify their existence and level of involvement in the 5 countries visited and to confirm their existence in the others through documentation and reports, and level of involvement through a survey. In addition to documenting their existence, the ET was able to verify that the capacity of these NFI’s has been strengthened through informal meetings<sup>27</sup>, although requests for continued an additional support were unanimously voiced. The ET considers that in order to facilitate cross-fertilization and exchange of information, it would be beneficial to the overall process to organize at least one yearly joint meeting of the focal points, either independently of, or piggybacking onto other meetings.

Although “informal” terms of reference exist for the NFI’s, the ET gathered evidence to demonstrate the need for these to be updated to reflect the current realities of ECREEE, as well as the growing demands placed on the NFI’s. The ET considers that the NFI’s would gain from a formal process to develop and introduce ToRs clearly delineating roles and responsibilities. In addition, this would likely also help “to ensure that the profile of the NFI is the adequate one”.

As can be seen from the graph below, the overall perception of ECREEE by the NFIs visited, in terms of relevance, ownership, effectiveness of impact, efficiency and sustainability is, overall, very high (0 = Very low 5 = Very high).

---

<sup>27</sup> These have been held in the margins of other meetings, and reportedly “a specific NFI meeting has never taken place, only as sideline to other events”



The ET was informed that at present ECREEE is very active in trying to mobilize additional resources and this has been facilitated by the fact that ECREEE is a specialized ECOWAS Centre, which provides the institution with leverage (financial anchor). This has already proved to be important as it was reported that some of the current partners were not supportive of ECREEE becoming a UNIDO Regional Center of Excellence (“these are created, and eventually the financial burden falls on the country”<sup>28</sup>).

Although it was also reported that ECREEE has so far not been able to secure direct financing from the EU, for lack of a strong lobby there, there are ongoing discussions with the Ademe (Agence de l’Environnement et de la Maîtrise de l’Energie – French Agency for environment and harnessing of energy, for its acronym in French), which is considering shifting its support to direct financing, rather than continuing its support via consultants to provide services.

Irena’s (The International RE Agency) work in WA is currently channeled through ECREEE. It is interesting to note that ECREEE was established after Cape Verde joined Irena, of which it is a Founding member, and this association is considered a positive step in strengthening the presence of ECREEE in the region.

## Result Area 2 – Tailored policy, legal and regulatory frameworks created and implemented

**Summarized outputs** are reported, as presented in the approved Implementation Report of 2012, in support of this Area:

<sup>28</sup> Interview data

Final ***draft of Regional RE Policy prepared***, stock taking missions and training workshop completed (including 15 country reports, and RE Baseline Report); ***Establishment of SEEA-WA EE Technical Committee*** (EETC), organization of EETC meetings, participation in regional meetings, RE Policy Technical Committee meetings carried out as well as coordination meeting to harmonize assumptions and targets of RE and EE policy documents; Workshop to validate ***draft of regional RE Policy Framework*** organized; ***SEEA-WA Regional validation workshop for EE White Paper*** organized resulting in ECOWAS energy experts recommending that the regional RE&EE policy documents be presented to the ECOWAS Energy Ministers for adoption; ***ECOWAS Commission High Level Forum*** organized – through ECREEE – during which ***Regional Policies on RE and EE were adopted***<sup>29</sup>, and the ***ECOWAS RE Observatory (ECOWREX) was launched***; the ***pilot project on bioenergy sustainability indicators in Ghana was successfully implemented*** and the final progress report was completed; regional bioenergy forum was organized and the ***Regional Strategy Framework on Bioenergy for Enhancing Energy Access*** was adopted.

The ET assessed the effectiveness of actions under this Result Area as **Highly Satisfactory**.

The ET took note that two regional policy documents (ECOWAS Renewable Energy Policy (EREP) and Energy Efficiency Policy (EEEP)) had been developed with the assistance of national, regional and international consultants, and building on existing documents, such as the RE&EE Strategy prepared by Cape Verde.

The outputs under this Result Area are considered critical as they lay the foundation for the future regulatory framework that will help to ensure the ongoing relevance and sustainability of the RE and EE efforts that ECREEE is tasked with promoting.

The evaluation team assessed that ECREEE, as a specialized agency of ECOWAS with a public mandate to promote regional renewable energy (RE) and energy efficiency (EE) markets, started taking note of the relevance and background of the regional context and built on this to create an enabling

---

<sup>29</sup> The Meeting of the Energy Ministers adopted the following resolutions: The ECOWAS Energy Efficiency Policy; The ECOWAS Renewable Energy Policy; The ECOWAS Small-Scale Hydro Power Programme; and The ECOWAS Bio-energy Strategy and recommended that the ECOWAS Council of Ministers and the Authority of Heads of State and Government adopt these

environment by mitigating various barriers for the dissemination of green energy technologies and services.

Overall the evidence gathered by the ET points to the fact that this particular series of outputs of ECREEE are considered as a “phenomenal piece of work”. Furthermore, the ET considers that the successful coordination of RE & EE initiatives - from the policy side through to program planning and implementation - in 15 extremely diverse economies (with very different social contexts) clearly demonstrate that ECREEE has taken on a leadership role in this sector.

As has been mentioned in other sections of this report, the capacity building activities are considered to have been effective, and successfully implemented, and the ECOWREX web based information system has been launched.

### **Result Area 3 – Capacities are strengthened and applied**

**Summarized outputs** are reported, as presented in the approved Implementation Report of 2012, in support of this Area:

**Capacity needs assessment** and **capacity building program** finalized; **RETSscreen train the trainers network** is operational (nine national trainings were implemented in seven countries and approximately 220 experts from public and private sector have been trained – 4 local experts have been certified as RETScreen trainers); **training courses on RE Policies and incentive Schemes** organized and attended by more than 60 participants from ministries of Energy and Finance, national regulatory agencies, and the main utilities; **Workshop on Financing and Investment in Mitigation Actions in West Africa** jointly organized with the African Caribbean Pacific Business Climate Facility to catalyze the introduction of necessary legal and regulatory reforms, with participation of 80 experts (Focus on creating the enabling environment for investment and innovative finance in NAMAs in the RE, EE and transport sectors); training **Workshop on Sustainable Energy and Gender** conducted, with over 70 participants (65 men) trained in the tools and techniques for gender mainstreaming in regional policies; **Workshop on Key Findings and Tools for the Global Energy Assessment (GEA)** organized (with GEF support) and attended by more than 60 energy experts and policymakers; hands on training on rule electrification with PV conducted. 32 technicians from all countries trained in design and implementation of solar energy based livelihood projects for rural communities; **Workshop on Renewable Energy Technologies for Productive Uses in West Africa** organized and attended by over 25 key experts from public, government, regional institutions, research institutions, and universities from Africa and industrialized countries. This included representatives from ministries of energy and research institutions; **Agreement concluded to implement an e-learning Regional training program for RE&EE integration (2013)** with

national utilities, ECOWAS Commission and the WAPP (in cooperation with Columbia University); **Workshop on Wind and Solar Resource Mapping** organized (with the support of USAID) (over 10 technical experts from ECOWAS Universities trained); **Workshop on Bioenergy Resource Assessment** organized, bringing together representatives of the Ministries of Energy and Agriculture of ECOWAS, together with GBEP Partners and Observers, as well as regional and international organizations, academia, business and civil society representatives in the field; 22 experts trained in a four day **Investment Project Appraisal Training**; **8 National Competence Centers** contracts awarded to national institutions (7 type 1, 1 type 2<sup>30</sup>); the **PVPS and SHC programs** joined by ECREEE to cooperate in the field of data provision, awareness raising and capacity building.

The ET assessed the effectiveness of actions under this Result Area as **Highly Satisfactory**.

The higher-end comment regarding the results of work undertaken in this area is indicative of the overall success of the institution. In general the perception is that the establishment of ECREEE has facilitated “many meetings with other like minded organizations” and, most importantly has allowed for “the creation of a debate space to open up the field”. Although it is not yet possible to speak of the medium or long-term results, overall it is estimated that these successes will pave the ground for eventual outcomes and impact of this project, which is to facilitate penetration of RE & EE technologies into West Africa.

Overall the ET, based on material collected during the interviews, can conclude that there is a high degree of satisfaction with the training activities put in place by ECREEE. In addition, and as can be seen from the survey results presented in the diagram below, the respondents consider the quality of the workshops to be very good, to good, which would tend to indicate a high degree of satisfaction.

---

<sup>30</sup> Type 1 Competence Centers are institutions with general expertise in EE. They will provide support to the project, participating in training workshops to strengthen their capacity. Type 2 Competence Centers support the implementation of the project in specific areas, namely EE cooking, EE standards and labeling and EE in Buildings.





**Result Area 4 – Knowledge base, awareness raising and advocacy strengthened**

**Summarized outputs** are reported, as presented in the approved Implementation Report of 2012, in support of this Area:

The **ECOWAS Observatory for Renewable Energy and Energy Efficiency**<sup>31</sup> **was launched** (implemented under the umbrella of the Strategic Program for West Africa of the GEF). Staff was brought onboard and Technical Committee (15 experts, two meetings organized) met to discuss country profiles and produce **Data Implementation Sheets for the 15 countries**. Second phase of implementation has taken place and **relevant country data has been collected, processed and populated onto the Ecowrex**; The **Annual Status Report of RE&EE in the ECOWAS Region** was prepared and includes a comprehensive **RE baseline report and EE status report**, in addition, a **comprehensive status report on SSHP** (including investment inventory) was prepared<sup>32</sup>; Key **comprehensive Resource Assessments on PV, CSP and Bio-crops** were finalized in cooperation with different partners. These have resulted in data and GIS maps (being integrated into Ecowrex), a geodatabase with annual average data for wind and solar (allowing for simulations to be carried out to select the 5 most promising sites on which to develop commercially viable models of RE projects), **selection of 4 crops to be assessed further** (Second phase, jatropa,

<sup>31</sup> [www.ecowrex.org](http://www.ecowrex.org)

<sup>32</sup> Comprehensive publication planned for 2013, in cooperation with REN21, IRENA and UNIDO

cassava, sweet sorghum and cashew), as well as a comprehensive report on SSHP.

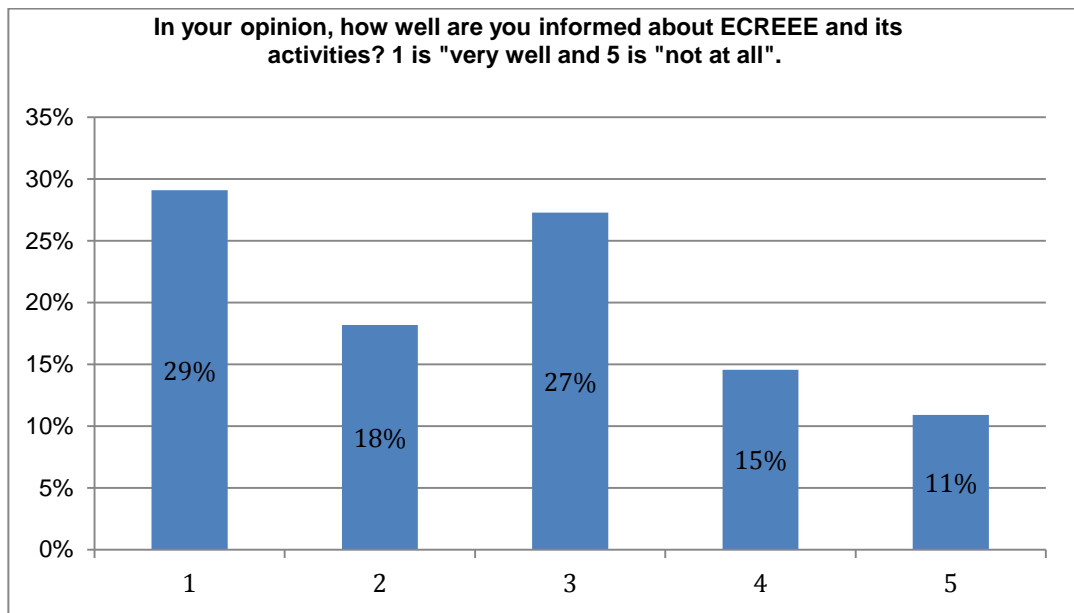
The ET assessed the effectiveness of actions under this Result Area as **Highly Satisfactory**.

ECOWREX was reported to be a "very useful tool with huge potential". However, the ET was also informed that the demands of data management and processing on existing staff have created a situation in which it is not possible, for example, to gather required data on harmonization. The ET was also informed that although hard data for prefeasibility studies is available for PV, this is not yet the case for CSP. In order to ensure the accuracy, relevance and continued success of this tool, resources should be allocated accordingly.

Regarding the use of existing UNIDO in house expertise, it was remarked that inter-linkages with other ongoing initiatives of UNIDO have been explored and in some cases have led to collaborative efforts. This is the case of the Burkina Faso project on improved cook stoves for productive activities (household beer breweries operated by women). The ET was informed that although during the project development phase links with the Secretariat were weak, this has changed with for example participation in regional conferences organized by the Secretariat and this has facilitated more integrated discussions focusing on productive usage.

As well the ET was informed that collaboration between ECREEE and the Regional Center for Micro Hydro Technology and Small Hydro, established 2005 in Nigeria, has begun and is exploring collaborative activities to for example establish satellite centers. Other opportunities still remain to be fully explored including ongoing preparatory work on a Small Hydro Workshop for ECOWAS experts, as well as capacity building projects in East Africa.

As regards general awareness of activities, it would appear that there is room for improvement, as can be seen from the survey results presented in the diagram below, which shows that over 25% of respondents still consider they are not well informed about the activities of the Secretariat.



#### **Result Area 5 – Business and investment promotion**

**Summarized outputs** are reported, as presented in the approved Implementation Report of 2012, in support of this Area:

The following Pilot projects were developed in 2011:

- **Green ECOWAS HQ** – completed and running
- Cidade Velha - **Solar lighting project** (in collaboration with the Ministry of Tourism, Industry and Energy) to promote tourism on the island of Santiago. 27 solar lamp systems installed to illuminate the access road to a historic fortress (Fortaleza de S. Filipe), and a municipality (Chã Gonçalves). The ET was informed that although initially these were installed only in the Fortaleza, subsequently to the redesign of the access road, it was determined that a much smaller number of units were required to produce a site-appropriate result. The remaining units were then redeployed to the municipality, quite simply “changing [the] life” of its inhabitants, and this was verified by the ET;
- **ONE-UN Green** - implementation of energy efficiency measures (switch to LED lamps) and installation of a 25 kw PV system was completed

In addition the following took place:

- Feasibility study of 5 PV Plants - **High level prefeasibility appraisal of 40 RE investment projects including PV plants completed** (prepared for the first meeting of the ECOWAS RE Business and Investment Initiative), finalization of a **feasibility study for a solar thermal cooling system** at the Cape Verde National Assembly in Praia and of **two**

**feasibility studies for a solar thermal system** for a hotel and a local beverage company.

- **Feasibility study for a concentrated solar power plant (CSP)** - first phase concluded, including geospatial data gathering, simulation of yearly solar data of the region and, using a multi criteria method, elaboration of maps showing areas where CSP power plants could be developed. A review of the state of the art of CSP technologies was also conducted;
- Technical assistance from the Spanish Ministry of Industry - **preliminary discussions held** with the Spanish Ministry of Industry and wind projects in Cape Verde identified as possible beneficiaries of the TA;
- Concluded partnership with US TDA – **Agreement for USAID to collaborate with ECREEE** under the auspices of the Climate Technology Initiative - Private Financing Advisory Network (CTI-PFAN) and USAID’s Regional Clean Energy Investment Initiative (RCEII)
- **RE&EE Micro-finance for West Africa (EREF)** – Based on a study elaborated by the ADA the EREF facility was established at ECREEE HQ (managed by ECREEE with TA from UNIDO) and a first call for proposals was launched. The Technical Committee of the EREF approved 41 projects (approximately 25% of received concept notes);
- Call for medium and large-scale investment projects in the region (pipeline) – the **inventory of medium to large-scale RE projects was completed** in collaboration with NFIs (158 projects identified of which 64 are considered in an advanced stage <sup>33</sup>). 41 projects received direct support for their development and were presented at the Investment Forum;
- **Creation of the ECREEE RE and Investment Initiative (EREI) – Investment Forum held** (approx. 90 participants, mainly financiers, project promoters, donors and market analysts) to present a pipeline of investment opportunities in the West Africa renewable energy market. An **agreement was also reached with USAID Regional Clean Energy investment Initiative (RCEII) to create the Private Financing Advisory Network (PFAN) – West Africa** aiming to create a regional base of support for PFAN in West Africa by contributing to the development of a PFAN network of partners and interested stakeholders, as part of the ECOWAS RE&EE Investment Initiative (EREI), and to organize, promote and host the West Africa Forum on Clean Energy Financing (WAFCEF);
- ECOWAS Regional Rural Electrification – The **preparation of a Mini-grid Toolkit** was agreed between REN-21 and EUEI-PDF to be published with

---

<sup>33</sup> A number of these having reached financial close or at a very advanced stage of development.

the EREF call on mini-grids (2013). A **paper on micro-grids for rural electrification in ECOWAS** was also developed. A **draft concept note on an ECOWAS Rural Electrification Programme** was also elaborated;

- Demonstration projects for regional scaling - **Projects on Bioenergy activities for demonstration** in 2013 have been elaborated, including ethanol fuel and stove, waste to energy, regional biogas programme, (most of them as part of the ECOWAS Cooking Initiative);
- Regional SSHP Investment Workshop – **Workshop on SSHP Investment** was held and over 70 experts and policymakers attended. **SSHP Program Document was finalized** and will be implemented between 2013 and 2018;
- SAIS <sup>34</sup> field research mission on the viability of the RE fund - The **research project on Attracting Investments into Commercial-Scale Renewable Energy Projects in West Africa was concluded**. This covered different funding models for the commercial/industrial development of RE projects in the ECOWAS region to analyze their energy sectors, banking and financial infrastructure, and current investment and development trends;
- GEF Cape Verde Project – Workshop held with participation of approximately 50 experts and policymakers;
- GEF Typha Project – **Project approved** in September 2012;
- Regional biomass conservation project for West Africa with GIZ - Various **bioenergy demonstration projects earmarked for execution** in the 2013 work plan, **including ethanol fuel and stove, waste to energy, regional biogas** programme. They will be implemented under the auspices of the ECOWAS Cooking Initiative;
- **SEEA-WA Project Coordination Meetings and M&E Program** – Coordination meetings held in the first year of the project to discuss technical issues, administrative issues, narrative and financial reports, as well as an update on the operational plan and budget;
- Lamps of knowledge for Africa with ICS - UNIDO (participation of UNIDO, UNICEF and UNESCO) – No progress;
- Replication of the ECREEE model in Southern and East Africa – Preparatory phase completed;
- GEF Project in Guinea Bissau – **PIF developed for the project on Promoting Small to Medium Scale Renewable Energy Markets** in Guinea Bissau;
- Support to activities on the M&E of the ECREEE Framework were completed.

---

<sup>34</sup> School of Advanced International Studies of the Johns Hopkins University.

The ET assessed the effectiveness of actions under this Result Area as **Highly Satisfactory**.

As can be seen from the above summary of outputs, the volume and variety of activities under this program area is substantial, and whilst they are all considered to be important, the ET will more closely look at the EREF (ECOWAS RE Fund) and EREI (ECREEE RE Initiative) mechanisms as these represent the greatest potential for replicability and success, as well as the greatest challenge from a management perspective.

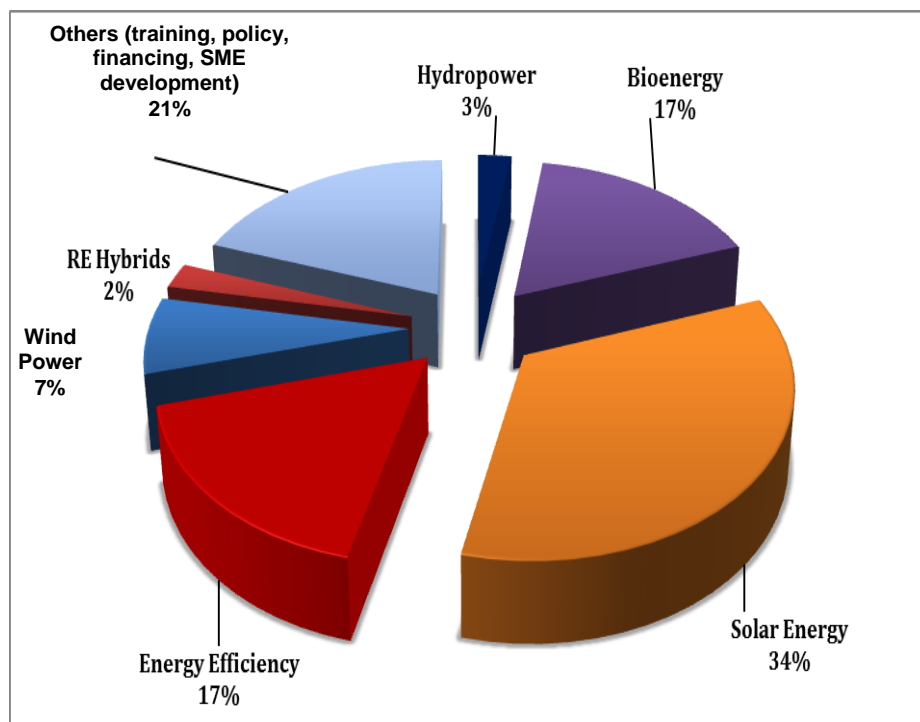
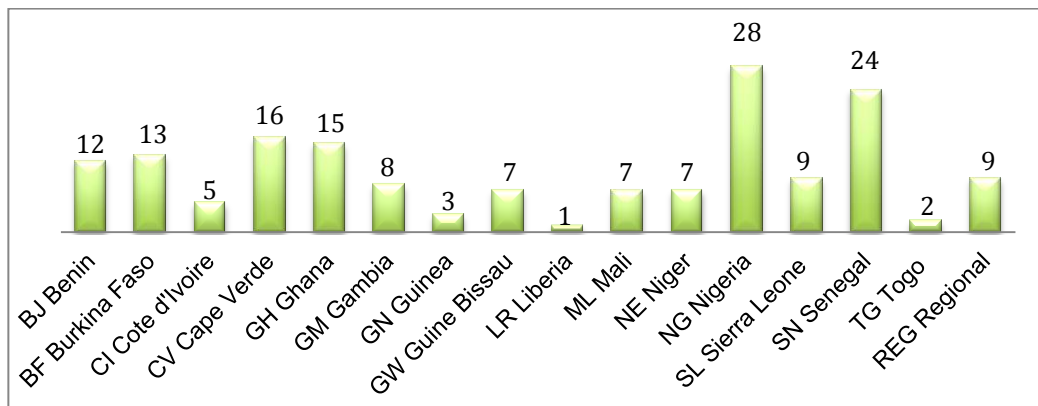
The establishment and launch of the EREF responds to Action Line 2 of the ECOWAS White Paper “to establish a regional rural RE&EE innovation fund”. This fund is managed by ECREEE with the support of Austria, Spain and UNIDO and it’s stated objective is to co-fund at least 2,000 small-scale projects by 2030<sup>35</sup>. In order to reach this goal, the ECREEE Secretariat aims to undertake regular demand-driven competitive calls for proposals seeking to identify projects with high social and economic benefits and replication potential. Eligible applicants are to be selected amongst private companies, municipalities, NGOs and cooperatives and must include participation of local project partners from West Africa. With the establishment of the EREF the centre fulfilled the request of the National Focal Institutions (NFIs), which demanded such an instrument in the first NFI coordination meeting. Establishing the overall quality documentation for the execution of such call for proposals (e.g. guidelines, project document and contract templates, appraisal policy) required a tremendous effort from the new centre.

The ET noted that the response to the initial EREF call for proposals by far surpassed the expectations – and very nearly the response capacity – of the ECREEE Secretariat and its partners. In total, 166 Concept Notes were received and analyzed and 41 Projects were approved, for a reported total of € 994,300. The leveraged Co-financing is reported to be of € 2,067,289 (from applicants and partners) representing a ratio of slightly over 1:2. Regarding the per country and mix of projects, the following diagrams<sup>36</sup> illustrate the origin of proposals, as well as the large part given to solar followed by general capacity building activities and energy efficiency and bioenergy.

---

<sup>35</sup> EREF will make available grant co-funding for small and medium-scale RE&EE investments and businesses with a grant ceiling of € 50,000.

<sup>36</sup> ECREEE presentation, March 2013, Vienna.



Although these results are encouraging, the ET was informed that the process to review the applications was “much longer than expected”, with announcement of winners almost 1 year after initial call was made. A two-stage call for proposal modality was used. In a first round concept note were evaluated. The best applicants were invited to submit detailed full proposals.

At this point it shall be mentioned that EREF was also used as a strategic awareness raising and capacity building tool. In 2010 the new centre (located in relative isolation in Cape Verde) was hardly known in the region. Through the EREF instrument the centre reached break-even. Moreover, the call for proposal was used as internal capacity building tool for the relatively young ECREEE staff.

Some of the experts were appraising such project for the very first time. Several capacity building workshops were held. An international consultant was hired to assist the staff in the appraisal of projects. Through the calls the ECREEE experts was able to collect a lot of data from the different ECOWAS countries. In this context, the EREF was also important for knowledge management and networking.

It is important to note that the ET was informed that the EREF load had been distributed amongst 8 ECREEE staff members, based on expertise and language. This ensured the necessary capacity building of the staff. However, the caused delays also brought to light, in the eyes of an interviewee, the relevance of an intervention so many years down the line. The ET received comments ranging the full-spectrum from “without EREF, I would have closed shop” to ““EREF is a facility, but in reality it is a complexity”, however overall the funds utility is not question. Since the ECREEE staff is now trained in evaluation it can be expected that further call for proposals will be executed faster.

Regarding the actual amount granted to projects however, the ET documented high levels of dissatisfaction given that the full financing requested had never been granted. This call for proposals created expectations that were not delivered upon and as “villagers don’t know of the existence of the Fund, the reputation and credibility of the intermediaries (NGO’s) has been damaged”. Issues are also reported regarding the slowness of the disbursements. At this point it should be noted that many of the proposals requested for the maximum amount of 50.000 Euros. The evaluation for projects revealed that most of the projects requested the maximum amount and were clearly over-subsidized. The restrictive approach of ECREEE ensured that the applicants had to rethink their budgets and also to demonstrate more ownership concerning the mobilization of own funding. Through that approach ECREEE could finance 41 projects instead of only 20 projects and raise more co-funding. The value for money was increased and more people have been reached through projects.

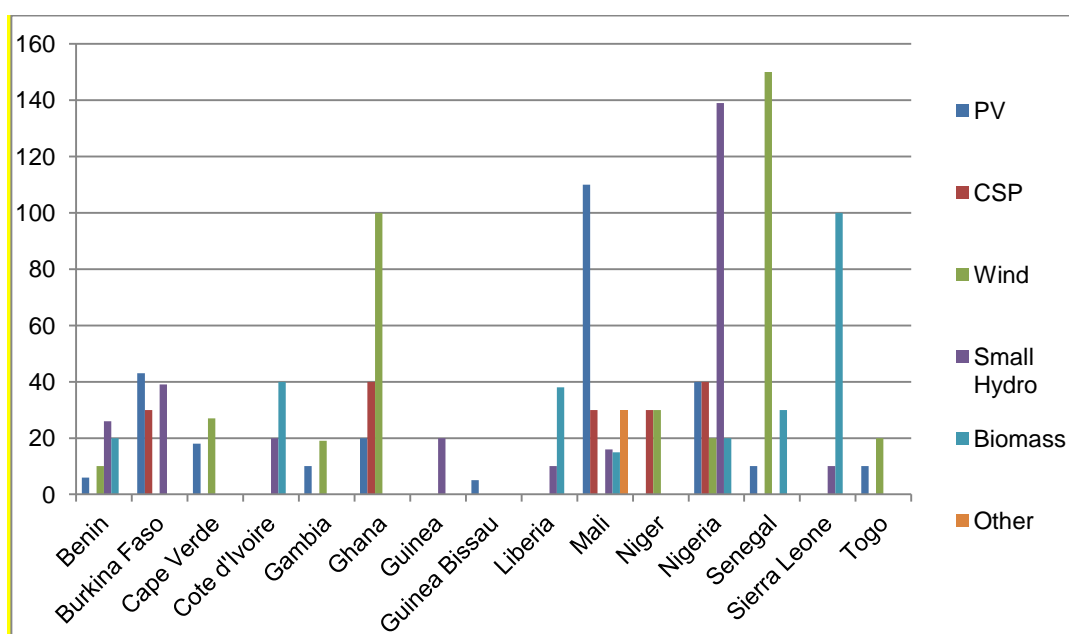
Although only a handful of interviewees mentioned having briefly considered cancelling the projects, most reported that while the delays and reduced financing received obliged them to rethink and reduce the initial proposals and expected results, these were in general “not jeopardized” and “although instead of having feasibility studies for 15 communities, these could only be carried out for 13”. It is interesting to note despite the above that some projects have generated additional value added, (social and health component) for example as some of the freezers installed in women led projects (Ice makers for cooperatives) will include compartments to store vaccines and medications.

Given the above, the ET is of the opinion that while these results are very positive, the level of resources required to evaluate proposals was underestimated, as was the requested level of financing.



As regards EREI, the ET was informed that to date a pipeline of medium to large-scale renewable energy projects has been successfully developed and presented via the organization of Investment Forums. These annual events aim to establish a network of investment stakeholders in the region meeting under the aegis of ECREEE to “address the main issues related to RE investments in West Africa and propose solutions”. The ET was informed that these meetings have a great potential to sensitize the financial institutions and trigger their interest and in fact this has manifested itself via requests for additional information and contacts to the ECOWAS commission (early 2013).

The mix of projects is varied as can be seen from the diagram below <sup>37</sup> and currently stands at over 700, which were identified with the help of the national focal institutions.



While the Fund provides links to the private sector, with ECREEE bringing in the technical expertise on one side, and access to potential financial partners on the other, the ET is of the opinion that the level of engagement will be improved by appointing one person to deal with these investment activities on a full-time basis at the Secretariat. As was said by one of the interviewees “when you go to investment production, the scale and maximum visibility of the projects are the name of the game”.

<sup>37</sup> ECREEE presentation, March 2013, Vienna

## 5.5 Sustainability and impact

The energy crisis in the region will present an ongoing opportunity for the institution if it is able to deliver practical energy support programs, in particular in light of the fact that the United Nations General Assembly has declared 2014 – 2024 as the Decade of Sustainable Energy for All, underscoring the importance of energy issues for sustainable development and for the elaboration of the post-2015 development agenda. The resolution stresses “the need to improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services and resources for sustainable development” and highlights as well the importance of improving energy efficiency, and increasing the share of renewable energy and cleaner and energy-efficient technologies.

The ET was informed in one case that “sustainability was not a concern”, and this not only because of the progress in establishing, formalizing and strengthening the institution, and the results obtained to date, but as well given that RE is “the only way forward” and “having ECREEE is a necessity”. The ET was also able to obtain confirmation that ECREEE will be funded from the core operational budget of the ECOWAS. Furthermore, the fact that ECREEE staff will be included in an exercise to streamline the organization and will be considered as staff of ECOWAS provides strong arguments in favor of the continued sustainability of this initiative. The ET also had the opportunity to confirm, on numerous occasions, that ECREEE is considered as the ECOWAS arm for issues related to RE&EE, with all such matters institutionally referred to it.

In this context it would seem **highly likely** that ECREEE’s regional approach could have a positive impact gradually leading to mitigation of existing barriers and economies of scale - preconditions for success - and could facilitate the identification of additional resources that could favour the development and accelerated investment in RE and EE strategies in the region. The fact that these play directly into the ECOWAS agenda and contribute to the reduction of greenhouse gas emissions is also considered a strong point in support of sustainability and impact. On this latter point, the opportunity to accurately quantify the avoided emissions of CO<sub>2</sub> from the ECREEE projects should not be missed.

And, last but not least, the fact that this model is currently being replicated in South Africa (SADEC) and East Africa (EAC), with the support of different partners including Austria<sup>38</sup>, also would seem to indicate that the sustainability of this type of model is not only not considered a high risk, but also that it has the

---

<sup>38</sup> An MoU was signed by EAC, ADA and UNIDO (with ADA contributing €1 million) in July od 2013 and a similar one is being finalized for SADEC

potential to impact not only this region, but other regions in which it might be implemented.

Upon review of the funding commitments received by the centre, it is considered likely that it will be financially stable throughout the second operational phase. This aspect is a success for the center since similar centers have failed due to a lack of financial sustainability.

Lastly, it is important to mention that in order for ECREEE to ensure that its impact is long-lasting, capacity building of financial institutions in the region, as well of investment climates in member states, will require sustained effort from the part of the center.

## 6 Issues with regard to a possible next phase

---

### 6.1 Assessment

The 2012-2016 Business Plan makes a strong case for ECREEE, mentioning specifically that it already enjoys several clearly discernible comprehensive advantages and could come to develop some more. In particular reference is made to the fact that the center enjoys considerable financial support; that it has a formal regional mandate authorized by the ECOWAS member countries; that is a truly regional organization; and that it has considerable flexibility with respect to activities. Also mentioned is the fact that it is well connected at the international level.

By virtue of its institutional mandate from the ECOWAS Commission member states it has the power to convene stakeholders in the sectors covered under its mandate and has the potential to be active in extremely varied areas, in different types of activities, from policymaking, project development, training, capacity building etc.

In addition, the fact that the ECREEE model is being replicated in 3 regional centers which “are designed and implemented on the basis of a shared and recognized model and proven methods” will lead to 35 sub-Saharan African countries having access to “enhanced information, training, knowledge-sharing and financing for RE & EE”. This active network will also contribute to the creation of innovative ideas and new opportunities for the implementation of concrete measures in the member states, and will not only facilitate communication and cross fertilization, but will also help to ensure the efficient use of resources which are increasingly being made available to this type of initiatives by the donor Community<sup>39</sup>. The network will play an important role in the implementation of the SE4ALL Initiative in Africa.

### 6.2 Recommendations

“The success of any institution hinges on the quality of staff of the institution and greater autonomy in its operations”<sup>40</sup>

---

<sup>39</sup> The role of regional co-operation to achieve SE4ALL, Robert Zeiner, 29 May 2013

<sup>40</sup> UNIDO/ADA/ECOWAS Project Document, 2009, p.9

## 7 Recommendations

CONCLUSION 1	Supporting continued success
	Recommendation 1
<p>A long-term administrative structure for the Secretariat was not designed from the start for a rapidly growing institution and in-house capacity gaps are now becoming apparent, as a result of the increased workload stemming from a rapidly growing project portfolio and expanding demands/ Limited planning and implementation capacities.</p>	<p>Ensure that the management structure of ECREEE is adapted to the upcoming challenges. Capacity gaps should be identified and an organizational strategy to adapt the institutional structure to address these should be put in place, including plans to enhance the capacities of the staff as well as the National Focal Institutions (NFIs).</p>
Contributing Conclusions	Supportive Recommendations
<p>Although ECREEE is perceived as globally positive, it finds itself at a crossroads, having to shift its activity focus away from softer activities, to on the ground implementation (particularly in the area of investment and business promotion).</p> <p>Given that ECREEE reportedly reached its response capacity vis-à-vis its work load at the end of 2012, unless institutional changes are made, it will be difficult to address any additional challenges arising from implementation of, for example, the EREF (and any of its likely future priorities such as bio energy), or the ECOWREX (data management, processing), or EREI.</p> <p>The long-term viability of the action plans of ECREEE will be ensured if</p>	<p>The current administrative structure of the Secretariat should be reviewed and reporting lines should be established to strengthen its response capacity. This should also include the establishment of a formal Management Team with clear responsibilities and regular meetings.</p> <p>A strategy for organizational development should be elaborated, job descriptions for all current staff should be reviewed to match these to the operational needs of the secretariat.</p> <p>Internal coordination mechanisms should be strengthened and a mechanism to periodically update all staff on progress towards objectives (weekly/bi-monthly), as well as at mid-point during</p>

CONCLUSION 1	Supporting continued success
<p>and only if at the institutional level their implementation is backed by a perennial structure.</p> <p>Based on demands for its services, and availability of resources, the human and institutional capacity of ECREEE needs to be strengthened to allow it to take on the tasks assigned to it. The existing capacity was severely tested with the first round of calls for proposals for EREF, for which the level of resources required to evaluate the proposals was underestimated, as was the requested level of financing.</p> <p>Flagship programs are currently entering into their active phases and rapidly being scaled up, leading to demands being placed on staff, on data management and processing, as well as on security of the information contained within the systems, which if not addressed and improved will run the risk of jeopardizing these processes.</p> <p>There are currently too many direct reporting lines to the ED and his time must be freed up to promote the organization and mobilize funds.</p> <p>Absence of ED should not be an obstacle and/or should not constitute a bottleneck and, mechanisms should be put into place to delegate full authority in his absence.</p> <p>The institution has not yet capitalized on its successes and the role of the relatively new communications unit will need to be clarified in order to allow it to cope with the increasing flows of information that ECREEE activities will generate.</p>	<p>implementation of a given Work Programme should be instituted.</p> <p>The Communications Unit should elaborate a strategy to promote and increase the visibility of the institution, regionally and internationally.</p> <p>EREF should avoid raising financial expectations that can't be met and to this effect should consider exploring the possibilities offered by alternative mechanism such as revolving funds, and should consider the possibility of revisiting, and funding, projects approved in the first round, which withdrew for financial reasons.</p> <p>ECREEE should keep a running log of avoided CO2 emissions as a result of its actions (EREF and EREI, Pilots projects, etc.)</p> <p>In order to ensure the continued success of the flagship programs, resources (both financial and personnel) should be allocated accordingly, in particular, for the EREI where the level of engagement would be improved by appointing one person to deal with these investment activities on a full-time basis at the Secretariat.</p> <p>The result area of investment and business promotion and the private sector and industry participation in ECREEE processes should be strengthened.</p> <p>To guarantee the security and stability of the information generated and being managed by the ECREEE Secretariat, the IT network should be strengthened, including a state-of-the-art firewall and back-up servers.</p>

<b>CONCLUSION 2</b>	<b>Strengthening the links</b>
	<b>Recommendation 2</b>
<p>Although synergies exist between several regional initiatives on RE/EE in the regional context, ECREEE is now in a better position than these to channel and coordinate opportunities.</p>	<p>There is a need to strengthen the functional link between the ECREEE, other initiatives, ECOWAS directorates, partners and UNIDO.</p> <p>The need for additional human resources/enhanced organizational setting to strengthen this capacity should be assessed.</p>
<b>Contributing Conclusions</b>	<b>Supportive Recommendations</b>
<p>The subsidiarity principle as referred to in the preface of the White Paper states that “clearly, the objective of the Region is to intervene where it has the most added value in strengthening regional integration through exchanges between member States, in promoting harmonized institutional and policy frameworks while incorporating Access to Energy Services (AES) as a priority, and for the development of energy programs targeting poverty reduction in rural and peri-urban areas to achieve MDGs.”</p> <p>The UNIDO Country Offices are not contributing to the dissemination of ECREEE success stories, meetings and/or other activities as they are not always informed in a timely manner of ongoing activities.</p> <p>In order to better reflect national priorities while promoting a regional entity, the role of the NFIs should be enhanced by facilitating a shift, from a one-person model, to a more structured institutional focal representation of ECREEE. For this ToR’s should be developed, including guidelines for establishment of in country coordination.</p>	<p>ECREEE should build each of its activities on the principle of subsidiarity which makes it possible to identify each country’s level of regional intervention.</p> <p>Direct communication lines should be established between UNIDO headquarters accounting personnel and the Secretariat and training sessions in administrative and financial processes for key staff should be facilitated.</p> <p>UNIDO should capitalize on the investment of a Country Office, which can showcase ongoing work, and provide admin/logistical support by ensuring they are kept informed of activities on an ongoing basis.</p> <p>As soon as the structures are consolidated UNIDO should consider gradually subcontracting assignments to the center.</p> <p>In light of the planned implementation by ECOWAS of the SAP system, it would be beneficial to ensure that training for key staff of ECREEE takes place as soon as possible to facilitate a smooth transition.</p>

CONCLUSION 1	Supporting continued success
<p>mechanisms. This would help to ensure that there is a clear understanding as to what the NFI responsibilities are vis-à-vis ECREEE/country.</p> <p>In particular, and although they are described as necessary, the existing coordination mechanisms are weak or not in place between NFIs and national stakeholders, and do not formally exist between different NFIs.</p> <p>The NFIs are currently only partially involved in the EREF process, i.e. the interaction takes place directly between ECREEE &amp; the applicants, and countries are only informed of the winners.</p>	<p>As well, in-house administrative training sessions should be organized for all professional staff to facilitate the work of the financial unit.</p> <p>A formal process should be put in place to develop and introduce ToRs clearly delineating roles and responsibilities of the NFI's.</p> <p>NFIs, with the assistance of ECREEE, should establish and formalize internal coordination mechanisms and establish communication mechanisms with public agencies involved – direct or indirectly – with the RE and EE sectors. This should be expanded to include stakeholders representing a broad spectrum of society.</p> <p>Yearly joint meeting of the focal points, should be organized, either independently of, or piggybacking onto other meetings to maintain sense of ownership, facilitate cross-fertilization and exchange of information and should include an update and discussion on EREF applications.</p>

CONCLUSION 3	Going further
	Recommendation 3
<p>In line with the activities of the National Multisectoral Groups (NMGs) at country level, at regional level (i.e. ECOWAS), bringing the Energy Directorate and other Directorates (Agriculture, Education, Health, etc.) together would trigger the alternative energy systems (AES).</p>	<p>ECREEE has successfully attracted donors and built a network of focal Institutions in member countries and, given its AES specificity (through renewable energy and energy efficiency), it should actively collaborate with the NMG's.</p>



CONCLUSION 3	Going further
<p>mainstreaming process at the regional level. This would also facilitate multisectoral dialogue between counterparts at both regional and national levels with the inclusion of AES in their strategies and programmes.</p>	
Contributing Conclusions	Supportive Recommendations
<p>ECREEE could contribute to the unifying framework for Regional white Paper (RWP) implementation.</p>	<p>ECREEE should take the lead regarding this institutional issue in order to better promote and support activities in support of the achievement of AES in the region.</p> <p>The center should act as facilitator and supporter rather than implementer of grass-root activities; it should avoid competition and overlapping of services provided by the private sector and other institutions (e.g. consultancies, audits, trainings); use call for applicants, tenders and call for proposals; focus on the added value of regional cooperation and exchange (e.g. train the trainers, RE&amp;EE data collection, regional policy processes, research networks, dissemination of lessons learned); the center should provide information and data at no cost, in order to ensure a strengthening of local capacities and knowledge management.</p>

## 8 Lessons learned

---

The relevance, support and sense of ownership for ECREEE was confirmed in all countries visited and through the first operational phase of the institution and the implementation of its initiatives and projects, it has contributed to raise the profile of RE and EE not only locally, but regionally. The ECREEE model is new and unique and part of the success of the institution derives from the ECOWAS Commission offloading part of its mandate to a newly created institution. Although this created some apprehension in the ECOWAS Commission, this was resolved by closely involving its high level representatives on board in the CS and EB. This contributed to strengthen a dedicated institution on one hand, and to secure the support of the Commission, on the other.

The positive results of the ECREEE model to date are based on a strong and clearly defined institutional linkage to ECOWAS, a solid regional institution with sufficient “absorptive capacity”, a clear political mandate from its member states to promote renewable energy and energy efficiency and, a budget to fund the ECREEE secretariat. It is this “patronage” of ECREEE that makes the technical support from UNIDO and donors effective and relevant. Without it, it is highly likely that the model would not work.

This said, a number of lessons learned should be kept in mind when developing similar institutions:

- Involve key stakeholders (e.g. ministries, utilities, electrification agencies, private sector, civil society) during the preparatory phase and operational phase; gather inputs for the design, the technical program and demanded services; create awareness and attract interest;
- Mainstream and encourage ownership and strong local identity throughout the design and operations of the centre. The ECREEE experience and other evaluations on the centres have highlighted the importance of local ownership and use of local procedures to ensure sustainability and long-term capacity strengthening. The host country should show high interest in the centre and see it as strategic investment;
- The budget of the center should reflect the needs, be realistic, ambitious and not be limited to the actual received funding commitments at the beginning. Fund mobilizations should be a core activity of the center and the Director. The expansion of the project portfolio should be a requirement for the expansion of staff and administrative costs. Form shall follow function. The mixture of co-funding from ECOWAS, international support and active fund raising of the centre is the basis for the financial sustainability of ECREEE. There are numerous examples of centres

closed after the first phase due to the dependence on only one financing source and very limited budget scope. A clear funding gap shall be shown to interested donor partners;

- The early establishment of the network of National Focal Institutions (NFIs) is crucial for the functioning of the center. The network allows high level access to national policy makers and national support services (e.g. workshops, project monitoring, awareness creation and data collection); the experience of ECREEE has shown that the strengthening of the capacities of the NFIs is very important; The compensation of NFIs for provided services should be clarified;
- The involvement of UNIDO as technical partner during the preparatory, establishment and first operational phase of the centers is key. UNIDO should act neutrally and provide technical backstopping. However, the UNIDO institution building involvement should be seen always as limited in time. The main objective being to establish a strong local institution and foment its gradual independence. UNIDO will gain credibility and win an implementing partner for projects;
- The provision of highly qualified seconded experts recruited by international tender to the centers from UNIDO, AECID and other partners is crucial. In the best case such an expert shall combine technical-economic energy skills with management and development cooperation experience. Good relations and contacts with international donors are of high importance for fund raising and building of trust for the centres. The expert shall assist the Director of the center in the establishment and first operational phase (e.g. staffing, procurement, financial management, technical program, project cycle management) until the Centre is consolidated; in the beginning priority shall be given to the establishment of an effective office, as well as the creation of the internal rules, processes and templates;
- The quality of the local staff and a clear management and staff strategy are a key success factors; it is important to develop the organizational chart and TORs for administrative and technical staff; the center should start with a small base of staff and grow with increasing demands and project funds; staff should be employed under the rules and procedures of the regional economic community at least in the mid-term; the recruitment of a renowned Director with extensive knowledge on the energy sector and strong relationships with national governments, the regional economic community and donor partners is a key success factor; an alternate should be appointed to ensure the functioning of the office in the absence of the Director;
- An efficient and effective institutional structure should be established in the Centre with high level of legitimacy in the regional economic

community; clearly defined duties and roles of the Executive Board, Technical Committee, Secretariat, NFIs and Executive Director from the very beginning; strategic representation of countries, departments of the regional community (e.g. technical and administrative) and core donors in the governance structure;

- The definition of the legal status (e.g. specialized agency) and scope of delegation of competencies from the regional organization to the Centre (e.g. signing of contracts, recruitment, procurement) from the very beginning is key. For efficiency purposes it is important that the center has its own legal identity but works in accordance with the rules of the regional organization. Any conflicts between the energy unit in the regional organization and the center shall be avoided. To ensure continued donor support the center has to show efficient implementation.
- A long-term (4 to 5 years) and short-term (annual) planning, execution and monitoring framework including a set of performance indicators should be developed; this to allow the efficient monitoring of the progress by the donor partners and the Executive Board. To avoid double financing all activities and co-funding received by the center should be included in the annual work plans. The management of the center should take ownership in developing the Business Plan and work plans; The design of the project document should leave space for changes in accordance with the priorities of the Director and demands from the national focal institutions (flexibility clause);
- The annual work plans should be developed in close coordination with the NFIs and other relevant market enablers. NFIs should carry out wider stakeholder consultations on the work plans;
- As soon as the structures are consolidated, development partners should start gradually subcontracting assignments to the center;
- The center shall act as facilitator and supporter rather than implementer of grass-root activities; it should avoid competition and overlapping of services provided by the private sector and other institutions (e.g. consultancies, audits, trainings); Calls for applicants, tenders and call for proposals should be used; emphasizing the added value of regional cooperation and exchange (e.g. train the trainers, RE&EE data collection, regional policy processes, research networks, dissemination of lessons learned); the center shall provide information and data for free, in order to ensure a strengthening of local capacities and knowledge management.;
- Demonstrate added value on local and international levels with early start-up activities with high visibility factor (e.g. country visits, call for applicants and/or projects, tenders, regional key conferences and workshops, data provider, partner in project submissions); avoid the “dead valley impression“ in the beginning (long development time of programs);

establish website and newsletter cycle; the Director of the centre should attempt to be present at important international events and maintain donor relationships;

- Permanent pro-active fund raising for the technical program of the Centre should be a key performance indicator for staff; the center should participate in call for proposals and donor dialogues from the very beginning; the center should prepare high-quality project documents in cooperation with strong partners from the region and internationally; partners should involve the centre as executing partner for project in the early stage of development (e.g. SPWA);
- Well-designed long-term oriented flag-ship priority programs should be developed with the potential for up-scaling to be implemented during the first operational phase across all result areas (e.g. capacity and policy development, knowledge management, awareness raising, business and investment promotion); making use of innovative approaches and models with the potential for up-scaling and replication (e.g. train the trainer approaches, financing mechanisms); urban and rural areas focus;
- An informative website should be created, informing regularly on updates and the newsletter cycle of the Centre should be established; a contact database should be built up, making use of electronic social media features;
- A strong network of partnerships with local and int. institutions in the clean energy sector should be developed, seeking to develop common projects and win-win situations; The comparative advantage of the centre due to knowledge of the local environment should be sought;
- An internal quality, appraisal and management framework should be established for technical procurements and projects, as well as a technical appraisal framework for RE & EE projects and programs; templates should be developed for project appraisal, procurement and project cycle management; as well as standard project document templates to be used by the centre to co-fund and monitor projects;
- The country and donor interests should be managed and balanced carefully by the Director of the Centre; The centre should seek to maintain its independence and cooperate with a wide range of local and international partners; it should coordinate donor activities and define the priorities for their assistance through the annual work plans and its business plan; The building up of numerous partnerships will strengthen the capacities of the centre and will make it easier to raise co-funding. The funding in some cases could be managed by another entity, but the centre, should receive credit and visibility.

## Annex A - List of interviewees

NAME	POSITION	CONTACT DATA
<b>AUSTRIA</b>		
<b>ADA</b>		
Monika Tortschanoff	Program Manager West Africa and Uganda	Monika.tortschanoff@ada.gv.at
Hannes Bauer	Sustainable Energy	Hannes.bauer@ada.gv.at
Robert Zeiner	Director, Programmes and Projects International	Robert.zeiner@ada.gv.at
Ursula Steller	Head of Unit, Countries and Regions	Ursula.steller@ada.gv.at
<b>UNIDO</b>		
Alois Mhlanga	UNIDO Manager of ECREEE project	a.mhlanga@unido.org
Martin Lugmayr	UNIDO Technical Assistant at the ECREEE Secretariat	m.lugmayr@unido.org / mlugmayr@ECREEE.org
Josy Thomas	Industrial Development Officer	j.thomas@unido.org
Rana Ghoneim	Industrial Development Officer	r.ghoneim@unido.org
Sunyoung Suh	Associate Expert	s.suh@unido.org
Mohammed El Gallaf	UNIDO Representative	m.el-gallaf@unido.org
Nina Zetsche	Industrial Development Officer	n.zetsche@unido.org
<b>CAPE VERDE</b>		
<b>ECREEE</b>		
Mahama Kappiah	Executive Director	mkappiah@ECREEE.org
David Villar	AECID seconded Resident Coordinator	dvillar@ECREEE.org
Nuru Jobe	Financial Officer	njobe@ECREEE.org
Joarrel Barros	Project Assistant	jbarros@ECREEE.org
Alcides Oliveira	Admin HR Officer	adeoliveira@ECREEE.org
Ibrahim Soumaila	Energy Efficiency Expert	isoumaila@ECREEE.org
Jansenio Delgado	Renewable Energy Expert	jdelgado@ECREEE.org
Bah Saho	Renewable Energy Expert	bsaho@ECREEE.org
Alma Mensah	Head of Admin and Finance	amensah@ECREEE.org

Salett Nogueira	PR & Knowledge Management Officer	snogueira@ECREEE.org
Jafaru Abdulrahman	IT & Observatory Officer	jabdulrahman@ECREEE.org
<b>MINISTRY OF TOURISM, INDUSTRY AND ENERGY</b>		
Antonio Baptista	Director General for Energy	Antonio.baptista@mtie.gov.cv
Abraão Andrade Lopes	Ex Director General for Energy	Abrao.lopes@mtie.gov.cv
<b>UN</b>		
Rui Levy	National Programme Officer UNIDO	rui.levy@cv.jo.un.org
Octavio Silva	Chief of operations	Octavio.silva@cv.jo.un.org
<b>MINISTRY OF FOREIGN AFFAIRS</b>		
Jose Borges	Minister	
Carlos Semedo	Director, General Global Affairs	Carlos.semedo@govcv.gov.cv
<b>ELECTRA – ELECTRICITY AND WATER AGENCY</b>		
João Manuel Dias da Fonseca	Executive Director	j.fonseca@electra.cv
<b>SENEGAL</b>		
<b>MINISTRY OF ENERGY AND MINES</b>		
Ibrahima Niane	NFI – Director of Energy	papeniane@yahoo.fr
Gora Niang	Director, Hydraulic Energy	niangora2002@yahoo.fr
Lamine Diop	Past Director RE	lapadio@hotmail.com
Cheike Wade	ASER - Senegalese Agency for Rural Electrification	gwade@aser.sn
<b>TECHNICAL BUREAU FOR SPANISH COOPERATION</b>		
Rafael Garcia	General Coordinator	Rafael.garcia@aacid.sn
Pablo Matos	Andalucia Cooperation	
Mercedez Navarro	Economic Sector and Rural Development	
<b>GSERM – GROUPEMENT SENEGALAIS DE REALISATION ET MAINTENANCE</b>		
A. Kassim Diakite	General Director	g.serma@gmail.com
Fatoumata Traore	Marketing Manager	fatdiatra@gmail.com
Khadydiatou Dia	Administrator	Khady-dia@gmail.com

<b>NIGERIA</b>		
<b>UNIDO</b>		
Raymond Tavares	Deputy Representative	r.tavares@unido.org
Reuben Bamidele	National Programme Officer	r.bamidele@unido.org
Chuma Ezedinma	NPO - Agribusiness & Agroindustry	
<b>ENERGY COMMISSION OF NIGERIA – THE PRESIDENCY</b>		
J. S. Olayande	Deputy Director	josepholayande@yahoo.com
<b>ICEED – INTERNATIONAL CENTRE FOR ENERGY ENVIRONMENT AND DEVELOPMENT</b>		
Ewah Out Eleri	Executive Director	ewah@icednigeria.org
<b>SPANISH EMBASSY</b>		
Javier Nievas	Project Officer	Programacedeao.1@fiiap.org
<b>ECOWAS COMMISSION</b>		
Bayaornibe Dabire	Director of Energy	bdabire@ecowas.int
Alfred Braimah	Director Private Sector	mbraimah@ecowas.int
Bougonou Djeri-Alassani	Principal Programme Officer – Policies and Regulations	bdjerialassani@gmail.com
Johnson Boanuh	Director, Environment	jboanuh@ecowas.int
<b>GHANA</b>		
<b>UNIDO</b>		
Frank Van Roampy	UNIDO Representative	<a href="mailto:F.VanRompae@unido.org">F.VanRompae@unido.org</a>
<b>KITE</b>		
Ishmael Edjekumehne	Executive Director	iedjekumhene@kiteonline.net
<b>MINISTRY OF ENERGY AND PETROLEUM</b>		
Wisdom Ahiataku Togobo	Director of RE	wtogobo@gmail.com wtogobo@energymin.gov.gh
<b>ABANTU FOR DEVELOPMENT</b>		
Rose Mensah Kutin	Director	rose@abantu-rowa.org
<b>BIOGAS TECHNOLOGIES AFRICA LTD</b>		
John Afari Idan	CEO	info@biogasonline.com
<b>UNDP</b>		
Etiosa Ugyigue	National Project Coordinator	Etiosa.uyigue@undp.org
<b>SPANISH EMBASSY</b>		
Juan Antonio Frutos Goldarach	Deputy Head of Mission	Juan.frutos@maec.es



<b>BURKINA FASO</b>		
<b>UN</b>		
Safyatou Ba	Head of UNIDO Operations	<a href="mailto:office.burkinafaso@unido.org">office.burkinafaso@unido.org</a>
<b>UNIVERSITÉ DE OUAGADOUGOU</b>		
Zacharie Koalaga	Maitre de conference en physique	koalaga@univ_ouaga.bf
<b>BAR RESTO WA TED VIMDÉ</b>		
Blandine Bouda	Coordonatrice, Presidente de l'Association des Dolotières	Bouda.blandine@yahoo.fr
<b>2iE</b>		
Yao Azoumah	Director of Joint Research Centre for Sustainable Energy	Yao.azoumah@2ie-edu.org
<b>COMMUNE DE OUAGADOUGOU – DIRECTION DE LA PROPLETE</b>		
El Hadj Sidi Mahamadou Cisse	Directeur de la propreté	Cisse_sidi@yahoo.com
<b>INDIVIDUALS</b>		
Abedayo Agbejule	Principal Lecturer, University of Applied Sciences, Finland	ade@abesafrica.com
Jean Michel Garcia	Batiafrica	jmgarcia@batiafrica.com
Benoit Kalasa	Regional Director - UNPF	kalasa@unfpa.org

## **Annex B - Terms of reference for the MTE**

### **Terms of Reference for the UNIDO – ADA – AECID - ECOWAS Joint Independent mid-term project evaluation of the preparatory and first operational phase of the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE)**

UNIDO Project Nos. XP/RAF/10/016, YA/RAF/10/002, YA/RAF/09/021,  
YA/RAF/12/003, YA/RAF/09/001

Austria Development Cooperation (through UNIDO)

Project No. UE/RAF/09/028

Austrian Development Cooperation reference number 2599-00/2009

AECID International Cooperation Subsidy No. 2448/09

## **I. Project Background**

### **A. Establishment of ECREEE**

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) is a specialized Centre of Excellence of the Economic Community for West African States (ECOWAS) with a public mandate to promote regional renewable energy and energy efficiency markets. It was created by the ECOWAS member states at the background of a severe energy crisis in the region. In 2008 the 61st Session of ECOWAS Council of Ministers adopted the regulation C/REG.23/11/08 and gave the Centre a legal basis.

After the successful completion of the preparatory phase the Centre commenced operation in July 2010 with support of ECOWAS, the Governments of Austria and Spain and key technical assistance of the United Nations Industrial Development Organization (UNIDO). The centre acts as an independent body but within the legal, administrative and financial framework of ECOWAS. Further information on the legal status of the Centre is available in the headquarters agreement, the enabling rule PEC/ER/1/01/11 on the organization and operation of ECREEE and the minutes of the Technical Committee and Executive Board meetings.

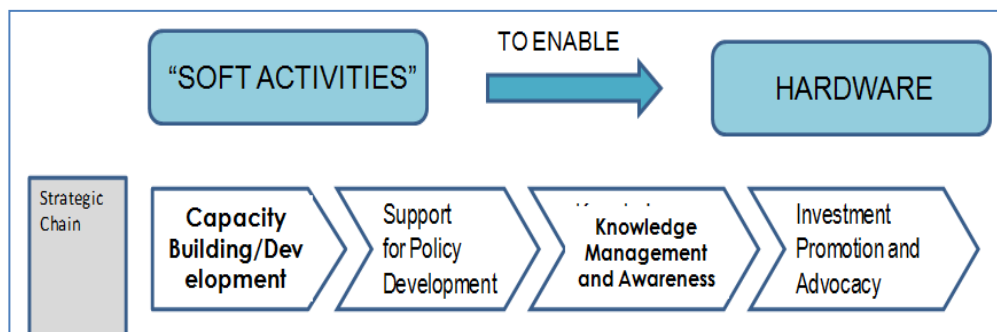
A detailed overview on the objectives, result areas, structure, logical framework (including performance indicators) of the Centre can be found in its Business Plan (2011 to 2016). An overview on the activities and achievements of the Centre since its creation can be found in the annual work plans, status reports, and UNIDO progress reports.

**B. Objectives, results and outputs of the Centre**

	Intervention logic
<b>Overall objective/ Development goal/Impact</b>	To contribute to the sustainable economic, social and environmental development of West Africa by improving access to modern, reliable and affordable energy services, energy security and reduction of energy related GHG emissions and climate change impacts on the energy system.
<b>Specific Objective/ Outcome(s)</b>	The specific objective of ECREEE is to create favourable framework conditions for regional RE&EE markets by supporting activities directed to mitigate existing technology, financial, economic, business, legal, policy, institutional, knowledge and capacity related barriers.
<b>Result areas and outputs</b>	<ul style="list-style-type: none"> <li>• RESULT AREA 1: Effective regional RE &amp; EE promotion agency created and financial sustainability reached</li> <li>• RESULT AREA 2: Tailored policy, legal and regulatory frameworks created and implemented</li> <li>• RESULT AREA 3: Capacities strengthened and applied</li> <li>• RESULT AREA 4: Knowledge management, awareness raising, advocacy and networks strengthened</li> <li>• RESULT AREA 5: Business and investment promotion</li> </ul>
	<p><b>Activities:</b> The activities to be implemented by the Centre across the different result areas are defined in the annual work plans which are subject for approval by the Executive Board. The Centre undertakes mainly software intervention which will lead to investment into hardware.</p>

**C. Alignment with key policies**

Figure 1: ECREEE Result Areas



**ECREEE works towards the achievement of the objectives of the ECOWAS Renewable Energy Policy and Energy Efficiency Policy** which were adopted by the ECOWAS Ministers of Energy during the ECOWAS High Level Energy Forum, held from 29 to 31 October 2012 in Accra, Ghana (see policy documents). Moreover, the activities of ECREEE contribute to (...)

- The objectives of the UN Sustainable Energy for All Initiative (SE4ALL). The initiative aims at the achievement of three interlinked targets by 2030: universal access to modern, affordable and reliable energy services; doubling the rate of improvement in energy efficiency; doubling the share of renewable energy in the global energy mix.
- The WAPP Master Plan Scenario which aims at doubling the regional electric generation capacity by 2025 (additional 10.000 MW) primarily through large hydro and gas.
- The ECOWAS White Paper on energy access foresees that at least 20% of new investments rural electrification should originate from locally available renewable resources.

#### **D. Institutional structure of the Centre**

The institutional structure of the Centre includes:

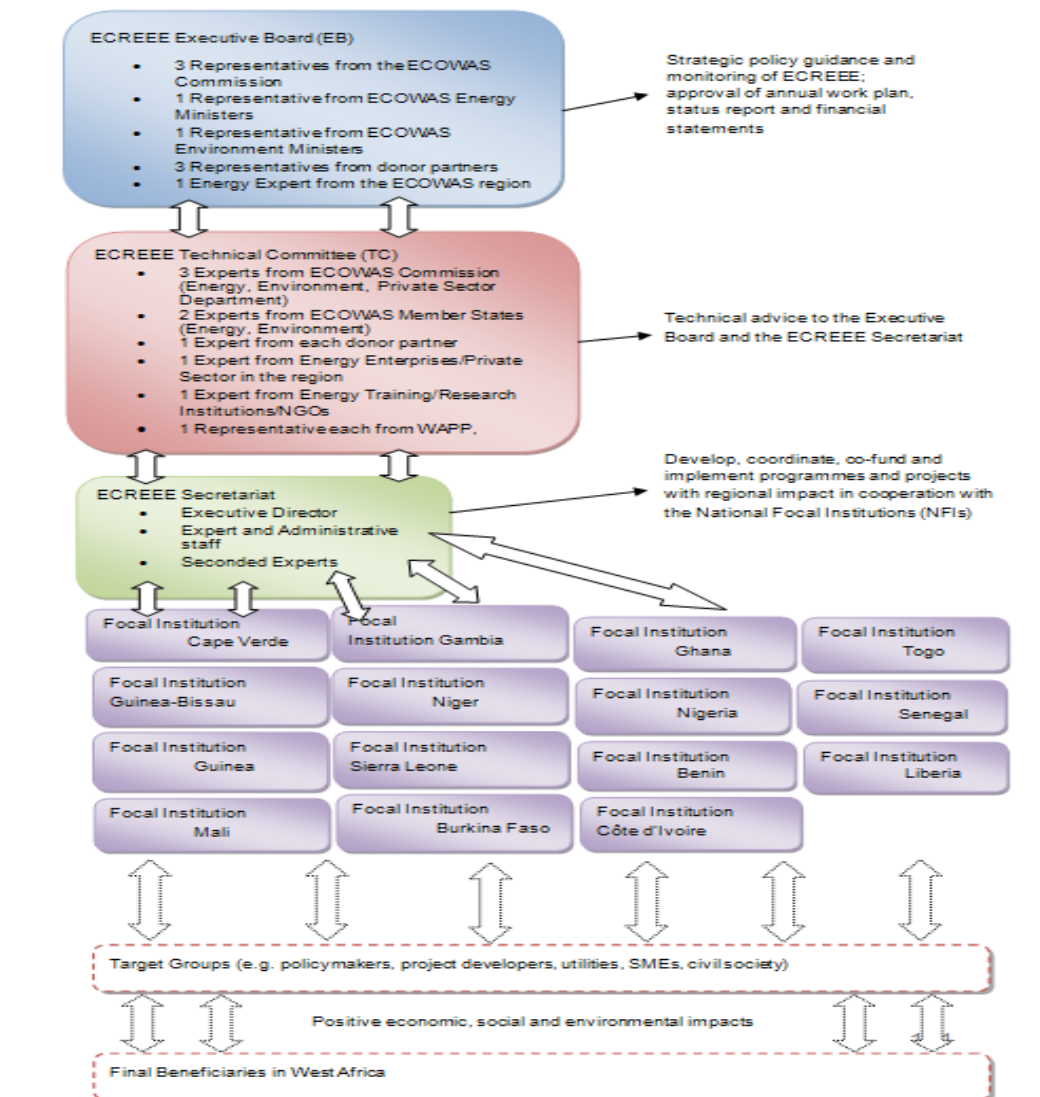
- The Secretariat based in Praia, Cape Verde.
- The Executive Board (EB).
- The Technical Committee (TC).
- The National Focal Institutions (NFIs) in the 15 ECOWAS countries.

The **ECREEE Secretariat** is based in the capital of Praia, Cape Verde, and operates in all three ECOWAS languages (English, French, and Portuguese). It operates with a small multinational team of West African and international full-time staff. The Secretariat is headed by the Executive Director, Mr. Mahama Kappiah, former Head of the ECOWAS Energy Division for Energy Access and Renewable Energy. The Secretariat implements the activities and elaborates the annual work plans and status reports and presents the documents for review and approval to the Technical Committee and Executive Board. Usually, the activities of the Centre are executed in cooperation with its NFIs or other public and private entities. UNIDO and the Spanish Agency for International Development and Cooperation (AECID) are providing seconded experts as part of their technical assistance. The internal structure of the ECREEE Secretariat can be described as follows:

- a. Department of Management and Organizational Development (DMOD).
- b. Technical Energy Department (TD).
- c. Department for Administration and Finance (DAF).

ECREEE has established a **network of National Focal Institutions (NFIs)** which interlinks the Secretariat with all ECOWAS Member States. The activities of the Centre are executed in cooperation with the NFIs or other entities of the public and private sector. The Secretariat implements the activities and elaborates the annual work plans and status reports and presents the documents for review and approval to the Technical Committee and Executive Board.

The Centre is governed by an **Executive Board (EB)** and a **Technical Committee (TC)** which meets usually twice a year. The EB is the highest decision making body which provides strategic guidance and approves the annual work plans, progress reports and financial statements of the Centre. The technical guidance is provided by the Technical Committee (TC). The TC has the role of reviewing major technical documents and reports for submission to the EB. If necessary the TC reviews projects to be funded by ECREEE resources and is recommending their approval by the EB.



## **E. Scope of Intervention**

The geographic scope of intervention of the Centre is defined as follows. ECREEE (...):

- Supports and executes RE&EE activities and projects which cover one or more ECOWAS countries: Benin, Burkina Faso, Cape Verde, Gambia, Ghana, Guinea, Guinea-Bissau, Côte d'Ivoire, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.
- Focuses primarily on activities and projects with regional impact or national projects which demonstrate high potential for scaling-up or regional replication.
- Works in urban as well as peri-urban and rural areas. Due to the high relevance of decentralized RE&EE technologies and services for rural areas the Centre will run a special rural energy program.

The Centre promotes the following energy technologies/solutions:

- All appropriate renewable energy and energy efficiency technologies and solutions, including also partly renewable energy based hybrid systems and mini-grids.
- Small scale hydro power projects usually with a maximum capacity of 30 MW.
- Biofuel projects which prove to be sustainable.
- Liquid Petroleum Gas (LPG) cooking projects are eligible due to their high relevance for low-income population groups.

## **F. Activities and Services**

In accordance with the long-term planning framework of the Business Plan and the annual work plans the Centre executes and supports activities, programs and projects in the scope of the four areas:

- a) Tailored policy, legal and regulatory frameworks;
- b) Capacity development and training;
- c) Knowledge management, awareness raising, advocacy and networks;
- d) Business and Investment Promotion.

ECREEE provides the following services to different clients and target groups:

- Develop and implement a coherent regional RE&EE policy framework of ECOWAS and facilitate its implementation on national levels;
- Develop and execute regional programs and projects with other partners and mobilize funding;

- Operate as key entry point for the implementation of international funding to mitigate climate change in the energy sector (e.g. UN, GEF, IBRD);
- Provide co-funding for demand-driven programs and projects executed by the private and public sector or civil society in the region (e.g. call for proposals and tenders);
- provide a framework for capacity building activities and strengthens networks between research and training institutions as well as organize train-the-trainers workshops;
- Update and provide RE&EE information and data for investors;
- Think tank, lobbying agent and advisory platform for RE&EE in West Africa;
- Networking and co-organization of conferences, forums and workshops;
- Facilitate north-south and south-south cooperation for knowledge and technology transfer.

## **G. Highlights of ECREEE activities**

### **Execution of major programs**

ECREEE (...):

- Implements the ACP-EU Energy Facility Project, "Supporting Energy Efficiency for Access in West Africa (SEEA-WA)" Project.
- Implements the ECOWAS Small Scale Hydro Power Programme (2013 to 2018).
- Implements the GEF-UNIDO Project: "Promoting Regional Coordination, Coherence and Knowledge Management under the Energy Component of the GEF Strategic Programme for West Africa (SPWA)", executed in cooperation with UNIDO.
- Implements the GEF-UNIDO Project: "Promoting Market Based Development of Small to Medium Scale Renewable Energy Systems in Cape Verde".
- Develops the GEF-UNIDO Project: "Demonstration of the feasibility and viability of small to medium scale renewable energy technologies and creation of an enabling environment for replication and up-scaling in Guinea Bissau".

### **REGIONAL AND NATIONAL RE&EE POLICY SUPPORT**

ECREEE

- Develops and implements the ECOWAS Regional Renewable Energy Policy with support of the Renewable Energy Cooperation Programme

(RECP) of the European Union. The policy will set attainable RE targets and scenarios for urban as well as rural areas.

- Develops and implements the ECOWAS Energy Efficiency Policy with support of the European Union. The policy will propose a portfolio of policy measures, laws, regulations and incentives.
- Supports the development of national RE&EE policies, laws and standards in individual ECOWAS countries (e.g. feed-in-tariffs, equipment standards, building codes).

## CAPACITY DEVELOPMENT AND TRAINING SUPPORT

### ECREEE (...):

- Executes a regional RE&EE capacity needs assessment in cooperation with local universities to design a tailored capacity building program.
- Offers tailored trainings for different RE&EE market enablers by using the added value of regional interexchange and train-the-trainers approaches.
- Manages the RETScreen Clean Energy Project Analysis training network.

## KNOWLEDGE MANAGEMENT AND AWARENESS RAISING

### ECREEE (...)

- Manages the ECOWAS Observatory for Renewable Energy and Energy Efficiency (EORE) which provides RE&EE market data and information for investors.
- Executes several RE resource assessments in the area of wind, solar, bio-crops and small scale hydro power by using means of Geographical Information Systems (GIS).
- Executes awareness raising campaigns and organizes conferences on different RE&EE issues.

## BUSINESS AND INVESTMENT PROMOTION

### ECREEE (...)

- Manages the ECOWAS Renewable Energy Facility (EREF). The EREF provides small grants for small and medium sized RE&EE projects in peri-urban and rural areas. It supports feasibility studies, business start-ups and small investments.
- Manages the ECOWAS Renewable Energy Investment and Business Initiative (EREIB) which supports the development of a RE project pipeline for medium and large scale projects.



- Implements several high visible demonstration projects with the potential for replication in other ECOWAS countries.
- Contributes to the development of tailored financial schemes for RE powered mini-grids and stand alone systems.

## H. Budget and supporters

The initial core partners of the Centre, namely the ECOWAS Commission, the Austrian Development Agency (ADA), the Spanish Agency for International Development Cooperation (AECID) and the United Nations Industrial Development Organization (UNIDO) mobilized around **11,6 million Euro core-funding** for the establishment and first operational phase of ECREEE (2009 to 2014). In addition, ECREEE and its core-partners mobilized around **5,9 million Euro co-funding** from different sources for specific projects or activities (e.g. workshops, trainings) of the Centre.

Project fact sheet at the launch of project (see Annex 5: project document).

Start date:	1 November 2009
Project inputs (UNIDO + ADA)	€ 2,352,350 (incl. € 1,800,000 from ADA)
Counterpart inputs (ECOWAS Commission)	€ 1,802,000
Total project budget:	€ 4,154,350
Expected duration of project:	42 months
Originally expected completion date:	30 April, 2013

AECID funding project fact sheet (see Annex 6 project document/framework agreement).

Start date:	December 2009
Total project budget:	€ 7 million + € 410,000 subsidy for resident Coordinator
Expected duration of project:	5 years
Originally expected completion date:	1 December 2014

Other financing to ECREEE activities and nature of agreements (status of Nov. 2012)

Partner and nature of agreement	Nature of Agreement	Funding	Starting date / running period
European Commission (different instruments)	ACP-EU Energy Facility, RECP, BIZCLIM grants	approx. € 2.0 million	2011 to 2014
USAID	Consultancy services	approx. € 0.8 million	2011 to 2012
GEF-UNIDO projects	Implementing Agency	approx. € 2.0 million (excl. co-funding)	2012 to 2015
IRENA	Agreement on Capacity Building; conference support;	approx. € 0.6 million	2012 to 2014
<b>Others</b> (e.g. ADEME, ESMAP, UNDP, GBEP, other UNIDO projects, GFSE, IPF)	Various modalities	approx. € 0.5 million	2010 to 2012
Total		approx. € 5.9 million	2010 to 2015

## I. Role of partners

The support of the core partners ADA, AECID and UNIDO has been central for the establishment and first operational phase of ECREEE. As such, this **evaluation will only assess how the contributions from ADA, AECID, UNIDO and ECOWAS have helped ECREEE to achieve its vision and objectives** in line with the initial project document, Business Plan and MOU between ECOWAS and AECID. The roles of the core partners are varying. Whereas ADA and AECID are donors, UNIDO is acting more in the role of a technical assistance provider and partner. Due to the initial non-existence of defined structures, management and proceedings of the Centre, ADA channeled its funding through UNIDO on the basis of the initially agreed UNIDO-ECOWAS-ADA project document. These activities were mainly implemented according to UNIDO procedures and rules. UNIDO provided a technical expert to assist the Executive Director of the Centre to establish the internal procedure, structure and technical program from the very beginning (Feb. 2010). Based on the successful completion of the establishment phase AECID provided funds and a seconded expert from mid of 2010 directly to ECREEE (through ECOWAS). Nowadays, ECREEE is cooperating with a broad range of donor and technical partners on a project to project or activity to activity basis.

## J. Planning and monitoring framework and status of implementation

ECREEE is applying an **interrelated short-term and long-term planning and monitoring framework**. The ECREEE Business Plan provides a long-term planning framework for the period 2011 to 2016. The approved Business Plan integrates and substitutes also the initial planning framework of the ECREEE project document which covered initially only the contributions of ECOWAS, UNIDO and ADA. The long-term framework of the Business plan defines measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix. Moreover, targets were set for each of the established indicators per result area (see Business Plan).

The **annual work plans**, which are subject to approval by the Board, provide a short-term planning framework which incorporates projects and activities to be executed by the Secretariat in a given year. The defined activities contribute to the achievement of the performance indicators and goals of each result area. The **annual status reports** monitor the implementation of the work plans and report on the achievements in the different result areas of the Business Plan. In accordance with the ECREEE project document the initial support was **structured in a preparatory phase (December 2009 to July 2010) and a first operational phase** (from August 2010). The status of achievements as agreed in the project document and ECREEE Business Plan can be found in the ECREEE status reports and UNIDO progress reports (see indicators). A comprehensive overview on the achievements between 2010 and 2012 can be found in the annex. The performance of the Centre was rated in throughout all years high.

### a) ECREEE Core funding from December 2009 to date.

Project No.	Title	Donor	Total allotment (in EUR)	Disbursements (in EUR)
XP/RAF/10/016, YA/RAF/10/002,Y A/RAF/09/021 (operationally completed)	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	UNIDO - Regular Program of TC, Regular Budget	20,000/ 230,000/ 3,250	20,462/ 221,699/ 3,250
YA/RAF/12/003	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	UNIDO - Regular Budget	175,000	82,437
UE/RAF/09/028 / Contract 2599- 00/2009	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	Austrian Development Agency (ADA)	1,318,181	717,356
YA/RAF/09/001	ESTABLISHMENT OF THE SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY - PREPARATORY	UNIDO - Regular Budget	20,224	20,224

Annex B – Terms of reference for the MTE

<b>Project No.</b>	<b>Title</b>	<b>Donor</b>	<b>Total allotment (in EUR)</b>	<b>Disbursements (in EUR)</b>
	ASSISTANCE			
International Cooperation Subsidy No. 2448/09	SUPPORT FOR THE ECOWAS REGIONAL CENTER FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	Spanish Agency for International Development and Cooperation (AECID)	7,000,000	990,000
ECOWAS Commission	PREPARATORY AND FIRST OPERATIONAL PHASE OF SECRETARIAT OF THE ECOWAS REGIONAL CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE)	ECOWAS Commission	1,802,000	1,200,000
Total			10,568,655	3,255,428

## b) ECREEE Budget Needs Forecast in the long-term Source: ECREEE Business Plan 2011-2016, p. 29.

<b>Table 5: Indicative ECREEE Budget (2012–2016) Indicative Budget Requirements (EURO)</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>TOTAL</b>	<b>% of total budget</b>
RESULT AREA 1: Effective regional RE&EE promotion agency created and efficiently managed (overhead)	1,528,750	1,397,500	1,347,500	1,410,000	1,225,000	6,908,750	20%
RESULT AREA 2: Tailored policy, legal and regulatory frameworks created and implemented	1,745,000	890,000	890,000	890,000	250,000	4,665,000	14%
RESULT AREA 3: Capacities strengthened and applied	730,000	1,000,000	1,000,000	1,500,000	1,500,000	5,730,000	17%
RESULT AREA 4: Knowledge management, awareness raising and advocacy strengthened	1,540,000	700,000	500,000	250,000	150,000	3,140,000	9%
RESULT AREA 5: Business and investment promotion	2,100,000	3,000,000	3,000,000	3,000,000	3,000,000	14,100,000	41%
<b>TOTAL BUDGET</b>	<b>7,643,750</b>	<b>6,987,500</b>	<b>6,737,500</b>	<b>7,050,000</b>	<b>6,125,000</b>	<b>34,543,750</b>	<b>100%</b>
Overhead in % (staff salaries, running costs, equipment)	20%	20%	20%	20%	20%	20%	
Total Potential Contributions (EURO)							
Funding sources	2012	2013	2014	2015	2016	TOTAL	
ECOWAS Commission – ECREEE project	596,000	1,000,000	1,000,000	1,000,000	1,000,000	4,596,000	
ECOWAS Commission – others	500,000					500,000	
AECID	2,180,000	2,000,000	1,630,800			5,810,800	
ADA (pledges from 2014 to 2016 to be confirmed)	862,063	704,838	500,000(to be confirmed)	500,000(to be confirmed)	500,000(to be confirmed)	3,066,901	

<b>Table 5: Indicative ECREEE Budget (2012–2016) Indicative Budget Requirements (EURO)</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>TOTAL</b>	<b>% of total budget</b>
Austria – Multilateral Aid	150,000					150,000	
UNIDO	175,000	126,694	Pledge to be confirmed	Pledge to be confirmed	Pledge to be confirmed	301,694	
EUEI-PDF	230,000	250,000				480,000	
SEEA-WA	865,500	500,000	500,000			1,865,500	
USAID	370,000					370,000	
GEF Regional Project	180,000	200,000	200,000			580,000	
GEF Cape Verde Project	330,000	500,000	500,000			1,330,000	
Other	495,000	500,000	500,000	500,000	500,000	2,495,000	
Government of Cape Verde	12,000	12,000	12,000	12,000	12,000	60,000	
<b>TOTAL FUNDING</b>	<b>6,945,563</b>	<b>5,793,532</b>	<b>4,842,800</b>	<b>2,012,000</b>	<b>2,012,000</b>	<b>21,605,895</b>	
<b>FUNDING GAP</b>	<b>698,187</b>	<b>1,193,968</b>	<b>1,894,700</b>	<b>5,038,000</b>	<b>4,113,000</b>	<b>12,937,855</b>	
<b>CUMULATIVE FUNDING GAP</b>	<b>698,187</b>	<b>1,892,155</b>	<b>3,786,855</b>	<b>8,824,855</b>	<b>12,937,855</b>		

### **III. Scope and purpose of the evaluation**

The ECREEE is a complex and multi-stakeholder initiative. The mid-term evaluation will cover the ECREEE as a whole, with particular focus on the inputs provided through UNIDO, ADA, AECID and the ECOWAS Commission directly to ECREEE for the institutional build-up of the centre and its first operational phase. The use of inputs from other donors and stakeholders, in particular funds for specific projects (e.g. GEF projects) will not be evaluated in-depth, but will be taken into consideration as far as they are important to assess the ECREEE overall performance and relevance.

The evaluation of ECREEE shall take into consideration the different support modalities of partners and the changed short-term and long-term planning and monitoring framework. Whereas UNIDO and ADA's support has been delivered over the initial project document, AECID has provided direct support to the ECOWAS Commission and transferred the annual budget to ECREEE on the basis of the annually agreed work plans. The annual work plan cycles and the later approved Business Plan are integrating and replacing the initial planning framework of the project document which covered only the contributions of ECOWAS, UNIDO and ADA. As such, the work plans of ECREEE and the Business Plan became the central working documents over which support from different partners is channeled. The draft work plans are subject to review and approval by the Technical Committee and Executive Board. The donor funds are earmarked for specific activities in the work plans. However, formally UNIDO continues to report to ADA on the basis of the initial project document.

This mid-term evaluation will cover ECREEE activities for the period December 2009 to December 2012. The purpose of the independent mid-term evaluation (MTE) is to enable the project stakeholders to:

- (i) Assess the continued relevance of project objectives and planned outcomes, including the implicit and explicit assumptions and risks of the project.
- (ii) Assess the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact and sustainability.
- (iii) Assess the efficiency of implementation: quantity, quality, cost and timeliness of inputs and activities.
- (iv) Provide an analytical basis and recommendations for the continuation of the project.

- (v) Draw lessons of wider application for the replication of the experience gained in other projects.

The long-term framework of the Business plan includes measurable and attainable performance indicators for the objectives and result areas of the logical framework matrix of ECREEE. Moreover, targets were set for each of the established indicators per result area (see Business Plan). The indicators will help the consultant to undertake the evaluation. The indicators of the Business Plan incorporate also the indicators of the initial project document.

In order to assess the above mentioned dimensions of the project, the following criteria/questions will guide the evaluation team:

### **Relevance**

The extent to which:

- (i) The project objectives are aligned to national and/or regional policies and take into account other initiatives in the field of renewable energy/energy efficiency.
- (ii) The project objectives and outcomes are relevant to the needs and priorities of target groups and beneficiaries;
- (iii) The project objectives are aligned to the donors' priorities, including UNIDO, ADA and AECID thematic priorities and programme outcomes.

Efficiency of implementation:

The extent to which:

- (i) Inputs have been provided as planned in terms of timeliness, quality and quantity.
- (ii) Use of inputs led to the production of foreseen outputs.
- (iii) The cost of inputs (consultants, equipment, subcontracts) was reasonable and comparable to the cost of equivalent inputs.

### **Effectiveness**

Assessment of:

- (i) The outputs produced, in particular the viability and effectiveness of projects and programs.



- (ii) The use of ECREEE outputs (e.g. studies and assessment reports, training) by key target groups and clients.
- (iii) The outcomes, which have been or are likely to be realized through utilization of outputs.

### **Impact and sustainability**

- (i) The validity of the project concept (TOC) with a view to likelihood of contributing to expected impacts.
- (ii) Assess the extent to which the project outputs/outcomes are based on a sustainable plan / can be maintained in a sustainable manner. In particular analyze the potential for the development of a market for ECREEE services.
- (iii) Identify any unintended (positive or negative) effects of the project. In particular possible effects of raised awareness at the level of political decision making at national and regional level.

### **Factors affecting results**

- (i) What are the key project-internal factors (e.g. strategy applied, implementation approach, internal competencies, type and quality of expertise used, etc.) that determine the performance of the project and long-term effects?
- (ii) What are the key project-external factors (e.g. existing environmental legislation, budgetary provisions in the country and in the region, participation of private sector, etc.) that determine the performance of the projects and long-term effects?
- (iii) Assessment of project coordination and management, including
  - The national management and overall field coordination mechanisms. The UNIDO, ADA and AECID HQ based management, coordination, quality control and technical inputs.
  - Project M&E and its use to inform project steering and adaptive management.
  - Synergy benefits in relation to other relevant initiatives in the region and at country levels.
- (iv) Project identification and formulation.

- Was the project identification and formulation process participatory and was it instrumental in selecting relevant problem areas and counterparts requiring technical cooperation support.
- Does the project have a clear thematically focused development objective and immediate objective and/or outcomes, the attainment of which can be determined by a set of verifiable indicators?
- Was the project/ programme formulated based on the logical framework approach and included appropriate output and outcome indicators.

#### **IV. METHODOLOGY**

The evaluation will use a mixed method approach, collecting and analysing information from a range of sources. The evaluation will encompass the following steps:

##### Document review

A desk review of different sets of documents will be carried out as a first step of the assignment. The document review will include:

- the ECOWAS-UNIDO-ADA project document and the ECREEE Business Plan;
- annual work plans and progress reports;
- Minutes of meetings of the Steering Committee and the Executive Board and Financial Documents (e.g. audits);
- Generated technical project and workshop reports, technical documents from subcontractors and consultants and corresponding terms of reference;
- ECREEE Project documents (e.g. ECOWAS Renewable Energy Facility, ECOWAS Small Scale Hydropower Programme);
- Strategies and policies on renewable energy and energy efficiency in general and in ECOWAS region in particular;
- Strategies and programmes of other development cooperation agencies active in this field and in the region and other regions.

### **Theory of change analysis of the programme**

Based on the desk review, the evaluation team will analyse the “*theory of change (TOC)*” of the programme. This will map out how inputs and activities will (or should have) logically led to: outputs, outcomes, and impacts and identify key assumptions and impact drivers. This will enable the evaluation to verify through interviews and surveys in how far the design of the programme is realistic and adequate, whether it is consistent with the original objectives and/or whether it contains critical strengths and/or weaknesses that need to be addressed. As the mid-term evaluation can not yet determine the actual impact of the ECREEE, the TOC analysis will allow to assess the actual “progress towards impact”, i.e. whether the project is well underway to achieve impact as planned.

### **Interviews with stakeholders, staff, experts and counterparts**

- Semi-structured interviews with ECOWAS Commission, ECREEE staff and key staff of other stakeholders, UNIDO project manager & Director.
- Semi-structured interviews with beneficiaries and local counterparts in five selected ECOWAS<sup>41</sup> countries. As per the ECREEE’s Technical Committee and Executive Board meetings of 1-2 November outcomes, the selection of countries to be visited was agreed as following: Cape Verde, Nigeria, Senegal, Burkina Faso and Ghana.
- Semi-structured interviews with selected representatives of organizations active in the field of renewable energy and energy efficiency in the ECOWAS region, including those developing similar, complementary or competing initiatives and those who are potential funders of ECREEE projects in the future.

### **Counterpart and expert survey**

A survey will be carried out to triangulate findings from desk review, review of TOC and interviews and to capture the opinion of the national stakeholders about the project and its anticipated impact. The final selection of the survey participants will be done in consultation with the project manager. It is foreseen to include:

---

<sup>41</sup> 15 West African countries constitute ECOWAS; these are: Benin, Burkina Faso, Cape Verde, Cote d’Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

- Key staff in national agencies/ministries cooperating with the project.
- Selected renewable energy experts in the region.

## **V. EVALUATION TEAM and TIMING**

The evaluation will be conducted by one independent international evaluation consultant acting as team leader, one regional consultant from one of the ECOWAS countries and one UNIDO HQ based consultant to programme and role out the counterpart and expert survey. To ensure impartiality through the evaluation process, these will be hired through an open international competitive bidding process.

UNIDO evaluation group will be responsible for the quality control of the evaluation process and report. It will provide inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, ensuring that the evaluation report is useful for all stakeholders in terms of organizational learning (recommendations and lessons learned) and its compliance with UNIDO evaluation policy and these terms of reference.

All consultants will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions.

The members of the evaluation team must not have been directly involved in the design and/or implementation of the project.

The project manager will support the evaluation team by liaising with counterparts and preparing the evaluation missions to the selected countries. Further, the UNIDO Field Offices in the ECOWAS countries to be visited will provide support for the evaluation mission.

The evaluation is scheduled to take place in the period \_February 2013 to – March 2013. The final version of the evaluation report will be submitted 6-8 weeks after the debriefing, at the latest.

## **VI. REPORTING**

**Inception report:** After the evaluation team has been constituted and a first set of interviews and review of key documents has been carried out and before the other evaluation activities start (including especially the field visits), the team leader will present an inception report to be shared with all partners, in which the evaluation approach outlined here is operationalized. This should include an evaluation matrix, a concrete strategy for the surveys and draft TOCs the ECREEE project.

The main deliverable of the evaluation exercise is the final report of around 40-50 pages with a 3-page executive summary. The report should cover the key evaluation issues outlined in section III. It should describe the methodology used and highlight any methodological limitations, identify key concerns and present evidence-based findings, conclusions, recommendations and lessons learned.

The evaluation report shall follow the structure given in the annexes. Reporting language will be English.

**Review of the Draft Report:** The draft report will be shared with all major stakeholders for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report. A presentation of the draft report will be done to the ECREEE Executive Board, ECREEE staff and selected beneficiaries.

**Quality Assessment of the Evaluation Report:** All UNIDO evaluations are subject to quality assessments by UNIDO Evaluation Group. These apply evaluation quality assessment criteria and are used as a tool for providing structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality (annex 3).

## Annex 1 of terms of reference

### Template of in-depth evaluation reports

#### I. Executive summary

- Must be self-explanatory
- Not more than three pages focusing on the most important findings and recommendations
- Overview showing strengths and weaknesses of the project

#### II. Introduction

- Information on the evaluation: why, when, by whom, etc.
- Information sources and availability of information
- Methodological remarks and validity of the findings
- Project summary (“fact sheet”, including project structure, objectives, donors, counterparts, timing, cost, etc.)

#### III. Regional and project context

*This chapter provides evidence for the assessment under chapter VI (in particular relevance and sustainability)*

- Brief description including history and previous cooperation
- Project specific framework conditions; situation of the country; major changes over project duration
- Positioning of the project (other initiatives of government, other donors, private sector, etc.)
- Counterpart organization(s)

#### IV. Project Planning

*This chapter describes the planning process as far as relevant for the assessment under chapter VI*

- Project identification (stakeholder involvement, needs of target groups analyzed, depth of analysis, etc.)
- Project formulation (stakeholder involvement, quality of project document, coherence of intervention logic, etc.)
- Description of the underlying intervention theory (causal chain: inputs-activities-outputs-outcomes)
- Funds mobilization

## **V. Project Implementation**

This chapter describes what has been done and provides evidence for the assessment under chapter VI

- Financial implementation (overview of expenditures, changes in approach reflected by budget revisions, etc.)
- Management (in particular monitoring, self-assessment, adaptation to changed circumstances, etc.)
- Outputs (inputs used and activities carried out to produce project outputs)
- Outcome, impact (what changes at the level of target groups could be observed, refer to outcome indicators in prodoc if any)

## **VI. Assessment**

The assessment is based on the analysis carried out in chapter III, IV and V. It assesses the underlying intervention theory (causal chain: inputs-activities-outputs-outcomes). Did it prove to be plausible and realistic? Has it changed during implementation? This chapter includes the following aspects:

- Relevance(evolution of relevance over time: relevance to UNIDO, Government, counterparts, target groups)
- Ownership
- Efficiency (quality of management, quality of inputs, were outputs produced as planned? Were synergies with other initiatives sufficiently exploited? Did UNIDO draw on relevant in-house and external expertise? Was management results oriented?)
- Effectiveness and impact (assessment of outcomes and impact, reaching target groups)
- Sustainability
- If applicable: overview table showing performance by outcomes/outputs

## **VII. Issues with regard to a possible next phase**

- Assessment, in the light of the evaluation, of proposals put forward for a possible next phase
- Recommendations on how to proceed under a possible next phase, overall focus, outputs, activities, budgets, etc.

## **VIII. Recommendations**

- Recommendations must be based on evaluation findings
- The implementation of the recommendations must be verifiable (indicate means of verification)

- Recommendations must be actionable; addressed to a specific officer, group or entity who can act on it; have a proposed timeline for implementation
- Recommendations should be structured by addressees:
  - UNIDO
  - Government and/or Counterpart Organizations
  - Donor

**IX. Lessons learned**

- Lessons learned must be of wider applicability beyond the evaluated project but must be based on findings and conclusions of the evaluation



## Annex 2 of terms of reference

### JOB DESCRIPTION

**Post title** International Evaluation Team Leader

**Duration** 48 days over period of 3 months

Project “Preparatory and First Operational Phase of Secretariat of the ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREEE)”

**Entry on Duty Date** \_\_\_\_\_

**Duty station** home-base with travel to (countries to be discussed)

#### Duties

The international evaluation consultant, as team leader, will carry out an in-depth evaluation of the above mentioned UNIDO project in accordance with the Terms of Reference (TOR).

Duties	Duration	Location	Results
Study programme and project documentation including implementation and progress reports and documentary outputs of the project. Analyze intervention logic and design; Develop survey questionnaire	5 days	Home base	List of issues to be clarified; first draft of chapters on project design
Prepare inception report and present and discuss with project manager and ODG/EVA	3 days	Home base	Evaluation approach and programme operationalized
Evaluation mission programme: lease with the UNIDO project manager(s) to set up meetings/interviews in countries	2 day	Home base	Mission programme reflects evaluation priorities
Field mission: carry out meetings, visits and interviews of stakeholders according to the mission programme.	18 days	Cape Verde, Nigeria, Ghana, Senegal, Burkina Faso	Information gathered on issues specified in TOR
Analysis of survey results; drafting main preliminary conclusions and recommendations and discuss them with project staff, counterparts, stakeholders.			Draft conclusions and recommendations

<b>Duties</b>	<b>Duration</b>	<b>Location</b>	<b>Results</b>
Presentation and discussion of preliminary findings and recommendations with UNIDO project manager, URs in ECOWAS project countries, UNIDO Evaluation Group. Fill information gaps (request additional document and reports where necessary).	2	Vienna	Feedback from project manager and UNIDO Evaluation Group, information gaps filled
Prepare the draft evaluation report according to TOR.	15 days	Home base	Draft report prepared and sent to UNIDO Evaluation Group
Review feedback received on draft report and prepare final evaluation report.	3 days	Home base	Final evaluation report submitted to UNIDO Evaluation Group
Total	48 days		

### **Qualifications**

- advanced university degree in a field related to industrial development;
- extensive knowledge and experience in the field of renewable energy;
- experience in conducting evaluations

**Languages:** English (French is an added value)

**Background information:** see the Terms of Reference

**Impartiality:** According to UNIDO rules, the consultant must not have been involved in the preparation, implementation or supervision of the project subject to this evaluation

**JOB DESCRIPTION****Post title** Regional Evaluation Consultant**Duration** 48 days over period of 3 months

Project “Preparatory and First Operational Phase of Secretariat of the ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREEE)”

**Entry on Duty Date** \_\_\_\_\_**Duty station** home-base with travel to countries to be discussed)**Duties** The international (regional) evaluation consultant will carry out an in-depth evaluation of the above mentioned UNIDO project in accordance with the Terms of Reference (TOR).

<b>Duties</b>	<b>Duration</b>	<b>Location</b>	<b>Results</b>
<p>Study relevant programme and project documentation including progress reports and documentary outputs and TOR;</p> <p>Study relevant background information (national policies, international frameworks, etc)</p> <p>Assist in the preparation of the field missions and the inception report, as required</p>	7 days	Home base	Analytical overview of available documents; list of issues to be clarified; background data needed for evaluation collected at field level; inputs to inception report
<p>Participate actively in meetings, visits and interviews according to the evaluation programme</p> <p>Participate in drafting the main conclusions and recommendations, and present them to stakeholders in accordance with the instructions of the team leader</p>	18 days	Cape Verde, Nigeria, Ghana, Senegal, Burkina Faso	<p>Notes, tables; information gathered on issues specified in ToR;</p> <p>Draft conclusions and recommendations</p>

<b>Duties</b>	<b>Duration</b>	<b>Location</b>	<b>Results</b>
Carry out additional interviews as required (phone or skype)	5 days	Home base	Interview protocols, findings incorporated in evaluation report
Participate in the preparation of the report according to the instructions of the team leader	5	Home base	Inputs to the report
Total	35 days		

### **Qualifications**

- Advanced university degree in a field related to industrial development;
- Knowledge of country's industrial development situation, institutions and programmes in the field of renewable energy and energy efficiency;
- Knowledge and experience in the field of renewable energy;
- Experience in evaluations desirable

**Language:** English and French

**Background information:** see the Terms of Reference

**Impartiality:** According to UNIDO rules, the consultant must not have been involved in the preparation, implementation or supervision of the project subject to this evaluation.

### Annex 3 of terms of reference

Report quality criteria	UNIDO Evaluation Group Assessment notes	Rating
A. Did the report present an assessment of relevant outcomes and achievement of project objectives?		
B. Were the report consistent and the evidence complete and convincing?		
C. Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible?		
D. Did the evidence presented support the lessons and recommendations?		
E. Did the report include the actual project costs (total and per activity)?		
F. Quality of the lessons: Were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
G. Quality of the recommendations: Did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can they be implemented?		
H. Was the report well written? (Clear language and correct grammar)		
I. Were all evaluation aspects specified in the TOR adequately addressed?		
J. Was the report delivered in a timely manner?		

#### Checklist on evaluation report quality

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1, and unable to assess = 0.

## **Annex 4 of terms of reference**

The following table gives a rough overview on the ECREEE progress by using the logical frameworks matrix of the original project document agreed between ECOWAS, ADA and UNIDO. As agreed in the Executive Board meetings the ECREEE Work Plans, Status Reports and Business Plan is based on a fully revised logical framework matrix which reflects the extended mandate and increased number of ECREEE donor partners. Although the log frame of the original project document does not reflect the full picture of ECREEE outcomes, outputs and activities UNIDO reports to ADA according the original project document.

Outcome/Output/ Activities	Indicator	Means of Verification	Achievements
<b>OUTCOME A:</b> Creation of a conducive market environment through developing regional policy and regulatory framework that creates a level playing field for investments in renewable energy and energy efficiency technologies and services.	Regional policy and regulatory framework for promoting investments in renewable energy and energy efficiency technologies and services is proposed.	Documents on a regional policy framework and regional standards for renewable energy equipment and equipment performance labeling scheme.	
<b>Output 1:</b> A regional policy and regulatory framework for renewable energy and energy efficiency is proposed.  Related 2012 Work Plan Activity IDs: POL-1 to POL.8;	Records of the consultative process of establishing the regional policy framework.	Regional policy and regulatory framework document.  (see EREP and EEEP document and baseline reports & country reports)	100% completed as planned.
<b>Activities</b> 1.1 Review of national policies and strategies of the energy and energy-allied sectors in each ECOWAS member state to identify areas that need updating and further development.			ECREEE undertook a comprehensive assessment of existing RE&EE policies and strategies in all ECOWAS countries in cooperation with the NFIs. A comprehensive RE baseline report was prepared for the development of the ECOWAS Renewable Energy Policy (EREP) and Energy Efficiency Policy (EEEP). Detailed RE&EE country reports were developed. ECREEE experts visited all ECOWAS countries during its stock-taking missions. The SSHP and bioenergy frameworks were reviewed during several resources assessments (see activity).

<p>1.2 Propose studies on national energy tariff regimes in each ECOWAS member state and propose a possible strategy for harmonization of regional energy trade and integration with a particular focus on renewable energy and energy efficiency markets.</p>			<p>In most West African countries no tailored schemes for renewable energy and energy efficiency are existing. The national tariff systems were reviewed during the development of the baseline report of the ECOWAS Regional Renewable Energy Policy. The action plan of the EREP includes concrete actions in this regards (see annex on financial instruments). ECREEE facilitated the process regarding the development of feed-in-tariffs in Ghana and the establishment of the net-metering system in Cape Verde. As a response to the lack of financial schemes, ECREEE designed a specialized financial mechanism for small and medium sized renewable energy and energy efficiency projects in West Africa. The specific objective of the ECOWAS Regional Renewable Energy Facility (EREF) is to create a favourable investment and business environment which leads to accelerated deployment and use of RE&amp;EE technologies and services in peri-urban and rural areas of West Africa. The EREF provides grant co-funding for small and medium sized renewable energy and energy efficiency (RE&amp;EE) projects and businesses in rural and peri-urban areas through competitive call for proposals. In the second phase the experiences and lessons learned of the EREF will be transferred to the ECOWAS countries which should lead to the adoption of national financing</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



			mechanisms. 41 projects with an overall volume of 3 million Euro were selected during the first call of proposal undertaken in 2011/12.
1.3 Propose a regional policy and regulatory framework for promoting renewable energy and energy efficiency and present same to policy makers for adoption.			The EREP and the EEEP were adopted by the ECOWAS Ministers of Energy during the ECOWAS High Level Energy Forum which took place from 29 to 31 October 2012, in Accra, Ghana. Both policies include regional targets and a detailed action plan to be implemented on regional and national levels. The national countries are obliged to develop national RE policies and action plans which respond to the set regional targets in 2013 (see also policy documents). The implementation of the regional targets on national levels has commenced already in some of the countries and in alignment with ECREEE (e.g. Ghana, Senegal, Cape Verde). UNIDO/ECREEE assists currently Gambia in the development of a renewable energy policy. The EREP action includes the development of a separate sustainable biofuel policy and regional policy guidelines for RE based rural electrification.
1.4 Regularly provide policy briefs to policy makers like Ministers and Heads of States on topical issues in renewable energy and energy efficiency.			ECREEE provided and continues to provide policy and expert inputs for different meetings and conferences organized by ECOWAS (e.g. COP-17, Rio+20 side event). Major RE&EE baseline reports and policies were prepared. The RE&EE policies and the SSHP and bioenergy programs were

			<p>adopted by the Ministers. The results of the baseline reports and assessment were brought to their attention. Moreover, ECREEE organized or co-organized a broad range of RE&amp;EE conferences and forums (additional to the trainings under outcome B) which targeted the private sector as well as high level governmental representatives. Between 2010 and 2012 ECREEE organized RE&amp;EE events (excluding trainings) which were attended by more than 1.936 local and international energy experts (439 participants in 2010, 479 in 2011 and 1.018 in 2012).</p> <p>2010</p> <ul style="list-style-type: none"> <li>• International Symposium on Renewable Energy and Economic Competitiveness, 17 to 21 May 2010 in Praia/Mindelo, Cape Verde, 130 participants, in cooperation with the UNICV</li> <li>• Regional Workshop on Energy Efficiency, 24 May 2010 in Burkina Faso, 57 participant, in cooperation with ADEME</li> <li>• Official inauguration ceremony of the ECOWAS Centre for Renewable Energy and Energy Efficiency, 6 July 2012, Praia, Cape Verde, 52 participants</li> <li>• Regional Workshop on the ECOWAS Solar Energy Initiative (ESEI) at Hotel Meridien</li> </ul>
--	--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>President from 18<sup>th</sup> to 21<sup>st</sup> October 2010 in Dakar, Senegal, 150 participants</p> <p>2011</p> <ul style="list-style-type: none"> <li>• The Validation Workshop of the GEF/UNIDO project named “Promoting Market Based Development of Small to Medium Scale Renewable Energy Systems in Cape Verde” took place on 24 March 2011 with the presence of approximately 57 participants from 30 organizations. The project was developed by UNIDO in cooperation with the Ministry of Tourism, Industry and Energy (MTIE) in Cape Verde and the ECREEE Secretariat.</li> <li>• ECREEE and AREA organized the Power Kick for Africa: International Conference on Renewable Energy and Gender on 29 July 2011 in Abuja, Nigeria:<a href="http://www.area-net.org">http://www.area-net.org</a> (72 participants)</li> <li>• ECREEE Regional Workshop: “Accelerating Universal Access to Energy Services through the Use of RE &amp;EE in West Africa” and Technical Side Meetings for the ECOWAS RE Policy, ECOWAS EE White Paper, SEEA-WA project and ECOWAS</li> </ul>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>Solar and Wind Assessment (70 participants), from 24 to 27 October 2011, in Accra, Ghana.</p> <ul style="list-style-type: none"> <li>• In the context of the 2011 Africa Industrialization Day, ECREEE in cooperation with UNIDO and the Ministry for Industry in Cape Verde organized the one day workshop on "Tackling Energy Poverty in Africa &amp; Industrialization in Cape Verde: the Way Forward" on 22 November. (50 participants)</li> <li>• Co-organized and hosted the OECD West Africa Club Forum "West Africa and Brazil: Addressing Renewable Energy Challenges" in Praia, Cape Verde, 5 to 6 December 2011 (120 participants).</li> <li>• The ECREEE COP-17 Side Event "Promoting Renewable Energy and Energy Efficiency Investments for Sustainable Development in West Africa" is scheduled to take place at the Inkosi Albert Luthuli International Convention Centre (ICC) in Durban on 7 December 2011. It was attended by around 60 participants.</li> </ul> <p>2012</p> <ul style="list-style-type: none"> <li>• A Regional Bioenergy Forum was successfully held in</li> </ul>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>Bamako, Mali from 19 -21 March 2012. It was co-organized with the GBEP and supported by UNEP, UNDP/PREP, the US, Canada Environment Agency and the UN Foundation/Global Alliance on Clean Cook stoves. 190 experts participated in the Forum.</p> <ul style="list-style-type: none"> <li>• In order to benefit from expert advice on energy efficiency and to ensure ownership of the Regional Energy Efficiency Policy Paper, an EE Technical Committee was established. The first meeting of the EE Technical Committee was held March 27 – 28, 2012 in Praia, Cape Verde. A technical meeting was also held also with the RE Policy consultants (IED) from March 29-30, 2012 in Praia, Cape-Verde to review the RE baseline report and scenarios. Around 20 experts participated.</li> <li>• The GEF CV Project was launched in Praia on April 12, 2012 in a special workshop. The One UN Coordinator, the ECREEE Director and the Minister of Energy of Cape Verde opened the workshop. Around 50 experts and policy makers participated.</li> <li>• Workshop on “Renewable Energy Technologies for</li> </ul>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>Productive Uses in West Africa” organized by ICS-UNIDO in cooperation with ECREEE, in Trieste from 17 to 19 April 2012. The Workshop was attended by over 25 key experts from selected public, government and regional institutions, research institutions and universities as well as international consultants, both from Africa and industrialized countries, were identified, selected and invited to participate in the discussions.</p> <ul style="list-style-type: none"> <li>• In collaboration with UNIDO, the Energy Sector Management Assistance Programme (ESMAP) of the World Bank, as well as the Government of Liberia, conducted a validation workshop on the ECOWAS Small Scale Hydro Power Program from 18–20 April 2012 in Monrovia, Liberia (see also training). Over 70 experts and policy makers from 13 ECOWAS countries and international level attended the workshop.</li> <li>• The ECREEE Rio+20 Side Event ‘Towards Universal Access to Sustainable Energy Services in West Africa’ took place on 17 June 2012. Around 60 participants were present in the side event.</li> <li>• The regional validation workshop</li> </ul>
--	--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>for the RE&amp;EE policies was successfully held in Dakar, Senegal from the 25 - 27 June 2012. Over 140 experts participated in the meeting and it received considerable attention in the ECOWAS media.</p> <ul style="list-style-type: none"> <li>• The first Forum of the ECOWAS Renewable Energy Investment Initiative (EREI) was organized in cooperation with the African Development Bank in Dakar, Senegal, 27 to 28 September 2012, 90 participants;</li> <li>• The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the Global Forum for Sustainable Energy (GSFE), the Global Environment Facility (GEF), the United Nations Industrial Development Organization (UNIDO) and the Government of Ghana jointly organized the ECOWAS-GFSE-UNIDO High Level Energy Forum on “Paving the Way for Sustainable Energy for All in West Africa through Renewable Energy and Energy Efficiency” from the 29–31 October 2012, in Accra, Ghana. (over 323 participants)</li> </ul>
--	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			2010 to 2012  ECREEE held so far six Executive Board Meetings (around 90 participants) and three Coordination meetings of its National Focal Institutions (around 60 participants).
Outcome/Output/Activities	Indicator	Means of Verification	Achievements
<p><b>Output 2: A regionally agreed equipment standards and equipment performance labeling scheme is developed.</b></p> <p>Related 2012 Work Plan Activity IDs: POL-1 to POL.08;</p>	Records of consultative process of compiling existing schemes and inventories of equipment in member states.	<p>Document on equipment standards and performance labeling procedures.</p> <p>(see EREP and EEEP document and baseline reports &amp; country reports)</p>	<p>75% completed as planned.</p> <p>The implementation of the activity has started and follows the adoption of the EREP and EEEP which set a first regional wide standard for RE&amp;EE. The <b>development of common RE&amp;EE equipment standards was included in the EREP and EEEP and are part of their action plans.</b> However, the output was not too realistic since the policies need to be developed before the standards (what took at least one to two years). The development, adoption and implementation of standards might take another one to two years.</p>



<p>Activities</p> <p>2.1 Identify products in the renewable energy and energy efficiency sectors to be included in the regional standard and performance-labelling scheme.</p> <p>2.2 Formulate the required standards making use of already existing standards in ECOWAS member states, other economic communities, and countries elsewhere</p> <p>2.3 Define procedures for certification of labelling and standards</p> <p>2.4 Present the regional standards for renewable energy equipment and equipment performance labelling scheme to policy makers for consideration and adoption.</p> <p>2.5 Provide equipment certification services and issue licenses for compliance.</p>			<p><b>Under the EREP action plan</b> in 2013/14 it is planned to develop several regional guidelines and standards for potential assessments, for RE grid integration, the preparation of national renewable energy plans (NREPs), models for PPA, FIT, Quotas, rural concessions, as well as the organization of a conference to compile and development of regional RE equipment standards.</p> <p>The development of standards and label is <b>part of the EE policy</b> and one of its initiatives. The activity is also part of the EE Program of ECREEE which is partly funded by the EC. The EE program foresees the assessment and elaboration of standards and labels on regional levels to be implemented on national levels. Through the GEF Typha project implemented by UNDP/ECREEE a standard for energy efficient bricks will be established.</p>
Outcome/Output/Activities	Indicator	Means of Verification	Achievements
<p><b>OUTCOME B. Policy makers in the energy sector are trained on policy, legal and regulatory issues in promoting renewable energy and energy efficiency projects.</b></p>	<p><b>TRAINING PROGRAMMES CONDUCTED FOR ECOWAS MEMBER STATES.</b></p>	<p><b>Certificates of attendance.</b></p>	

<p><b>Output 3: Policy makers, representatives of rural electrification agencies are trained on policy and legal aspects in the promotion of renewable energy and energy efficiency programmes and projects.</b></p> <p>CAD.1 to CAD.10</p>			100% completed as planned.
<p>Activities</p> <p>3.1. Develop training programmes targeted at policy and decision makers that cover policy, regulatory and legal issues for promoting renewable energy and energy efficiency projects. Training to cover issues like, negotiating a PPA, supporting IPPs, setting feed in tariffs, policy options for creating a level playing field for RE&amp;EE, strategies for decentralized power generation, in particular mini-grids for rural electrification etc.</p> <p>3.2 Develop training programmes targeted at technical experts that cover design,</p>	<p>2 policy makers from each ECOWAS member states receive certificates.</p>		<ul style="list-style-type: none"> <li>- Under 2012 work plan the ECREEE capacity building programme progressed. ECREEE has completed a <b>regional RE&amp;EE capacity development and training needs assessment</b> in cooperation with 2ie, KNUST and UNICV. Based on the results the elaboration of a comprehensive regional training program was initiated. There is general agreement with the Africa-EU Renewable Energy Cooperation Program (EUEI-PDF) to co-fund this activity. Currently, TORs for contracting a consultant are under preparation.</li> <li>- ECREEE is <b>usually not</b></li> </ul>

<p>development, manufacturing, and maintenance of renewable energy technologies, energy efficiency measures and techniques, etc.</p> <p>3.3 Identify participants from each ECOWAS member state to be trained.</p> <p>3.4 Organize the first regional training workshops for at least 2 policy makers from each member state and issue certificates of attendance.</p> <p>3.5 Evaluate and update the training programme.</p> <p>3.6 Post the training material on the ECREEE website and disseminate copies of the training programme on CD ROM to stakeholders in the region.</p> <p>3.7 Conduct training programmes on demand and charge fees.</p>			<p><b>elaborating new training programs</b> since there are already well-established programs and manuals in existence - some are even offered by institutions in the ECOWAS region. The Centre acts more as a facilitator and promoter. ECREEE cooperates in this regard with specialized institutions such as 2iE and KNUST, REEEP, TERI, ITC, AEE-Intec or others which are already offering trainings in the region. ECREEE particularly supports train-the-trainers approaches to scale-up national programs on regional levels.</p> <p>Agreement was found between UNIDO, ECREEE, Columbia University and the Engineering Department of the University of Cape Verde in Mindelo. <b>A MoU was prepared and will be signed between all partners</b> during the ECOWAS High Level Energy Forum, from 29 to 31 October 2012. The program will start end of 2012 and will be mainly implemented by e-learning. Workshops will be held in Mindelo, Sao Vicente, Cape Verde.</p> <ul style="list-style-type: none"> <li>- For the RE Policy and Incentive Scheme workshop (see below), ECREEE developed <b>a training</b></li> </ul>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p><b>manual</b> In 2012 ECREEE in cooperation with UNIDO submitted a proposal for the elaboration of a standard <b>trilingual train the trainers toolkit on renewable energy and energy efficiency</b>. The proposal was accepted in the first stage. The final proposal was submitted and is pending approval. The toolkit will be a standard learning tool to be included in the ECOWAS RE&amp;EE train the trainers network. The project is implemented in cooperation with 2ie in Burkina Faso, KITE in Ghana, UNICV in Cape Verde and RRA in Liberia.</p> <ul style="list-style-type: none"> <li>- ECREEE has <b>exceeded by far the envisaged result indicator "No. of trained experts"</b>. The project document envisaged the training of 180 experts from different sectors (60 policy makers, 30 entrepreneurs, 30 support institutions, 30 manufacturers, 30 utility experts) on different RE&amp;EE aspects. Since 2010, <b>ECREEE trained more than 742 experts (140 in 2011 and 602 in 2012) from different target groups</b> (technical experts, policy makers, financiers) on various issues (e.g. incentive and policy schemes, small scale hydro</li> </ul>
--	--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>power, gender). Moreover, ECREEE applied partially a more sustainable train the trainers approach. The following trainings were implemented:</p> <p>2011</p> <ul style="list-style-type: none"> <li>a. ECREEE, in collaboration with AECID and ITC successfully organized the <b>Regional Seminar on the Integration of Renewable Energy into the Energy Systems of the ECOWAS Region</b> which took place from the 15th to 17th of June 2011 in the Canary Islands, Spain. Particularly utilities and policy makers were invited. (27 participants)</li> <li>b. A regional <b>train-the-trainers workshop on RETScreen financial RE&amp;EE project appraisal and planning</b> was organized by ECREEE in cooperation with UNIDO and RETScreen International, from 24 to 26 August 2011 in Kumasi, Accra. (35 participants)</li> <li>c. In 2011, 18 ECOWAS experts participated in e-training of the Fundación Centro de Educación a Distancia para el Desarrollo Económico y Tecnológico, facilitated by ECREEE. (18 participants)</li> </ul>
--	--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>d. ECREEE in cooperation with the university of KNUST and EU-PDF organized a regional <b>GIS Energy Access Planning Training</b> in Kumasi, Ghana, from 22 to 23 of August 2011. (35 participants)</p> <p>e. ECREEE, in collaboration with ICS-UNIDO, jointly organized a GIS training for mapping quality infrastructure in the ECOWAS region, from 28 November to 2 December 2011, in Praia, Cape Verde. (26 participants)</p> <p>2012</p> <p>a. In partnership with the International Renewable Energy Agency (IRENA) and the Spanish Institute for Energy Diversification and Savings (IDAE), organized a <b>two-day intensive training course on “National Renewable Energy Policies and Incentive Schemes”</b>. The training, which held from 9–10 April 2012 in Praia, Cape Verde sought to reinforce capacities among the ECOWAS Member States in the area of energy planning and policy formulation aimed at promoting renewable energy at the national level. Over 60 experts attended.</p>
--	--	--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>b. In collaboration with UNIDO, the Energy Sector Management Assistance Programme (ESMAP) of the World Bank, as well as the Government of Liberia, and supported by the Austrian Development Cooperation (ADC) and the Spanish Agency for International Cooperation (AECID), conducted <b>a key workshop on small-scale hydro power (SSHP) development for West Africa from 16–20 April 2012 in Monrovia, Liberia</b>. The workshop included a two day training workshop. 70 experts attended the training.</p> <p>c. In partnership with the United Nations Industrial Development Organization (UNIDO) and the International Institute for Applied Systems Analysis (IIASA) organized <b>a one-day workshop on key findings and tools of the Global Energy Assessment (GEA)</b>. The workshop was held on 12 April 2012 in Praia, Cape Verde, with support from the Global Environment Facility (GEF). Over 60 experts attended.</p> <p>d. In the framework of the elaboration of the ECREEE study "promoting RE &amp;EE investment and business framework in the ECOWAS region in the context</p>
--	--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>of the NAMAs’ a two-day workshop on Financing and Investments in Mitigation Actions in West Africa was held June 4-5, 2012 in Accra, Ghana. 80 experts participated.</p> <p>e. In recognition that women bear a disproportionate share of the burden imposed by lack of access to modern energy services, a one-day <b>ECREEE training workshop on “Sustainable Energy and Gender”</b> was conducted by the <b>ENERGIA network on 28 June 2012</b>. Over 75 participants, of whom 65 were men, participated.</p> <p>f. ECREEE, with the support of the United States Agency for International Development (USAID) and the technical assistance of Nexant, organized a <b>regional capacity building workshop on ECOWAS Wind and Solar Resource Mapping in Praia, Cape Verde, from 9–11 July 2012</b>. 10 participants;</p> <p>g. A <b>4 day Investment Project Appraisal Training for ECREEE Staff and other experts based in Praia, Cape Verde</b> was conducted by RENAC. This</p>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



			<p>training took place between 17 and 20th September 2012 at the ECREEE Secretariat. 22 participants;</p> <p>h. In cooperation with TERI, from India, a <b>Hands-on Training on Rural Electrification by using PV</b> was conducted from October 1-5, 2012, in Lome, Togo; 25 participants;</p> <p>i. <b>The ECOWAS RETScreen train the trainers network is operational.</b> The added value of a train the trainers approach was proven. As concrete follow-up to the regional RETScreen training held in 2011, <b>eight national RETScreen trainings were implemented in seven ECOWAS countries</b> (Ghana, Cape Verde, Senegal, Mali, Ivory Coast, Nigeria, Gambia) by now. Further trainings are scheduled to take place in November/December 2012 (Liberia, Guinea Bissau). Till date, around <b>200 experts from the public and private sector have been trained.</b> All trainings ended with a written exam. Successful candidates received a certificate in the use of RETScreen. So far, <b>4 local</b></p>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p><b>experts have been certified as RETScreen trainers.</b></p> <p>j. Further trainings are included in the approved 41 projects of the ECOWAS Renewable Energy Facility (EREF). The will be carried out 2012/2013.</p>
<p><b>Output 4: Policy makers from energy related fields such as agriculture, transport, education, health etc. are trained on the potential roles and methods of integrating of renewable energy and energy efficiency technologies and measures in their sectors.</b></p> <p>CAD.1 to CAD.10</p> <p>Activities</p> <p>4.1 Develop training programme targeting decision makers in energy related sectors focusing on the potential role of renewable energy and rational use of energy in their sectors and integrating renewable energy components and energy efficiency measures</p>	<p>2 selected policy makers from energy related sectors in each member state are able evaluate RE&amp;EE projects and how to integrate RE&amp;EE into their projects and programmes</p>	<p>2 policy makers from energy related sectors in each ECOWAS member state receive certificates.</p>	<p>100% completed as planned.</p> <ul style="list-style-type: none"> <li>- See output 3 (see for example incentive schemes training in cooperation with ECOWAS Ministries of Finance, or SSHP workshop)</li> </ul>

<p>and techniques to their areas. For policy makers in agriculture, the focus would be strategies for mainstreaming RE&amp;EE into the agriculture value chain.</p> <p>4.2 Train at least 2 policy makers from each ECOWAS member states from the energy related sectors.</p> <p>4.3 Disseminate the training programme through electronic media</p> <p>4.4 Train policy makers on demand and charge fees for the training.</p>			
<p><b>Output 5: Technical experts, private sector representatives, entrepreneurs, technology manufacturers etc are trained on renewable energy and energy efficiency technologies and services enterprise development.</b></p> <p>CAD.1 to CAD.10</p> <p>Activities</p> <p>5.1 Develop training programme focusing on designing, developing, preparing and</p>	<p>2 selected entrepreneurs in each ECOWAS member state can identify, develop and analyze potential projects.</p>	<p>2 entrepreneurs from each ECOWAS member state receive certificates.</p>	<p>100% completed as planned.</p> <ul style="list-style-type: none"> <li>- See output 3 (particularly RETScreen training)</li> </ul>

<p>managing renewable energy and energy efficiency projects. The training programme to include technical aspects, business plan development, investment structuring and mobilization, negotiating power purchase agreements etc.</p> <p>5.2 Adapt UNIDO's COMFAR Software and use it to conduct training on renewable energy project investment analysis.</p> <p>5.3 Identify 2 technical experts, private sector representatives and entrepreneurs in each ECOWAS member states to undergo the training and conduct the training.</p> <p>5.4 Evaluate and update the training programme taking into considerations feedback from participants.</p> <p>5.5 Widely disseminate the training programme to all stakeholders in the region through electronic and print media.</p> <p>5.6 Train technical experts, entrepreneurs and private sector representatives on demand and charge fees for the training programmes in areas that include; business development and management, opportunities for women and entrepreneurs in renewable energy and energy</p>			
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--

<p>efficiency technologies and services etc.; developing CDM projects, equipment manufacture, operation and maintenance etc.</p> <p>5.7 Conduct training courses on demand and charge fees.</p>			
<p><b>Output 6: Staff of renewable energy and energy efficiency support institutions and centers/agencies of quality control are trained to implement and enforce a regionally agreed equipment standards and equipment performance labeling scheme.</b></p> <p>CAD.1 to CAD.10</p> <p>Activities</p> <p>6.1 Develop a training programme on enforcing and ensuring compliance with the regional equipment standards and performance-labeling scheme.</p> <p>6.2 Train 2 representatives from renewable energy and energy efficiency support institutions and centres/agencies of quality control from each ECOWAS Member State on compliance with regional standards and</p>	<p>2 representatives of national support institutions understand regional equipment standard and performance labeling scheme and can enforce compliance with these benchmarks</p>	<p>2 representatives of national support institutions receive certificates.</p>	<p>Not implemented so far.</p> <ul style="list-style-type: none"> <li>- See output 2 (see SEEA-WA Project and EE workshops); the equipment standards are pending to be developed on the basis of the EREP and EEEP in 2013.</li> </ul>

<p>performance labeling scheme. 6.3 Widely disseminate the training programmes on the regional standards through the website of the ECREEE and disseminating CD-ROMs, provide regular training course and charge full cost recovery fees.</p>			
<p><b>Output 7: Representatives of renewable energy and energy efficiency equipment manufactures/suppliers/installers from each ECOWAS member states are trained to produce/supply/test equipment that comply with regional standards and performance labeling scheme.</b></p> <p>CAD.1 to CAD.10</p> <p>Activities</p> <p>7.1 Develop training material to train equipment manufacturers/suppliers to comply with regionally established standards and performance labeling scheme. 7.2 Train 2 representatives of equipment manufacturers/suppliers from each ECOWAS member</p>	<p>2 equipment manufactures from each member state can manufacture equipment in line with regional standard.</p>	<p>2 equipment manufacturers from each member state receive certificates.</p>	<p>100% completed as planned.</p> <ul style="list-style-type: none"> <li>- See output 3 (e.g. SSHP workshop, bioenergy forum)</li> </ul>

<p>states.                  7.3 Continuously provide certified training services for equipment manufacturers/suppliers and charge fees for the training.                  7.4 Test and certify compliance of equipment from different manufacturers and charge fees.</p>			
<p><b>Output 8: Train staff or decision makers from power utilities and oil companies on benefits and strategies of integrating renewable energy and energy efficiency options in existing energy supply systems</b></p> <p>CAD.1 to CAD.10</p> <p>Activities</p> <p>8.1 Establish contact with WAPP and associations of oil companies active in the region with a view to jointly develop a training program on benefits and strategies of integrating renewable energy based energy and energy efficiency options into existing energy systems.                  8.2 Develop the joint training programmes.                  8.3 Conduct the training courses</p>	<p>2 representatives of utilities and oil companies can integrate RE&amp;EE projects in existing energy infrastructure.</p>	<p>2 representatives from each member states receive certificates.</p>	<p>100% completed as planned.</p> <ul style="list-style-type: none"> <li>- See output 3 (see several RE workshops)</li> </ul>

<p>jointly with the WAPP and associations of oil companies in the region targeting 2 selected representatives from each ECOWAS member state.</p> <p>8.4 Provide such training services on demand and charge cost reflective fees.</p>			
<b>Outcome/Output/Activities</b>	<b>Indicator</b>	<b>Means of Verification</b>	<b>Achievements</b>
<p><b>OUTCOME C: INCREASE AWARENESS ON RENEWABLE ENERGY AND ENERGY EFFICIENCY TECHNOLOGIES IN THE REGION THROUGH THE DISSEMINATION OF KNOWLEDGE AND AWARENESS RAISING PROGRAMMES.</b></p>	<p><b>INFORMATION ON BENEFITS AND STRATEGIES OF USING RENEWABLE ENERGY AND ENERGY EFFICIENCY TECHNOLOGIES AND KNOWLEDGE MANAGEMENT SERVICES PROVIDED.</b></p>	<p><b>INFORMATION MANAGEMENT SYSTEMS IN PLACE, RENEWABLE ENERGY RESOURCE ATLAS FOR THE REGION, SENSITIZATION WORKSHOPS ETC ARE ORGANIZED.</b></p>	
<p><b>Output 9 : Establish a renewable energy and energy efficiency information management system for the region</b></p> <p>OBS.1 to OBS.11</p> <p>Activities</p>	<p>Web-based platform for exchange of information and knowledge established.</p>	<p>Web-based platform.</p> <p>see <a href="http://www.ecowrex.org">http://www.ecowrex.org</a></p>	<p>100% completed as planned.</p> <p>The project was implemented under the umbrella of the Strategic Programme for West Africa (SPWA) of the GEF. The <b>key structure, categories and functions</b> of the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX) were <b>elaborated by</b></p>



<p>9.1 Design and build a website of the ECREEE and an information management system for both renewable energy resources and technologies and energy efficiency measures and techniques in the region.</p> <p>9.2 Collect and collate and process information/data from member states focal institutions and counterpart agencies as well as from other international bodies and make it available through the website.</p> <p>9.3 Input the collected information/data into the built information management system and update periodically.</p> <p>9.4 Through a periodical newsletter, disseminate information, news on renewable energy and energy efficiency developments in the region to counterpart/focal institutions in the region and development partners.</p>			<p><b>ECREEE and UNIDO staff</b> in the first half of 2012. On the basis of the findings, the <b>TORs for a consultancy were prepared and a competitive tender was launched.</b> The Spanish organization CESEFOR was awarded with the contract. Moreover, ECREEE recruited a GIS/webiste specialist in-house to steer the process and train IT-GIS expert from Nigeria. The website can be accessed through <a href="http://www.ecowrex.org">http://www.ecowrex.org</a>.</p> <p>The technical ECREEE-UNIDO experts provided the data and information from different projects (e.g. resources assessments, RE baseline report, SSHP baseline report, RE site lists, project lists). The <b>activity is in the last phase of the development process</b>, which includes testing and fixing of bugs. The ECOWREX was launched at the ECOWAS-GFSE-UNIDO-GEF High Level Energy Forum (HLF) from 29 to 31 October 2012 in Accra. The activity was funded through the provided UNIDO-GEF SPWA resources, multilateral aid of Austria and AECID. The system and data quality will be improved through an ECOWREX expert to be recruited soon.</p> <p><b>A special section on the regional GEF Strategic Program for West Africa (SPWA)</b> was included to the ECOWREX. A compendium of project brochures for</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>the 22 projects was elaborated and uploaded on the ECOWREX. A progress report on the status of implementation of the SPWA program was prepared by ECREEE and UNIDO, the coordinators of the program. The Compendium was also printed and will be presented at the ECOWAS HLF in Accra, Ghana. All GEF agencies and GEF Focal Points were invited to the HLF and a special session of the SPWA will be held there.</p> <p>ECREEE successfully developed and disseminated a broad range of tri-lingua newsletters and brochures on different programs and projects.</p>
<p><b>Output 10: Build renewable energy resource atlas for the region.</b></p> <p>OBS.1 to OBS.11</p> <p>Activities</p> <p>10.1 Carry out resource mapping of renewable energy resources available in member states.</p> <p>10.2 Build a resource atlas for renewable energy resources and update periodically.</p> <p>10.3 Input the resource atlas in the information management</p>	<p><b>RESOURCES ASSESSMENTS UNDERTAKEN.</b></p>	<p><b>INFORMATION MANAGEMENT SYSTEMS IN PLACE, RENEWABLE ENERGY RESOURCE ATLAS FOR THE REGION, SENSITIZATION WORKSHOPS ETC ARE ORGANIZED.</b></p> <p><b>SEE</b>  <a href="http://www.ecowrex.org">HTTP://WWW.ECOWREX.ORG</a> AND  <a href="http://www.ecreee.org">WWW.ECREEE.ORG</a>.</p>	<p>100% completed as planned.</p> <p><b>ECREEE launched and finalized several key regional resources assessments</b> in the areas of PV, CSP, biocrops in cooperation with different partners. The data and GIS maps of the assessments were integrated into the ECOWREX portal.</p> <p>The <b>solar and wind assessment</b> has been executed by NEXANT with the funding from USAID. NEXANT elaborated a geodatabase with annual average data of wind (wind speed) and solar (DNI and GHI) for the ECOWAS region. A set of country maps has also</p>

<p>system.</p>			<p>been elaborated.</p> <p>For the ECOWAS Renewable Energy Policy (EREP) a <b>comprehensive RE baseline report</b> on the ECOWAS region (200 pages) was prepared.</p> <p>Moreover a <b>comprehensive status report on SSHP</b> including an investment inventory was prepared. ESMAP indicated support for the implementation of a spatial GIS SSHP assessment based on climate data in 2013 under the ECOWAS SSHP Program.</p> <p>In cooperation with <b>CENER a comprehensive CSP assessment</b> was developed.</p> <p>A <b>biocrops assessment report on feasible and sustainable crops-region combinations</b> has been developed in cooperation with UNIDO and Quinvita. GIS biocrops maps were integrated into the ECOWREX. The second phase of the programme would start as soon as the selected country visits have been undertaken. The latest report selected 4 crops that would be further assessed in the second phase and include jatropha, cassava, sweet sorghum and cashew due to their suitability using the criteria of weather conditions.</p>
----------------	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			A comprehensive <b>regional capacity needs assessment</b> has been prepared in cooperation with 2ie, KNUST and UNICV (see capacity building)
<p><b>Output 11: Knowledge management services and products developed</b></p> <p>OBS.1 to OBS.11, COM.1 to COM.18</p> <p>Activities</p> <p>11.1 Compile an inventory of relevant experiences/projects and papers/study reports/research reports and documents on best practices, skills, know-how, knowledge, technology suppliers in each country etc with emphasis on RE&amp;EE available in the region and other regions of the world.</p> <p>11.2 Publish the collected and processed information/data on the ECREEE website.</p>	<p><b>INVENTORY ESTABLISHED</b></p>	<p><b>DATABASE</b></p> <p><b>SEE <a href="http://www.ecowrex.org">HTTP://WWW.ECOWREX.ORG</a> AND <a href="http://www.ecreee.org">WWW.ECREEE.ORG</a>.</b></p>	<p>100% completed as planned.</p> <ul style="list-style-type: none"> <li>- See also outputs 9 &amp; 10 &amp; outcome 3.</li> <li>- The ECREEE website was established and offers a broad range of information on RE&amp;EE in the ECOWAS region. The website is currently under revision. The information services of the website migrated already to the ECOWREX portal (see document library). The ECOWREX library will be further expanded.</li> </ul>
<p><b>Output 12: renewable energy and energy efficiency demonstration projects implemented in selected member states</b></p> <p>INV.1 to INV.18</p>	<p><b>2 RENEWABLE ENERGY AND/OR ENERGY EFFICIENCY INVESTMENT PROJECTS ARE IMPLEMENTED IN SELECTED</b></p>	<p><b>2 RENEWABLE ENERGY AND/OR ENERGY EFFICIENCY EQUIPMENT AND REPORTS FOR EACH PROJECT.</b></p> <p><b>SEE FEASIBILITY STUDIES AND PROJECT</b></p>	<p>100% completed as planned.</p> <p>The number of envisaged 2 demonstration projects was exceeded by far. UNIDO assisted ECREEE to develop financing mechanisms such as the ECOWAS Renewable Energy Facility (EREF). Through such multiplier</p>

<p>12.1 Identify and develop priority and visible investment renewable energy and energy efficiency projects in selected ECOWAS member states. The projects should be jointly implemented with private sector or other investors such and local governments</p> <p>12.2 Develop criteria for selecting 2 priority projects.</p> <p>12.3 Implement the 2 selected priority projects.</p> <p>12.4 Analyze lessons learnt from each demonstration project and disseminate findings widely through print and electronic media and through the website of the ECREEE.</p>	<p><b>ECOWAS MEMBER STATES.</b></p>	<p><b>DOCUMENTS</b></p>	<p>mechanisms and successful fund mobilization the investment component of ECREEE could be strengthened considerably:</p> <ul style="list-style-type: none"> <li>• An <b>energy audit at the ECOWAS HQ</b> was undertaken and the planning for the integration of RE components was finalized. So far the project is pending implementation.</li> <li>• ECREEE and UNIDO, in collaboration with the Ministry of Tourism, Industry and Energy of Cape Verde executed a solar lightening project to support the efforts of the municipality of Ribeira Grande to develop tourism on Santiago island. <b>27 solar lamps, poles and accessories were installed</b> on a turnkey basis, to illuminate the access road to the historic fortress “Fortaleza de S. Filipe”. The project will be officially inaugurated on 9th October 2012.</li> <li>• ECREEE/UNIDO contracted a consultant from Ghana to undertake a <b>comprehensive audit report</b> of the UN building and prepared the TOR for the implementation of <b>energy</b></li> </ul>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------	-------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p><b>efficiency measures (switch to LED lamps) and the installation of a 25 kw PV system.</b> The report and TORs were finalized and a tender was launched recently.</p> <ul style="list-style-type: none"> <li>• The ECOWAS Renewable Energy Investment Initiative which targets medium and large scale projects was launched. This activity has been executed with <b>SKM consultancy providing a high level prefeasibility appraisal of 40 RE investment projects</b> including PV plants. The project list was prepared for the <b>first meeting of the ECOWAS Renewable Energy Business and Investment Initiative.</b></li> <li>• Moreover, the <b>feasibility study for a solar thermal cooling system in the National Assembly of Praia</b> was finalized. It turned out that in the current status a solar thermal system is not feasible. As an alternative a grid-connected PV system was proposed. Moreover, <b>two feasibility studies for a solar thermal system for a hotel and a local beverage company</b> were developed.</li> </ul>
--	--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>Several <b>investment projects are included in the GEF Cape Verde project</b> which was developed by UNIDO in partnership with ECREEE.</p> <ul style="list-style-type: none"> <li>• <b>CENER submitted the DNI Resource Assessment</b> as well as preliminary results indicating technically feasible locations. CENER also submitted a <b>report on the state of the art of CSP</b>. The planned feasibility study of a CSP plant will be concluded by the end of 2012.</li> <li>• With the <b>finalization of the first EREF call a major mile-stone was achieved by the ECREEE staff</b>. The appraisal capacities of the staff was strengthened through UNIDO support. Through the proposals ECREEE received a lot of data and information which was integrated also into the ECOWREX. The Technical Committee of the ECOWAS Renewable Energy Facility (EREF) for rural and peri-urban areas <b>approved 41 projects with an overall volume of €3m</b>. <b>ECREEE is co-funding with around €1m (see report attached - around 25% of received concept notes</b></li> </ul>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p><b>approved).</b> The facility will be managed by ECREEE with technical assistance from UNIDO and will co-fund the selected projects with a €1m from the Spanish Agency for International Development (AECID) and the Austrian Development Cooperation (ADC). Contractual issues are being finalized with successful applicants. The projects will be implemented throughout the next two years. First disbursement will be done before end of the year. Based on the experiences of the <b>first call the EREF project document was finalized (see attached).</b> EREF received indications for support by the European Commission for a next call. There is the intention to launch a call on mini-grids in 2013. There EREF project manager will be recruited end of the year.</p>
<p><b>Output 13: Project concept notes and full proposals are developed and submitted to development partners for funding.</b></p> <p>INV.1 to INV.18</p>	<p>Project proposals developed and submitted to development partners</p>	<p>Copies of project proposals and concept notes.</p> <p>see several project documents</p>	<p>100% completed as planned.</p> <p>ECREEE <b>participated successfully in international call for proposals to attract project funds.</b> Through such processes ECREEE demonstrated its competitiveness. For the following projects ECREEE overtakes direct implementation and fund management responsibilities. <b>The grants for the</b></p>



			<p><b>project are exceeding 4,5 million Euros:</b></p> <p>EC projects (...)</p> <ul style="list-style-type: none"> <li>• the ACP-EU Energy Facility Project, "<b>Supporting Energy Efficiency for Access in West Africa (SEEA-WA)</b>" Project (EC grant excluding co-funding 1,5 million Euro) in cooperation with other partners (e.g. ADEME, AEA, AERE).</li> <li>• the <b>ECOWAS Regional Renewable Energy Policy Project</b> with support of the ACP-EU Renewable Energy Cooperation Programme (RECP) (grant around 0,3 million Euro).</li> <li>• the development of the <b>Regional RE&amp;EE Capacity Development Programme</b> with support of the ACP-EU Renewable Energy Cooperation Programme (RECP) - still under development.</li> <li>• the research project "<b>Development of a Cost-effective, modular and Dry Concentrating Solar Power for Africa: Design and Test of Components</b>" in cooperation with 2ie, KNUST and SIREA with support of the ACP Research for Sustainable Development Program of the 10th EDF Intra-</li> </ul>
--	--	--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>ACP Envelop (0,7 million Euro grant) .</p> <ul style="list-style-type: none"> <li>• ECREEE in cooperation with UNIDO is implementing the project “Promoting Regional Coordination, Coherence and Knowledge Management under the Energy Component of the GEF Strategic Programme for West Africa (SPWA)” (GEF grant 0,6 million Euro)</li> <li>• ECREEE, in collaboration with the Ministry of Energy in Cape Verde, commenced the implementation of the GEF project “Promoting market based development of small to medium scale renewable energy systems in Cape Verde” (GEF grant excluding co-funding 1.4 million Euro).</li> <li>• ECREEE, in collaboration with the Ministry of Energy in Guinea Bissau, commenced the development of the GEF project “Promoting market based development of small to medium scale renewable energy systems in Guinea Bissau” (GEF grant excluding co-funding according to letter of endorsement: 1,4 million Euro).</li> </ul>
--	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Annex C – Summary of regional and global energy policy initiatives

### ECOWAS White Paper

The ECOWAS initiatives in the energy sector date back from its 1982 Regional Energy Policy adopted by Heads of State and Government <sup>42</sup> AND intended to harmonize member states energy policies and increase collective energy autonomy. Electricity is given great prominence, even exclusive, following the major outages in the 1990s, hence the creation of the West African Power Pool, better known with its English acronym WAPP. In 2003, ECOWAS adopted a Protocol <sup>43</sup> on Energy establishing a legal framework to promote long-term cooperation that aims at:

1. Guaranteeing and ensuring free access to energy, equipment and energy products between member states;
2. Defining non-discriminatory rules for trading and conflict resolution;
3. Attracting and protecting private investment;
4. Ensuring environmental protection and energy efficiency.

In this chronology of the ECOWAS action in the energy sector, the Regional White Paper (RWP) for access to modern energy services in rural and peri-urban areas was adopted in 2006. Two regional entities, ECOWAS and WAEMU, are behind the Regional White Paper as their physical expression of a regional vision on Access to Energy Services (AES), vision that Heads of State have embodied and which Member States seem to also share totally now.

Finally, ECOWAS has established several specialized regional institutions: the West African Gas Pipeline Authority, the WAPP Secretariat, the Centre for Renewable Energy and Energy Efficiency (ECREEE) and recently, in 2009, the ECOWAS Regional Electricity Regulatory Authority.

The ECOWAS White Paper on a Regional Policy for Increasing Access to Energy Services (AES) in Peri-Urban and Rural Areas set the following three targets to be achieved by 2015:

- 100% of the total population should have access to improved cooking fuels and stoves, whereas 9.2% currently have access to LPG cooking devices.

---

<sup>42</sup> Decision A/DEC .5/12/99

<sup>43</sup> Decision A/DEC.17/01/03

- 66% of the population in rural and urban areas should have access to individual electricity supply; 100% for the urban areas and 36% for the rural areas. Furthermore, 60% of the rural population should live in a locality with modern access to water supply, education and health services as well as telecom services.
- 60% of the population living in rural areas should have access to motive power for productive uses.

Furthermore, among the 10 indicators listed to measure the impacts of the policy, indicator 10 states that at least **20% of the new investment in electricity generation in rural areas should be driven by local and renewable resources**. Recently undertaken progress reviews of the implementation process of the White Paper indicate that most of the targets will not be achieved by 2015. A renewed political commitment and a stronger focus on sustainable energy solutions are required.

The Evaluation Team assess that ECREEE is taking the lead on that issue. Indeed, the ECOWAS Energy Directorate, responsible for providing leadership of AES within the Regional Organization, is yet to fully share the RWP approach with the other Directorates (ownership of the RWP by all ECOWAS operational directorates).

The first step in implementing the RWP has been the establishment of National Multi-sectoral Groups (NMG) the role of which is to give impetus to an inter-sectoral coordination as the concept of Access to Energy Services (AES) would recommend. In consideration of the continuity of the regional activities, In general, Ministries in charge of energy, through their various Directions, are responsible for the promotion of AES at the national level. In the NMG, AES is under the responsibility of representatives of the energy departments. NFIs put in place by ECREEE could largely take stock of this existing initiative. The national multi-sectoral institutional structures (NMG/GTS) and the AES integration process in the MDGs can be strengthened at the regional level through the introduction of AES in ECOWAS Commissions/Technical Sectoral Departments.

This will facilitate regional efforts to harmonize legal and regulatory frameworks conducive to access to energy services through a multi-sectoral approach in member countries. The question then arises whether the regional level has enough “tools”, whether it has adequate capacity to efficiently stimulate the AES process. The answer to this concern consisted of providing the ECOWAS with an institutional and organizational environment as well as the reporting mechanism with member States for maximum efficiency of implementation of the RWP. ECREEE is seen as this arm to attain this goal. The Centre for Renewable Energy and Energy Efficiency

(ECREEE), which has attracted many donors and also had focal institutions (NFIs) in member countries, could operate in collaboration with the NMG with its AES specificity through renewable energy and energy efficiency. ECREEE would contribute to the unifying framework for RWP implementation, in particular the Regional Action Plan for AES designed by ECOWAS in the process of the implementation of the RWP.

### **The WAPP and its revised master plan**

The framework for an integrated regional power market is set up by the West Africa Power Pool (WAPP), one of the specialized regional institution of ECOWAS, with the main objective of finding a technical and economic optimum between:

- Development of large regional power generation projects.
- Development of regional power interconnections among the ECOWAS countries, so that power from the projects could flow to the deficit countries.

The WAPP Master Plan approved in September 2011, foresees 30 power generation projects selected as WAPP regional projects with a total capacity of 10.3 GW and a cost of US\$18 billion (€15 Billion). The major share of this new capacity is projected to be available from 2017 to 2019. The selected projects are based primarily on large hydro power (21) with 7,093 MW, on natural gas (3) with 1,300 MW, on coal (2) with 1,075 MW and on renewable energy (4) with 800 MW. It must be noted that some projects are already getting delayed, and, therefore, the proposed scenario will most likely not happen as scheduled. This would have serious consequences for the importing countries and countries relying on new large hydro. In this context, RE technologies might be becoming more competitive.

### **WAEMU Regional Initiative for Sustainable Energy (IRED)**

Like ECOWAS, the treaty establishing WAEMU included, at a very early stage, the issue of energy in its priorities. The objectives and principles of the common energy policy, as defined in this treaty, are (1) to guarantee energy supply security and (2) to ensure optimal management of energy resources by systematizing electricity networks interconnections and promoting renewable energies.

These principles formed the basis for the development of the Community Energy Programme (CEP) adopted in April 1997 in Bamako structured around axes mainly oriented towards the development of energy supply sources (accelerating interconnections of electricity networks, promoting new and renewable energies,

developing rural electrification, energy efficiency, bio-energies, supply of petroleum products, and development of other energy resources).

Following the adoption of the RWP, a framework agreement was signed between ECOWAS and WAEMU establishing a bridge between the two institutions in addition to existing periodic consultations. Discussions indicate a need for an initiative to boost AES regional governance by building exchange capacity between the two institutions.

However, WAEMU runs sectoral programmes implementing useful energy technologies, this without being embedded in an AES approach (solar equipment in health centres, water pumping with renewable energy, modern biomass for electrification, etc.).

The only ongoing regional activity is funded by the EU and the Francophone Energy and Environment Institute. It is about training on energy balances and setting Energy Information Systems (EIS) in some member states. In the WAEMU agenda, there is a desire to revive the former Regional Solar Energy Centre (based in Bamako) without “duplicating ECREEE” (emphasis on bio-fuels, standards and standardization).

The recent Regional Initiative for Sustainable Energy (IRED) is essentially a strategy to address the crisis in the electricity sector in WAEMU member states. It is exclusively oriented towards planning of major electricity infrastructure using various sources (conventional and renewable) and not towards AES as part of the Regional White Paper approach.

Without going through the internal organization, it clearly turns out that WAEMU has institutional and organizational characteristics similar to those of ECOWAS where the department in charge of energy is the one with a clear understanding of the multi-sectoral vision of AES. This vision still needs to be shared with other departments of the regional institution.

The development objective for the IRED is formulated as follows: ‘In 2030, all UEMOA citizens will have access to a cheap energy supply, from a West African comprehensive, integrated and harmonised power market delivering clean energy based on a dynamic public private partnership’.

This initiative is based on 3 main pillars:

- Rehabilitation and development of large hydro-production;

- Conversion from oil to gas of existing thermal production and rehabilitation and development of large gas fired combined cycle plants (450 MW);
- Sharing the regional capacity through the regional integration (interconnections).

It is expected that an increasing share of additional power capacity can be covered by renewable energy.

The Evaluation Team assessed a collaboration line between ECREEE and WAEMU Energy Programme. There is a process in strengthening relationship between the two institutions.

## **IRENA**

The International Renewable Energy Agency (IRENA) is an intergovernmental organization founded in 2009. Its mission is to promote renewable energies worldwide.

It will be playing a leading role in technology transfer (North/South cooperation) and providing advice on incentive policies facilitating fossil fuel withdrawal (oil, coal, gas) and their replacement by renewable energies (wind, solar, hydroelectricity, geothermal energy, tidal power, ocean energy). Therefore, IRENA has a technical, legal, economic, and political mission.

In July 2010, 148 countries and the EU signed its statutes which were ratified by 29 of those countries and the EU. The statutes entered into force on July 8th, 2010. Abu Dhabi, in the United Arab Emirates, was also designated as IRENA's interim headquarters.

IRENA signed a cooperation protocol with ECREEE, which could bring the international entity to be part of RE/EE activities in the ECOWAS sub-region. IRENA conducted its first mission in Africa (precisely in Senegal) to assess the capacity of the country to massively deploy renewable energy. ECREEE had already received funds from IRENA focusing on capacity building for Access to Energy Services through Renewable Energies.

## **The UN Sustainable Energy for All (SE4ALL) Initiative**

The UN Secretary-General has launched the Sustainable Energy for All (SE4ALL) Initiative. The Secretary-General is urging all stakeholders, including at the highest level and in private and public sectors, academia and civil society to take concrete

action and commitments towards three critical objectives – all to be achieved by 2030: (1) ensuring universal access to modern energy services; (2) doubling the share of renewable energy in the global energy mix, and (3) doubling the global rate of improvement in energy efficiency.

Tangible commitments have been mobilized through the Secretary-General's High-level Group on Sustainable Energy for All (SE4All). The United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil in June, 2012 (Rio+20) concluded with more than US\$500 billion mobilized with over 700 commitments made, most of them in sustainable energy. The commitments are to be transformed into a framework of concrete actions globally, including the ECOWAS region. Within this framework, ECREEE has the mandate to represent the ECOWAS region on all matters relating to renewable energy and energy efficiency.

### **Permanent Inter-State Committee for Drought Control in the Sahel (CILSS)**

The CILSS initiative (PREDAS) covers 7 of the ECOWAS countries (Niger, Burkina Faso, Mali, Senegal, Cape Verde, Guinea Bissau and The Gambia) and focuses on woody biomass, sustainable management of forest and wooded lands and sustainable use of wood-fuel, including substitution strategies (LPG and kerosene). Efforts are being made in the CILSS countries to build commitment around a national domestic fuel policy having sustainable forest management, efficient uses of the resources (cook stoves and charcoal production) and fuel substitution as main pillars.

Another side of this context is found at national level. Almost all West African countries are endowed with huge Renewable energy potential in one hand, and there are opportunities and promising trends emerging through National RE/EE Policy Development in the other hand. In particular, there is considerable potential to address both grid and off-grid related energy service needs of the region.



## **Annex D – Questionnaire for counterparts and expert survey**

### **Joint UNIDO-ADA-AECID-ECOWAS Independent mid-term evaluation of the Preparatory and first operational phase of ECREEE**

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) is a specialized Centre of Excellence of the Economic Community for West African States (ECOWAS) with a public mandate to promote regional renewable energy and energy efficiency markets. It was created by the ECOWAS member states at the background of a severe energy crisis in the region. In 2008 the 61st Session of ECOWAS Council of Ministers adopted the regulation C/REG.23/11/08 and gave the Centre a legal basis.

After the successful completion of the preparatory phase the Centre commenced operation in July 2010 with support of ECOWAS, the Governments of Austria and Spain and key technical assistance of the United Nations Industrial Development Organization (UNIDO). The centre acts as an independent body but within the legal, administrative and financial framework of ECOWAS. Further information on the legal status of the Centre is available in the headquarters agreement, the enabling rule PEC/ER/1/01/11 on the organization and operation of ECREEE and the minutes of the Technical Committee and Executive Board meetings.

Dear participant, this survey has been designed as a tool as part of the mid-term evaluation covering the ECREEE as a whole, with particular focus on the inputs provided through UNIDO, ADA, AECID and the ECOWAS Commission directly to ECREEE for the institutional build-up of the centre and its first operational phase (i.e. activities for the period December 2009 to December 2012). Therefore it meant to reveal the interaction of several actors with the ECREEE and to find out about their perceptions, expectations and proposals in order to optimize ECREEE in the future. The survey population comprises a huge number of individuals from various institutions, including government agencies, private sector, civil society and academia, whether directly or not involved with the Program.

**The survey is structured around the following specific dimensions:**

- the continued relevance of project objectives and planned outcomes, including the implicit and explicit assumptions and risks of the project;
- the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact and sustainability; the efficiency of implementation: quantity, quality, cost and timeliness of inputs and activities;
- the analytical basis and recommendations provided for the continuation of the project;
- the lessons drawn of wider application for the replication of the experience gained;
- we highly appreciate your participation in this survey and kindly invite you to complete the following questions. The estimated time to complete the survey is 10 minutes.

There are 20 questions in this survey

**A. General information**

**1 Which type of institution are you working for? \***

Please choose **only one** of the following:

- International Organization
- National Government
- Provincial or municipal government
- Technical or scientific institution/ university
- NGO
- Private company
- None/ Independent
- Other

**2 Please indicate your location.**

Please choose only one of the following:

- Americas
- Africa

- Europe
- Asia
- Oceania

**3 Please indicate your country.**

Please choose **only one** of the following:

Benin

Burkina Faso

Cape Verde

Gambia

Ghana

Guinea

Guinea Bissau

Ivory Coast

Liberia

Mali

Niger

Nigeria

Senegal

Sierra Leone

Togo

Other, please specify: -

**4 What is your position? \***

Please choose **only one** of the following:

- Political position
- Coordinator/ manager
- Advisor/ consultant

- Technical expert
- Administrative
- Researcher
- Professor
- Diplomat
- Other

**5 In your opinion, how well are you informed about ECREEE and its activities?  
1 is "very well" and 5 is "not at all". \***

Please choose **only one** of the following:

- 1
- 2
- 3
- 4
- 5

**6 How did you learn about ECREEE? \***

Please write your answer here:

**B. The ECOWAS Center for Renewable Energy and Energy Efficiency (ECEEE)** originates from the ECOWAS Ministerial Meeting held in Ouagadougou. In this meeting, the participating Ministers and Representatives of Governments agreed on the importance of establishing an institution for bringing together regional efforts within and outside the region to increase the spread of renewable energy and energy efficiency in ECOWAS region.

**7 According to you, how relevant is the initiative of setting up ECREEE for the region? \***

Please choose **only one** of the following:

- Very relevant

- Relevant
- Relatively relevant
- Not relevant

**8 Which of the ECREEE functions do you consider as a priority?**

**Please choose at least 2 and at most 5 of the following functions. \***

Please choose **all** that apply:

- Facilitation of access to information on RE/EE in the region
- Promotion of RE/EE in various public-private spheres
- Support of research activities in RE and Energy efficiency
- Carrying out capacity building programs and continuing education
- Promotion of the coordination of various institutions within and outside the region
- Inputs for the development of national and regional policies
- Inputs for the development of a specific regulatory framework
- Technical assistance in RE projects
- Fund raising for small scale RE/EE barriers removal projects
- Promotion of investment projects in RE/EE linked to local and national development
- Promoting financial support mechanisms

**9 Which of the following mechanisms do you believe to be the most effective to continue the institutionalization and consolidation of ECREEE at regional and national levels? Please choose at most 3 of the following mechanisms.**

Please choose **all** that apply:

- Internal/administrative restructuring to meet fast growing institutional demands
- Restricting ECREEE role to Regional/National policies formulation/quality control and fundraising activities
- Restructuring the Board and/or Technical committee to emphasize strengthened future ECOWAS linkages

- Empowerment of National Focal Institutions (NFI)
- Creation of National Units overseeing ECREEE activities with participation from governmental and private sectors and civil society
- Creation of Centers of Excellence comprehending various actors from private and public sectors
- Creation of sub-thematic multi-sectoral networks

Add any other.

**10 Which outputs/outcomes of ECREEE do you consider most relevant and useful? Please choose at most 3 of the following answers. \***

Please choose **all** that apply:

- General Information/news and updates on RE/EE
- Regional policies
- Technical documents
- Programs and projects
- Dissemination of technical workshops and events
- Business opportunities and alliances (partnerships)
- Forums and other spaces for professional exchange
- Other:

**D. Capacity building**

This thematic area concerns specific initiatives for training, promotion and dissemination of renewable energy in education and cultural areas as in recent years, regional technical workshops and currently, various training activities have been promoted (specialized courses, bi-monthly newsletters on RE/EE, joint research programs between universities, among others).

**11 Have you participated in any technical workshop organized by ECREEE? \***

Please choose **only one** of the following:

- Yes

- No

**12 How would you rate the quality of the workshop(s)? \***

**Only answer this question if the following conditions are met:** Answer was 'Yes' at question '21. Please choose **only one** of the following:

- very good
- good
- weak
- very weak

**C. Web Portal ([www.ecreee.org](http://www.ecreee.org))**

The web portal was implemented for the purpose of promoting the integration of online information and knowledge exchange relating to Renewable Energy (RE) and Energy Efficiency in ECOWAS member countries. It provides access to a knowledge platform to countries and equally includes a Geographic Information System (GIS), technical reports, amongst other information of interest related to the topic of RE/EE and the region.

**13 How often have you used the web portal? \***

Please choose **only one** of the following:

- Never
- Only once
- A few times
- Frequently

**14 How would you rate the usefulness of the web portal for the dissemination of information exchange on Renewable Energy and Energy Efficiency in the region? \***

**Only answer this question if the following conditions are met:** Answer was 'Frequently' or "A few times' or 'only once' at question '14

Please choose the appropriate response for each item:

	very useful	useful	not really useful	not useful at all
For the Public Sector				
For the Private Sector				

**15 How would you rate the available information in the web portal? \***

**Only answer this question if the following conditions are met: Answer was 'Frequently' or 'A few times' or 'only once' at question '14**

Please choose **only one** of the following:

- Thorough/ complete
- Limited/ scarce
- Poor/ insufficient

**E. Final questions**

In order to evaluate your overall satisfaction with ECREEE, please answer the following questions.

**16 In your opinion, what are the strengths of ECREEE? \***

Please write your answer here:

**17 In your opinion, what are the weaknesses of ECREEE? \***

Please write your answer here:

**18 We would be grateful for any additional information on the program's benefits for you (and your organization/ institution/ company).**

Please write your answer here:

**19 Would you or your organization be interested in providing any concrete contribution to a future efficient ECREEE? Which?**

Please write your answer here:

**20 We would highly appreciate any recommendations or proposals you might have to help us improve the program's performance.**

Please write your answer here:

Thank you for completing this survey.



