



**ECREEE**  
TOWARDS SUSTAINABLE ENERGY

# STRATEGIC PLAN

**2017-2021**

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## 1. Introduction

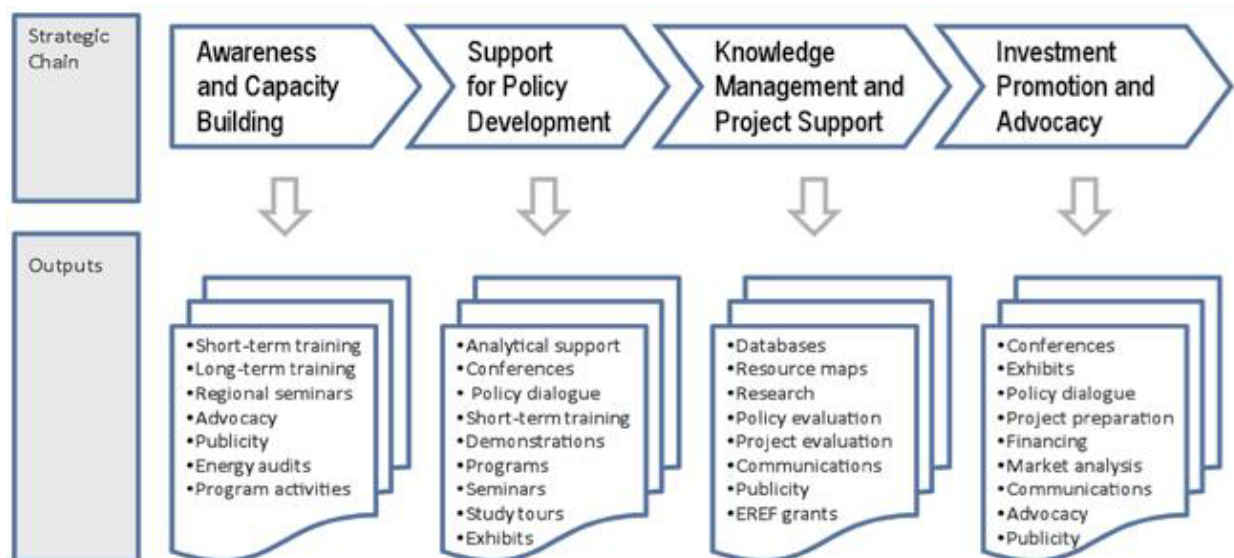
### 1.1. ECREEE

ECREEE was established in 2010 in response to the energy poverty crisis faced by the West Africa region, and the need to mitigate the effects of climate change. It was a strategic decision by West African leaders —under the auspices of the ECOWAS Commission— to strive to reduce the daunting energy deficit and to promote renewable energy and energy efficiency in the region.

A review of the power sub-sector demonstrates very low access rates, insufficient capacity for power generation and distribution, poor reliability of power supply, high costs, low renewable energy penetration, rampant inefficiencies and very high unmet demand. In this sense, addressing the region’s relative energy poverty and precarious energy security is a challenge; it hinders economic growth and development performance, while also impacting negatively on the quality of life of the population.

In 2011, ECREEE formulated its business plan for the 2011—2016 period to begin to address these challenges. Figure 1.1. below, taken from this plan provides an overview of the core areas of focus and activities for this period.

Figure 1.1: ECREEE’s Strategic Value Chain of Results Areas



Source: ECREEE’s Business Plan 2011—2016

The overall objective of ECREEE as defined in its business plan 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)*. More specifically, ECREEE aims to create favorable framework conditions for regional renewable energy and energy efficiency markets by supporting activities directed to mitigate existing technological, financial, economic, business, legal, policy, institutional, knowledge and capacity related barriers.

### 1.2. ECREEE: 2017—2021

ECREEE has become the energy agency for the ECOWAS region; it is now largely seen as the institutional set-up to deal with all renewable energy (RE) and energy efficiency (EE) matters in the region. ECREEE played a critical role in the adoption of a community vision of

ensuring universal access to energy by 2030, as well as in the approval of four major community policies on RE and EE. These include the renewable energy policy, the energy efficient policy, bioenergy policy, and gender policy. The ECOWAS region, under the technical leadership of ECREEE, has now set out to implement these policy agendas as a way to address the daunting challenges facing the region in providing access to clean and affordable energy for all.

At the end of the first business plan period, ECREEE launched a two in one exercise: first it reviewed the implementation of its first business plan (2011-2016) and, based on this, formulated a strategic plan for the next five years. This document presents the strategic plan for 2017 – 2021. The plan provides a strategic agenda for ECREEE focused on leading the efforts of the West African community to realize its vision of universal access to reliable and affordable energy by 2030.

To this effect, the interventions of ECREEE will concentrate on RE and EE, with emphasis on facilitating the implementation of concrete on the ground projects. The RE program will include three overarching components: (i) Clean Energy Corridors, (ii) Regional stand-alone Off Grid Electrification, and (iii) Regional Mini-Grid Rural Electrification. The *ECOWAS Renewable Energy Policy (EREP)* aims to increase the share of RE in the region's overall electricity mix. The goal is to reach 35% in 2020 and 48% in 2030. Within the RE program, ECREEE will aim to build the technical, political and institutional requirements to ensure there is a conducive environment to achieve the community goals. Additionally, ECREEE will serve as a catalyst and facilitate investment in various technologies, including solar, wind, hydro and bioenergy.

The EE program will implement measures aimed at freeing up 2,000 MW of power generation capacity. The program will include seven overarching components: (i) Regional EE standards and labeling, with implementation at national level, (ii) EE in industry, (iii) EE in buildings, (iv) EE in lighting, (v) Clean cooking fuels and stoves, (vi) High Performance Distribution of Electricity, and (vii) EE in transportation.

Additionally, ECREEE will place emphasis on the implementation of ECOWAS community priority projects with activities such as facilitating and supporting feasibility studies as well as project development and finance. Other critical focus areas during the plan period will include support for energy planning and building enabling environments for RE and EE in West Africa.

ECREEE's strategic plan has been conceived as a means to lead West Africa to achieve its vision of universal energy access. The strategic plan is a key part of realizing the energy vision and will serve as a tool for ECREEE to function and to perform its role as the West African energy agency. The strategic plan is presented in five sections. Section 2 provides a review of the energy context in West Africa. Section 3 provides a synthesized strategic review of ECREEE, with a focus on the failures and success, as well as a SWOT analysis. Section 4 presents ECREEE's strategic plan, including the vision and mission, the strategic focus, strategic approach and organizational capability. Section 5 covers the issues of implementation, while Section 6 provides the conclusion to the strategic plan.

Renewable energy and energy efficiency offer West Africa unique opportunities to address the energy deficit facing the region. The progress over the past decade has been remarkable as regards RE and EE technologies; ECREEE, as the lead agency for ECOWAS on energy, puts renewables and energy efficiency at the heart of the region's transformation in the energy sector, to ensure universal access to energy while also mitigating climate change. This is crucial to ensuring sustainable economic, social and environmental development in West Africa.

## 2. West Africa's Energy Context

### 2.1. West Africa Energy Situation

Established in 1975 in Lagos, Nigeria, the Economic Community of West African States (ECOWAS) comprises 15 sovereign states united in their desire to achieve regional integration in all sectors of economic activity, namely: industry, transport, telecommunications, energy, agriculture, natural resources and trade as well as economic, social and cultural issues. Under the aegis of ECOWAS, the West African region has made strides in the development of a regional energy market. Articles 26, 28 and 55 of the Revised ECOWAS Treaty of 1993 give the Community a clear mandate to foster the promotion, cooperation, integration and development of the energy sector across Member States.

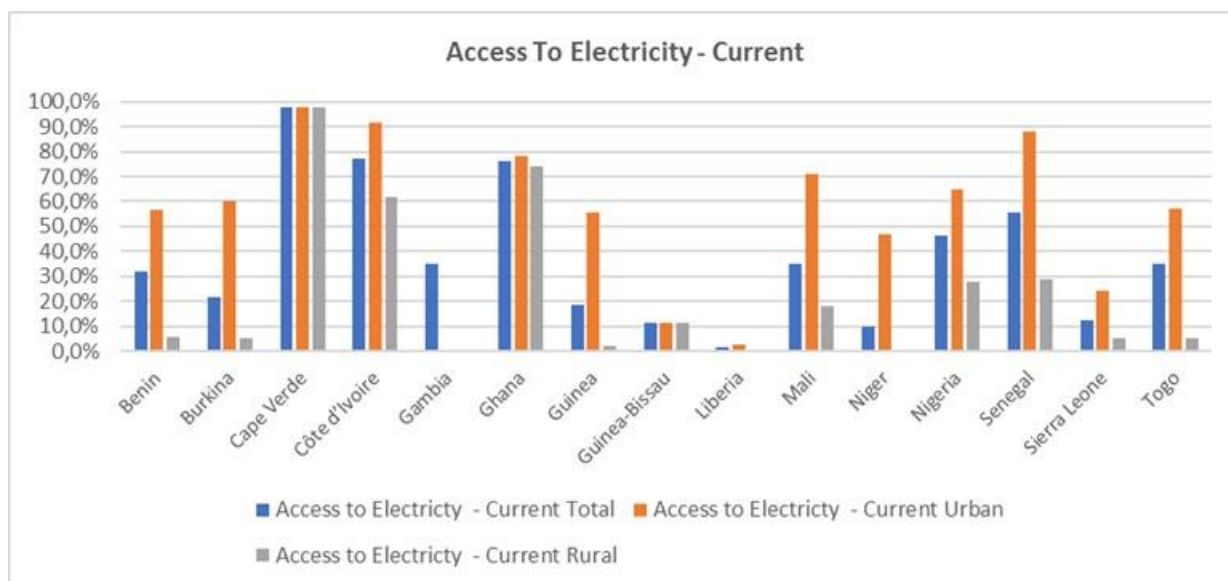
The region's energy sector is characterized by the interrelated challenges of energy access, energy security and climate change mitigation and adaptation, which are intertwined with the region's economic challenges. In addition, lack of knowledge and information, considered to be major hurdles, present serious political barriers and can result in unsuitable policies, which fail to support RE and EE<sup>1</sup>. This challenging context considerably complicates the implementation of regional strategies aimed at fostering socio-economic development, attracting foreign investment programs, providing basic social services, and achieving the Sustainable Development Goals (SDGs).

#### 2.1.1. Energy Poverty

Energy poverty and its consequences for local economies and social development are projected to remain the predominant challenge for West Africa through to 2030. The overall access to electricity in the ECOWAS Region remains low. Household access to electricity across the region is about 20%. But wide gaps exist between the access rates in urban areas that average 40% and in rural areas with coverage of 6% to 8% of households. In countries such as Benin, Togo and Guinea, for instance, the differences are substantial (between 50-60% in urban areas and around 5% in rural areas), while in other countries such as Cote d'Ivoire and Ghana the electrification rates are more balanced. Moreover, significant energy access and energy pricing inequalities exist between urban and rural areas. Whereas urban areas tend to use energy in the form of electricity, charcoal, kerosene and other fuels, rural areas continue to rely on largely traditional biomass for meeting their energy requirements for cooking, lighting and space heating.

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<sup>1</sup> REN21, 2017, Renewables Global Futures Report, Paris, REN21 Secretariat - <http://www.ren21.net/future-of-renewables/global-futures-report/>



In the ECOWAS region, the level of access to social basic services including modern energy services is one of the lowest in the world; even in the most advanced member states, coverage rates for localities and households access rates to modern energy services (for cooking, motive power and electricity) remain very low, and simply do not exist in most parts of member countries, particularly in rural areas.

The impact of low level and lack of access to energy seriously hampers efforts to achieve meaningful development. ECOWAS governments recognize that access to energy is fundamental to eradicating widespread poverty and achieving development set goals. Improving access to energy services is now an important part of priority goals in all ECOWAS countries.

### 2.1..2. Energy Security

Energy security is of high importance for the governments in West Africa as it affects economic growth and industrial development. The external and internal environment for the energy sector has changed considerably in past years and requires urgent answers from policymakers as well as public and private investors. Currently, the ECOWAS region is confronted with the reality of energy vulnerability, fuel price volatility and system unreliability.

The electricity systems in West Africa are facing tremendous challenges due to the growing gap between predicted demand, existing supply capacities and limited capital to invest. The energy intensity in the countries remains high and electricity is used in an inefficient way throughout all sectors. At least 60% of the ECOWAS electricity generation capacity runs on expensive diesel or heavy fuel oil and imposes significant pressure on national budgets, private households and the private sector. Overall, the performance of the West African power sector over the years has been unsatisfactory. Despite implementing power sector reforms aimed at stimulating private sector participation and liberalization, the utility services in the region have not been able to mobilize significant private investment.

### 2.1..3. Climate Change Mitigation (and water)

West Africa's economies will inevitably be confronted in the coming decades by the costs and effects of climate change mitigation and adaptation. Given the region's vulnerability to climate change, the urgent need for reliable and affordable energy supply to ensure energy security



and energy access poses a dilemma for policymakers. Urgent investments in generation and transmission facilities are required to satisfy the increasing urban and rural needs for modern, affordable and reliable energy services. In the meantime, expansion of an energy supply, based on inefficient, fossil fuel based combustion technologies will increase GHG emissions and increase negative climate change impacts. New energy infrastructure investments have a long lifespan and determine the GHG emissions for the next 20 to 30 years. Climate change impacts (temperature rise, extreme weather events and droughts) will challenge the energy security of West African countries and will have to be mainstreamed into energy policy planning (e.g. impacts on water flows).

#### **2.1..4. Energy and Gender**

The effects of the interrelated challenge of energy access, energy security and climate change facing the region affects the lives of men and women differently. For example, in areas where wood fuel is the primary alternative fuel, women are seen to suffer more as a result of energy poverty.

Women, who are overwhelmingly responsible for procuring and using traditional biomass for cooking, experience more directly the negative effects of the lack of access to clean and modern forms of energy. Indoor air pollution, exposure to respiratory diseases, safety issues, and less time available for personal development are some of the effects associated with the supply and use of traditional fuels, and exemplify the underlying challenges faced by a larger number of women in the ECOWAS region.

In order to redress these inequalities, it is imperative to promote socially inclusive sustainable energy development for sustainable economic development in the ECOWAS region. Specific interventions include:

- Addressing gender inequality in energy access through innovative policy instruments;
- Creating a critical mass of gender-aware policy makers and empowered women entrepreneurs and technicians;
- Bridging knowledge gaps among Gender and Energy Practitioners;
- Transforming business ideas in energy into real, commercially viable enterprises.

#### **2.1..5. Current Status for Renewable Energy (RE)**

Renewables are now the least expensive option for new power generation in almost all countries and it is considered that significant barriers for further market expansion are therefore not related to cost but to the limitations of existing infrastructure<sup>2</sup>. It is clear that regional energy access, energy security and climate objectives will not be achieved simultaneously in future decades without significant additional investment in sustainable energy infrastructure in West Africa. Along with other low-carbon technologies, renewable energy and energy efficiency are appropriate tools to address these challenges simultaneously and in a sustainable manner.

Over recent decades, a broad range of proven decentralized and centralized RE&EE technologies and solutions, ready to meet various energy services in urban or rural areas of West Africa, have been developed. Renewable energy (RE) systems are particularly effective

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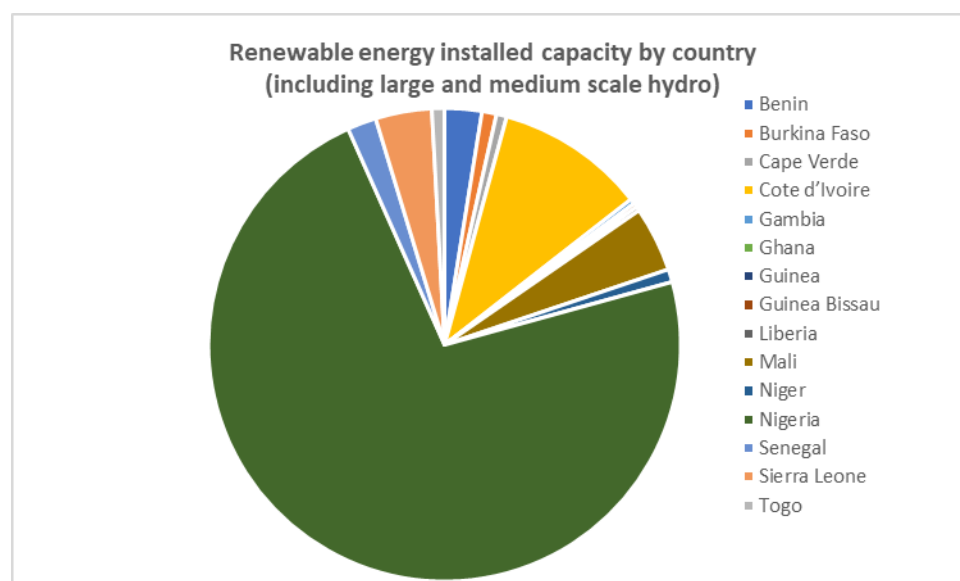
<sup>2</sup> REN21, 2017, Renewables Global Futures Report, Paris, REN21 Secretariat - <http://www.ren21.net/future-of-renewables/global-futures-report/>



if they are combined with energy efficiency (EE) measures, which are usually available at low cost.

If planned carefully and according to quality principles, such investments can be associated with various benefits and opportunities for West African countries. RE&EE can make a considerable contribution to the eradication of the described negative externalities of the current energy systems. RE based economic development is in many cases more sustainable, as it relies on local energy sources, creates local employment opportunities and prevents negative environmental externalities of the energy system (GHG emissions, local environmental impacts).

Currently, grid connected RE amounts to approximately 4,9 GW in terms of installed capacity and approximately 3 GW in terms of operational capacity. The overall RE installed capacity is expected to grow significantly over the next decade.



In addition, although current medium and large hydro capacity accounts for more than 94%, in 2030 the energy supplied from RE is expected to be shared in a more balanced way between Small Hydro, Large Hydro, photovoltaic and biomass.

West Africa can rely on a wide range of untapped renewable energy potentials:

- An estimated 23,000 MW of hydroelectric potential is concentrated in five of the 15 Member States, of which only about 16% has been exploited. According to preliminary estimates, small hydropower potential in the region amounts to around 6,000 MW;
- There is good potential for all forms of bioenergy. Traditional biomass is already the main source of energy for the poor and accounts for 80% of total energy consumed for domestic purposes;
- There are considerable wind, tidal, ocean thermal and wave energy resources available in some ECOWAS countries; and,
- The region has vast solar energy potential with very high radiation averages of 5–6 kWh/m<sup>2</sup> throughout the year.

### 2.1..6. **Current Status for Energy Efficiency (EE)**

The tremendous global development of RE over the past three years, combined with rising energy demand of rapidly emerging economies, brings the debate about specific actions for EE—to increase energy productivity—squarely back on the political agenda. Had EE measures taken over the past 25 years not been adopted, the current global demand would be 826 EJ/a (19.725 Mtoe); 251 EJ/a (5.987 Mtoe) higher than it is today. Efficiency measures saved an amount of energy equal to the total demand of China, India and Europe combined. In 2015 energy intensity was more than 30% lower than it was in 1990<sup>3</sup>.

With respect to energy efficiency opportunities, there is significant potential to improve the demand side and supply side EE in buildings, appliances, power generation and transmission. It is estimated that in ECOWAS, 25% to 30% of the total electricity supply is consumed in the building sector, namely cooling and hot water heating. The technical and commercial energy losses due to theft and/or illegal operators lie in the range of 25% to 30% (with a number of sources pointing to 40%). In the EMCCA/CEMAC countries, electricity losses over transport and distribution networks account for approximately 40%; and in the SADC region the average losses are between 25 and 30%. This is quite high in comparison to the 7% to 10% range of energy theft in Northern America and Western Europe.

A general lack of understanding regarding how EE measures can be fast tracked requires identifying efficient financial support mechanisms for those without access to energy services.

## 2.2. **The changing policy landscape**

At present the West African markets for RE&EE remain largely underdeveloped, with the region yet to take advantage of its RE&EE potentials. This is largely due to technical, financial, economic, legal, institutional, policy and capacity related barriers, amongst which are the following:

- Although significant cost reductions have been achieved, a variety of renewable energy technologies (RETs) still tend to be more expensive than their conventional competitors;
- Due to the widespread lack of knowledge and awareness, RETs are still perceived as expensive although some are already cost-competitive when they compete with conventional alternatives under specific conditions;
- Technical knowledge is required to establish a critical mass of policy analysts, economic managers, project financiers and engineers who will be able to manage all aspects of renewable development. For successful dissemination, it will be necessary to foster trained manpower capable of developing and manufacturing RETs offering RE services;
- In some countries, subsidies for fossil fuel based solutions create a disadvantage for already competitive RETs;
- The lack of tailored policies, as well as regulatory and legal frameworks in the ECOWAS region, is a key constraint for the wider usage of RE&EE technologies. Clear direction and leadership from governments is often missing, resulting in an ad hoc evolution in the RE sector. Although some of the ECOWAS countries have fully adopted RE support policies, targets and laws, the adoption and implementation of existing policies is largely still at an initial stage. In general terms, the efforts in the region are still insufficient to significantly make a difference, and this for various reasons including practical issues such as applicable feed-in tariffs, technical standards for power generation, which are largely not addressed by current policies and regulations. Additionally, in most ECOWAS countries there are no model Power Purchase Agreements (PPAs) in place, which would guide

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<sup>3</sup> REN21, 2017, Renewables Global Futures Report, Paris, REN21 Secretariat - <http://www.ren21.net/future-of-renewables/global-futures-report/>

negotiations between utilities and independent power producers (IPPs) and potential investors;

- Oversight of the RE&EE policies to ensure they are adequate, coherent and aligned with policies for other sectors like, education, health, agriculture, trade and industry is necessary. Although RE&EE targets and policies are adopted by the Ministry of Energy or Environment, the import of RE equipment remains highly taxed, or labeling standards for appliances or building codes are not in place. In some cases, the importation of efficient light bulbs attracts more import duty than the importation of inefficient incandescent bulbs;
- Energy policies are often focused on grid-based electricity and oil products. Energy issues for urban areas and peri-urban areas tend to receive more attention compared to matters concerning rural areas. Policy frameworks are non-existent for rural and remote areas, where decentralized RE systems have greater market opportunities and are competitive options; and,
- In some cases, policy statements have largely remained broad statements of intention and are not the result of evidence-based analysis. Essentially, policies have tended to be monolithic, focusing just on the energy sector, yet renewable energy is a cross-cutting issue where there is clear need for linkages with other sectors such as agriculture, water, health and, education.

### **2.3. Regional Integration in the ECOWAS Energy Sector**

Faced with the need to increase energy security while simultaneously addressing climate change concerns, ECOWAS has acknowledged the promotion of RE and Energy Efficiency (EE) as an important area for regional cooperation and integration, and has taken a pioneering role in the development of a regional sustainable energy framework in Sub-Saharan Africa. The experience of the European Union (EU) has shown that regional integration can be a useful tool to facilitate the adoption and implementation of RE&EE policies and incentive schemes on national levels (e.g. EU Directive with binding renewable energy targets).

Since 2006, much has been achieved by ECOWAS to provide guidance and support to the fifteen ECOWAS countries for the adoption and creation of RE and EE markets. First and foremost is the establishment of the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the first regional renewable energy and energy efficiency Centre in Sub-Saharan Africa, aimed at promoting and supporting the development of RE and EE in the ECOWAS region. In July 2013, the Authority of ECOWAS Heads of State and Government renewed its commitment to the provision of access to sustainable energy services in West Africa by adopting two path-breaking policies - the ECOWAS Renewable Energy Policy (EREP), which aims to increase the share of renewable energy in the region's overall electricity mix to 35% in 2020 and 48% in 2030; and the ECOWAS Energy Efficiency Policy (EEEP), which aims to implement measures that free 2000 MW of power generation capacity and in the long term, more than double the annual improvement in energy efficiency, so as to attain levels comparable to those of world leaders. The policies include a broad range of RE&EE measures to be implemented at regional and national levels, and represent the ECOWAS contribution to the achievement of the objectives of the Sustainable Energy for All (SE4ALL) Initiative.

#### **2.1..7. EE in buildings**

Based on a mandate by the ECOWAS authorities to coordinate the implementation of the regional policies as well the SE4ALL Initiative in West Africa, ECREEE, in collaboration with technical and financial partners, supported the ECOWAS Member States to develop individual Sustainable Energy Country Action Plans (National Renewable Energy Action Plans - NREAPs, National Energy Efficiency Action Plans - NEEAPs, and SE4ALL Action Agendas).

These country action plans aim to contribute towards the attainment of the regional sustainable energy targets by 2020 and 2030.

At a regional high level policy & investment forum, which was held in September 2015 in Abidjan, Cote d'Ivoire, ECOWAS Member States presented their respective Sustainable Energy Country Action Plans to relevant stakeholders, including international partners and investors. In order to operationalize these country action plans, ECREEE and partners are currently supporting Member States in the elaboration of their SE4ALL Investment Prospectuses (IPs). The IPs aim to provide an approach to operationalizing the Country Action Agenda, in each specific sector or subsector, by identifying and developing a set of implementable projects and programs, including their investment requirements, which can be presented to potential private and public investors.

At the recently concluded Summit of the Authority of the ECOWAS Heads and State and Government in Monrovia, Liberia in June 2017, a further commitment of the region was demonstrated for the promotion of sustainable energy access, using the available biomass resources through the adoption of the Bioenergy Policy and the mainstreaming Gender in the sustainable energy agenda with the adoption of the Gender Energy Policy.

### 3. ECREEE: Strategic Review

#### Introduction

ECREEE as an agency has to date made significant impact on the policy landscape, raising awareness, developing policies and supporting their introduction and implementation; however, it is at a cross roads and now needs to re-focus its efforts to ensure the ECOWAS achieves its vision of “energy access for all by 2030”. As mentioned in the preceding chapter, this is taking place in a very challenging context and will require that the agency strive to fully align with the accepted principle and goal of universal access, supported by strong policies on RE, EE, Gender, and bioenergy.

The ECOWAS region faces daunting energy challenges despite the vast energy resources of its 15-Member States, and sustainable energy development is still a challenge. The energy challenge considerably complicates the implementation of strategies aimed at fostering economic development and structural transformation in the region. Energy, in a way, has become a binding constraint to growth and development in the region.

Since its inception, ECREEE’s focus has been to help address the energy challenges facing the region. In order to achieve its mandate, the ECREEE implemented and supported Programs under five overarching priority Result Areas; these were defined in the ECREEE Business Plan 2011 – 2016:

- I. Effective Regional RE&EE Agency Created and Efficiently Managed;
- II. Tailored policy, legal and regulatory frameworks;
- III. Capacity development and training;
- IV. Knowledge management, awareness raising, advocacy and networks;
- V. Business and Investment Promotion.

At the end of the implementation of the first business plan in 2016, a strategic review of ECREEE was commissioned. The review examined ECREEE along two different dimensions, the first focusing on the relevance, ownership, efficiency, effectiveness, and sustainability and impact; the second along that of the five Results Areas. The functional dimension also examined the performance of ECREEE with respect to management (administration and human resources), coordination, and monitoring and evaluation (M&E). ECREEE received an overall rating of Moderately Satisfactory, and the evaluation evidenced the following overarching ratings for ECREEE’s interventions (Table 3.1). In addition, ratings were attributed to the existing Result Areas and administrative functions. Table 3.2 below succinctly presents the main contributing factor for the rating, and minimal requirements to improve it.

Table 3.1

Relevance	Ownership	Efficiency	Effectiveness	Sustainability and Impact
Very high	High to Very high	Satisfactory Information required	Moderately Satisfactory Minor shortcomings	Moderately Likely - strong corrective actions required

Source: 2016 Final Evaluation

Table 3.2

ECREEE: 2017 – 2021 Strategic Plan

Result Areas	Evaluation Rating	Notes
Result Area 1: Effective Regional RE&EE Agency Created and Efficiently Managed	Moderately Satisfactory	Secretariat is staffed and operational; however, the response capacity is at risk: Management structure must be aligned to match institutional and operational demands Internal coordination mechanisms need to be strengthened Communication unit in place but not yet acting/seen as a pillar of the institution
Result Area 4: Knowledge management, awareness raising, advocacy and networks;	Satisfactory	Most outputs have been delivered as expected Data management and processing are overstressing capacities
Result Area 2: Tailored policy, legal and regulatory frameworks Result Area 3: Capacity development and training; Result Area 5: Business and Investment Promotion	Highly Satisfactory	
Management (Administration, Human Resources)	Moderately Satisfactory	Need to focus on critical organizational capabilities (OED, Accounting/Financial, IT, Communications...)  Functional units not all set up as individual units, nor aligned both with each other or with different tasks of the institution  Mobilize additional resources  A critical concern not yet strategically addressed
Coordination	Moderately Unsatisfactory	Countries need to take the lead in coordinating and communication with ECREEE, including rapid response to issues.  Terms of reference for NFIs need to be implemented or modalities changed to NFN (National Focal Networks)  Strengthen ties/coordination  With ECOWAS (GIABA), ERERA, WAPP, etc.
Monitoring and Evaluation	Highly Unsatisfactory	A fully functional M&E system not in place yet

Source: 2016 Final Evaluation

The following sections highlight the key successes of the first 7 years of ECREEE operations, and introduce the main challenges that must be addressed for the agency to go forward  
*ECREEE: 2017 – 2021 Strategic Plan*

sustainably (Overview of Key Successes and Challenges). These are reviewed in detail further on, based on the Results Areas (Assessment and Findings of the Final Evaluation).

As previously mentioned, the energy crisis in the region presents both a challenge and 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 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 EE, and increasing the share of RE and cleaner and EE technologies. Additionally, the ECOWAS community has called for universal access to energy by the year 2030 and has set audacious targets for RE and EE by 2020 and 2030, which ECREEE has to lead the region to achieve.

At present it is considered that the operational sustainability of ECREEE (i.e. the ability to function at a minimal operational level) is highly likely. This is supported by the fact that staff contracts are funded from the core operational budget of the ECOWAS. This provides a good argument in favor of the continued sustainability of this initiative and indicates it seems highly likely that ECREEE’s regional approach could eventually have a positive impact; gradually leading to mitigation of existing barriers and economies of scale —preconditions for success— and this should as well facilitate the identification of additional resources that could favor the development and accelerated investment in RE and EE strategies in the region.

The fact that these also 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. Also, the fact that this model is currently being replicated in South Africa (SADC) and East Africa (EAC), with the support of different partners including Austria<sup>4</sup>, also would seem to indicate that the sustainability of this type of model is not considered a high risk, and also that it has the potential to impact this region, and others in which it might be implemented.

The Final Evaluation evidenced that the funding commitments received by the Centre from its donors are expected to continue, under modalities that could however change, depending on how ECREEE addresses some of the current concerns that have been clearly identified. In this perspective, it is considered likely that it will be financially stable in the near future. This aspect would be fundamental; as similar centers have failed due to a lack of financial sustainability. However, for this to happen, a number of urgent corrective actions will have to be forcefully implemented (organizational design, management, financial to name a few).

As regards financing in support of sustainability the mixture of co-funding from ECOWAS, international support and active fund raising of the center was foreseen as the basis for the financial sustainability of ECREEE. In particular, the BP11-16 stated “the share of international donor grants would decrease from 85% of the Centre’s annual budget in 2012, to 70% in 2016 and 50% in 2020. 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 (e.g. sponsoring in the context of the ECREEE Business Advisory Committee)”. In addition, “The share of ECOWAS and voluntary member state contributions should increase from 15% in 2012 to 25% in 2016 and 40% of the annual budget in 2020. By 2020, the Centre would receive around 10% of its annual budget

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<sup>4</sup> An MoU was signed by EAC, ADA and UNIDO (with ADA contributing €1 million) in July 2013 and a similar one was finalized for SADC, and the Caribbean and Pacific Region. These centers became operational recently



through commercial services provided to private partners and investment shares (fee for service)”.

However, when this co-funding does materialize, it will be necessary to take into consideration the effect of the projects generating the funds, on the ECREEE workload. It is important to guarantee the accuracy of reporting, when addressing implementation rates as this currently does not take account the additional workload generated by the indirect exercise of budgetary resources; these currently are not channeled through ECREEE, however work resulting from the implementation of activities they support do place additional requirements on ECREEE staff.

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.

### **3.1. Implementation progress and main results**

#### **3.2.1. Overview of Key Successes and Challenges**

In the first business plan period (2011-2016), ECREEE made significant inroads and progress in raising awareness on need for sustainable energy in West Africa, and has led the ECOWAS Community to formulate and adopt regional policies on critical areas of RE and EE. ECOWAS has also adopted other community policies, including Bio-energy to promote the transition to sustainable production, trade and use of bioenergy. The Gender policy aims to address existing barriers that may hinder the equal participation of women and men in expanding energy access in West Africa and, by the extension, the success of the SE4ALL initiative and the ECOWAS Regional Policies on Renewable Energy and Energy Efficiency.

ECREEE has managed to develop a good reputation externally while at the regional level Ownership is considered very high. Awareness for RE and EE has been raised not only locally, but regionally and ECREEE interventions are perceived as globally positive. ECOWAS has taken steps to reinforce ECREEE as its RE & EE arm. Momentum has been generated over the last years and it would appear ECREEE is on track to being “treated like any other ECOWAS institution”. In fact, it could be argued that over this initial period ECREEE has essentially become the de facto energy agency of ECOWAS. This will have implications for the sustainability of ECREEE. As regards Sustainability, for example, prospects are overall considered to be good, if the current donor streams are maintained. In addition, the ECOWAS intervention, which included adding ECREEE’s staff to its employee roster, is a strong signal and will contribute to the sustainability of the Center.

As a relatively new institution, ECREEE has been quite successful in raising funds and mobilizing partnerships in and outside of the region, from policy makers, donor partners to technical partners, academia, and the business community, to the civil society. Its core donors have played crucial roles and not just in providing funding. Their engagement has provided unique support and allowed ECREEE important alliances. This is partly why ECREEE has been able to mobilize funding to develop and design quite a few projects, provide multiple facilities (grants and technical assistance) to support RE and EE project development in West Africa. It has also succeeded in diversifying its source of funds, while enabling access by West African member states to tailor-made, country-specific technical assistance. Additionally, ECREEE has trained hundreds of policy makers and technical staff since its inception and its grants program has supported many small-scale projects while supporting medium-to-large scale projects through technical assistance.

ECREEE has also designed and launched the implementation of many programs in support of RE and EE objectives in West Africa. It designed and implemented the EREF project, which provided tangible support for the development of and implementation of projects in the region. The Gender program is also allowing ECREEE to raise awareness of the interplay between

gender and energy to ensure action. Additionally, it has designed and launched the implementation of the ECOWAS Renewable Energy Entrepreneurship Support facility, which supports entrepreneurs to increase their annual turnover.

ECOWAS Small Scale Hydropower program by ECREEE has also increased awareness and facilitated the mapping of the high and untapped potential of small-scale hydropower in West African countries. Two critical outputs include GIS Hydropower Potential Mapping as well as detailed train the trainer courses on Small-Scale Hydropower development. Programs for Small-scale hydropower development have been launched in Sierra Leone and Guinea. Other programs by ECREEE include SOLTrain, which aims to raise awareness on heat and direct solar water heating as necessary component for decreased loads in national electricity grids. It also provides training programs as well as market studies and the monitoring of existing solar water heating systems launched in 5 countries jointly with training institutions.

Other consequential projects include the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX) and the West Africa Energy Week. The ECOWREX is an interactive data portal with energy statistics for all ECOWAS member states. The system includes approximately 60,000 data points, dashboards with key performance indicators and pioneer activities, such as the development of energy balances. A key output of ECOWREX is the first spatial data infrastructure for energy planning in the ECOWAS region. ECOWREX is generating new knowledge and facilitating energy planning and policy making in the region. Finally, platforms such as HDX, REN21, IRENA, GEOSS and ENERGYINFO from the World Bank have started publishing ECOWREX data and producing new knowledge that reverts to the users from the region.

While ECREEE has achieved significant successes, it also faces tremendous challenges. There is still a low level of awareness about ECREEE, at the regional level, which translates into low ownership, generated in part by the difficulty to keep a continued trend of collaboration when changes occur in national institutions (for example institutional transitions in the Energy sector in Senegal and Burkina Faso). There is still a pressing need to reinforce this ownership throughout all 15 Member States, in particular by shifting some of the responsibility for awareness raising at the national level to the institutional structure conceived for this purpose: the NFI. Finally, ownership is considered very high in Cape Verde where the evidence is spread over all stakeholders, making ECREEE a strong partner for RE and EE issues.

A critical outcome of the management challenge is the strategic deficit. For example, ECREEE has about 15 technical programs for a roughly similar amount of technical staff. The drive to raise funds has led management to acquiesce to any program that is of interest to donors. New programs have been created without internal discussion and strategy; reduced access to non-earmarked funding disables purely ECREEE-owned program preparation and implementation. The risk is a shift in orientation from the needs of the region to only what is of interest to the international donor community. The limited number of staff vis-à-vis the number of programs is problematic; this creates situations in which technical staff is split between several programs simultaneously and with no oversight, guidance, or support. Additionally, Staff development is not a focus. With staff overburdened, people work in silos and the necessary strategic collaboration and links between programs are not effected. Unless the staff can be substantially increased, it might be better to focus on a limited number of key areas/activities. This decision will in future need to be made strategically to ensure that shortchanging of EE, in favor of RE ceases to be the modus operandi.

The following tables summarize the information presented above:

Management	MS
Admin / HR	MS

Finance	U
Programmatic activities	S
Established partnerships	S
Coordination	MU
M&E	HU

Highly Satisfactory No shortcomings	Satisfactory Minor shortcomings	Moderately Satisfactory Minor shortcomings	Moderately Unsatisfactory Significant shortcomings	Unsatisfactory Major shortcomings	Highly Unsatisfactory Major shortcomings
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Source: 2016 Final Evaluation

### 3.2. Emerging Realities: Overview and challenges facing ECREEE

As regards sustainability, prospects are overall considered to be good, if the current donor streams are maintained. In addition, the ECOWAS intervention is a strong signal, however mechanisms for commercial services (fee for service) are not in place yet, curtailing some of the revenue streams the Centre could potentially access.

In future ECREEE will need to be much more active in trying to mobilize additional resources, a task which should have been facilitated by the fact that ECREEE is a specialized ECOWAS Centre (which provides the institution with leverage as a financial anchor). This has previously been identified as a critical concern and has as of yet not been addressed: the fact that ECREEE has not been able to secure direct financing for reasons relating first and foremost to financial accountability (from the EU, or from the US to name only these). This is critical for the sustainability of the institution and it is considered urgent to ensure that this perception is shifted; achieving this will take time and will require deploying corrective measures that will at the very least address the recommendations from previous evaluations and assessments.

The regional ownership is considered to be very high, for example at ECOWAS level, which has taken steps to reinforce ECREEE as its RE & EE arm. Momentum has been generated over the last years and it would appear ECREEE is on track to being “treated like any other ECOWAS institution”; however, achieving this still requires concerted efforts. At the Member State level, there is still a low awareness about ECREEE, which translates into low ownership, generated in part by the difficulty to keep a continued trend of collaboration when changes occur in national institutions (for example institutional transitions in the Energy sector in Senegal and Burkina Faso). There is still a pressing need to reinforce this sense of ownership throughout all 15 Member States, in particular by shifting some of the responsibility for awareness raising at the national level to the institutional structure conceived for this purpose: the NFI.

## ECREEE: SWOT Analysis

### Strengths

- Strong official mandate for ECOWAS region (mission, vision) and convening power
- ECREEE has acquired a degree of sustainability, thanks in part to ECOWAS core financing
- It is the RE and EE agency for ECOWAS, has high visibility and has put in place strong regional and national policies – member states have policies that derive from these regional policies
- Strong partnerships developed within the region, across different sectors and with different actors
- Institution and its staff are perceived as capable of delivering high quality products
- Seen by the ECOWAS member states as a strategic partner
- Well established and known organization across the region but also across the continent and beyond
- Strong interaction between ECREEE and donor partners
- ECREEE serves as door opener and pushes technology transfer

### **Weaknesses**

- Second level management not fully functional resulting in weak internal communication and information flows
- Challenges regarding strategic coordination between the programs
- Mismatch between human resources and the number of activities and programs, which can affect the quality of outputs/results;
- Lack of results oriented planning; weak monitoring and reporting on impact/results
- Absence of a well-coordinated fund raising strategy
- Limited cooperation programs/collaboration with other relevant regional institutions
- Insufficient resources, and focus in the area of energy efficiency
- Lack of mechanisms to transfer institutional memory upon departure of staff
- Insufficient participation of ECREEE in country level dialogues.

### **Opportunities**

- ECREEE is the preferred partner for donors who want to implement regional initiatives and has a significant from some core donors
- Positive advancement of regional integration process
- High potential for RE and EE
- RE and EE has picked up in many of the donors' agendas
- Countries value ECREEE's contribution to the advancement of the RE and EE sectors and that places ECREEE as a strategic partner for these countries
- Increased interest and awareness regarding open data
- Replication of similar regional centers for RE and EE in 4 other regions
- Entities/stakeholders from other regions wanting to enter the market
- A market of 150m people without access to energy
- Increasing local capacity (female and male)
- SDGs have clear target for access to sustainable and affordable energy, Paris agreement included sustainable energy, etc.
- Acceptance of role of women in improving energy access
- Increased acceptance by the public

### **Threats**

- Lack of stable core funding – change of donors' priorities; Potential donor fatigue and/or change of donors' priorities in mid to long term
- Overlapping activities/mandate with UEMOA – duplication of efforts among regional entities in similar space (WAPP, ERERA) / Relations often characterized by a spirit of competition rather than of cooperation

- ECREEE will see increased competition at national level where it does not have representation/strong presence and linkages
- Lack of integration of regional targets into national targets and planning
- Volatile nature of financial allocations from ECOWAS, to programmes
- Hiring freeze on recruitment process of permanent staff results in uncertainties
- Lack of skilled women professionals to increase women's role

As described above, awareness for RE and EE has been raised not only locally, but regionally. ECREEE's interventions are also perceived as positive; however, the institution finds itself at a crossroads and must aim to lead West Africa to a future of universal energy access. It must seek to address the challenges by building on its strengths in order to seize opportunities, address its weaknesses while actively working to minimize the threats. This will require, amongst others:

- Continued streamlining of the organogram
- Continued strengthening of the Units
- Ensuring financial accountability
- Strengthening internal coordination mechanisms
- Preparation of an organizational manual
- Ensuring and maintaining high standards re security of data
- Relocating to permanent facilities
- Strengthening the capacity of countries, by supporting in particular the transformation of the existing National Focal Institutions and expanding them into National Focal Networks. This will also require strengthening ties institutionally, both nationally and regionally
- Mainstreaming gender throughout the region
- Deploying a permanent M&E capacity, and
- Following up on previous recommendations/assessments methodically
- Ensuring the continued support of the core donors

## 4. ECREEE: Strategic Agenda

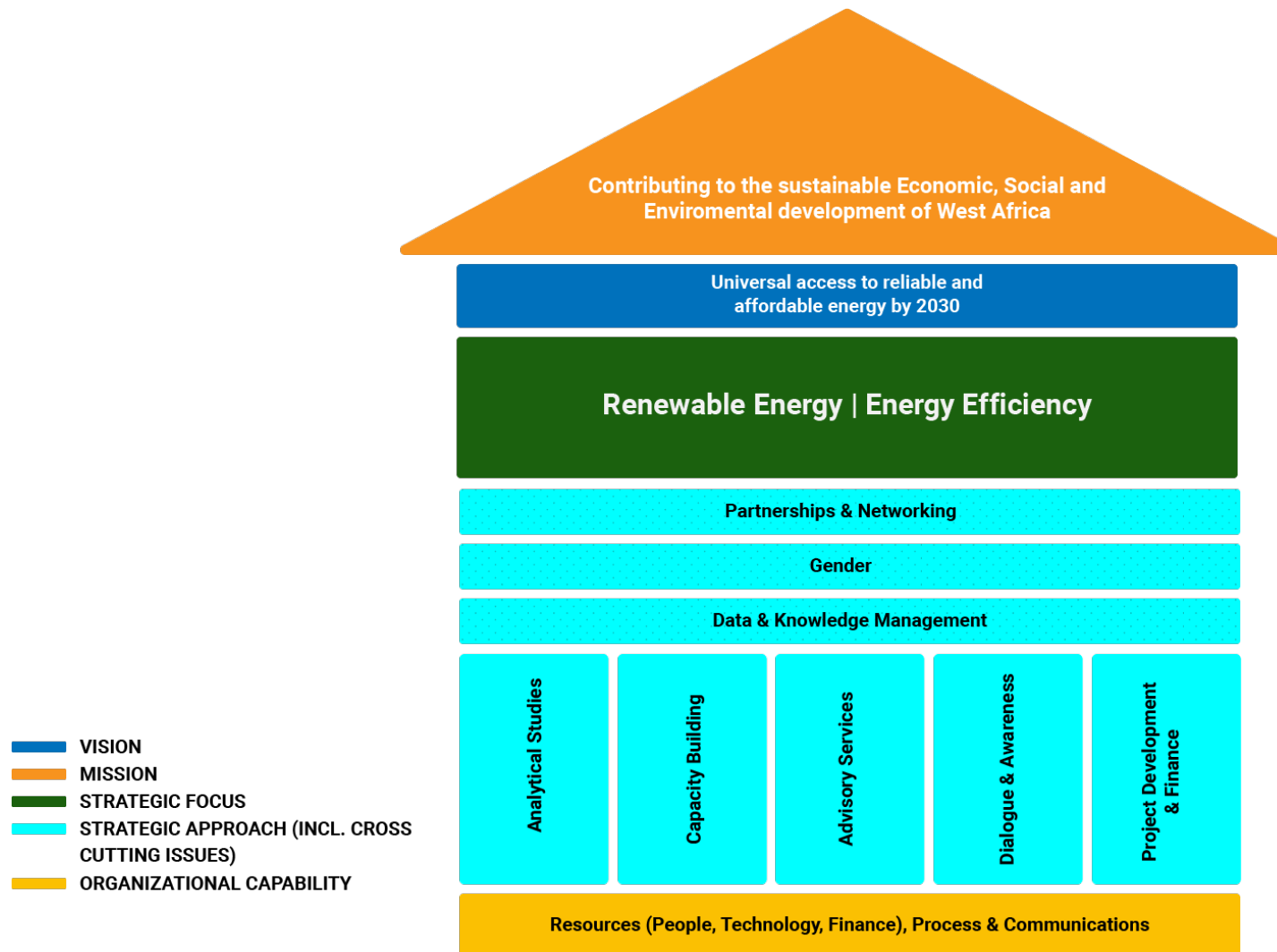
### 4.1. Overview

The earlier Chapters of this strategic plan examine the context in which ECREEE must operate. Chapter 2 focuses on the West African context while Chapter 3 presents a strategic review of ECREEE. This chapter begins the next part of the strategic plan, which focuses on the future of ECREEE, with the aim of answering a few specific questions. What vision for ECREEE? What will be the areas of focus? What approach will be taken by ECREEE to achieve its goals? What factors will affect the implementation and how will these be addressed?

ECREEE was established by the ECOWAS Commission to contribute to the sustainable economic, social and environmental development of West Africa. The Center is to contribute to the region's sustainable development by improving access to modern, reliable and affordable energy services. This is expected to facilitate energy security and ensure a reduction of energy related GHG emissions and climate change impacts. The need for ECREEE in West Africa is more pressing today than ever, in light of the huge energy deficit facing the West African region, the need for structural transformation, and the need to facilitate sustainable economic development, as well as the need to begin to quickly take the necessary measures to minimize climate change effects given the vulnerability of the region.

The proposed strategic agenda is aimed at making ECREEE the “go to” partner in the pursuit of sustainable economic, social and environmental development in the region. The aim of which is to contribute to West Africa's structural transformation and development while addressing the needs for renewable energy and energy efficiency (Figure 4.1). The strategic agenda will provide the basis for the preparation of the Annual Work Plans and guide the interventions of ECREEE. Starting with the 2018 Work Plan, this strategic agenda calls for a restructuring of ECREEE's current 15 programs to ensure alignment with the strategic agenda going forward.

**Figure 4.1: ECREEE’s Strategic Agenda**





## 4.2. Mission and Vision

ECREEE was established in 2010 as a regional center to promote RE and EE in West Africa. It was the first of its kind on the continent. The ECREEE model has now been replicated in East Africa, Southern Africa, the Caribbean and the Pacific. The core mandate of ECREEE is aligned with the broader strategic goals of ECOWAS' Vision 2020, which aims to ensure sustainable development in West Africa as well as the sustainable conservation of the region's environment and resources. Since its inception in 2010, ECREEE has played an active role in developing region-wide policies related to clean energy and energy efficiency as well as in facilitating awareness, and investment and business promotion while also assisting with building capacity for EE and RE in the region. In fact, it has successfully led the efforts to build consensus at the policy level in the region on RE and EE.

ECREEE has pursued its purpose of '*contributing to the sustainable economic, social and environmental development of West Africa*' since it began operations in 2010. This purpose or mission is to help promote socio-economic development that is environmentally sustainable in West Africa. This is expected to be accomplished by helping to *improve access to clean, reliable and affordable energy services* in West Africa. ECREEE will achieve its mission through serving as the RE and EE agency for West Africa. As West Africa's agency for RE and EE, ECREEE's vision is inspired by the collective decision of the region. ECREEE will therefore aim to lead the region to achieve the vision of 'universal access to reliable and affordable energy by 2030.'

The lesson of the last 7 years is clear. ECREEE has played a critical role in the process of laying the foundation for RE and EE in West Africa. Principally, ECREEE has helped to lead the region in efforts to build consensus and adopt proposals on key policy issues. To date, four major policies have been adopted by the Heads of States and Governments of the region. These policies are: Renewable Energy, Energy Efficiency, Bio- Energy and Gender. In order to continue to build on the foundation and to achieve its purpose and vision, ECREEE will aim to become the 'go to' institution when it comes to RE and EE in West Africa. It will support the government, private sector as well as other stakeholders in developing and implementing concrete projects on the ground in West Africa. This, however, requires an ECREEE that has relevance, reputation and resources.

ECREEE will aim to become relevant and indispensable given its mandate and the unique role ascribed to it by its stakeholders in West Africa. ECREEE will also have to become an effective partner in the development of clean energy and promotion of energy efficiency in the region. ECREEE will take the lead in thinking about the region's energy future, with special emphasis on supporting the ECOWAS Community to address the key barriers to development and adoption of clean energy and energy efficiency technologies. The aim is for ECREEE to help decision makers make better decisions on RE and EE issues to achieve sustainable development in the region as well as promoting investments in clean energy and energy efficiency. In addition, ECREEE, over the plan period, will place emphasis on promoting investments in concrete renewable energy and energy efficiency projects to augment energy access in the region.

ECREEE will build and bolster its reputation with the quality of its outputs and interventions. ECREEE will strive to become a world-class agency on RE and EE to ensure that it becomes the go to problem solver and advisor to decision makers whether in governments, private sector or in civil society. This will require that ECREEE become and be seen as the producer of new knowledge, innovative policies and creative ideas as well as facilitating the development of coalitions to implement projects that will ensure improved access to clean, reliable and affordable energy services in West Africa.

Moreover, success will require that ECREEE address a crucial challenge: securing resources (both financial and human). ECREEE will have to ensure a robust and more diversified

revenue stream to assist it to pursue its mission and vision. It must also build a high performing team with the managerial and technical know-how. This will require the engagement of the founders, and ECREEE must seek new and innovative approaches to cultivate non-traditional partners for funding and to generate revenue from targeted programs to ensure financial sustainability. In addition, ECREEE will have to diversify its partnerships for funding, while also seeking ways to earn revenue.

### 4.3. Strategic Focus

The mandate of ECREEE is to lead the ECOWAS region in achieving the regional sustainable energy goals and policies that have been adopted by member states (Annex 1: ECOWAS Clean Energy Policy Agenda). Therefore, ECREEE's interventions going forward will build on previous achievements and focus on promoting renewable energy and energy efficiency in West Africa. During the last plan period, significant emphasis was placed on building an enabling environment for renewable energy and energy efficiency in West Africa. ECREEE's interventions previous years were focused mainly on policy making both at the regional and national levels, as well as ensuring the setting of community goals and targets. While these work will need to continue, emphasis in this plan period will focus on augmenting installed capacity of renewable energy and energy efficiency in West Africa. In short, the focus will be on concrete projects that will enhance access to energy and aim to drastically reduce the energy poverty in the region.

#### Renewable Energy

The renewable energy program will include three components: (i) Clean Energy Corridors, (ii) Regional stand-alone Off Grid Electrification, and (iii) Regional Mini-Grid Rural Electrification. ECOWAS **Renewable Energy** Policy (EREP) aims to increase the share of renewable energy in the region's overall electricity mix. The goal is to reach 35% in 2020 and 48% in 2030. Within the renewable energy focus area, ECREEE will aim to build the technical, political and institutional requirements to ensure there is a conducive environment to achieve the community goals. Additionally, ECREEE will serve as a catalyst and facilitate investment in various technologies, including solar, wind, hydro and bioenergy.

The **West Africa clean energy corridors** component of the renewable energy program will strive to ensure the installation of 2 GW of grid-connected power generation in areas with high radiation and close to the transmission grid. In addition to promoting the building of enabling environment, ECREEE will undertake zoning, planning as well as the mobilization of funds. A critical aspect of ECREEE's intervention will be to engage and work with the private sector and investors to ensure the design, funding and implementation of concrete projects that will augment installed capacity of renewable energy in West Africa. ECREEE will raise funds and seek partners for project development as well as facilitate access to financing through lines of credit for private sector operators for major projects in the region.

Another component of the renewable energy program is **the regional stand-alone off-grid electrification**. This component will also be used by ECREEE to facilitate investments in concrete projects during this plan period in order to increase access to sustainable electricity services in the ECOWAS region for household, commercial enterprises as well as public health and educational facilities. The component will be implemented in three (3) steps: (i) technical assistance activities to improve off-grid market ecosystem, including creating the framework conditions for implementation of the electrification activities within the project; (ii) support financial intermediaries to finance service providers to electrify households and commercial enterprises including the establishment of a credit facility for private sector solar enterprises to develop the market for off-grid electricity products and services in the project countries; (iii) support service providers to electrify public institutions, including support for the

electrification of public institutions and community facilities, using mini-grids and/or standalone systems.

Concretely, ECREEE's priority over the plan period will include working with partners such as the World Bank mobilize funding for projects in the region. This will facilitate access to finance for private sector promoters of solar systems for homes as well as for electrification of public facilities (health centers and schools). ECREEE will also actively support planning process for grid extensions, building capacity and implementing quality assurance (certification and standards) as a way to assist in facilitating an enabling environment in the region.

The third component of the renewable energy program is **regional mini-grid rural electrification**. The aim is to augment the power production in rural areas by 2,000 MW using mini-grids based on renewable energy solutions, including solar, wind, hydropower and biomass. Also, where necessary the hybridization of existing mini-grids powered by diesel units will also be supported. Interventions to ensure the realization of the goal will include mobilization of funds to set up lines of credit, support for planning grid extensions, capacity building as well as supporting standards and certification to ensure quality assurance. These interventions by ECREEE will contribute to building the enabling environment for the development of regional mini-grid rural electrification in West Africa.

## Energy Efficiency

The energy efficiency program will aim to implement measures that would free 2,000 MW of power generation capacity. Based on preliminary projections developed by the UNEP/GEF, by transitioning to efficient on-grid lighting, for example, the ECOWAS Region could attain annual energy savings of approximately 6.75% of total electricity consumption. These savings would be enough to supply the total annual electricity consumption of at least 2.4 million households. In monetary terms, regional annual financial savings on electricity bills, from transitioning to efficient lamps, could exceed US\$220 million. Furthermore, additional savings will also accrue from the reduced need for ECOWAS Member States to invest in new power plants.

The Energy Efficiency program will have seven components: (i) Regional energy efficiency standards and labeling, with implementation at national level, (ii) Energy Efficiency in industry, (iii) Energy Efficiency in buildings, (iv) Energy Efficiency in lighting, (v) Clean cooking fuels and stoves, (vi) High Performance Distribution of Electricity, and (vii) Energy Efficiency in transportation.

The Regional energy efficiency standards and labeling component aims to facilitate **Standards and Labeling** in the region. The adoption and compliance with region-wide efficiency standards for building and efficiency labeling for major energy consuming equipment and appliances will facilitate substantial savings in energy consumption. ECREEE, over the plan period, will serve as a catalyst and facilitate the development of standards and a system for certification to ensure quality assurance for lighting, electrical appliances and others such as cook stoves at the regional level. ECREEE will develop maps as well as directives and will provide capacity building for national authorities and private sector promoters. For example, one area where there are many competing products is clean cook stoves. However, there are no efficiency ratings to compare one cook stove to another. Developing and working with countries to implement efficiency rating system for products such as cook stoves and other appliances and lightings will be a key focus of this component.

The component on **Energy Efficiency in Industry** aims to promote energy efficiency in the industrial sector in West Africa. Interventions by ECREEE over the plan period will center on finance, capacity building, standards and flagship demonstration projects. Specifically, ECREEE will undertake activities to support the implementation of ISO 50001 and energy diagnosis, as well as raise funds to set up lines of credit for industry and private sector

promoters, and undertake flagship projects to demonstrate the energy efficiency in industry. It will also help showcase examples in ECOWAS member states (such as that of the sugar cane processing industry in Senegal and that of cement in manufacturing in Sierra Leone) as a way to promote awareness and change in the industrial sector in the region.

The component on **Energy efficiency in Buildings**, will be supported by the recently approved Regulation for Energy Efficiency in Buildings in the ECOWAS Region and will focus on developing additional building standards and directives as well as undertaking capacity building for planners, master builders and architects in design, planning, construction and maintenance of no-energy and low-energy buildings, regarding construction and insulation materials, shadowing elements, cross-ventilation, orientation of the building and finally use of solar water heating and solar PV when needed and appropriate. Another focus is to encourage and assist member states to further develop policies and standards for EE in buildings to oblige builders of new homes to ensure energy efficiency. It will also promote the implementation of ECOSTAND/IEC/ISO standards and facilitate the design and implementation of flagship programs to showcase energy efficient buildings. Additionally, ECREEE will also aim to mobilize funds to facilitate financing for energy efficiency buildings in the region.

The **efficient lighting** component of the energy efficiency program will have strong linkages to the standards and labeling component and will ensure rapid transition to efficient lighting solutions for homes, businesses, and industry as well as for public spaces. Key interventions for ECREEE will include preparatory activities, including study and analysis, strategy formulation, investment promotion, as well as identifying lessons learnt and sharing with interested parties/stakeholders. ECREEE will also facilitate the development of a regional policy for efficient lighting in public spaces. In addition, it will design and implement capacity building programs as well as regulatory directives. These will facilitate the implementation of projects to ensure efficient lighting on the ground.

Another component of the energy efficiency program is **Clean cooking fuels and stoves**. Inefficient cook stoves with wood, charcoal, dung or coal which continues to be prevalent in the West Africa region pose gender-specific health hazards as well as threats to the economy and the environment. This is why the WACCA action was developed and a community goal of universal access to clean, safe and affordable cooking energy for the entire population by 2030 was set. Under the clean cooking fuels and stoves component, ECREEE will lead the region in achieving the agreed upon goals for clean and efficient cooking energy. Key technologies to be promoted will include small-scale biomass gasification, biomass rural electrification, as well as domestic, community and industrial biogas. Main interventions during the plan period by ECREEE will include standards, labels and certifications for clean cooking stoves. ECREEE will also mobilize funds to facilitate access to finance by private sector producers.

The **High Performance Distribution of Electricity** component of the energy efficiency program will involve interventions to reduce commercial and technical losses which are two critical challenges facing electricity distribution systems in West Africa. The aims are to contribute to freeing 2,000 MW of power generation capacity and reduce GHG emissions by about 3 MT eqCO<sub>2</sub>. ECREEE will work with stakeholders to find and implement solutions to reduce both technical and commercial losses. One such solutions will be the mobilization of funds to make available credit lines to utilities in the region to design and implement projects to reduce both technical and commercial losses. Examples of projects to be supported will include supporting new transmission and distribution networks and network management systems. ECREEE will support studies and serve as catalysts for project development and finance.

The **Energy Efficiency in Transportation** component will address an emerging critical challenge in West Africa due to the increasing energy consumption in the transport sector as the region further urbanizes and its population grows. ECREEE intends to initiate a few key

activities in facilitate the pursuit of efficiency in the transport sector in West Africa to reduce fuel consumption, costs, congestion, accident risks, and greenhouse gas emissions while contributing to sustainable economic development. ECREEE will initiate studies and analysis as well as facilitate the formulation of a regional strategy for energy efficiency in transportation.

ECREEE's Priority Actions for 2017—2021

STRATEGIC FOCUS AREAS				Interventions
	Areas	Tools	Targets	
RE	Clean Energy Corridors	Solar, hydro, wind, biomass	Achieve renewable energy in the region's electricity mix of 35% in 2020 and 48% in 2030  26% of the regions population getting their electricity from renewable sources by 2020	Support for Zoning; planning; building enabling environment; Capacity Building; Funds mobilization to facilitate access to financing for private sector (lines of credit)
	Regional stand-alone Off Grid Electrification	Climate change mitigation to mobilize funding for priority projects	The share of new renewable energy such as wind, solar, small scale hydro and bioelectricity (excl. large hydro) will increase to around 10% in 2020 and 19% by 2030.  Additional 2,425 MW renewable electricity capacity by 2020 and 7,606 MW by 2030	Facilitate Enabling environment; support Planning for grid extensions; Capacity Building; Quality assurance (standards and certification);  Funds mobilization: Facilitating access to finance for private promoters for solar home systems, facilitating access to finance for electrification of public facilities (health centers and schools)
	Regional Mini-Grid Rural Electrification	Certification & quality assurance	2 GW of grid-connected solar generation in areas with high radiation and close to the transmission grid.  2,000 MW mini-grids; Electrifying 4,000 rural localities using mini-grids  Biomass to account for 5 % of the total installed electricity capacity in the region, corresponding to 686 MW by 2020 (28% of RE capacity) and 2008 MW (13% of RE Capacity) by 2030  Serve 75% of the rural population with grid extensions and around 25% by renewable energy powered by mini-grids and stand-alone hybrid systems by 2030	Facilitate Enabling environment; Funds mobilization; Planning for grid extensions; Capacity Building; Quality assurance (Standards and Certification)

STRATEGIC FOCUS AREAS				Interventions
	Areas	Tools	Targets	
EE	Regional EE standards & labeling implementation at national level	Training and diagnostic for quality assurance (standards, labels, & certification) lighting, electrical appliances	Develop and adopt region-wide standards and labels for major energy equipment & appliances before the end of 2020;	Develop standards, labels and certification for efficient lighting, efficient appliances, & cook stoves  Develop directives (support national implementation); Work with port authorities; Capacity Building,
	EE in industry	Training and diagnostic for quality assurance (standards, labels, & certification) lighting, electrical appliances	Implementation of energy management systems (ISO50001) in all of the ECOWAS countries	Support implementation of ISO 50001; Facilitate access to finance for investment; Capacity Building  Facilitate Flagship programs in this area (for ex sugar cane in Senegal, Cement industry in SLN)
	EE in buildings	Training and diagnostic for quality assurance (standards, labels, & certification) lighting,	By 2030, around 50% of all public buildings and 25% of all hotels and agro-food industries with hot water requirements will be equipped with solar thermal systems.  Develop and adopt region-wide efficiency standards for buildings (e.g. building codes);	Support for implementation of ECOSTAND/IEC/ISO, Facilitate access to finance – lines of credit; Capacity Building for implementation of the EE Directives (Regulations)  Facilitate implementation of Flagship programs in this area



STRATEGIC FOCUS AREAS				Interventions
	Areas	Tools	Targets	
		electrical appliances		
	Clean cooking fuels and stoves	Quality Assurance - Standards & Certification	<p>Universal access to safe, clean, affordable, efficient and sustainable cooking for the entire ECOWAS population by 2030, including 20% (2020) and 26% (2030) of LPG users</p> <p>Develop and adopt region-wide standards and labels for cook stoves by 2020</p>	<p>Regional level support: facilitate the adoption of standards for cooking technologies; promote use of alternatives to Fuel wood; Facilitate the implementation of the Initiative on Standards and Labeling; Capacity building for research and policy development; Facilitate consistent system for monitoring and evaluation</p> <p>National Level: mapping the existing initiatives on fuel and cooking equipment and updating national strategies for cooking energy.</p>
	High Performance Distribution of Electricity	Quality Assurance - Standards	<p>Free 2,000 MW of power generation capacity; Reduce GHG emissions by about 3 MT eqCO<sub>2</sub></p> <p>Reduce losses in electricity distribution, from the current range of 15% to 40%, to under 10% by 2020</p>	Facilitate access to financing for investment; Capacity Building
	EE in transportation	Quality Assurance - Standards	<p>Share of ethanol/biodiesel in transport fuels will increase to 5% in 2020 and 15% by 2030.</p> <p>Reduce fuel consumption</p>	Support Preparatory work; Undertake study and analysis; Formulate strategy; Capacity Building
	EE in lighting – domestic and public	Quality Assurance - Standards	<p>Annual energy savings of approximately 6.75% of total electricity consumption.</p> <p>Savings to supply the total annual electricity consumption of at least 2.4 million households</p> <p>Phase out inefficient lamps by 2020</p>	Support preparatory work, Undertake study and analysis; Study on lessons learnt; developing strategy for public lighting (domestic exists), Capacity Building; Technical assistance to implement efficient lighting on the ground

#### 4.4. Strategic Approach

A key differentiating factor for ECREEE in this plan period is the overwhelming focus on facilitating and serving as a catalyst for the implementation of concrete projects on the ground that will have direct impact on enhancing access to energy as well as reduce the energy poverty in the region. The previous section presents the two areas of focus for ECREEE—renewable energy and energy efficiency—as well as the various components for each. The next questions, therefore, are how will ECREEE intervene and what approaches will it adopt?

ECREEE's interventions will be guided by key principles, such as regional and national ownership; resource optimization or efficiency and effectiveness in implementation; prioritization of programs or interventions based on ECOWAS' regional priorities; stakeholder participation; identification and application of best practices, replicability and up-scaling of successful approaches and solutions; consideration of gender, social and environmental criteria in all programs and interventions.

Engaging the region is crucial and as such ECREEE will be working with the various stakeholders in its interventions in the region. Critical among the stakeholders are the governments, the utilities, private sector firms, and financial institutions, including regional and international development finance institutions (DFIs). ECREEE cannot achieve its mandate or serve as a major catalyst to facilitate investments in concrete projects without working with private sector promoters as well as financial institutions. As such, in line with its objectives for this plan period, ECREEE will place significant emphasis on working with the private sector, especially promoters. It will also work with financial institutions both commercial banks and DFIs, both at the regional and international levels, with the aim of mobilizing funds to establish lines of credit to ensure access to funds by project promoters in the region. As such, the private sector will be a critical partner for ECREEE.

On the approaches, ECREEE, over the plan period, will concentrate its efforts around five mutually reinforcing strategic interventions plus three cross-cutting issues in pursuit of its vision and mission. These include (i) Analytical Studies, (ii) Dialogue and Awareness, (iii) Advisory Services, (iv) Capacity Building, and (v) Project Development and Finance. ECREEE has also identified a few cross-cutting issues which must be taken into account in all of its interventions to ensure success, and these are (i) Data and Knowledge Management, (ii) Gender, and (iii) Partnerships and Networking.

ECREEE will undertake its interventions within the various components of the two program areas using any or a combination of tools. For example, analytical studies to gain insights to support its stakeholders in its areas of focus or to inform policies or strategies to address specific issues. The results gained from the analytical work might be needed to inform ECREEE's advisory services in support of decision makers and project promoters as well as form the basis for organizing dialogue and raising awareness. Additionally, in all interventions, ECREEE will endeavor to take into account the gender dimension and the need to build partnerships. Additionally, ECREEE will ensure that it uses and/or contribute to its data and knowledge platform as part of its interventions. Critical goals will be to foster gender mainstreaming, evidence-based decision making, and capacity building programs, as well as provide support in project development and finance.

Combined, the above formed the intervention framework that ECREEE has adopted to implement its programs over the plan period while working towards achieving its vision of facilitating universal access to clean, reliable and affordable energy services in order contribute to the sustainable economic, social and environmental development of West Africa. The strategic approach is mutually reinforcing and should allow ECREEE to drive the growth of renewable energy and energy efficiency in West Africa. We now briefly flesh out the elements of the approach, including the cross-cutting issues.

#### **4.4.1. Analytical Studies**

ECREEE's reputation will depend on the quality of its outputs and the relevance of its work in support of the ECOWAS Community and its stakeholders, including governments, utilities and private sector. The analytical studies undertaken will be a crucial element of its interventions and will inform critical aspects of the work of ECREEE. Analytical studies will be undertaken as part of studying the feasibility of projects as well as to support strategy and policy formulation in key areas. Importantly, the studies will serve as inputs in the design and implementation of capacity building programs, including training needs assessment, as well as facilitate project development and finance. ECREEE's analytical studies program will therefore be applied in nature; they will be undertaken in support of policy, market, project development, and training. They will be carried out, when necessary in partnership with established centers in the region as well as elsewhere.

In addition to the above, the analytical studies will facilitate learning about renewable energy and energy efficiency issues in the region. ECREEE will develop partnership and alliances with institutions (including universities, technical and vocational schools, etc.) to undertake analytical studies and contribute to building the knowledge base on renewable energy and energy efficiency in West Africa. ECREEE will pursue partnership arrangements with reputable institutions, as well as create opportunities for others to undertake studies while also providing a platform for knowledge gathering and sharing. This is crucial for ECREEE's work in West Africa and will bolster its reputation, ensuring that it becomes the 'go-to' institution for solutions by West African governments, businesses, NGOs and international organizations on the pressing issues of RE and EE in the region.

#### **4.4.2. Advisory Services**

ECREEE intends to build robust advisory services within its areas of focus as part of its effort to become the 'go to' institution in the region on renewable energy and energy efficiency issues. The knowledge accumulated from its analytical studies will serve as the basis for ECREEE's advisory services. A key focus will also be that of facilitating the use of evidence in decision making on renewable energy and energy efficiency in the region. This will involve transforming findings into decisions and easily digestible policy briefs, drawing out implications and recommendations in support of policy making, as well as in its dialogue and advocacy activities. ECREEE will also engage with project promoters and private sector operators and provide advisory support for project design, finance and implementation with the aim of facilitating investments in concrete projects to enhance energy access.

The success of ECREEE will depend on its capacity to play a vital role and serve as an informed and independent voice on key issues relating to RE and EE. As such, ECREEE will have to build the capacity to produce relevant advisory services in-house and through a network of partner institutions and organizations to support government policy makers, private sector and utilities. The fact is that ECREEE has contributed to the establishment of a coherent regional Policy Framework for renewable energy and energy efficiency. Going forward, ECREEE will continue to assist member states to build a conducive environment that is attractive for promoters and investors to enhance investment in renewable energy and energy efficiency projects. Support might include assistance with undertaking legal and regulatory reforms. In energy efficiency, for example, ECREEE will provide advisory support to facilitate the approval and implementation of a series of underlying instruments such as standards, certification and labelling to promote energy efficiency in lightings, appliances, buildings and industry.

#### **4.4.3. Dialogue and Awareness**

The scale and scope of ECREEE's mandate in West Africa requires that it mobilizes the entire region in order to build a conducive environment for renewable energy and energy efficiency, as well as expand investments in concrete programs and projects by both the private and public sectors. It follows that ECREEE must reach out to and engage relevant stakeholders in order to achieve concrete results in its focus areas with significant impact on energy access. Efforts must be made to engage decision makers both in the public and private sectors as well as the people. A key aspect of the dialogue and awareness work will be policy briefings for decision makers and public education programs on renewable energy and energy efficiency, including issues related to climate change mitigations. Such a public education program will aim to inform, raise awareness, educate the population in order to change mindsets and policies, and serve as an advocate for investments in renewable energy and energy efficiency.

The public awareness program will include special attention to the media from radio, television, the press to new media, using social media platforms and bloggers. ECREEE has initiated a process of training journalists for better and improved reporting on renewable energy and energy efficiency. This must be augmented and built into a permanent dialogue between the media and ECREEE, given the nature of the tasks ahead. Changing policy and engaging the public on critical issues is not simply about providing policy or information briefs, it is also about changing mindsets and attitudes. Therefore, concerted efforts will have to be made by ECREEE to build relationships across the spectrum of stakeholders.

ECREEE will engage in targeted activities. The first is a series of ongoing sensitization efforts to share information, findings and novel ideas, with emphasis on what people as well as policy makers need to do. This will include engaging other actors and building networks to help sensitize the public and policymakers on the benefits of developing renewable energy resources and achieving improvements in energy efficiency. Second, the communications unit will contribute to accurate, balanced and objective reporting about ECREEE and its activities by organizing pro-active interviews, press briefings and other outreach activities. In addition, it will ensure effective public relations, and production and dissemination of publications and information on ECREEE and its activities. Third, ECREEE will organize business-oriented forums on renewable energy and energy efficiency to facilitate dialogues and explore business opportunities. One approach which could integrate many elements here is for ECREEE in partnership with others to revamp its West African Energy Week and turn it into a platform for policy makers, businesses, investors, utilities, activists, innovators, researchers, energy exerts to meet for dialogue, network, and build partnerships to solve problems and seize business opportunities.

#### **4.4.4. Capacity Building**

Capacity building to train West Africans on renewable energy and energy efficiency issues is key to achieving the vision of ECREEE. As such, capacity and skills upgrading will be a key element of the ECREEE's strategy and efforts will be made to partner with various institutions, universities and technical and vocational institutes to develop and implement programs to fill the gaps and meet the needs within the region. The region is faced with capacity and skills gaps among policy and decision makers. There are officials formulating and implementing renewable energy and energy efficiency policies with only a minimal understanding of the issues. Another area is negotiations of commercial agreements for renewable energy projects. Decision makers need to continuously upgrade their skills. Yet, opportunities for capacity building in renewable energy and energy efficiency are quite limited. Therefore, capacity building for decision makers in the public and private sectors as well as in civil society is a crucial element of ECREEE's strategy.

In addition to capacity building at the policy level, there is a need for technical and vocational training in renewable energy and energy efficiency. There is shortage of technical expertise

and knowledge on renewable energy and energy efficiency in the region. It will be critical to work with universities and technical vocational institutions to enhance offerings in theoretical and technical training in the region for renewable energy and energy efficiency. The region needs to produce RE and EE engineers and technicians. ECREEE will build on its successes in capacity-building activities and will continue to seek synergies and establish collaboration with educational and technology partners and the ECOWAS capacity development initiative. ECREEE will integrate capacity development components in renewable energy and energy efficiency projects. The capacity building initiatives will also strive to achieve an equal participation based on gender and other social criteria to ensure inclusion of women, youth and vulnerable groups as well as ensuring south–south and north–south collaborations. Additionally, in order for ECREEE to ensure that its impact is long-lasting, capacity building of financial institutions in the region is crucial. This is important for building a conducive investment climate in member states.

ECREEE will aim to partner with others to develop and implement short executive and technical education programs, which will aim to deliver targeted learning programs that are short-term in nature and highly focused. ECREEE will also motivate institutions with the necessary requisites to develop and implement technical and vocational education programs. Given the successes demonstrated by the train the trainers approach, ECREEE will continue to support national trainers through regional training activities, and to strengthen the technical capabilities of the NFIs. This will contribute to addressing the pressing need for additional trained technicians in the region, and will complement ongoing efforts. Critical areas of focus for the capacity building program will include policy planning and implementation; monitoring and evaluation; design and implementation of regulations for renewable energy and energy efficiency; design and enforcement of standards for equipment and appliances; regional certification systems for renewable energy and energy efficiency professionals; and integrating and managing electrical grids with variable energy sources. ECREEE will also aim to secure funding for multi-annual capacity building and practical training programs for vocational and training institutions.

#### **4.4.5. Project Development and Financing**

A primary goal of ECREEE over the plan period is to significantly increase bankable projects and substantially raise renewable energy and energy efficiency investments in the region. ECREEE will seek to work with member states, institutions, utilities, DFIs, as well as private sector actors to facilitate project development and financing. A critical challenge in the implementation of major clean energy projects is their sheer complexity, and navigating the complexities of project development and finance could be quite daunting. The process requires technical, legal, finance, and project development knowledge, including nuanced market knowledge, careful negotiation and sophisticated financing capabilities as well as ability to navigate the project risks. ECREEE will therefore be dedicating substantial resources on mobilizing finance from DFIs as well as other financial.

There will be need for PPPs as well as other types of mechanisms to promote project development and financing. ECREEE will be working with member states and the private sector to support demonstration projects. ECREEE will also mobilize a network of project developers and financial institutions to work with on renewable energy and energy efficiency projects in the region. Additionally, ECREEE will continue to promote and/or co-fund the development and implementation of a broad array of pilot demonstration and investment projects, with high visibility, socio-economic impact and potential for replication.

The ECOWAS Renewable Energy Facility (EREF) for rural and peri-urban areas will be overhauled and institutionalized to assist with the launch and/or support existing efforts (pioneers) or avant-garde technology (at the R&D stage). EREF, as a tool, will be upgraded to support project development and project financing, including mobilization of partners for key



projects. EREF will also continue to make available grant based co-funding for small and medium sized renewable energy and energy efficiency projects and businesses. Regular calls for proposals will continue, and will be tailored to reflect both the needs of the region, as well as the financial realities of the institution. Synergies with other operational areas of ECREEE, as well as with other national and/or international efforts in the region will be actively pursued especially in the strategic focus areas of ECREEE. The ECOWAS Renewable Energy Investment and Business Initiative (ERIBI) will also be revamped by ECREEE, including organizing Investment Fora with participation of local and international investors to facilitate access to finance. ECREEE will also mobilize seed support for the development of major projects in the region.

An important element of the project development and financing will be support, when necessary, to improve policy and regulatory framework. It is clear some major projects will require policy and regulatory reforms to ensure success. Therefore, targeted and specific interventions will be developed to improve the policy and regulatory environment, building on the achievements of the last plan period.

#### **4.4.6. Cross Cutting Issues**

This section covers the cross cutting elements of the strategic approach. That is, the critical issues that ECREEE must be cognizant of and take into account in its interventions. Three key elements in ECREEE's strategic agenda are cross cutting: (i) data and knowledge management, (ii) partnerships and networking, and (iii) gender. These are critical for the success of ECREEE and each will be taken into account in all interventions.

##### **4.4.6.1. Data and Knowledge Management**

Crucial to fulfilling the mandate of ECREEE is an information and knowledge repository. This is crucial to ensuring evidenced-based policy and decision making on renewable energy and energy efficiency in the region. The ECOWREX platform was established by ECREEE for this purpose, and it is used to facilitate data gathering, analysis and reporting. In its interventions, ECREEE will need data to support decision making while also generating information during the implementation of projects to enrich its data and knowledge base. The plan going forward is to expand the ECOWREX platform to include knowledge management. In addition to statistical data, the system will be enhanced to have the capacity for information storage, retrieval and analysis. Information gathering will be expanded to include studies, project documents, policy briefs, and foresight materials on emerging developments in renewable energy and energy efficiency. ECOWREX tools will be developed and used to equip member states with transferable skills on data collection and management.

ECREEE will implement a network strategy for information acquisition to ensure a robust data and knowledge base. The system will allow for anyone with expertise and information to participate by contributing information, studies, and project documents. Additionally, ECREEE will push for the development and roll out of a Cooperative Data Collection and Publication Strategy amongst ECOWAS institutions. This will help to avoid costly duplication of efforts, and will support the enlargement of the community of data contributors, to ensure the sustainability of data collection and knowledge management. Furthermore, ECREEE will engage the countries in data gathering. In support of this effort, a regional Data Collection and Management Policy will be developed to guide the implementation of the collection, processing and dissemination of sustainable energy data in the ECOWAS region. The policy framework will facilitate cooperation among the member countries in the region and seek to mitigate the political barriers while also expediting administrative procedures to facilitate information exchange. It will include protocols and formal data-sharing agreements between member states. ECREEE will also enhance its support to member states, with the

development, collection and sharing of spatial data and metadata, according to international standards. Maintaining up to date and reliable spatial information and software tools, relevant for energy planning and increased quality regional GIS studies in West Africa will be a priority given the importance to achieving the policy goals adopted by the community.

The success of the regional data and knowledge management system will depend on the quality and timeliness of available data and information as well as the ease of access by all stakeholders, including researchers, students, and policy makers, utilities, private sector, investors and project developers. ECREEE will develop and implement a tool for knowledge management and an active communication and information dissemination program, which will also be linked to its awareness building and dialogue activities. An interactive website and mobile tools will be developed to share and disseminate information. The newsletter will be upgraded. ECREEE will incentivize the use of the platform to prepare policy briefs and case studies as part of its efforts to promote best practices and ensure the wide sharing of project information and results. ECREEE will organize data and knowledge dissemination workshops, webinars and seminars. ECREEE will also use social media platforms as part of its communication and outreach efforts to disseminate information.

#### *4.4.6.2. Partnerships and Networking*

ECREEE needs partners within and outside the region to achieve its vision and mission, and it will aim to build a network of experts and institutions to partner with to drive growth of sustainable energy in the region. ECREEE's strategy is to use its in-house staff and resources as well as its mandate as West Africa's energy agency to leverage the capabilities of stakeholders. This will allow ECREEE to make the necessary impact and change the trajectory for renewable energy and energy efficiency in West Africa. Therefore, ECREEE will build an extended and diversified network of partner organizations, including investors, utilities, promoters, governments, development finance institutions, vocational and technical training institutions, as well as universities and research centers.

In its activities, ECREEE will seek to attract partners with skills, resources and funding to jointly develop and implement projects that will contribute to achieving its mandate. ECREEE will position itself to work and collaborate with partners on various issues and in an integrated approach. It will aim for innovative collaborations to build the knowledge base, seek innovative ideas, deliver insights in form of policy advice and action plans as well as to collaborate in providing vocational and technical training. It will also partner to undertake project development and finance with private sector, promoters and financial institutions. ECREEE understands the principal role investors and financial institutions need to play and will work with them closely in the design, funding and implementation of concrete projects to substantially grow the production of renewable energy and facilitate energy efficiency in the region.

Additionally, given the scarcity of expertise on renewable energy and energy efficiency in the region, ECREEE will work towards building a database of experts and institutions and create a network to facilitate dialogue and collaboration. Each program of ECREEE will have a database and a network. The communications team within ECREEE will help lead a process to develop an online platform to serve as a registry for experts and institutions as well as to facilitate dialogue and collaboration.

#### *4.4.6.3. Gender*

Energy interventions have significant gender benefits. What is needed however is careful design and the targeting of interventions based on a context-specific understanding of the energy challenges and household decision-making on energy issues. In the region, for example, most households continue to cook with highly polluting and time-consuming



traditional cooking technologies and fuel sources, mainly wood. Improved cook stoves have the potential to reduce indoor air pollution, improve the health of women and children, and cut time spent collecting fuel wood. However, the penetration of energy efficient cooking stoves remains very low in the region. One critical challenge is that energy sector governance has been largely gender-blind and the incorporation of gender considerations in energy infrastructure planning has been very limited. This is despite the fact that there are significant gender-differentiated risks, impacts, and benefits in many cases.

This is why the ECOWAS Community adopted a gender policy. Under the gender policy, four critical areas have been identified: Gender assessments in energy projects, awareness raising for gender in energy issues, female participation in the energy sector both at the public and private levels, and gender responsive monitoring and accountability. The gender disparities in the energy sector led to the adoption of the ECOWAS Policy for Gender Mainstreaming in Energy Access. The policy aims to address barriers to the equal participation of men and women in the expansion of energy access. The gender perspective is crucial and ECREEE will ensure that the gender perspective is taken into account in all its programs and interventions, while also leading the effort to implement the energy gender policy of the ECOWAS community.

ECREEE will undertake gender assessments in all its energy projects, while incentivizing others to do the same. In support of this agenda, ECREEE will lead an effort to develop a framework for undertaking gender impact assessments in the energy sector, as well as raising awareness to facilitate acceptance both at the policy level and in the private sector. ECREEE will work to ensure this becomes the norm for policies, projects and procurement. ECREEE will also lead the region in designing and implementing awareness raising and sensitization programs on gender issues in the energy sector.

ECREEE will also push to enhance female participation in the energy sector both in the private and public sectors. The aim is to achieve community goals of ensuring that 50% of energy projects and initiatives with government participation will include gender dimension in all aspects from design, implementation to evaluation by 2020 and rising to 100% by 2030. Similarly, ECREEE will aim to ensure that women's participation in the energy workforce is at least 25% by 2020 and 50% by 2030, both for the public and private sectors. ECREEE will also aim to facilitate a gender responsive monitoring and accountability framework is implemented in the energy sector by each member state. This will help to provide comprehensive monitoring and accountability regimes to ensure compliance.

ECREEE considers gender issues critical to achieving its mandate in West Africa and will expand its training and capacity building efforts to ensure that policy makers are able to realize improved regulatory environment that engenders private and public sector investments in the energy sector. ECREEE will also aim to promote the understanding of gender and energy linkages, as well as the role of gender assessments in energy planning, regulation and development among the stakeholders. Moreover, as part of its gender mainstreaming, ECREEE will be promoting gender-responsive investments and business development. This will include targeted support to women-led businesses and projects in energy sector to ensure they become commercially viable enterprises.

#### **4.5. Organizational Capability**

The successful implementation of this strategic plan and the achievement of the objectives set for the period depends on ECREEE's capacity as an organization. Here this is defined to include the resources (people, technology, and finance) as well as processes and communication. In fact, it is the base on which all the elements of the strategic agenda rest. ECREEE needs to have the right people, with the skills and the experience to implement its strategic plan. It also needs the right technology, including information technology and other tools to succeed. ECREEE must also have the right processes, whether in financial or, human

resource management which are in alignment with those of the ECOWAS Commission. Additionally, ECREEE needs to enhance its capability to communicate internally and with the outside world. Communications is key. Moreover, it needs to mobilize funding as well as put in place a transparent process for reporting.

Gaps have been identified in all these areas. The structure of ECREEE needs to be looked at. For example, it is important to ensure a more engaged board. There is also a need to upgrade the executive office; a de facto chief operations officer will be needed, given the necessary absences of the Executive Director to undertake partnership development and to attract resources. In addition, the recruitment process which is ongoing at the time of the development of this plan will be used to bring in more experienced staff to join the team. There is a need for a strategy to ensure financial sustainability, including the raising of funds from more partners, getting access to global funds, while also seeking ways to undertake activities that can generate income. The full implementation of newly acquired financial management software will facilitate improved and adequate reporting, addressing the issues raised in the evaluation. Additionally, the processes for financial management as well as human resources will fully adhere to the rules approved by the ECOWAS Commission. These are crucial for the implementation of the plan and ECREEE plus its stakeholders must dedicate resources to ensure the necessary capability to face the challenges ahead and implement the strategic agenda successfully. These issues are further addressed in next section on implementation.

## 5. Implementation Issues

### 5.1. Introduction

This section addresses the issues of implementation and highlights key areas which might impact on the implementation of the strategic agenda and proposes the way forward. The successful implementation will require setting priorities and goals, defining the indicators, and monitoring performance over time. It is essential that ECREEE has the right people, technology, adopt recognized and generally accepted processes (HR, finance, procurement, etc.), as well as a put in place transparent monitoring and evaluation capacity. Also crucial is the need for funding and to mobilize financing from partners in support of ECREEE's agenda for the future. Importantly, ECREEE will have to develop a robust fundraising strategy and implement it flawlessly, while also ensuring that some of its activities can generate revenue. Additionally, ECREEE must be able to engender goodwill from the people, including political leaders so that there is support for its agenda. Ensuring that ECREEE secures all these will be challenging at best.

### 5.2. Organization

A key result area in the first plan period (2011—2016) was strengthening the capacities of ECREEE. This was necessary for the sustainability of ECREEE over the long term, and its ability to contribute in a meaningful way to long-term economic, social and environmental development of West Africa (including assuring gender responsiveness), through improving access to clean, reliable and affordable energy services. The organization has been able to successfully deliver on its main mandate and responsibilities, despite the fact that problem areas have been identified. However, it is not expected that these accomplishments can continue in a sustainable manner if corrective actions and measures are not implemented. Achievements will be built upon to increase its visibility and ECREEE will be further strengthened to ensure that it is seen as, and understood to be the regional 'go to' institution for renewable energy and energy efficiency in West Africa.

In support of the above, the Centre will take all the necessary measures to ensure that the Office of the Executive Director (OED) is able to perform at full capacity. The OED will continue to promote the organization and provide guidance and support to the functional units. For this purpose, the Director positions will be staffed, including the Director of renewable energy and energy efficiency as part of the ongoing recruitment process. Also, the position of Funds Mobilization expert will be created and filled as part of the ongoing recruitment. The Directors will coordinate the various units and lead the execution of programs and projects. The Director for renewable energy or energy efficiency will act as OIC in the absence of the OED. Additionally, the Directors will help oversee and coordinate the units' mandates and the execution of programs and projects, ensuring these are aligned with the strategic goals and philosophy of the institution.<sup>5</sup>

The overarching framework is provided by this strategic plan, which will be operationalized yearly through ECREEE's annual work plans. The OIC will report directly to—and work in full agreement with—the ED. Although a Deputy Executive Director position is a natural requirement for an institution demanding the regular and prolonged absence of the ED. At this time, ECREEE will continue to function under the approved organogram and it is expected that the OIC arrangement will provide the

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<sup>5</sup> These positions will be filled after the approval by the ECOWAS Commission, as part of the overall Human Resource planning strategy of ECOWAS, has been completed and approved.

necessary support to ensure the proper functioning of the institution, while the ED is in the field, carrying out public relations, promotion of the institution, and fundraising. The OIC will act within specific and pre-established limits. Therefore, the role of the OIC will be filled with a senior director with expertise and extensive experience.

Streamlining in support of horizontal management requires that an organizational manual (operational manual) be prepared, defining internal procedures (including workflows), as well as procedures for interaction with the ECOWAS, Technical Committee, Executive Board, donors, partners, and Member States. This manual will clearly present the policies and procedures of ECREEE, considered indispensable to provide staff the independence and sense of security required to operate effectively and maximize results. In support of this, mechanisms to establish fluid communications at and between all levels will be explored and put in place by the Management Committee, to ensure all staff are informed, and to repeat success stories (inspiring), and ensure shortcomings are not repeated. This process of institutional learning is crucial for the achievement of the objectives for the plan period and ECREEE will ensure that it has the systems to draw lessons from its interventions, including the analytical studies. A key element of this will be an intranet that will be developed by ECREEE.

The overarching objective expected from the implementation of these measures is that of ensuring that ECREEE meets and maintains the highest possible fiduciary standards (administrative, procurement, internal controls, and project cycle management) in line with the directives of ECOWAS Commission. This is required to manage the challenges of growth ahead and to transition from international donor funding towards more sustainable revenue sources.

### **5.2.1. People – Human Resources**

The most recent evaluation confirms that the current administrative structure of the Secretariat must be enforced and/or reviewed and that reporting lines should be established to strengthen the response capacity of the institution. The establishment of a formal Management Team with clear responsibilities and regular meetings is also required. A review of the organizational design is considered critical, as is the successful completion of the ongoing recruitment process to filled positions as per the approved organogram. However, when implementing this recommendation, it will be important to consider that 7 years after ECREEE was set up the requirements and qualifications for staff have significantly changed, both from a technical and a political perspective. In this sense it is necessary to ensure that skills meet the requirements and that ECREEE provides an environment that is people friendly and is capable of attracting and retaining high quality staff.

With the expected completion of the recruitment process for ECREEE, the next priority, as mentioned in the previous section, is the preparation of an organizational manual (operational manual) that will define internal procedures (including workflows), as well as procedures for interaction with partners and Member States. The manual will clearly present the policies and procedures of ECREEE to provide staff the independence and sense of security required to operate effectively and maximize results while ensuring that it remains fully aligned with ECOWAS policies. In collaboration with ECOWAS Commission's Legal Director, a legal advisor (on retainer) should be engaged to provide support to ECREEE. ECREEE will also have the opportunity to strengthen its human resources and capacity through project staff. ECREEE will build on its experience and ensure that it is able to augment its capacity to achieve its mandate through project funded staff.

A strategy for organizational renewal and staff development will be prepared to address the immediate and future needs; it will support and facilitate the reassignment of existing staff to positions that they are competent to assume. This will be done while keeping in mind that these must also represent individual challenges. ECREEE will also ensure that knowledge management and growth prospects for staff are properly reflected in the activities of the organization, as per the widely accepted principles applied by the ECOWAS Commission and other international organizations, in order to ensure that staff are prepared to perform at their highest levels. Emphasis will be placed on training and staff development as well as retention to reduce rapid turnover. Staff departures and entry will be planned to facilitate proper handover. The office intranet will also allow the archiving of information (reports, emails, etc.) for easy transfer and sharing among staff. ECREEE will also multiply its capacity through networking and developing partnerships, within and outside of the West African region with research centers, universities and academics as well as private sector firms and international institutions to jointly undertake programs. ECREEE will also define affiliate programs to attract practitioners and experts who can serve on a short-term basis as affiliate resident scholars or policy experts.

### **5.2.2. Financial Accountability**

In order to position itself as a necessary and indispensable partner, ECREEE will now take all necessary measures to permanently strengthen its established administrative, financial and procurement procedures to ensure they are fully in compliance with the directives and processes of the ECOWAS Commission. This is crucial in building trust with its partners and ensuring funding. Financial accountability—applying full fiduciary standards of international organizations—must be locked into place, in order for the institution to access, manage and account for available funds in an agile and timely manner. Measures will be taken to ensure that the financial unit has the required independence to act in an autonomous manner, by reporting directly to the Executive Director.

To ensure the objective and transparent assessment of accounting procedures, ECREEE will also take the necessary measures to ensure that auditors are appointed in line with the practices of the ECOWAS Commission to prepare annual audit reports, in line with internationally accepted best practices and requirements. This will include appointment of an Audit Committee to oversee the implementation of audit recommendations. Measures will also be taken to create internal expertise to support the Units (technical, finance, legal, procurement, transactions) and these will be provided with access to traceable and reliable financial program expenditures, in real-time. Regular accounting and financial reports will be prepared and published in line with requirements. Training will be provided to staff to use financial information systems software and tools.

### **5.2.3. Technology**

Although all IT systems are currently operational, an ongoing issue of concern relates to the security and stability of the ECREEE Secretariat's network. There is awareness of this issue at management level and there are efforts underway to strengthen the information technology system for ECREEE as well as adopting technology to augment its capacity to achieve its mandate. ECREEE will also align its information technology practices to the ECOWAS Commission's IT Policy, in order to ensure the confidentiality, integrity and availability of data and IT systems network. Effectiveness will be improved, positively affecting the working conditions of staff, by implementing and consistently upgrading the IT systems. ECREEE will therefore fast track the development of its

intranet which will allow for various functions, including a portal, calendar, procurement, planning and internal communications.

ECREEE's actions will include the development of systems to aide with project management and communication, both internally and externally. The Project management tool will be developed to aid staff and the center in managing projects and ensure robust reporting. A peer review tool for the validation of data sets and information will also be developed and will serve as a critical element of engaging the focal network. Information technology continuity management will be supported, by ensuring availability and reliability services, as well as disaster management systems and risk management. The capacity of staff will be built up as required and information technology support will be enhanced.

ECREEE's communication media and tools will also be strengthened to support awareness raising as well as facilitate both internal and external communication. ECREEE will revamp its website to be a repository of information and knowledge as well as ensure that it becomes a tool for interactive communication with its target audience. Project pages will be developed and used to provide up-to-date information on each project. Linked to the website will be the development of a blog for ECREEE's in-house experts and members of its networks to undertake dialogue on critical issues that are important for West Africa with respect to renewable energy and energy efficiency. ECREEE will also aim to extensively adopt and use social media to disseminate ideas and reach its target audience. Efforts will include the development of a mobile application to be coordinated by both the communication and information technology units.

#### **5.2.4. Funding Strategy**

ECREEE's development to date has greatly benefited from the strong political and financial commitment of ECOWAS, and from the financial and technical support of its donors: Austria, Spain and UNIDO. The establishment and staffing of the Centre endowed with a regional mandate, experienced staff and international visibility has attracted the attention of a broad range of donors and partners, such as UNIDO GEF, European Union, Austrian Ministry of Environment, EUEI PDF, World Bank, GIZ, USAID, NREL, Luxembourg, etc. The fact is ECREEE has been reasonably successful in raising funds from donors.

ECREEE has enhanced its sustainability by ensuring the continuous commitment of ECOWAS, which intends to fund ECREEE's programs with an amount equivalent to 10% of the total external funding amount. In addition, ECOWAS remains the source of funding for administration and staff. This support is crucial for the sustainability of ECREEE over the long term. ECREEE, over the plan period of 2017-2021, will need to be able to rely on a steady access to non-committed program funding from external (current and future) donors and from ECOWAS. ECREEE will also raise funds from ECOWAS program budget. ECREEE will build and strengthen relationships with donor partners able to support its core budget.

However, there are no guarantees. ECREEE, for example, did not achieve the financial vision laid out in the business plan 2011-2016, which aimed for progressive reduction in the share of donor financing for ECREEE. Efforts to ensure a more robust fundraising is underway. The ongoing recruitment process will provide ECREEE a specialized fundraising staff. The staff will provide the technical lead in resource mobilization and support management and staff in the process of raising funds. Second, a key challenge before was the process of fundraising; it was undertaken in isolation and without coordination or an overall strategy. ECREEE is planning a change. A comprehensive



funding strategy will be formulated, and it will be done in collaboration with the ECOWAS Commission.

ECREEE will also, as part of the funding strategy, seek ways to obtain fees for some services. This is crucial to the diversification of ECREEE's sources of funding. ECREEE will aim to attract new partners and potential donors. It will target private sector, international foundations and high net worth individuals, seek new creative ways to partner with other institutions. While funding is expected to continue, given the interest in clean energy and energy efficiency as well as the awareness on the need to curb the emissions of green house gas, ECREEE will aggressively seek new avenues to finance its programs and also seek to raise more money within the region and from new partners. It will aim to seize the opportunity provided by the rising interest in clean energy and energy efficiency, as well as the awareness on the need to curb the emissions of green house gas.

Additionally, ECREEE will seek to begin to generate income from some of its programs. An example is the West Africa Energy Week which could be monetized by charging participants that are not members of the delegations of ECOWAS member states as well as for suppliers and vendors to exhibit their products. ECREEE will assess the different options available to establish itself as an implementing agency for international financing institutions. ECREEE will however be restrictive in its participation in calls for proposals and will establish mechanisms to ensure that human resources, qualifications and capacities of staff are available, and that these activities provide added value for the population of ECOWAS, as well as generate income for ECREEE. ECREEE will also aim to participate in project development and financing activities for a fee; such activities might include participating in the initial studies, making data available, and providing expertise support project development. ECREEE will charge a fee to the owners of such projects.

The issue of generating revenue is crucial to sustainability but also delicate given the fact that ECREEE is a development institution. In this regard, ECREEE will commission a study on the issue of generating revenue, with the aim of proposing a strategy to the Board not only on the "how" but also the structure to support such an endeavor. In addition, the study should provide guidelines on whether or not a separate legal entity should be created for such activities. It should also make recommendations on how the staffing and how the obtained gains will revert to support ECREEE's activities.

Success with fundraising and generating revenue will only be achieved if ECREEE is seen as transparent and accountable by donors and its partners. ECREEE will therefore fully comply with ECOWAS rules, ensure full role out of the SAP which it has implemented, and provide training for its Administrative and Finance team to upgrade their capacity for financial management. ECREEE will ensure that financial reports are prepared regularly and timely. The goal is to demonstrate to donor partners that funds are used as agreed and with accountability, while providing the means for verification. These are crucial to maintaining credibility and ensuring that current donors continue to provide support while new ones are confident to come on board.

#### **5.2.5. Communications**

Communication, both external and internal, remains a challenge for ECREEE despite its achievements. ECREEE has not been able to fully communicate its activities and results to engage the stakeholders due to the complexity of the topics, the multiplicity of the target audience and the language issues. Internally information flows among the team has been weak and members of the team are not necessarily fully cognizant of what is happening in the institution. Management is working on addressing both the issue of internal and external communications. The intranet development was initiated

to facilitate internal communication and will be fast tracked. A communications strategy has been developed to address the challenge of external communications.

A key part of the activities of ECREEE relates to building awareness, advocacy and changing mindsets as well as promoting policies to facilitate investment in sustainable energy. These require robust communications, and ECREEE's communications strategy envisions the upgrade of the communications unit, fostering awareness, reinforcing relationships with key stakeholders, and actively communicating with the public and key stakeholders on what ECREEE is doing and ensuring visibility of project implementation.

Efforts will be made to ensure close proximity to media and enlisting of the media to promote the activities of ECREEE. The training of journalists which was initiated will be continued and extended. In addition, ECREEE will deepen relationships with the media and ensure that its messages are taken to the public directly. It will also invest in ensuring its experts have visibility and are made available for interviews with media houses on renewable energy and energy efficiency issues. Also, all ECREEE's programs will each have a media and communication strategy to ensure outreach, raise awareness and to facilitate visibility for all actions. Furthermore, new media tools such a mobile application, web portal and the intranet will be exploited to showcase and ensure the visibility for ECREEE's actions. Additionally, in support of effective outreach activities, a conference services team will be phased in to coordinate and oversee the planning and implementation of ECREEE events, such as Workshops, Summits, Conferences, as well as major international Workshops and Training Sessions.

### **5.3. Monitoring and Evaluation**

ECREEE will engage in a systematic measurement of its performance on an ongoing basis in order to learn as an institution and to correct course when needed. A critical element of this is the development of a robust monitoring and evaluation framework — with specific indicators for monitoring and for evaluation— and the on-going set-up of a monitoring and evaluation function within ECREEE. The framework will include a Theory of Change to guide and validate interventions of the institution. ECREEE is in the process of creating a permanent Monitoring<sup>6</sup> and Evaluation position, which will be appropriately and permanently staffed to develop a logical framework, with SMART indicators. SMART indicators will be defined for all objectives to be achieved in each of the two program areas. The indicators will be used to track progress and monitor implementation of programs and their respective components. This will feed into the reporting processes of the institution.

ECREEE will undertake internal reviews on a quarterly and an annual basis. The annual review will be rigorous with a report published while the quarterly review will focus on checking progress against set objectives. In addition, a mid-term evaluation will be undertaken and an end of planning period (five-year) evaluation will be done. The mid-term and five year evaluations are to be undertaken by external independent consultants in line with ECOWAS requirements, while the quarterly and annual reviews will be internal and aim to provide the team an opportunity to evaluate progress, as well as identify constraints and seek solutions.

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<sup>6</sup> Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds



The performance of ECREEE will be assessed based on standard indicators, which will review progress towards delivery of activities, outputs, outcomes and eventual impact. The indicators will also assess the ability of ECREEE to attract resources such as funding, and to retain staff. These assessments will track ECREEE's progress towards reaching its goals, relevance to stakeholders, and outputs (for example, the number of publications, number of people trained, number of projects developed, etc.) The initial impact indicators will contribute to the eventual measurement of the impact of ECREEE's activities in the region, including in key areas such as poverty, economic growth, and quality of life (HDI). ECREEE has begun the development of a monitoring and tracking system which will form the basis for the monitoring and evaluation system.

In support of monitoring and evaluation, ECREEE will also complete the development and rollout of its intranet, to facilitate interagency communication, and tracking and monitoring of project related activities. This system, once fully rolled out and adopted, will significantly facilitate drafting and preparation of reports (progress, annual, financial, etc.), allowing for regular review of progress and contributing to ECREEE's integration of lessons learned into project implementation. In addition this will support transparency and accuracy of the institutions reporting activities, and will, as a result, contribute to solidifying its hard earned institutional reputation.

#### **5.4. Risks and Mitigating Factors**

ECREEE's agenda for the next years is challenging and requires the seamless orchestration of many elements, to ensure its successful implementation. There are several critical risks, however, which could hinder ECREEE's ability to implement this agenda successfully: (i) People/Staffing, (ii) Funding, (iii) Stakeholders' Commitment, (iv) Technology, (v) Mandate vs. Donor Interests; and (vi) Conducive Environment.

##### **5.4.1. People/Staffing**

Ensuing universal access to energy in West Africa by 2030 will not be an easy task. It will require political will, funding, high levels of technical, managerial, engineering and legal skills, as well as an enabling environment. ECREEE, as the agency for the ECOWAS Community, is charged with leading the efforts in the region. ECREEE will build an attractive intellectual environment, ensure critical mass, and will strategically engage getting talented people to join the staff. This will require building an enabling environment that is conducive to work. ECREEE will put in place robust processes for capacity upgrading for staff, as well as putting in place a transparent process for hiring, evaluation and staff advancement in line with the regulations of ECOWAS Commission. This is crucial for recruiting and retaining talented people in its workforce. Additionally, ECREEE will strive to ensure that the staffing level commensurate with the number of programs and activities.

##### **5.4.2. Funding**

Despite the support of ECREEE's core donors and its success in raising funds, funding remains a key challenge and poses significant risks. There is a potential for donor fatigue and decline in aid; such a reduction will have direct impact on ECREEE's capacity to implement the ECOWAS agenda for renewable energy and energy efficiency. Therefore, ECREEE will mitigate the funding risks by formulating a funding strategy, with the aim of enhancing its fundraising capacity, ensuring better fundraising coordination, and diversifying its source of funding. It will also actively seek new donors, including foundations, and emerging countries in Asia, Africa and Europe. It will

undertake extensive advocacy and do ensure enlist champions able to assist with fundraising.

### **5.4.3. Stakeholders' Commitment**

Policy and decision makers' commitment also pose a risk to ECREEE. Will they be supportive despite signing the various policy declarations? Also, will they meet their national obligations? How much will they respond to the need for funding for renewable energy and energy efficiency programs? Will they have the foresight to undertake the necessary reforms to ensure business environments that are conducive to the growth of RE and EE in the region? Part of the challenge within the region is funding. Will priority be given to renewables and energy efficiency?

The fact is the potential for insufficient engagement and limited follow-through by policymakers in member states due to human resource, policy and political constraints would limit ECREEE's ability to show results. Despite West African countries having signed on to the community policies, there are no guarantees that they will formulate and implement the necessary national policies that are aligned with the regional goals. ECREEE will need to mobilize all the actors and stakeholders in the region to build a large constituency and coalition to promote renewable energy and energy efficiency goals in the region. The constituencies should help engage and push West African governments and stakeholders in the region to act. In addition, the people must also be mobilized to actively support renewable energy and energy efficiency. Dialogue, advocacy and communications will be key for ECREEE in efforts to mobilize all stakeholders.

The NFIs could drive the process of ensuring commitment and support from national stakeholders. As such, the capacity of NFI's will be strengthened through informal/formal meetings in order to facilitate cross-fertilization and exchange of information. ECREEE will also continue to organize at least one yearly joint meeting of the focal points, either independently of, or piggybacking onto other meetings. ECREEE will aim to create the National Focal Networks. The NFN will be aligned whenever possible with the National Multi-sectoral Committees or similar coordination structures already in place. In addition, in cases where the foreseen collaborative response is not as expected, mechanisms will be put in place to ensure that the higher level authorities are kept informed, in a timely fashion of potential shortcomings of the system, so that the situation may be redressed.

### **5.4.4. Technology**

Technological progress has made renewables more competitive over the years. The challenge is if the technological progress will continue in order to guarantee that renewables are not only competitive with traditional energy sources, but also cheap enough to ensure that clean modern energy is affordable for all. Continued progress in technological innovations with declining costs will be crucial to ensuring clean and affordable energy for all by 2030. Within the region, the adoption of the new technologies is a challenge given the need and costs of revamping old transport and distribution networks. Will the countries in the region be able to make the necessary investments? Another aspect of this challenge is technical and managerial capability within the region. Will the countries in the region have the trained people and the necessary skills to accompany global progress in RE and EE?

ECREEE will aim to mitigate the technology risks. It will serve as a catalyst and facilitate links between emerging technology firms, research centers and universities in the region. It will also partner with training centers and universities to design and implement

short to long-term programs for capacity building in the critical areas to ensure the region has the necessary capacity to accompany progress. ECREEE will help promote capacity building and upgrade of capabilities within the region in order to ensure the region can effectively adopt renewable energy and energy efficiency technologies. Also, ECREEE will promote investments in upgrading and modernizing the energy infrastructure to ensure uptake of renewable energy and energy efficiency in the region.

#### **5.4.5. Mandate vs. Donors' Interests**

A key opportunity today for ECREEE is that there is a high level of interest in supporting renewable energy and energy efficiency to mitigate climate change effects. ECREEE will continue to rely on donor funds in its efforts to pursue the region's agenda for universal access to affordable energy by 2030. The challenge however is whether or not donor's interest will continued to be aligned with the region's interests. What will happen if there is a divergence of interests? Two things must be done to mitigate this risk. ECOWAS and the member states must progressively enhance their funding for ECREEE to reduce dependency. Also, it will be incumbent on ECREEE to be proactive and to be strategic enough to ensure that support by donors fits within the needs of the region rather than simply taking funds just because it is available. The goal must be to raise funds directly for programs and projects to support the realization of the regional vision.

#### **5.4.6. Conducive Environment**

Ensuring universal access to energy in West Africa, given the current state of gaps, will require sizeable investments. The required investment is beyond the capacity of the region's governments. As such, there is a need for the participation of the private sector in meeting the energy vision in West Africa. For this to happen, however, West African governments will have to ensure that the environment is more conducive for businesses and entrepreneurs in the energy sector. The governments in the region will have to continue to undertake institutional reforms and put in place legal frameworks that will incentivize investors and promoters. This will include streamlining institutional procedures. It will also be useful for the public sector to focus on risk mitigation and to aim to crowd-in private investors in the energy sector. It will also be necessary to engage promoters and financial institutions to promote investments. One support activity which could also yield results is building capacity for local financial institutions in the region. ECREEE will need to engage the various stakeholders and advocate for a conducive environment for investing in renewable energy and energy efficiency.

## 6. Concluding Remarks

After 7 successful years of operation, ECREEE is poised to become the regional reference organization in the areas of renewable energy and energy efficiency. This will not come easy and will require time, resources, and the commitment of the institution and its partners to deliver on the ground results, firmly anchored in a set of binding and mainstreamed local, national and regional policies. The fact is that ECREEE has demonstrated its relevance, and must continue to reinforce its position as the region's renewable energy and energy efficiency Center for West Africa. In the words of one stakeholder ECREEE is “indispensable in the sub-region”; it has contributed to harmonizing the member states and in so doing has perfectly played out its role. As a result, regional Directives are in place for renewable energy and energy efficiency, and while these still need to be fully mainstreamed at the national level, indications are that the process is now irreversible. However, this will not happen without the continued interventions and guidance of the Center.

The next stage now for ECREEE is to serve as a catalyst for investment in concrete projects on the ground to reduce energy poverty. In support of continued progress, well-designed long-term oriented priority programs will be developed and implemented by ECREEE in support of renewable energy and energy efficiency penetration in the region with the aim of achieving the vision of universal energy access by 2030.

The ECREEE 2017-2021 Strategy, approved by the Executive Board<sup>7</sup>, provides a renewed institutional vision and is aimed at consolidating ECREEE as the regional reference organization for renewable energy and energy efficiency. It defines the required mechanisms needed to deliver tangible and measurable results, in support of the sustainability of the institution. The Strategy builds on the clear medium and long-term objectives contained in the 2011-2016 Strategy but with a focus on achieving the agreed community policies in renewable energy and energy efficiency. Its interventions will include analytical studies, capacity building, advisory services, dialogue and awareness, as well as project development and finance. These interventions are complemented with three cross cutting issues (data and knowledge management, gender, and partnerships and networking). These mutually reinforcing tools will be deployed over the plan period, as ECREEE leads West Africa in pursuit of the vision of universal energy access by 2030.

The Strategy plus recommendations and action plans are inclusive, institution-wide development process through which issues of adaptive management, capacity and capabilities upgrading, technology, knowledge, and the role of the stakeholders at the local, national and regional levels were examined and addressed. It builds on the findings, lessons learned and recommendations of the Strategic Review carried out in January 2017.<sup>8</sup> This adaptive management approach to ensure that ECREEE delivers on its mandate must be strengthened. This will not only help its regional catalytic role, but will contribute to progressively position it as the organization for all things renewable energy and energy efficiency in the region.

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<sup>7</sup> The highest instance of ECREEE Management

<sup>8</sup> This Review covered the period 2009 – 2016 and has been validated by the Executive Board

## Annexes

### 1. ECOWAS Clean Energy Policy Agenda<sup>9</sup>

Policy	Vision (long-term)	Goal	Targets	Focal Areas (issues for the policy)
ECOWAS Renewable Energy Policy	The vision of the EREP is to secure an increasing and comprehensive share of the Member States' energy supplies and services from timely, reliable, sufficient, least cost and affordable uses of renewable energy sources. This should enable the entire region to reach universal access to sustainable energy services by 2030.	The purpose of the ECOWAS regional renewable energy policy (EREP) is to ensure increased use of renewable energy sources such as solar, wind, small-scale hydro and bioenergy for grid electricity supply and for the provision of access to energy services in rural areas	<p>The share of renewable energy (incl. large hydro) of the overall electricity mix of the ECOWAS region will increase to 35% in 2020 and 48% by 2030.</p> <p>The share of new renewable energy such as wind, solar, small scale hydro and bioelectricity (excl. large hydro) will increase to around 10% in 2020 and 19% by 2030. These targets translate to an additional 2,425 MW renewable electricity capacity by 2020 and 7,606 MW by 2030.</p> <p>To provide universal access to energy services it is envisaged that around 75% of the rural population will be served through grid extensions and around 25% by renewable energy powered by mini-grids and stand-alone hybrid systems by 2030.</p> <p>By 2020, the whole ECOWAS population will have access to improved cooking facilities either through improved stoves or fuel switching to other modern forms of energy such as LPG.</p>	<p>Clean energy corridors</p> <p>Regional off-grid electrification</p> <p>Regional mini-grid electrification</p> <p>Climate Change mitigation</p> <p>Solar thermal energy training and demonstration program/SOLtrain West Africa</p> <p>ECOWAS Small scale hydropower program</p>

<sup>9</sup> Adapted from various ECOWAS Policy Documents

Policy	Vision (long-term)	Goal	Targets	Focal Areas (issues for the policy)
			<p>The share of ethanol/biodiesel in transport fuels will increase to 5% in 2020 and 15% by 2030.</p> <p>By 2030, around 50% of all public buildings as health centers and schools, maternities and 25% of all hotels and agro-food industries with hot water requirements will be equipped with solar thermal systems. Also the residential sector will increase use of solar water systems significantly.</p>	
ECOWAS Energy Efficiency Policy (EEEP)	The overall objective of regional policy by 2020 is to double the annual improvement in energy efficiency, to attain levels comparable to those of world leaders.	The goal is to implement efficiency measures that free-up 2 000 MW of power generation capacity by 2020.	<p>lighting: phase out inefficient incandescent bulbs by 2020;</p> <p>electricity distribution: reduce losses in electricity distribution, from the current range of 15% to 40%, to under 10% by 2020;</p> <p>cooking: achieve universal access to safe, clean, affordable, efficient and sustainable cooking for the entire population of ECOWAS, by 2030;</p> <p>develop and adopt region-wide standards and labels for major energy equipment before the end of 2020;</p> <p>develop and adopt region-wide efficiency standards for buildings (e.g. building codes);</p> <p>create instruments for financing sustainable energy, including carbon finance, at the short term, and in the longer term, establish a</p>	<p>Efficient Lighting</p> <p>High Performance Distribution of Electricity</p> <p>Standards and Labeling</p> <p>Energy efficiency in buildings</p> <p>Energy efficiency in industry</p>

Policy	Vision (long-term)	Goal	Targets	Focal Areas (issues for the policy)
			regional fund for the development and implementation of sustainable energy projects.	
ECOWAS Bioenergy Policy	Transition to sustainable production, transformation, trade and utilization of biomass in order to ensure universal access to modern energy services with a view of creating added value, jobs, increasing food security, mitigating environmental impacts and overall sustainable development in ECOWAS .	Encourage the utilization of Bioenergy resources to provide sustainable energy access to its population prior to any attempt to export the resources.	<p><b>2020</b></p> <p>Universal access to clean, safe and affordable cooking energy, including 20% of LPG users</p> <p>26 % of electricity from Renewable Energy sources (2,425 MW) in the region; of which 634 MW is generated from biomass residues or dedicated plantations with the deployment of sustainable and efficient technologies and application</p> <p><b>2030</b></p> <p>Universal access to clean, safe and affordable cooking energy, including 26% of LPG users and 100% of improved cook stoves (ICS) and/or sustainable biomass fuels users.</p> <p>Electricity from biomass will account for 5 % of the total installed capacity in the region, which corresponds respectively to 686 MW by 2020 (28% of RE capacity) and 2008 MW (13% of RE Capacity) by 2030</p>	<p>Small-scale Biomass Gasification</p> <p>Biomass for Rural Electrification</p> <p>Clean Cooking Fuels and stoves</p> <p>Domestic, community and industrial biogas</p> <p>PPO, biodiesel and bioethanol for diesel oil and gasoline substitution and/or blending</p>

Policy	Vision (long-term)	Goal	Targets	Focal Areas (issues for the policy)
ECOWAS Policy for Gender Mainstreaming in Energy Access	A world where men and women shall enjoy equal access to modern energy services that is easily available, affordable and contributes to high levels of standards of living and economic development	Address existing barriers that may hinder the equal participation of women and men in expanding energy access in West Africa.	<p>100 % of energy sector government employees will have received some relevant training by 2020 (and routinely thereafter);</p> <p>50 % of citizens will be exposed to some form of relevant public service announcement by 2020 growing to 90% by 2030;</p> <p>At least 50 new scientific articles</p> <p>50% of energy policies by 2020 and 100% by 2030 will be gender-sensitive;</p> <p>50% of energy projects, programs, and initiatives with government participation will include gender dimensions in planning, implementation, analysis, and evaluation by 2020, rising to 100% in 2030.</p> <p>At least 25% women in the public sector energy workforce by 2020 and an equal (50-50) gender balance by 2030.</p> <p>At least 25% women participation in energy-related fields in the private sector by 2020 and an equal (50-50) gender balance by 2030, as determined through statistically rigorous random sampling.</p> <p>100% compliance by 2020 in the monitoring, accountability and review framework.</p>	<p>Gender Assessments in energy projects, including large-scale projects</p> <p>Widespread awareness of gender &amp; energy issues</p> <p>Female participation in the private and public energy sectors</p> <p>Gender responsive monitoring &amp; accountability framework</p>



## 2. Indicative Budget

ECREEEE's development to date has greatly benefited from the strong political and financial commitment of ECOWAS, and from the financial and technical support of its donors: Austria, Spain and UNIDO.

The establishment and staffing of the Centre endowed with a regional mandate, experienced staff and international visibility has attracted the attention of a broad range of donors and partners, such as UNIDO GEF, EU, Austrian Ministry of Environment, EUEI PDF, World Bank, GIZ, USAID, NREL, Gov. of Luxembourg, etc.

For the period 2017-2021 ECREEEE will need to be able to rely on a steady access to non-committed program funding from external (current and future) donors and from ECOWAS. This amount must remain above the 2-4 Mio EUR threshold in order to maintain the regional ownership, and fund allocation to programs, and to implement activities which otherwise would have difficulty to access funding from the international community (program preparation, long term capacity building, technology transfer and data collection for project development).

ECREEEE succeeded in leveraging 58 Mio EUR in secured funds, for the 2017 – 2021 period, from roughly 10 donors, the main funding being added by the World Bank, for a 4-year program on electricity access to households, businesses and communities, using modern off-grid electrification technologies.

For the fundraising targets for 2018-2021, ECREEEE developed two budget scenarios: The conservative scenario includes the World Bank program funds and a very conservative increase of external funding. The assumption under the optimistic scenario is that one or two additional donors will be brought on board to support additional programs with amounts similar to those in the World Bank program. The respective amounts are calculated to increase by 5% annually in the conservative scenario, and 10% in the optimistic scenario, both starting with the figure of 1.9 Million EUR as fixed in the Work Program for 2017. Both scenarios include the continuous commitment of ECOWAS, which intends to fund ECREEEE programs with an amount equivalent to 10% of the total external funding amount. ECOWAS remains the source of funding for administration and staff.

## ECREEE Conservative Budget Scenario 2017-2021 (in EUR)

ECREEE Conservative Budget Scenario 2017-2021 (in EUR)	TOTAL	Admin.	Programs and Projects				
		ECOWAS Admin.	TOTAL Program Funding	ECOWAS Program Funding 10% of ext. funds	SECURED Program Funding	ESTIMATION Current Donors	CONSERVATIVE Estimation New Donors
Rate 8 Feb 2017: 1 USD = 0.939 EUR							
Estimated Annual Increase rate		0.05					
<b>Estimated Budget 2017 (based on WP 2017)</b>	<b>€ 13,254,856</b>	<b>€ 1,937,698</b>	<b>€ 11,317,158</b>	€ 694,683	€ 9,128,070	€ 1,494,406	€ 0
<b>Estimated Budget 2018</b>	<b>€ 21,398,898</b>	<b>€ 2,034,583</b>	<b>€ 19,364,315</b>	€ 1,760,392	€ 13,703,923	€ 2,900,000	€ 1,000,000
<b>Estimated Budget 2019</b>	<b>€ 22,222,421</b>	<b>€ 2,136,312</b>	<b>€ 20,086,109</b>	€ 1,826,010	€ 12,234,099	€ 3,526,000	€ 2,500,000
<b>Estimated Budget 2020</b>	<b>€ 23,432,978</b>	<b>€ 2,243,128</b>	<b>€ 21,189,850</b>	€ 1,926,350	€ 11,737,500	€ 3,526,000	€ 4,000,000
<b>Estimated Budget 2021</b>	<b>€ 24,645,134</b>	<b>€ 2,355,284</b>	<b>€ 22,289,850</b>	€ 2,026,350	€ 11,737,500	€ 3,526,000	€ 5,000,000
<b>Total EUR</b>	<b>€ 104,954,287</b>	<b>€ 10,707,005</b>	<b>€ 94,247,283</b>	<b>€ 8,233,785</b>	<b>€ 58,541,092</b>	<b>€ 14,972,406</b>	<b>€ 12,500,000</b>
<b>Total USD</b>	<b>\$111,772,404</b>	<b>\$11,402,561</b>	<b>€ 100,369,843</b>	<b>\$8,768,674</b>	<b>\$62,344,081</b>	<b>\$15,945,054</b>	<b>\$13,312,034</b>

## ECREEE Optimistic Budget Scenario 2017-2021 (in EUR)

ECREEE Optimistic Budget Scenario 2017-2021 (in EUR)	TOTAL	Admin.	Programs and Projects				
			TOTAL Program Funding	ECOWAS Program Funding 10% of ext. funds	SECURED Program Funding	ESTIMATION Current Donors	OPTIMISTIC Estimation New Donors
Rate 8 Feb 2017: 1 USD = 0.939 EUR		ECOWAS Admin.					
Estimated Annual Increase rate		0.10					
<b>Estimated Budget 2017 (based on WP 2017)</b>	<b>€ 13,254,856</b>	<b>€ 1,937,698</b>	<b>€ 11,317,158</b>	€ 694,683	€ 9,128,070	€ 1,494,406	€ 0
<b>Estimated Budget 2018</b>	<b>€ 23,695,783</b>	<b>€ 2,131,468</b>	<b>€ 21,564,315</b>	€ 1,960,392	€ 13,703,923	€ 2,900,000	€ 3,000,000
<b>Estimated Budget 2019</b>	<b>€ 28,480,723</b>	<b>€ 2,344,615</b>	<b>€ 26,136,109</b>	€ 2,376,010	€ 12,234,099	€ 3,526,000	€ 8,000,000
<b>Estimated Budget 2020</b>	<b>€ 30,368,926</b>	<b>€ 2,579,076</b>	<b>€ 27,789,850</b>	€ 2,526,350	€ 11,737,500	€ 3,526,000	€ 10,000,000
<b>Estimated Budget 2021</b>	<b>€ 32,826,834</b>	<b>€ 2,836,984</b>	<b>€ 29,989,850</b>	€ 2,726,350	€ 11,737,500	€ 3,526,000	€ 12,000,000
<b>Total EUR</b>	<b>€ 128,627,123</b>	<b>€ 11,829,840</b>	<b>€ 116,797,283</b>	<b>€ 10,283,785</b>	<b>€ 58,541,092</b>	<b>€ 14,972,406</b>	<b>€ 33,000,000</b>
Total USD	\$136,983,091	\$12,598,339	€ 124,384,753	\$10,951,848	€ 62,344,081	€ 15,945,054	\$35,143,770

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