



# The ECOWAS Process and Strategy on the Development of the Sustainable Energy for All (SE4ALL) Action Agendas, National Renewable Energy Action Plans (NREAPs) and National Energy Efficiency Action Plans (NEEAPs)



#### Framework and Status of Implementation

Status: September 2014

#### Prepared by

ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)

In partnership with:



















#### **Imprint**

The ECOWAS Process and Strategy on the Development of the Sustainable Energy for all (SE<sub>4</sub>All) Action Agendas, National Renewable Energy Action Plans (NREAPs) and National Energy Efficiency Action Plans (NEEAPs)

Praia, Cape Verde August, 2014

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#### LIST OF ACRONYMS AND ABBREVIATIONS

AECID	Spanish Development Cooperation Agency	
AfDB	African Development Bank	
ANADEB	National Agency for the Development of Biofuels (Mali)	
CEET	Compagnie Energie Electrique du Togo	
CRSE	Regulatory Commission of the electricity sector (Commission de Régulation du Secteur de L'	
	Électricité), (Senegal)	
EC	European Commission	
<b>ECOWAS</b>	Economic Community Of West African States	
ECREEE	ECOWAS Centre for Renewable Energy and Energy Efficiency	
EE	Energy Efficiency	
EEEP	ECOWAS Energy Efficiency Policy	
EREP	ECOWAS Renewable Energy Policy	
EU	European Union	
GEF	Global Environmental Facility	
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International	
	Cooperation, GIZ)	
IRENA	International Renewable Energy Agency	
KoM	Kick-off Meetings	
kWh	Kilowatt hour	
LEAP	Long-range Energy Alternatives Planning System	
LEDS	Low Emission Development Strategies	
LESSP	Liberia Energy Sector Support Programme (Liberia)	
MESSAG	Model for Energy Supply Strategy Alternatives & their General Environmental Impacts	
E		
MEW	Ministry of Energy and Water (Mali)	
MLME	Ministry of Lands, Mines and Energy (Liberia)	
MS	Member States	
MW	Megawatt	
NERC	Nigerian Electricity Regulatory Commission	
NFI	National Focal Institution	
NREAP	National Renewable Energy Action Plan	
NREP	National Renewable Energy Policy	
PASER	Senegalese Rural Electrification Plan of Action	
PURC	<i>y</i> , , , , , , , , , , , , , , , , , , ,	
PV	Photovoltaic	
RE	Renewable Energy	
REA	Rural Electrification Agency (Nigeria)	
SE4ALL	Sustainable Energy for All Initiative	
UEMOA	Economic and Monetary Union of West Africa ( <i>Union Economique et Monétaire Ouest</i>	
1111	Africaine)	
UN	United Nations	
UNIDO	United Nations Industrial Development Organisation	
WAPP	West Africa Power Pool	
WB	World bank	

#### **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	5
BACKGROUND	6
ECOWAS RENEWABLE ENERGY AND ENERGY EFFICIENCY POLICY AND THE SE4	ΔΙΙ
INITIATIVE	
INITIATIVE	11
SUSTAINABLE ENERGY FOR ALL (SE4ALL) INITIATIVE	12
SE4ALL INVESTMENT PROSPECTUS	12
ECOWAS RENEWABLE ENERGY POLICY (EREP)	
EREP MAIN OBJECTIVES AND TARGETS	
ECOWAS ENERGY EFFICIENCY POLICY (EEEP)	
EEEP MAIN OBJECTIVES AND TARGETS ARE:	
IMPLEMENTATION OF THE REGIONAL RE & EE POLICIES	14
DEVELOPMENT OF THE NATIONAL SE4ALL ACTION AGENDAS, NREAPS AND NEEAPS	14
	·
FRAMEWORK AND PROCESS OF THE SE4ALL ACTION AGENDAS, THE NREAPS A	
NEEAPS	15
IMPLEMENTING PARTNERS	16
ECREEE ACTION PLAN COORDINATION STRUCTURE	16
NATIONAL CONSULTANTS ENGAGED BY ECREEE	
INTERNATIONAL TEAM OF EXPERTS ENGAGED BY ECREEE	17
PARTNERS TO SUPPORT THE PROCESS	
TAKTNEKS TO 3011 OKT THET ROCESS	19
STATUS OF IMPLEMENTATION OF THE ACTION PLAN PROCESS IN THE ECOWAS	
COUNTRIES	
BENIN: BEN	
BURKINA FASO: BFA	25
CABO VERDE: CBV	31
COTE D'IVOIRE: CDI	35
THE GAMBIA: GMB	38
GHANA: GHA	42
GUINEA: GIN	44
GUINEA BISSAU: GNB	45
LIBERIA: LBR	
Mali: MLI	
NIGER: NER	_
NIGERIA: NGA	
SENEGAL: SE	_
SIERRA LEONE: SLE	
Togo – TGO	69

# **Executive Summary**

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 pathbreaking 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 Sustainable Energy for All (SE4ALL). Based on a mandate by the ECOWAS authorities to coordinate the implementation of the regional policies as well the SE4ALL Initiative in West Africa, the ECOWAS Centre for Renewable Energy and Energy

States to develop a coherent and aligned roadmap process.

Efficiency (ECREEE) is currently assisting the ECOWAS Member

Within this context, ECREEE has developed a regional framework for the development, implementation and monitoring of the National Renewable Energy Action Plans, National Energy Efficiency Action Plans, and the SE4ALL Action Agenda to ensure attainment of the regional targets by 2020 and 2030 in the ECOWAS Member States.

At a regional workshop organized by ECREEE in March 2014 in Abidjan, Cote d'Ivoire, ECOWAS Member States discussed and adopted the framework for the development and implementation of the regional RE&EE policies and the SE4ALL Action Agendas at the national level. The workshop took place with the active participation of the UN SE4ALL Africa Hub, and provided an opportunity for the presentation of the Action Agenda templates. The Member States have since embarked on the elaboration of their respective national action plans, based on the validated templates and extensive national stakeholders' consultation. To support this process, ECREEE and its partners have provided a team of national and international experts to assist each Member State.

This report provides an overview of the framework strategy for developing the action plans, and a summary of the current status of the process in each of the 15 ECOWAS Member States.

#### **BACKGROUND**

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. Indeed, this trio of challenges in turn considerably complicates the implementation of regional strategies aimed at fostering socio-economic development, attracting foreign investment programs, providing basic social services, and achieving the Millennium Development Goals (MDGs).

Energy poverty and its consequences for local economies and social development are projected to remain the predominant challenge for West Africa through to 2030. Per capita electricity consumption across the ECOWAS region is estimated at between 100 – 150kWh per annum in 2012, one of the lowest rates in the world. 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. Household access to electricity across the region is about 20%, but wide gaps exist between the access rates in urban areas, which average 40%, and in rural areas, which range from 6% to 8%.

In the ECOWAS, 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 access rates to modern energy services (such as for cooking, motive power and electricity services) in many localities and households remains very low while in other member states, many communities lack access altogether. The impact of low levels of access to energy seriously hampers efforts to achieve meaningful development, most notably the MDGs.

Confronted with a daunting challenge of ensuring the welfare of their population with a view to achieving the MDGs by the year 2015, and particularly reducing poverty by half as well as facilitating access to basic social services, ECOWAS governments recognize that access to energy is fundamental to eradicating widespread poverty and achieving development goals. Improving access to energy services is now an important part of priority goals in all ECOWAS countries.

In 2006 the ECOWAS/UEMOA white paper on access to energy services in peri-urban and rural areas set three major targets to be achieved by 2015:

- (i) access to improved cooking fuels and stoves
- (ii) access to individual electricity supply, (100% for the urban areas and 36% for the rural areas);
- (iii) 60% of the population living in rural areas should have access to motive power for productive uses.

A major focus of the White Paper was in using decentralized approaches to achieve access especially for populations in isolated areas. Building on these previous efforts, the Sustainable Energy For All (SE4ALL) Initiative as well as the ECOWAS Renewable Energy Policy and the ECOWAS Energy Efficiency Policy set targets of ensuring universal access to sustainable energy for the ECOWAS population.

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 recent years and requires urgent answers from policymakers as well as public and private investors. Currently, the ECOWAS region is confronted with the realities of energy vulnerability, fuel price volatility and system unreliability. The electricity systems in the region are facing tremendous challenges due to the growing gap between predicted demand, existing supply capacities and limited capital to invest. Energy intensity in 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.

West Africa's economies will inevitably be confronted in the coming decades by the effects of climate change and the increasingly urgent need to both mitigate emissions and promote regionally appropriate adaptation measures. Given the region's vulnerability to climate change, the urgent need for reliable and affordable energy poses a dilemma for policymakers. In the meantime, expansion of an energy supply based on inefficient, low-cost, fossil fuel based technologies will increase GHG emissions and contribute to disruptive climatic changes now and in the future. This makes it imperative that the

The electricity systems in West Africa are facing tremendous challenges due to the growing gap between predicted demand, existing supply capacities and limited investment capital.

ECOWAS region as a whole focuses on how to promote cleaner and more sustainable energy development, while avoiding locking itself into long-life and carbon-intensive infrastructural investments.

Climate change will challenge the energy security of West African countries and will have to be mainstreamed into energy policy and planning. This will include careful consideration of the extent to which certain investments, such as large hydroelectric dams, may increase the vulnerability of the electricity supply system, by increasing countries' exposure to drought, and other long-term changes to water flows.

#### Opportunities for RE & EE Deployment

The Regions energy access, energy security and climate objectives will not be obtained simultaneously in future decades without significant additional investment in sustainable energy infrastructure. Along with other low-carbon technologies, renewable energy and energy efficiency are appropriate tools to address these challenges simultaneously and in a sustainable manner. Due to rapid progress in recent years, a broad range of proven RE&EE technologies and centralized and

decentralized solutions are now available to meet energy needs in the urban and rural areas. If planned carefully, such investments can provide various benefits and opportunities for West African countries:

- Help mitigate many of the negative externalities of the current energy system, including air, water, and soil pollution, as well as global climate change;
- Create local economic opportunities and fuel job creation in new sectors;
- Foster greater knowledge development and the formation of local skills and expertise;
- Improve local and regional energy security.

#### **Energy Potential**

West Africa boasts considerable hydrocarbon resources, but they are unevenly distributed. Despite only representing 15% of the total land area, Nigeria is possess 98% of the region's proven reserves of crude oil, natural gas and coal, which represents 30% of Africa's total proven crude oil reserves (3,017 million tons), and 31% of Africa's proven natural gas reserves (3,581 billion m3). Smaller oil reserve deposits are located in the Gulf of Guinea (offshore Benin, Côte d'Ivoire and Ghana).

Apart from significant fossil fuel resources, West Africa can rely on a wide range of untapped RE&EE potentials.. In contrast with fossil resources, renewable energy resources, while not perfectly distributed, are far more equitably distributed, providing opportunities for all ECOWAS member states to increase their investments in this area.

- 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 hydro power potential in the region amounts to around 6000 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.
- The region has vast solar energy potential with very high radiation averages of 5–6 kWh/m2 throughout the year.

In addition, there is considerable potential for energy efficiency, including improving the energy efficiency in buildings, appliances, power generation and transmission. It is estimated that in West Africa, 25% to 30% of the total electricity supply is consumed in the building sector, for cooling and hot water heating. Moreover, while line losses are an unavoidable component of transmitting power over power lines, the technical and commercial losses due to theft, illegal operators, or inadequate system operation, lie in the range of 25% to 30% (some research state 40%).

#### Barriers for the RE&EE markets and investments in West Africa

So far the West African markets for RE&EE remain largely underdeveloped, with the region yet to take advantage of its RE&EE potentials due to various technical, financial, economic, legal, institutional, policy and capacity related barriers:

➤ Due to the widespread lack of knowledge and awareness, RETs are still perceived as expensive, although some are already cost-competitive with conventional technologies. In non-interconnected regions, RETs can produce reliable electricity service for a fraction of

- the cost of diesel and heavy-fuel oil based alternatives. Notwithstanding, perceptions about cost of RETs among stakeholders represent a significant barrier to accelerating the adoption of RETs in the ECOWAS region.
- 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 is necessary to foster trained manpower capable of developing and manufacturing RETs and offering RE services.
- In some countries, fossil fuel subsidies 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 are often missing, resulting in an ad hoc evolution in the renewable energy sector. Only a few ECOWAS countries have adopted RE support policies, targets and laws. However, implementation of existing policies is in most cases still at an early stage. Put simply, most of the efforts made in the region are still insufficient to make a significant difference. Practical issues such as applicable feed-in tariffs for power exported to the grid and technical standards for connecting independent power generators to the system are largely not addressed by current policies and regulations. In Addition, in most ECOWAS countries there are no model renewable energy Power Purchase Agreements (PPAs) in place which could guide negotiations between utilities and independent power producers (IPPs) and potential investors.
- Oversight of the RE&EE policies to make sure 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 importation of RE equipment remains highly taxed, and in many cases standards for appliances or building codes are not in place. In some cases, the importation of efficient light bulbs attracts more import duties 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 or are weak for promoting energy access in rural and remote areas, where decentralized RE systems have greater market opportunities and have proven to be cost competitive..
- In some cases, policy statements have largely remained broad statements of intention and not as a 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 like agriculture, water, health, education.

# Regional Approach

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. One 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, which aims at promoting and supporting the development of RE and EE in the ECOWAS region.

# ECOWAS Renewable Energy and Energy Efficiency Policy and the SE4ALL Initiative

The ECOWAS Member States have recognized that achieving the goals for energy access and ensuring energy security will require increased use of renewable energy, as well as increased efficiency in the use of energy. As a policy response to the rising energy security concerns, continued lack of access to energy services and the need for climate change mitigation actions, ECOWAS has taken a pioneering role in the promotion of sustainable energy technologies:

- In 2006, the ECOWAS/UEMOA White Paper on access to energy services for populations in rural and peri-urban areas, which foresees increased access to energy services and that, at least 20% of new investments in electricity generation, should originate from locally available renewable resources.
- In 2010, the ECOWAS Energy Ministers with support from the Governments of Austria and Spain and technical assistance from the United Nations Industrial Development Organization (UNIDO) established the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE), the first regional renewable energy promotion agency in Sub Saharan Africa.
- The revised ECOWAS Master Plan of 2011 aims at the creation of a regional electricity market by 2020/25. The expansion of electricity generation capacity derived primarily from large hydro resources and secondarily from natural gas.
- In 2012, the ECOWAS Energy Ministers adopted regional policies on Renewable Energy and Energy Efficiency, as well as the ECOWAS Small Hydro Power Program and the ECOWAS Bioenergy strategy Framework. The policies are in alignment with the SE4ALL targets and represent a voluntary commitment of ECOWAS to the SE4ALL Initiative.
- In July 2013, the ECOWAS Authority of Heads of State and State and Government adopted the ECOWAS Energy Efficiency Policy (EEEP), and the ECOWAS Renewable Energy Policy (EREP).
- In March 2014, the 15 ECOWAS Member States validated the action plan templates and regional process for the development of the NREAP, NEEAP as and the SE4ALL Action Agenda.

# Sustainable Energy for All (SE4ALL) Initiative

The Sustainable Energy for All initiative is a multi-stakeholder partnership between governments, the private sector, and civil society. Launched by the UN Secretary-General in 2011, it has three interlinked objectives to be achieved by 2030:

SUSTAINABLE ENERGY FOR ALL

- Ensure universal access to modern energy services.
- Double the global rate of improvement in energy efficiency.
- Double the share of renewable energy in the global energy mix.

The ECOWAS Authorities mandated ECREEEE to act as the SE4ALL Focal Point in the West Africa region. Against this background, ECREEE has embarked upon the regional SE4ALL program, which aims to develop, in consultation with Member States, activities that are in alignment with national and regional strategies. The activities will be executed in consultation with the SE4ALL Global Facilitation Team (GFT) in Vienna, the SE4ALL Hubs and all relevant partners. In 2011, a comprehensive stocktaking exercise was carried out by ECREEE and its partners in all ECOWAS countries. The baseline reports served as a basis for the development of the regional RE & EE policies and action plans. The National SE4ALL Action Agendas and respective investment prospectus (es) that will be developed at the national level by the ECOWAS countries will outline the actions required to attain the SE4ALL objectives the in West Africa.

A Country Action Agenda is intended to demonstrate how the three goals of the SE4ALL can be achieved in a particular country. It addresses the issues and gaps identified in the respective Rapid Assessment/Gap Analysis by outlining and prioritizing various courses of action. Moreover, it clarifies the role of energy services in various sectors and how efforts in the area of energy access, energy efficiency, and renewable energy sources can support the attainment of national development goals. Given the role of access to energy as enabler for water security, public health, education, income generation, empowerment of women, good governance and sustainable development, such transparent and cross-sectoral planning must be enabled through interministerial consultations.

#### **SE4ALL Investment Prospectus**

Based on the SE4ALL Action Agenda, one or more Investment Prospectuses will be developed to operationalize the Country Action Agenda. An Investment Prospectus can have a selective focus on one or more subsectors, on technology type or on geographic region. In some cases, it may be possible to have separate prospectuses for one or more categories of a subsector, for example, electrification or clean cooking in the case of energy access; wind, solar, geothermal projects in the case of renewable energy; or sector specific projects in the case of energy efficiency; or the combination of any categories/subsectors. These Prospectuses aim to achieve the SE4ALL goals by identifying and developing a set of implementable programs and projects, including their investment requirements, which can be presented to potential private and public investors. It is a time-bound short-to-medium term document which presents an integrated set of prioritized and sequenced investment opportunities. It integrates the technical, financial, and implementation requirements for achieving an intermediate goal and delineates the annual funding requirements for capital investments, technical assistance and capacity building over a given time frame. It also identifies policy frameworks or government priorities relevant to reaching these outcomes.

# **ECOWAS** Renewable Energy Policy (EREP)

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.

#### **EREP** main objectives and targets

- 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.
- 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.
- 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.
- 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.
- The share of ethanol/biodiesel in transport fuels will increase to 5% in 2020 and 15% by 2030.
- By 2030, around 50% of all health centers, 25% of all hotels and agro-food industries with hot water requirements will be equipped with solar thermal systems.

# **ECOWAS Energy Efficiency Policy (EEEP)**

The overall target of the regional energy efficiency policy is to double, by 2020, the annual improvement in energy efficiency, to attain levels comparable to those of world leaders. This means that each year, the amount of energy needed to produce a certain quantity of goods and services will decrease by about 4%. The specific target of the regional policy is to implement efficiency measures that free-up 2000 MW of power generation capacity by 2020.

## EEEP main objectives and targets are:

- lighting: phase out inefficient incandescent bulbs by 2020;
- electricity distribution: reduce losses in electricity distribution, from the current range of 15% to 40%, to under 10% by 2020;
- cooking: achieve universal access to safe, clean, affordable, efficient and sustainable cooking for the entire population of ECOWAS, by 2030;
- standards and labels: establish an ECOWAS Technical Committee for Energy Efficiency Standards and Labelling, and adopt initial region-wide standards and labels for major energy equipment by end 2014;
- develop and adopt region-wide efficiency standards for buildings (e.g. building codes);
- finance: create instruments for financing sustainable energy, including carbon finance, by the end of 2013, and in the longer term, establish a regional fund for the development and implementation of sustainable energy projects.

# Implementation of the Regional RE & EE Policies

The implementation of the regional RE & EE policies follows a two-pronged approach:

- On the national level, ECREEE and the ECOWAS Member States have started to develop National RE and EE action plans and the SE4ALL Action Agenda.
- On the regional level, concerted actions will support the efficient and harmonized approach through several initiatives that have been launched to implement the Policies.



ECREEE is currently assisting the ECOWAS Member States to develop their respective National Action Plans. Through the national action plan process, Member States are being supported to institutionalize actions that promote investments in sustainable energy services. Targets set will be based on national potentials and socio-economic assessments, and will require that they are underpinned by concrete laws, incentives and measures as well as a clear financing strategy and technically well-designed interventions.

#### Development of the National SE4ALL Action Agendas, NREAPs and NEEAPs

The SE4ALL Action Agenda, the NREAP and the NEEAP are developed in a holistic and integrated approach. The SE4ALL Action Agenda will serve as the holistic document and will include the specific Action Plans on RE and EE. ECREEE will also carry out regional activities which are aimed at facilitating the national implementation process (e.g. quidelines).

ECREEE has engaged national consultants in each country as well as a pool of international experts to support the development of the three Action Plans, which will be executed based on thorough consultation with key national decision makers and stakeholders. The process will comprise capacity development, awareness campaigns, advocacy, and lobbying of key national actors as well as the development of an investment prospectus for the action plans developed.

The National Renewable and Energy Efficiency Action Plans are integral components of the SE4ALL Agenda. The NREAP and NEEAP will feed into the SE4ALL Action Agenda.

All three Action Plans are expected to be endorsed by their respective Governments and national stakeholders.

# Framework and Process of the SE4ALL Action Agendas, the NREAPs and NEEAPs

The ECOWAS action plan process has been designed to follow a similar process used in the development, implementation and monitoring of the **Directive of the European Union for Renewable Energy and Energy Efficiency**.

The main objective is to provide support to the ECOWAS Member States in the development, adoption and implementation of SE4ALL Action Agendas, the NREAPs and NEEAPs to ensure that the ECOWAS Sustainable Energy Policy targets are achieved by 2030.

#### Specific objectives of the Framework:

Effective guidance and support is provided to the ECOWAS Member States in a range of different ways:

- in the design and development of the SE4ALL Action Agenda, the NREAPs and NEEAPs;
- in identifying gaps in their policies and in the design and establishment of the Action Plans; and
- in supporting the effective implementation and monitoring of the defined Action Plans towards the achievement of the ECOWAS Sustainable Energy goals for 2030.

NREAP

NEEAP

Comprehensive templates have been developed and are currently being applied by all ECOWAS countries. The templates were validated at a Regional ECOWAS Meeting in March 2014 in Abidjan. It is envisaged that the three National Action Plans will be finalized in all fifteen ECOWAS countries by the end of 2014.

The activities considered under this Framework will contribute to:

- The implementation of the ECOWAS RE and EE Policies;
- The objectives of the United Nations Sustainable Energy for All Initiative (SE4ALL) and the MDGs, which are being included as part of the UN's Sustainable Development Goals (SDGs). The initiative aims at achieving three interlinked targets by 2030: universal access to modern, affordable and reliable energy services; doubling the rate of improvement in energy efficiency; doubling the share of renewable energy in the global energy mix.
- Increase awareness and capacity on policy planning analysis tools;
- The growth of the current levels of investment in the renewable energy sector in the ECOWAS region;
- Increasing access to modern cooking facilities;
- Universal access to electricity services for the urban and peri-urban poor;
- Access to modern energy services for all schools, clinics, hospitals and community centres;
- Access to mechanical power for heating and productive uses for all communities, as well as for pumping and milling.

# **Implementing Partners**

- ECREEE is coordinating the process in the ECOWAS region
- **One National Consultant** was engaged by ECREEE **in each country** in consultation with the Ministry of Energy to provide support to the development of the three Action Plans.
- A team of International Experts was engaged by ECREEE to also support the process
- UNIDO, GEF, GIZ, EU through the SEEA-WA project, AECID and the Austrian
   Development Cooperation are the core partners providing financial support to ECREEE
   in order to carry out the process (contracting consultants, organizing meetings, etc.)
- Further partners such as the **SE4ALL Hubs** provide technical support to the process
- ECREEE remains committed to further donor coordination efforts to ensure that resources are effectively allocated, to tap into synergies, and to avoid duplication.

#### **ECREEE Action Plan Coordination Structure**

ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE): In order to improve access to modern, reliable and affordable energy services and accelerate the uptake of RE&EE technologies, the ECOWAS Council of Ministers created ECREEE, a unique regional renewable energy and energy efficiency promotion agency in Sub Saharan Africa. ECREEE started operations in 2010 with initial support from the Austrian and Spanish Governments and technical assistance from the United National Industrial Development Organization (UNIDO). The ECREEE Secretariat is based in Praia, Cape Verde, and maintains a network of National Focal Institutions (NFIs) in all ECOWAS countries. ECREEE aims to establish regional renewable energy and energy efficiency markets by supporting various activities to mitigate existing barriers for the dissemination of these technologies. ECREEE's main activities include policy development, capacity building, awareness raising, knowledge management as well as business and investment promotion. Further information is available at: www.ecreee.org

Name	DESCRIPTION OF MAIN RESPONSIBILITIES
Mr. Mahama Kappiah	Executive Director of ECREEE
Ms. Karin Reiss	ECREEE/UNIDO Sustainable Energy Expert; Member of the overall Action Plan coordination team and focal point for SE4ALL
Mr. Hyacinth Elayo	Policy Analyst at ECREEE; Member of the overall Action Plan
	coordination team and focal point for the NREAPs
Mr. Ibrahim Soumaila	Energy Efficiency Expert at ECREEE, Member of the overall Action
	Plan coordination team and focal point for the NEEAPs
Adeola Adebiyi	Project Officer at ECREEE, Principal support to the overall coordination of the Action Plans
Mr. Jansenio Delgado	Renewable Energy Expert, Specific support for Cape Verde and
	Guinea Bissau
Mr Nicola Bugatti	Seconded Expert of AECID to ECREEE, Specific support on the
	Baseline Data process
Jafaru Abdul Rahman	IT Expert at ECREEE, Specific support on the Baseline Data process and in the development of the online Monitoring and Tracking Platform of the Action Plans under the ECOWAS Observatory

#### National Consultants Engaged by ECREEE

ECREEE, with support of its partners, has engaged one national consultant in each ECOWAS Member State to provide principal support to the Ministry of Energy in the development of the three Action Plans. The consultants were selected by an open call for proposals between ECREEE and the Ministries of Energy in the respective countries.

Country	National Consultant
Benin	Mr. Adrien Bio Yatokpa
Burkina Faso	Mr. Jean Francis Sempore
Cabo Verde	Mr. Anildo Costa
Cote d'Ivoire	Mr. N'GUESSAN EGNY PIERRE
Ghana	Mr. Opoku Alfred Kwasi
Guinea	Mr. Camara Abou Kawass
Guinea Bissau	Mr. Raul Julio Antonio
Liberia	Mr. Jacob S. Sandikie
Mali	Mr. Bagui DIARRA
Niger	Mr. Yari Rabiou Hassane
Nigeria	Mr. Afolabi Otitoju
Senegal	Mr. Ngom Emile
Sierra Leone	Mr. Patrick Tarawalli
The Gambia	Mr. Sambou Kinteh
Togo	Mr. Tiem Bolidja

## International Team of Experts engaged by ECREEE

ECREEE with support of its partners has contracted a team of international experts to provide support to the process. These institutions include the Spanish Institute for Energy Diversification and Saving (IDAE) and the Austrian Energy Agency (AEA) which possess in-depth experience in the development of the NEAPs and NEEAPs in Spain, Austria and Europe in general through their strong involvement in the Concerted Action of the implementation of the RE and EE Directive in the European Union. Individual consultants have been contracted with extensive and relevant experience. This "pool of experts" provides principal support to the national consultants and also to ECREEE and serves as a backstopping and quality assurance team.

Name	DESCRIPTION OF MAIN RESPONSIBILITIES
Mr. Roman Ritter	Roman Ritter is an individual consultant. He is an energy expert and economist who worked for GIZ. While at GIZ, he was based in Indonesia where he coordinated several programmes. Within this project, he will be providing support to the development of the SE4ALL Action Agenda and NREAP in Ghana, Liberia and Nigeria.
Mr. Edgar Blaustein	Edgar Blaustein is an individual consultant and has been engaged on previous ECREEE projects. He was one of the key experts in the development of the ECOWAS EE Policy. Within this project he will provide specific support for the development of the Action Plans in

	Cote D'Ivoire, Guinea, Mali and Senegal.	
Mr. Mamadou Dianka	Mamadou Dianka is a senior expert and international consultant. He will be supporting the development of the Action Plans in 4 ECOWAS Member States: Niger, Burkina Faso, Togo and Guinea. He also has vast experience working in the <i>Union Economique et Monétaire Ouest Africaine</i> (UEMOA).	
Ms. Claudia Raimundo	Claudia Raimundo works for IT Power and was responsible for developing the NREAP template for ECREEE. Within this project she will:	
	<ul> <li>lead the preparation of the Inception Report</li> <li>support the development of the Action Plans in Cape Verde and Guinea Bissau; and</li> <li>provide technical assistance to ECREEE during the</li> </ul>	
	coordination of the project	
	Claudia Raimundo was also the lead consultant for the Cabo Verde UNIDO-GEF project for the promotion of small-to-medium scale RE projects currently under implementation. She recently completed the UNIDO-GEF project for integration of RE in the electricity Sector in Guinea Bissau (project awaiting approval from GEF).	
Austrian Energy Agency	Leonardo Barreto-Gomez, Cornelia Schenk and Andrea Jamek work for	
Mr. Leonardo Barreto- Gomez Ms. Cornelia Schenk Ms. Andrea Jamek	the Austrian Energy Agency (AEA). AEA was among the key institutions to support the development of the ECOWAS Energy Efficiency Policy. During this project, they will be providing support for the development of the NREAPs and NEEAPs in the following ECOWAS Member States: Cabo Verde, Cote D'Ivoire, Ghana, Sierra Leone and The Gambia. Leonardo Barreto-Gomez was the lead expert that developed the NEEAP Template.	
	AEA is the principal European Union coordinator on the Concerted Action for the Implementation of the Renewable Energy Directive in the EU where 30 countries participate and they are actively engaged in the concerted Action for the EU Energy Efficiency Directive.	
Spanish Institute for	Sofia Martinez works for IDAE. On this project she will provide support	
Energy Diversification and Saving (IDAE)	for 3 ECOWAS Member States: Cabo Verde, Ghana and Senegal. Sofia has extensive experience on Action Plan Development and is also participating in the Concerted Action of the EU for the Implementation	
Ms. Sofia Martinez	of the Renewable Energy Directive.	
Mr. Toby Couture	Toby Couture has worked with the US National Renewable energy Laboratory-NREL and is currently an individual consultant. His background is on policy and finance and he expects that in this project he is able to contribute to make the frameworks bankable. He will be supporting the development of the Action Plans in 4 ECOWAS Member States: Benin, Burkina Faso, Niger and Togo.	

#### Partner Agencies Supporting the Process

Austrian Development Cooperation (ADC) supports countries in Africa, Asia, South Eastern and Eastern Europe as well as the Caribbean in their sustainable development. The Federal Ministry for Europe, Integration and Foreign Affairs (MFA) plans ADC strategies. Austrian Development Cooperation aims at reducing poverty, conserving natural resources and promoting peace and human security in partner countries. *Long-term programmes and projects support help towards self-help.* The ultimate goal is to bring about a sustainable improvement in conditions of life. The Austrian Development Cooperation (ADC) supported the establishment of ECREEE since its beginning with the creation of a Secretariat in Cape Verde and a network of National Focal Institutions in all 15 ECOWAS member states. ADC will continue to support ECREEE with core funding towards its Business Plan 2011-2016 and the secondment of a technical assistant to ECREEE's secretariat in Cape Verde.

Further information is available at: www.entwicklung.at

The Spanish Agency for International Development Cooperation (AECID) is the main management body for Spanish cooperation, which combats poverty and works for sustainable human development. Together with its partners, the Agency works in over 30 countries through its network of Technical Cooperation Offices, cultural centres and training centres.

Since 2010 AECID has supported ECREEE by providing core funding, and through the secondment of a Technical Assistant.

Further information is available at: <a href="http://www.aecid.es/EN">http://www.aecid.es/EN</a>

United Nations Industrial Development Organization (UNIDO): UNIDO is the United Nations' specialized agency with the mandate to promote industrial development in the world's developing and least developed nations. UNIDO is one of the leading agencies in the field of energy access, renewable energy and industrial energy efficiency. As a response to the post-2015 challenges, UNIDO is promoting Inclusive and Sustainable Industrial Development (ISID) to harness the full potential of industry's contribution to the achievement of sustainable development, and lasting prosperity for all. On 2 December 2013 the UNIDO Member States adopted the Lima Declaration which gives ISID a crucial role in the long-term development agenda beyond 2015. UNIDO's services include the execution of demonstration projects, policy support, and capacity-building in the form of local training, workshops and targeted publications. UNIDO coordinates the energy component of the GEF Strategic Programme for West Africa (SPWA) – Energy Access. UNIDO has provided technical assistance for the establishment and operation of the Regional Centre for Small Hydropower, based in Abuja, Nigeria and for the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE). UNIDO currently provides support to the establishment of new Regional Sustainable Energy Centres in the Caribbean, Pacific, Indian Ocean, Southern and Eastern Africa. The regional centres respond to the urgent need for enforced south-south cooperation and regional capacities to promote inclusive and sustainable energy industries and markets in developing and emerging countries in the post-2015 era. These centres will participate in the Global Network of Regional Sustainable Energy Centres (GN-SEC). They also fulfill an important role in the Sustainable Energy For All (SE4ALL) Initiative. Further information is available at: www.unido.org

Global Environment Facility (GEF): The GEF unites 182 countries in partnership with international institutions, civil society organizations (CSOs), and the private sector to address global

environmental issues while supporting national sustainable development initiatives. Today GEF is the largest public funder of projects to improve the global environment. An independently operating financial organization, the GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. Since 1991, the GEF has achieved a strong track record with developing countries and countries with economies in transition, providing \$10.5 billion in grants and leveraging \$51 billion in co-financing for over 2,700 projects in over 165 countries. Further information is available at: <a href="https://www.thegef.org">www.thegef.org</a>

#### GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is world's leading provider of international cooperation services for sustainable development. GIZ operates throughout Germany and in more than 130 countries worldwide

Most of GIZ's work is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). However, GIZ also operates on behalf of other German ministries and public and private bodies in Germany and abroad. These include governments of other countries, European Union institutions, such as the European Commission, the United Nations and the World Bank.

GIZ operates in many fields: economic development and employment promotion; governance and democracy; security, reconstruction, peacebuilding and civil conflict transformation; food security, health and basic education; and environmental protection, resource conservation and climate change mitigation.

# GIZ support to ECREEE aims to Improve the preconditions for the use of RE in the power pool by:

- Support of selected countries in implementing EREP.
- Dissemination of experiences with national RE-policies.
- Preparation of specific RE projects for power generation

#### European Union through the SEEA-WA project and the Technical Assistance Facility

The European Union supported the development of the ECOWAS Renewable Energy Policy through the RECP Program and the ECOWAS Energy Efficiency Policy through the Energy Facility project "Supporting Energy Efficiency for Access in West Africa (SEEA-WA. The development of the Action plans are also supported by the EU. On the SE4ALL Action Agenda, the Technical Assistance Facility of the EU is to support, in the framework of the Sustainable Energy for All initiative, the targeted developing countries to improve their policy and regulatory framework conditions aiming at providing attractive and enabling conditions for increased public and private investment in energy access, energy supplies, renewable energy as well as energy efficiency.

Sustainable Energy for ALL (SE4ALL): In September 2011, UN Secretary-General Ban Ki-moon launched the Sustainable Energy for All (SE4ALL) initiative to mobilize all stakeholders to take concrete action toward three critical objectives to be achieved by 2030: (1) Ensuring universal access to modern energy services; (2) Doubling the global rate of improvement in energy efficiency; and (3) Doubling the share of renewable energy in the global energy mix. The initiative brings together the global convening power of the United Nations and the World Bank, the ability to

Development of the national Sustainable Energy for All (SE4ALL) Action Agendas and Renewable Energy and Energy Efficiency Action Plan Process

mobilize bold commitments and leverage large-scale investment, and a rapidly expanding knowledge network. It will "change the game" by introducing innovative public-private partnerships built from constructive dialogue on policy, investment, and market development by governments, businesses, and civil society. A Global Facilitation Team (GFT) has been established in Vienna to lead and manage the Sustainable Energy for All initiative globally. The African Development Bank (AfDB) serves as the African Regional Hub for SE4ALL, in cooperation with the African Union, NEPAD and UNDP. In addition to this there are a number of thematic hubs such as IRENA which serves as the SE4ALL Renewable Energy Hub, and the SE4ALL Energy Efficiency hub housed in the UNEP Risø Centre.

# STATUS of Implementation of the Action Plan Process in the ECOWAS Countries

#### Benin: BEN

#### **National Action Plan Implementation Team**

Function	Name
National Authorities	
Director Of Energy	Mr Sakariyou Mahman
National Focal Person for ECREEE (NFI)	Ministry Of Energy: Mr Clément Bill Akouedenoudje
National SE4ALL Country Focal Point	Mr Sakariyou Mahman
ECREEEE	
ECREEE Team	Ibrahim Soumaila/Karin Reiss/Hyacinth Elayo
National consultant engaged by ECREEE	Mr Adrien Bio Yatokpa
International Experts engaged by ECREEE	Mr Toby Couture, Mr. Mamadou Dianka

#### Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	The EU Delegation provides strong support to the development of <b>the NREAPs</b> and <b>NEEAPs</b> . The national ECREEE consultant will collaborate with the European Union consultant in order to take the existing data into consideration. EU SE4ALL Technical Assistance Facility shall provide support in the area of capacity building of the Ministry of Energy, rural electrification action plan and in developing biomass projects for rural areas.
World Bank	The World Bank has supported the development of the energy sector through the Ongoing programme: DAEM (Developpement de l'Accès à l'Energie Moderne)

#### Background:

- 1. In Benin three specific objectives are targeted under the RE sector, Strengthen national capacity for planning and management of the sub-sector;
- 2. Promote the efficiency of wood energy consumption and increase access to alternative sources of energy;
- 3. Develop the production and use of biofuels.

According to the action plan development Inception Report, other developmental prospects that will be considered under the action plan process are:

• Enhancing the existing hydropower potential locally through the development of small hydro sites identified as part of the electrification of rural communities;

- Promoting the use of other RE sources (agricultural residues, municipal waste, solar energy, wind energy) through projects to be undertaken by the Government or by private operators;
- Promote modern biofuels (specifically bioethanol and biodiesel) from the operation of various agricultural commodities identified: cassava, sweet sorghum, sugar cane, and possibly (the study of other raw materials)

#### Status of the SE4ALL Action Agenda and the RE and EE Action Plans

The inception Report for the National Action Plans process was submitted to ECREEE on the 8th of May. The National Kick-off Meeting (KoM) took place on the 4th of July 2014. The KoM assembled 65 participants. The selection of country working groups and baseline data collection has started and the consultation process with stakeholders is ongoing.

The workshop focused on the official launching ceremony of the Action plan process

• And the implementation plan

The official opening ceremony comprised three interventions:

- Welcoming remarks of Dr. Sakariyou MAHMAN, , Director of Energy
- Remarks of Mr. Ibrahim SOUMAILA, representing the Executive Director of ECREEE,
- Opening speech by Mr. Christophe KHAKI, Director of Cabinet, representing the Minister for Energy, Petroleum and Mining Research, Water and Renewable Energy Development.

The proceedings of the workshop took place in two phases:

- Presentations
- Q & A Session.

Four (04) presentations were made in plenary during the workshop:

- 1: ECREEE-SE4ALL-NEEAP-NREAPs in the ECOWAS region Presented by Mr. Ibrahim SOUMAILA, Energy Efficiency Expert, ECREEE
- 2: Overview of policies on Renewable Energy and Energy Efficiency in developed countries, ECOWAS and Benin, presented by Mr. Herbert KOULETIO
- 3: Experiences and lessons learned from programs supporting renewable energy and energy efficiency policies presented by Mr. Todema ASSAN
- 4: Mechanisms and the development process of NREAPs and NEEAPs action plans, SE4ALL agenda presented by Mr. Adrien BIO YATOKPA, ECREEE national consultant in Benin.

It should be noted that the already established national expert group will serve as the steering committee for the development of the action plans. This group was established according to the Ministerial Decree of 2014 No. 021 / MERPMEDER / DC / SGM / CTJ / CTE / DRFM / CEO / SA on the creation, assignment, organization and functioning of the group to coordinate all activities in the energy sector (CCASE).

#### The main recommandations from the national workshop are as follows:

Serial N°	Recommendations	Responsibility	Implementation time
1.	Admit other insitiutions/sectors within the Country Group to allow national ownership of action plans	DGE	Write letters to the insitiutions/sectors to nominate their representatives
2.	Lead the process with all partners and stakeholders of the energy sector in order to avoid duplication of initiatives	DGE	Develop a single document with all donors
3.	Invite ECREEE to provide support to Country Group in the framework of the development of NREAPs, and NEEAPs SE4ALL	DGE	

#### Upcoming and planned activities:

- Preparation of the draft report on the measures, targets and scenarios will take place from the 1<sup>st</sup> to 31<sup>st</sup> of August 2014.
- Benin intends to have a pre-validation workshop with the country group by the second week of September.
- Second validation workshop on strategic options and action plan in November 2014
- Final report in December 2014

# Burkina Faso: BFA

#### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Director Of Energy	Mr. Narcisse Sawadogo
National Focal Person for ECREEE (NFI)	Ministry of Energy: Mr. Jean de Dieu Yameogo
National SE4ALL Country Focal Point	Mr. Jean de Dieu Yameogo
ECREEE	
ECREEE Team	Ibrahim Soumaila/Karin Reiss/Hyacinth Elayo
National consultant engaged by ECREEE	Mr. Jean Francis Sempore
International Experts engaged by ECREEE	Mr. Toby Couture, Mr. Mamadou Dianka

#### Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	The EU Delegation provides strong support to the development of the SE4ALL Action Agenda and the Investment Prospectus through the engagement of a team from the EU SE4ALL Technical Assistance Facility at the request of the Government of Burkina Faso. ECREEE and the EU Delegation have a collaboration agreement where the action plan process will be implemented jointly.
World Bank	The World Bank supports the development of an EE Action Plan which covers electricity demand on the service sector. The national ECREEE consultant will collaborate with the World Bank consultant in order to take the existing data into consideration.  The World Bank supports the development of the electricity sector in Burkina Faso through the project to support the Electricity Sector (PASEL 2014-2018) following the PASE (Programme on Access to Energy Services - 2012-2014) and the DPES (Development Programme of Energy Sector - 2006-2011).
UNDP	UNDP supported the Ministry of Mines and Energy through the organization in December 2013 of a workshop on a preliminary SE4ALL Action Agenda (at this time called action plan) prepared by the Inter-ministerial Committee for the development and monitoring of the action plans of SE4ALL initiative (CISEPA). This interim report is a reference document for the studies being undertaken in the context of SE4ALL in Burkina Faso.
UNEP	A study is being carried out with support from UNEP and UNDP on job creation related to the SE4ALL initiative. The Consultant is currently based in Ouagadougou as part of the study.

#### Background:

In Burkina Faso, the existing reference frameworks in the field of energy are contained in the Strategy for Accelerated Growth and Sustainable Development (SCADD 2011-2015) and the Energy Sector Policy 2014-2025. One of the key objectives of the SCADD is to increase the use of national energy resources and improve the efficiency of energy consumption. The strategy document also pays particular attention to the development of renewable energy including solar energy. The National Action Plans process is seen as a means to operationalize initiatives and projects in the areas of RE and EE.

Regarding solar energy, there a number of incentives geared towards promoting the sector, for instance, a five-year tax incentive was adopted on January 1, 2013, while custom duties and value added tax (VAT) on solar energy equipment (photovoltaic and thermal) have been waived.

There are also promising projects in the field of solar energy:

- Photovoltaic Plant of 33 MWp from Zagtouli; prequalification procedure of construction companies is underway and this is a project led by the National Electricity Company of Burkina Faso (SONABEL)
- 2. Photovoltaic plant of 22 MWp from Windinga; the negotiation process is initiated between the private developer and the Government of Burkina Faso
- 3. Recruitment Process IPE (Independent Producers of Electricity) during the construction and operation of 5 Solar Power Photovoltaic with a unit capacity of 10 MW. This project is supported by the Government of Burkina Faso.
- 4. Implementation of the Development Program for Renewable Energy and Energy Efficiency (UEMOA PRODERE) in Burkina Faso consisting of the installation of solar streetlights on 17 roads in Ouagadougou and Pouytenga, solar kits in 50 localities Burkina Faso.
- 5. Energy Saving Regional Programme (EERP) of the Common Energy Policy (CEP) of the UEMOA, for the supply and installation of low energy lamps (LBC) in government offices and institutions of the United Union members.

As for hydropower, its contribution to the National Interconnected Network (RNI) in 2013 amounted to 106 GWh for a total production of 656 GWh of RNI (16%). The current installed hydroelectric generating capacity is 32 MW, the following are projects under investigation and/or are ongoing:

- 1. Bagré downstream (14 MW): Feasibility Study and Detailed Pre-project under way
- 2. Ouessa 2 (21 MW): Feasibility study planned
- 3. Samandeni (2.56 MW): Dam under construction
- 4. Good (7.8 MW), Folonzo (10.8 MW), Gongourou (5 MW) and Bontoli (5.1 MW): Feasibility studies programmed in PASEL (Support Project Area Under the Electricity)

For the biofuel sector, several studies have been initiated:

 Study of the Ecole Polytechnique Fédérale de Lausanne (EPFL) on Evaluation practice on the adaptation of standard RSB (Roundtable on Biofuels) for small farmers and analysis of the regulatory and fiscal framework for the sustainable development of biofuels Burkina Faso (with the support of the Swiss Agency for Cooperation to Development -DDC) 2. Study of the Development Agency of International Cooperation in the fields of Agriculture, Food and Rural Areas (ADECIA) on supporting the development and structuring of the biofuels sector in Burkina Faso.

#### With regards to domestic energy, it is pertinent to note that:

- 1. There is a policy aimed at the promotion of butane gas through subsidies on the fuel. The implementation of this policy has produced interesting results, increasing gas consumption from 3,000 tons in 1994 to 40,000 tons in 2012;
- 2. The National Program Bio-digesters of Burkina Faso (PNB-BF) started in 2009 under the Ministry of Animal and Fishery Resources. Over 3,500 subsidized bio-digesters with varying capacities (6, 8 and 10 m<sub>3</sub>) have been installed across the country between 2010 and 2013;
- 3. There is also a vast multifunctional platform (MFP) program, with a target of 1,700 to be installed by 2015. In addition to energy services, MFPs are also deployed as tools for food-processing, job and wealth creation, and poverty reduction among women in the rural areas. Funding for the programme is provided by various technical and financial partners, though establishing a funding mechanism to ensure its sustainability remains a major challenge.

In the field of energy efficiency, the following actions were taken and / or are in progress:

- Effective implementation of the "Energy Management" section in the Energy Sector Project Development (SEDP 2006-2011). Implementation of the programme aimed at the efficient use of energy in public buildings, and recorded accrual of energy savings valued at \$ 2 million United States Dollars during the period 2006-2012). The programme consisted of the following activities:
  - a. Energy audits in administrative buildings;
  - b. Replacement of incandescent lamps with compact fluorescent lamps (CFLs); and
  - c. Training and capacity building for government departments.
- 2. Development of an Action Plan for energy conservation in Burkina Faso April 2014
- 3. Supported by UNIDO and UEMOA, the "Bureau de Restructuration et de Mise à Niveau (BRMN)" conducts analysis and provides support in the form of equipment and human resources. It also operates a fund which guarantees soft loans for businesses.
- 4. The national utility, SONABEL, promotes energy efficiency in its transmission and distribution networks and aims to limit technical losses by a maximum of 11% and non-technical losses by 3%.
- 5. Actions undertaken by the Electrification Development Fund (EDF) through the distribution of 1,000 units of energy efficient lamps.
- 6. Project "Improved Stove Faso" launched in 2005 by the GIZ (German Development Cooperation) in collaboration with CILSS, facilitated the distribution, in 6 years, of over 200,000 improved cook stoves to households across the country
- 7. Project on Access to Energy Services (PASE 2012-2014): Strategy for the distribution of improved stoves and the establishment of a monitoring and evaluation system validated in July 2013. Distribution of the improved stoves was executed through:
  - a. Organization of regional fairs to promote improved stoves; and
  - b. Financial support to three developers for the implementation of their activities

- 8. A bill governing energy conservation in Burkina Faso was validated at a workshop held from 21 to 22 August 2014 which featured institutional actors.
- g. A World Bank project to support the electricity subsector: Component 3 "Promoting the rational and efficient use of energy in the private sector and households by managing demand and street lighting "
  - a. Sub-component 3.1: "Capacity Building for Energy Management";
  - b. Sub-component 3.2: "Installing energy efficient equipment";
  - c. Sub-component 3.3: "Public information, awareness and communication to promote the rational and efficient use of electricity";
  - d. Sub-component 3.4: "Business Lighting Africa".

The Electricity Sector Support Project (PASEL) is one of the major projects of the Government of Burkina Faso in the field of energy and more specifically in the electricity sub-sector. The project is supported by the World Bank and commenced on February 27, 2014 for a period of 5 years. It includes four components: 1) improving the availability and reliability of electricity supply in the area supplied by SONABEL; 2) the extension of the electricity grid to increase electricity access to rural populations and reducing connection costs; 3) promoting the rational and efficient use of energy in public buildings, private sector and households by demand management; 4) institutional strengthening and capacity building and awareness raising.

#### Status of the Se4ALL Action Agenda and the RE and EE Action Plans:

The various stages of the SE4ALL process in Burkina Faso are outlined below:

- June 2012: Burkina Faso hosted an important mission regarding the SE4ALL initiative the United Nations - European Union - World Bank - United States Department of State - UNDP - UNIDO - AFD
- 2. March 2013: Creation of CIESPA (Inter-ministerial Committee for the development and monitoring of the Action Plan of Sustainable Energy for All Initiative SE4ALL abbreviated CIESPA); Inter-ministerial Order creation of CIESPA states that the European Union and UNDP are members of the said Committee as Observers.
- 3. December 2013: Validation Workshop on the Provisional SE4ALL Action Plan by CIESPA with support of UNDP.
- 4. June-October 2014: Development of a SE4II national action plan and investment prospectus with the support of the European Union
- June-November 2014: Development of National Action Plans for Renewable Energy (NREAPs) Energy Efficiency (NEEAPs) with the support of ECREEE.

Synergies between the EU and ECREEE have been established with the approval of the various technical and financial partners and endorsed by the Ministry of Mines and Energy of Burkina Faso. Effective collaboration between the ECREEE National Consultant and the EU Consultant has also been established.

Following the conclusions of the regional meeting to officially launch the action plan process in Abidjan in March, 2014, the (NREAPs and NEEAPs will be developed based on the validated templates and framework agreed at the meeting.

As part of the national action development process, an inception report was submitted to ECREEE in June 2014 while the National Kick-off Meeting was held on 8th August 2014.



The official opening ceremony of the workshop was chaired by Mrs. Sagnon Maidara, Technical Advisor to the Minister of Mines and Energy, representing the Director of the Ministry of Mines and Energy. ECREEE was represented by Mr. Mamadou Dianka, International Consultant. The General Directorate of Energy was represented at the highest level by Mr. Sawadogo Narcisse, Director for Energy and members of his team:

- 1. Mr. YAMEOGO Jean de Dieu, Director, Renewables and Domestic Energy;
- 2. Mr. ZOUNGRANA Dieudonnée, Director, Promotion of Energy Savings
- 3. Experts from the Ministry of Energy.

The workshop brought together over 40 participants from the Ministry of Energy and other energy agencies, Members of CIESPA and several actors involved in the field of energy and related fields.

The main recommendations of the national workshop are as follows:

Serial N°	Recommendations
1.	The Ministry of Mines and Energy should facilitate the process of collecting data from the relevant stakeholders;
2.	CIESPA should be actively involved in the process and serve on the National Steering Committee
3∙	The action plan development process and other relevant initiatives should be aligned to ensure effective synergies;
4.	There is the need to continue consultation with national stakeholders in the planning for the next steps (data validation workshop and national validation workshop of the action plans), while respecting the timeframes for the assignment

#### **Upcoming and Planned Activities:**

- 1. Data collection and preparation for the Data Validation Workshop on is expected to take place in September 2014;
- 2. Organisation of the Validation Workshop on Actions, Objectives and Scenarios for RE & EE 2020/2030 (in September or October)
- 3. Development of the draft Action Plans (September and October 2014)

Development of the national Sustainable Energy for All (SE4ALL) Action Agendas and Renewable Energy and Energy Efficiency Action Plan Process

- 4. Organisation of the Validation Workshop of the draft National Action Plans (October and November 2014)
- 5. Development of Final Action Plans (November/December 2014).

#### Cabo Verde: CBV

#### National and ECREEE Action Plan Implementation Team

Function	Name	
National Authorities		
Director Of Energy	Ministry of Energy : Antonio Medina S. Baptista	
National Focal Person for ECREEE (NFI)	Antonio Medina S. Baptista	
National SE4ALL Country Focal Point	ТВС	
ECREEE		
ECREEE Team	Jansenio Delgado/ Karin Reiss/ Hyacinth Elayo/ Ibrahim Soumaila/Nicola Bugatti	
National consultant engaged by ECREEE	Anildo Costa	
International Experts engaged by ECREEE	IT Power (Claudia Raimundo), IDAE (Sofia Martinez), Austrian Energy Agency (Leonardo Barreto, Cornelia Schenk)	

#### Other partners supporting the Action Plan Process

Partner	Type of Support	
European Union	The European Union provides key support to the energy sector in Cabo Verde. Collaboration in the Action Plan Process has been agreed with the Delegation in Praia. The EU SE4ALL TAF team is designing a programme to optimize the share of renewable energy through demand side management and pumped storage option.	
Luxembourg Development Cooperation	Although there is no direct formal participation on the process, energy is a key sector for the development cooperation between Cabo Verde and Luxembourg. Luxembourg's Development Cooperation is seen as an important stakeholder.	
UNDP	There is clear synergy between this action plans and an UNDP-GEF project targeting the development of framework actions on the EE field, standards & labelling, EE in buildings, lighting, between other.	

#### **Background**

The Cabo Verde archipelago includes 10 islands and 5 islets. Each island operates its own local electricity grid that runs mainly on petroleum products (diesel or heavy fuel). As a result of the electrification projects that have been developed in recent years, electricity coverage in Cape Verde is around 90%, varying from island to island. The government however aims to increase electricity access to 100% in 2020. For most of the non-electrified areas, there is dependence on localised power grids that run on fossil fuels. At the country level and at the levels of specific islands, power demand is rapidly growing and is already close to the supply capacity. As a result, the dependence on imported petroleum products is increasing and exerting a heavy burden on the national budget. Besides electricity, others forms of energy used for cooking are biomass and gas. The government promotes the adoption of cooking gas as a strategy to reduce deforestation in rural areas.

Distribution of gas for cooking covers almost all the country although there still a large percentage of rural population (more than 60%) that prefer wood for cooking.

Although considerable investments have been made in power infrastructure in the last few years, they have largely failed to address the ever widening power supply shortage on some islands (particularly the main city and the tourist islands such as Sal and Boa Vista). The high electricity tariffs that the country experiences would potentially make investments in grid connected and decentralized renewable energy projects financially viable even without subsidies. In 2014, the electricity consumer tariffs were 32 Euro/cents per kWh (below 60 kWh consumption) and 40 Euro/cents (higher than 60 kWh consumption). The distributed nature of power grids i.e. one grid for each island, would also support the possibility of integrating small to medium scale renewable energy systems into existing grids or stand-alone grids for areas that are not currently accessed by the central grids.

The Government of Cape Verde has launched the implementation of an ambitious policy plan to reduce the country's dependence on imported fossil fuels through increased energy production from renewable resources. The Cape Verde National Energy Policy was approved in June 2008 by the Council of Ministries. The policy sets out the objectives for the Government for the energy sector with the overarching vision of achieving long-term independence from fossil fuels. The policy aims at renewable energy promotion, reduction of fossil fuel import dependence and improvement of energy efficiency. The objective of the policy is to generate 25% of the overall electricity mix of the country from renewable energy by 2012 and 50% by 2020, while it is envisaged that the island of Brava achieve 100% RE penetration by 2020.

The government is currently assessing the possibility of increasing the share of RE in the country's overall electricity mix to 100% by 2020.

In 2011, the Government has adopted a renewable energy law which allows IPPs to inject into the national grid of the utility. Based on an undertaken resource assessment, the Government has developed a comprehensive green investment plan which identified possible grid-connected solutions with an overall investment volume of 250 million Euros. Major grid-connected projects in solar power (5 MW for Santiago and 2.5 MW for Sal) and wind power (28 MW for Santiago, S.Vicente, Sal and Boavista in total) are operational. Through the private-sector investment and government-supported projects, Cape Verde currently generates around 30% of its electricity from renewable sources.

Apart from grid-connected solutions the Cape Verdean Government envisages to increase the utilization of small- and medium sized solutions which could provide competitive electricity to remote settlement, decrease the peak load and has the potential to create local employment. With that, the Government also responds to the technical limitations of the grids (grid stability) to increase the share of intermediate renewable energy power sources (wind and PV) to more than 25%.

The Government recently launched a GEF project to promote small to medium scale renewable energy solutions in cooperation with ECREEE and UNIDO. The project which is to be implemented between 2014 to 2018, aims to promote and incentivize the adoption of small to medium scale RE projects in the country. Activities planned within the project include the implementation of 2.5MW of RE demonstration projects, and strengthening of the legal framework and local capacities in the

RE sector. Furthermore, there is a UNDP-GEF project that is currently being developed to target the development of framework actions in the EE field - standards & labelling, EE in buildings, lighting, among others. The project document was finalised at the end of August 2014 and has been approved by the GEF CEO. Both GEF projects will seek clear synergies with the Government objectives and the national action plans development process.

Cabo Verde is considered a strategic priority country for the EU. Other partners active in the energy sector include Spain, Japan, Luxembourg and China.

#### Status of the Development of the SE4ALL Action Agenda and the RE and EE Action Plans:

- The national consultant submitted the National Inception Report to ECREEE for the elaboration of the action plan process on the 8<sup>th</sup> of May, 2014;
- The National Kick off meeting was held on the 30<sup>th</sup> of July of 2014 at ECREEE's headquarters in Praia. Participants at included representatives of various institutions, drawn from public and private companies, universities and international institutions. The event provided a useful platform for relevant stakeholders to discuss pertinent issues relating to the action plans development process.



The meeting also officially brought together the main stakeholders that will serve on the national steering committee for the action plan process. The committee includes the:

- Ministry of Energy
- The national regulatory agency, ARE
- Utilities
  - National Electricity and Water Company, ELECTRA
  - Fuel companies, ENACOL and Vivo Energy
  - o Private wind energy companies, Caboeólica and Electric
  - Private Electricity and Water companies Água, Águas de Ponta Preta, APP and Águas e Energia da Boavista, AEB
- Civil Society Groups
  - National Consumer Association, ADECO
  - National Board of Engineers and National Board of Architects
- Academia
  - Escola de Negócios e Tecnologias de Cabo Verde
  - Universidade de Cabo Verde
  - Universidade Piaget

Development of the national Sustainable Energy for All (SE4ALL) Action Agendas and Renewable Energy and Energy Efficiency Action Plan Process

Presently, the consultant is in the process of analysing the data collected and preparing the baseline report as well as the RE&EE scenarios for 2020/2030.

The Draft Baseline Report was finalized by the National Consultant and two Data Validation Workshops were carried out on the 24 of October in Mindelo and the second on the 29th of October in Praia. In both workshops, baseline data included in the Draft Baseline Report was validated and the proposed strategy and measures to include in the plans were discussed with stakeholders. All stakeholders recognised the good work carried out in the compilation of the baseline data and participated actively in the discussion of the proposed measures.

The Backstopping Team/Country Team worked with the National Consultant by revising the drafts of the baseline report and by discussing the strategy and measures to be included in the plans.

A member of the backstopping team carried out a mission to Cabo Verde to work and support the National Consultant. The mission was undertaken between the 26th and the 29th of October.

#### Upcoming and planned activities

- > Validation of Modelling and Scenarios for RE and EE in for the first half October;
- National Seminar on Validation of Measures, Objectives and Scenarios to the RE and EE is planned for the second half of October
- ➤ The first draft of the action plans are expected to be completed and validated at the beginning of November.

#### Cote D'Ivoire: CDI

#### National and ECREEE Action Plan Implementation Team

Function	Name	
National Authorities		
Director Of Energy	Ministry of Energy: Mr. Cisse Sabati	
National Focal Person for ECREEE (NFI)	Ministry of Energy: Mr. Cissé Sabati/N'goran Norbert	
National SE4ALL Country Focal Point	Mr. Kouhié Guéi Guillaume	
ECREEE		
ECREEE Team	Ibrahim Soumaila/Karin Reiss/Hyacinth Elayo	
National consultant engaged by ECREEE	N'guessan Egny Pierre	
International Experts engaged by ECREEE	Mr. Edgar Blaustein and Mr. Leonardo Barreto-Gomez, Ms Cornelia Schenk, Austrian Energy Agency	

#### Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	Energy is a focal sector for the EU in Cote d'Ivoire. The EU is the core supporter
	of the Energy Sector Development in Cote d'Ivoire. The EU SE4ALL Technical
	Assistance team is designing of programme of energy access by grid
	densification and extension, of technical assistance to the regulator for
	preparing the implementation decree of the new electricity law and of
	implementation of the EE and RE action plan. Meetings were held with the EU
	Delegation in order to align the activities. Concrete collaborations are being
	discussed.
UNIDO	UNIDO has provided support to the Energy Sector and has a GEF project

#### Background:

In Côte d'Ivoire, the main responsibility for the regulatory framework, generation, distribution and transmission of Renewable Energy (RE) and for Energy Efficiency (EE) is within the Ministry of Petroleum and Energy, assisted by the Ministry of Environment and Sustainable Development, which contributes to the preparation and implementation of government policies on renewable energy.

Despite the good RE resources available, the country has developed only a few pilot solar photovoltaic projects. The government intends to increase the level of electricity production to meet the expected increase in energy demand induced by large projects (e.g. mining) and the population growth.

The targets of the Ivorian Government in terms of the proportion of RE in the energy mix are as follows: 5% in 2015, 15% in 2020 and 20% in 2030.

#### Status of the Se4aALL Action Agenda and the RE and EE Action Plans:

The National Inception Report was submitted to ECREEE on 14<sup>th</sup> May 2014. The National Kick off Meeting of the development process of the National Action Plans will take place on the August of 2014. It is envisaged that all relevant stakeholders' will be present at the Kick off Meeting.

#### Upcoming and planned activities

The inception workshop was scheduled for 15<sup>th</sup> August 2014, but could not be held as it was declared a public holiday in Cote d'Ivoire. The current proposed timeframe and milestones for the assignment are as follows:

N°	Workshop	Week	Day
1	Kick-offf NREAP/NEEAP/SE4ALL Action Agenda	15 - 17	13/08/2014 - 27/08/2014
2	Data Validation	21-22	24/09/2014 - 01/10/2014
3	Validation measures, targets and scenarios for RE & EE 2020/2030	25 - 26	22/10/2014 - 29/10/2014
4	Validation of the final documents NREAP/NEEAP/SE4AL	26	31/10/2014

#### COMPOSITION OF THE COMMITTEE FOR THE DEVELOPMENT OF ACTION PLANS

Following discussions with the Director of Energy on 17th July 2014, it was agreed that two 2 committees be created to ensure efficient execution of the assignment.

#### 1. Oversight Committee.

The oversight Committee is comprises all strategic sectors of the country interested in RE & EE. They include: Education, Health, Economy and Finance, Scientific Research, Planning and Development, Agriculture, Environment, Family, NGOs and Civil society.

The Committee will be chaired by the Energy Minister or his representative. It will meet at the request of the Technical Committee.

#### **Functions**

Strategic supervision and approval of the final action plans NREAPs / NEEAPs / SE4ALL Action Agenda

#### 2. Technical Committee

The Technical Committee is composed of agencies directly concerned with RE&EE. These include: Energy, Water, Forestry, Environment and Sustainable Development, Agriculture, Animal & Fisheries.

The Committee will be chaired by the Energy Minister or his representative.

#### **Functions**

- Guide and facilitate the collection of data on renewable energy and energy efficiency;
- Define the path to achieve the objectives set by the Government in terms of RE / EE;
- Guide decision-making on the action plans;

- Define and direct the mobilization of human and financial resources required to develop action plans;
- Validate the data on renewable energy and energy efficiency;
- Confirm the objectives, scenarios and measures contained in the NREAPs / NEEAPs / SE4ALL Action Agenda;
- Prepare the final versions of the NREAPs / NEEAPs / SE4ALL Action Agenda;
- Monitor and evaluate the implementation of the action plans until the end of the process in 2030. The Technical Committee meets once a month during the process of developing action plans and quarterly for monitoring and evaluation of action plans at the end of its development.

### Upcoming and planned activities

• Data collection is in the early stage.

# The Gambia: GMB

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Deputy Permanent Secretary	Ministry of Energy: Mr. Demba Bah
National Focal Person for ECREEE (NFI)	Ministry of Energy: Mr. Modou Manneh
National SE4ALL Country Focal Point	Mr. Babucarr Bittaye,
ECREEE	
ECREEE Team	Karin Reiss/Hyacinth Elayo/Ibrahim Soumaila
National consultant engaged by ECREEE	Mr. Sambou Kinteh
International Experts engaged by ECREEE	Mr. Leonardo Barreto-Gomez, Ms. Andrea Jamek and Ms. Cornelia Schenk, Austrian Energy Agency and, Ms. Sofia Martinez, Spanish Institute for Energy Diversification and Saving (IDEA).

## Other partners supporting the Action Plan Process

Partner	Type of Support
European Union/BizClim	International consultants have been engaged by NEPAD/BizClim in order to support the development of the SE4ALL Action Agenda and the Investment Prospectus
UNDP	UNDP provides support through the facilitation of stakeholder consultations

### Background:

In The Gambia there is an RE law in place and a feed-in-tariff system, a national energy policy (strategy) and a draft national energy policy that are currently under review and revision. In addition, The Gambia has been selected by the African hub as one of the countries to be supported on developing its SE4ALL Action Agenda and Investment Prospectus; it therefore has strong support from NEPAD. The National Action Plans process which aims at supporting The Gambia in the development of its SE4ALL Action Agenda and Investment Prospectus for high priority RE projects, National Renewable Action Plan (NREAP) and National Energy Efficiency Action Plan (NEEAP) commenced in March 2014.

### **The Action Plan Process**

The Action Plan Process in The Gambia is being supported by NEPAD, UNDP other partners, and ECREEE and its partners. NEPAD, UNDP and partners are specifically supporting the development of SE4ALL Action Agenda with an Investment Prospectus while ECREEE and partners are supporting the development of also SE4ALL Action Agenda including the NREAP and the NEEAP. Although various support commenced at different times, they are all evolving through a uniformed process. The features of the process are divided into 8 main activities.

These activities are: i). Preparatory activities; ii). Inception report writing; iii). High-Level Kick-Off meeting; iv). Data collection; v). Scheduled coordination meeting of Steering/technical Committee and training workshop (methodological and modelling); vi). Key stakeholder baseline data validation; vii). Key stakeholder review workshop of draft RE & EE action plans; and, viii). National validation workshop of draft RE & EE action plans and SE4ALL Action Agenda.

Following the Regional Kick-Off Meeting of 17-20 March 2014 in Abidjan, the consultant and the ECREEE Focal Point met on 24<sup>th</sup> March 2014 in a preparatory meeting to develop a list of key institutions to be represented on the National Steering/Technical Committee for the process to be presented in the Inception Report. The key stakeholder institutions have so far designated permanent representatives to the Committee and are presented as follows:

Stakeholders Institution	Name of Representative (s)
Ministry of Energy (MOE)	Messrs. Babucarr Bittaye, Bafoday
	Sanyang and Lamin Marong
Department of Community Development	Mrs. Mama Janneh Sawaneh
Women's Bureau	Mrs. Ndye Fatou Jobe Sanyang
National Environment Agency	Mr. Malick Bah
Gambia Investment and Export Promotion	Mr. Abdoulie Hydra
Agency	
National Water and Electrical Company	Messrs. Ousman Njie and Lang Sabally
(NAWEC)	
Renewable Energy Association of the Gambia	Mr. Chris Dean
(REAGAM)	
Public Utility and Regulatory Authority	Mr. Matarr Touray
(PURA)	
United Nations Development Program (UNDP)	Dr. Almameh Camara
Gambia Technical Training Institute (GTTI)	

The status of the implementation process with respect to the two parallel supports system is summarized as follows:

### Status of the SE4ALL Action Agenda:

On the development of the SE4ALL Action Agenda/Investment Prospectus: a Kick-Off Meeting was held in March 2014; an inception report was prepared and submitted in April 2014; and coordination meetings were held in April/May 2014. Project proposal Concept Notes (CNs) for completion were sent out and responses to the last call for return from project promoters have been received by the Ministry of Energy (MOE), bringing the total received CNs to 12 of which 8 had earlier been forwarded to the NEPAD consultants for inclusion in the draft IP so far. A working group meeting has been finalised and the qualifying and selection criteria for projects to be included in the Investment Prospectus and shared with the NEPAD consultants.

A SE4ALL meeting and methodological training workshop was organized on the 24<sup>th</sup> to 27<sup>th</sup> of June 2014. The 1st draft of the SE4ALL Action Agenda is currently under review.

### Upcoming and planned activities of the SE4ALL Action Agenda:

One day technical review meeting to review the Regional Consultation Report is planned for 25th September, 2014 and a national consultation workshop is planned for 15th and 16th October, 2014 with all SE4ALL stakeholders.

Other important upcoming and planned activities are the finalization of the draft agenda and investment prospectus; development of a project data base and communication strategy; the holding of national validation workshop previously scheduled for September/October 2014 but now under review by MoE; and, the dissemination phase in October/November.

#### Status of the RE and EE Action Plans:

The National Inception Report has been written and submitted to ECREEE in April 2014. A national High-Level Kick-Off Meeting was held on the 27<sup>th</sup> June 2014 and was attended by ECREEE and the NEPAD team in the country at the time. A meeting report has been prepared and submitted to ECREEE on 11<sup>th</sup> July 2014. The following are some of the pictures of proceedings of the Kick-Off Meeting showing the High Table and the Floor:





The consultant has assembled and reviewed a good volume of documents of relevant information for the completion of the templates, commenced filling in the templates and embarked on a "specific data collection exercise" to fill-in gaps in specific data needs. The consultant held two Skype Conferences with our supporting International Consultant team on the 29th August, 2014 and 11th September, 2014 and, MoE and ECREEE partook in the latter. The team also furnished the consultant with a catalogue of measures as background document for the development of our RE and EE action plans. The national consultant has forwarded the draft baseline report to the backstopping team and relevant national stakeholders. Comments and suggestions were provided by the backstopping team, and the revised version was sent out and is currently awaiting feedback from the Ministry of Energy and other stakeholders. The validation workshop is expected to take place on the 20<sup>th</sup> of November. **Upcoming and Planned activities of RE & EE Action Plans** 

The following matrix summarizes the upcoming and planned activities with respect to the NREAP/NEEAP development process in terms of activity, responsibility and timeline:

ACTIVITY	RESPONSIBILITY	TIMELINE
Data Collection	Ministry of	25 <sup>TH</sup> August- 25 <sup>th</sup> Sept
	Energy/Consultant	2014
Review and Verification of	Ministry of	29 <sup>th</sup> & 30 <sup>th</sup> August 2014
Baseline Data by and Training	Energy/Consultant	
Workshop for the Steering		
Committee		
Baseline data Validation	Ministry of Energy/ECREEE	7th Oct 2014
Workshop Key Stakeholders		
Review Workshop of Draft RE &	Ministry of Energy/ECREEE	2 <sup>nd</sup> December 2014
EE Action Plan by Key		
Stakeholders		
National Validation Workshop of	Ministry of Energy/ECREEE	9 <sup>th</sup> December 2014
the Draft RE & EE Action Plans		
and SE4ALL Action Agenda		

The national consultant has commenced the completion of the NREAP and NEEAP templates with available information and data. The MoE is in the process of formally requesting support from ECREEE for these activities.

# Ghana: GHA

### National and ECREEE Action Plan Implementation Team

Function	Name
Director of Renewable Energy	Mr. Wisdom Togobo
Energy Commission	Mr.Alfred Ofosu Ahenkorah
National Focal Person for ECREEE (NFI)	Energy Commission: Kofi Adu AGYARKO
National SE4ALL Country Focal Point	Ms. Paula Edze, Energy Commission
ECREEE Team	Karin Reiss/Hyacinth Elayo/Ibrahim Soumaila
National consultant engaged by ECREEE	Opoku Alfred Kwasi
International Experts engaged by ECREEE	Roman Ritter, IDAE (Sofia Martinez), Austrian Energy Agency(Leonardo Barreto, Cornelia Schenk)

### Other partners supporting the Action Plan Process

Partner	Type of Support
UNDP	UNDP supported the development of Ghana's SE4ALL Country Action Plan (CAP) which was derived using the Sustainable Energy for All Acceleration Framework (SEAAF). UNDP is also supporting the implementation of the CAP.
US State Department	The US State Department supported the development of the SE4ALL Investment Prospectus Framework and facilitated the formation of the Financing Working Group (FWG).
African Development Bank	The African Development Bank is providing additional technical assistance to the revision of Ghana's SE4ALL CAP into an Action Agenda document. The AfDB support will address the development of a monitoring, evaluation and reporting system for Ghana's AA/IP process, as well as support to the economic and financial evaluation of mini-grid systems, and solar home systems.
European Union	Energy is not a focal sector in Ghana. However energy is a key factor for productive infrastructure investments in support of the Agriculture sector which is a focal sector with implication on growth and employment. Priority actions to improve productive use of energy in the agriculture sector are already mapped in the existing National Action Plan.

### Background:

The overall policy direction of the renewable sub-sector is to increase the share of RE, particularly solar, wind, mini hydro and waste-to-energy, in the national energy supply mix to 10% by 2020, and consequently contribute to the mitigation of climate change.

Ghana is the first ECOWAS country to have a SE4ALL Action Plan, which was adopted in 2012. Ghana's SE4ALL Country Action Plan (CAP) was derived using the SE4ALL Acceleration Framework. Following the decision by the SE4ALL Partners in Africa that the scope of SE4ALL is expanded from an Action Plan to an Action Agenda which led to the development and adoption of a template for a national Action Agenda document. Ghana sees the benefit in revising its CAP into an

Action Agenda which will also make monitoring and evaluation of SE4ALL progress across the region more uniform.

### Status of the Se4ALL Action Agenda and the RE and EE Action Plans:

Due to the existence of a SE4ALL Country Action Plan, there was no need for a formal kick-off meeting for the redrafting into an Action Agenda.

The Energy Commission has been nominated by the Minister for Energy and Petroleum to set up a Steering Committee to validate data gathered and supervise the work done by the Consultant. A working group has been formed accordingly. The first meeting for the development of the National Action Plans took place on the 23rd of July 2014. Data collected was to be reviewed and validated on 20th and 22nd of August 2014.

The second meeting was held from 20<sup>th</sup> to 22<sup>nd</sup> of August as planned. Data within the ECOWREX Template was virtually complete with a few gaps in four of the five sub-sectors, namely:

- a) Socio-economic Data
- b) Energy Sector Overview
- c) Renewable Energy
- d) Energy Efficiency

The data have been validated by the core Working Group at the Energy Commission and their comments captured onto the template. The major remaining gap after this meeting was 'Bioenergy and Biofuels' under the Renewable Energy sub-sector and one main sub-sector, Energy Access, also had to be completed.

The meeting identified the Forestry Commission (FC), Volta River Authority (VRA), Electricity Corporation of Ghana (ECG), Ministry of Gender and Social Protection (MGSP), Ghana Grid Company Ltd (GRIDCO) and the Ministry of Energy and Petroleum (MoEP) as the sources of the data gaps and leads were given to the local consultant to follow up on them. These institutions and agencies are also to be invited to join the Working Group

Currently (10th September) all available data have been collected from these agencies and the ECOWREX Template is being populated with the remaining data. The validated data is being transferred into the relevant portions of the NREAP Tables and other data sources in the NREAP Tables are being researched into for submission and validation by the expanded Stakeholder Working Group at the third official meeting of the Group.

The entire process is jointly being undertaken by the SE4ALL Coordinator and the National Consultant. The underlying reason is that the final validated data will enable the team to complete the SE4ALL Country Action Agenda Template. **Upcoming and planned activities** 

A meeting of the expanded groups is slated for the last week in September; the exact date will be fixed in consultation with the Core Working Group. Upon validation of the data, the National Baseline Report Structure will be completed and the date for the national validation workshop will be firmly fixed.

# Guinea: GIN

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Director Of Energy	Mr. Loua Cece Alexis
National Focal Person for ECREEE (NFI)	Ministry of Energy : Mr. N'Faly Yombouno
National SE4ALL Country Focal Point	Madame Bah Kadiatou (TBC)
ECREEE	
ECREEE Team	Ibrahim Soumaila/Karin Reiss/Hyacinth Elayo
National consultant engaged by ECREEE	Mr. Camara Abou Kawass
International Experts engaged by ECREEE	Mr. Edgar Blaustein

### Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	The European Union has an Energy Focus in Guinea. There will be a mission by the SE4ALL Technical Assistance team to the country.
World Bank	Within the World Bank's SE4ALL Technical Assistance Program (S-TAP), the Bank is supporting the development of the Investment Prospectus. The Bank has also assisted in the development of a comprehensive hydro atlas; establishment of a hydro PPP facility; Policy and Regulatory Reforms; Capacity Building and Knowledge Sharing on sector monitoring and evaluation.
UNDP	UNDP has supported Guinea in the development of its SE4ALL Strategy.

#### Background:

Although Guinea does not have an RE policy in place, several programs are designed to promote the use of RE in the country. At the institutional level, the RE sector is managed by two complementary structures, corresponding to two different administrative entities:

- The Ministry of Energy and Water;
- The Ministry of Higher Education and Scientific Research.

The Ministry of Energy and Water Resources is responsible for developing sectoral policies and set standards for RE. The National Directorate of Energy, is responsible for establishing policy guidelines and monitor project's implementation.

### Status of the Se4ALL Action Agenda and the RE and EE Action Plans

The National Inception Report was submitted to ECREEE on the 5<sup>th</sup> of July 2014. The establishment of a Stakeholder Committee (SC) was concluded in June 2014 and the first working meeting of the group of experts took place on the 19<sup>th</sup> of July 2014. Nevertheless, the Workshop to launch the process (National Kick off Meeting) is yet to be organised.

# Guinea Bissau: GNB

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Director Of Energy	Mr. Lamberto Soares Câmara
National Focal Person for ECREEE (NFI)	Ministry of Energy: Biabé Sigá
National SE4ALL Country Focal Point	TBC
ECREEE	
ECREEE Team	Jansenio Delgado/ Hyacinth Elayo /Ibrahim
ECREEL TEATH	Soumaila/Karin Reiss/
National consultant engaged by ECREEE	Mr. Julio Antonio Raul
International Experts engaged by ECREEE	Ms. Claudia Raimundo, IT Power

### Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	Energy is a not a focal sector for EU in Guinea Bissau. There will be a mission by the SE4ALL Technical Assistance team to the country.

### Background:

In Guinea Bissau, most energy sector legislation (with minor reference to RE) is from 2008. Several activities have been put in place that target RE, although most of the RE projects have been promoted by NGOs, for instance, the Portuguese NGO TESE is involved in the installation of a 314kW PV-hybrid system for the Bambadinca Village and ADPP is currently implementing solar dryers, cookstoves, small RES systems for productive uses, etc.

GNB is working on a RE Master Plan, which is still in a Draft version but is expected to be finalized in the near future. Moreover, a UNIDO/ECREEE-GEF project has been set up to increase RE in the electricity sector in Guinea Bissau. ECREEE is an implementing partner for this UNIDO/ECREEE-GEF project and clear links were established on the project for the development of the SE4ALL Action Agendas, the NREAP and NEEAP. The project will also foster the development of an Investment Plan for increasing the development of small to medium scale renewable energy projects in Guinea Bissau and has identified a series of renewable energy investment projects to be implemented in the next four years. Furthermore the UNIDO/ECREEE-GEF project will also contribute to the development of the (18MW) Saltinho Hydropower project.

### Status of the Se4aALL Action Agenda and the RE and EE Action Plans:

The stakeholder country group to be involved throughout the project has been proposed and will be established in the coming weeks. The group will include representatives from the Ministry of Energy and Industry/Directorate General of Energy, Ministry of the Infrastructures, Construction and Planning, Secretariat for the Environment and Tourism, Ministry of Education, National Institute of Research Studies, Ministry of Natural Resources / Directorate General of the Hydropower

Resources, Ministry of Agriculture and Rural Development / Directors-General of the Ministries of Forestry, Economy and Regional Integration, Social Solidarity and Fight Against Poverty, University of Guinea Bissau, NGOs, Institutes of Architects, Engineers, National Institute of Research and Applied Technology, Association of Consumer Goods and Services.

The National Inception Report of Guinea Bissau was submitted to ECREEE in May 2014. However, the National KoM is yet to be scheduled.

## Upcoming and planned activities

- A Country group will be established and KoM will be scheduled in the near future.
- A Renewable Energy and Energy Efficient baseline report will be compiled.

# Liberia: LBR

# National and ECREEE Action Plan Implementation Team

Function	Name
Director Of Energy	Mr. Sylvester Massaquoi
National Focal Person for ECREEE (NFI)	Ministry of Energy: Mr. Augustus Goanue
National SE4ALL Country Focal Point	TBC
ECREEE Team	Hyacinth Elayo / Karin Reiss/ Ibrahim Soumaila/
National consultant engaged by ECREEE	Mr. Jacob S. Sandikie
International Experts engaged by ECREEE	Mr. Roman Ritter

Other partners supporting the Action Plan Process and relevant studies, technical assistance and projects active in the field of RE and EE in Liberia

INTERNATIONAL PARTNERS	SE4ALL GOAL(S) (Energy Access/Renewable Energy/Energy Efficiency)	DESCRIPTION
European Union (EU)	SE4ALL Gap Analysis (Energy Access)	Preparation of Gap analysis report which identified gaps towards 100% access in 2030.
	SE4ALL Technical Assistance Facility	A framework to request SE4ALL funding or technical for priority projects when requested. The EU SE4ALL technical assistance facility is setting up a grid reinforcement and extension programme, a capacity building programme to the Ministry of Energy, a technical assistance programme to LEC and to RREA including related to the finalization of the new electricity law.
	Rural Energy strategy and master Plan	Developing and Demonstrating a Rural Energy Strategy and Master Plan for Liberia, including a pilot electrification of public facilities using solar PV.
	St. Jon River reconnaissance Study	Overall assessment, project definition and preparation of Terms of Reference for detailed feasibility studies.
	Energy for primary health care facilities	To regenerate vital community facilities by increasing access to, and the reliability of health services for the rural and semi-rural poor by delivering renewable energy solutions as well as energy efficiency measures. By modernizing 205 facilities of Liberia's fragile health infrastructure
	West African Power Pool (WAPP) Cross Border Project	Interconnection from Cote d'Ivoire to electrify 18 towns in counties bordering Cote d'Ivoire.

	Mt. Coffee Rehabilitation Tender Design – Hydro-power Generation	Detailed design and preparation of Tender documents
World Bank	SE4ALL Investment Prospectus	Within the World Bank's SE4ALL Technical Assistance Program (S-TAP), the Bank is supporting the development of the Investment Prospectus.
	Electricity Access Plan	A national electricity access plan that targets 70% coverage in Monrovia and 35% in the rest of the country by 2030.
	Liberia Electricity System Enhancement Project (LESEP 1& II), and Monrovia Improved Electricity Access Expansion Program (GPOBA)	These three projects provide financing for the provision of investments that are needed for distribution, the subsidization of connections to expand access to the poor, and enhancing power generation by procuring a 10 MW HFO power plant on Bushrod Island.
	Least Cost Power Development Plan	To assess and develop a plan that outlines the investment required to close the electricity gap and support long-term economic development.
	Scaling-Up Renewable Energy Program (SREP) Liberia - Renewable Energy Electrification program (REEP) in north-central Liberia.	The World Bank's support is part of a larger multi- donor program that is aimed at supporting renewable energy investments that seek to improve access to electricity by using lower cost options, compared to diesel generators.
	Liberia Accelerated Electricity Expansion Project (LACEEP)	This project provides a continued support to the expansion of the transmission and distribution network, as well as the connection of larger consumers. It also provides financing for HFO handing facilities; storage tanks, fuel transportation, and fuel pumping station. The project entails the construction of a 66kV transmission line along the Paynesville – Kakata corridor, as well as distribution in Kakata
	WAPP – CLSG Regional Transmission Line (Transmission backbone & Purchase of Energy)	This project supports the construction of a regional 225 kV transmission line (1,349 km) from the Ivory Coast through Liberia, Sierra Leone and Guinea.
	Africa Renewable Energy Access Program (AFREA)&Global Environment facility (GEF): Support to Rural and Renewable Energy	Helped the GOL establish Liberia's first-ever Rural and Renewable Energy Agency (RREA) as a functioning agency that is able to mobilize new renewable energy services and investment for rural areas – two pilot projects include the construction of a 6o-kW Yandohun Micro-Hydro Power in Lofa and a project to commercialize solar and other lighting products; The GEF components is funding the scale-up phase of the solar lighting project called lighting lives in Liberia (LLL)

African	CSLG Project	Rural Electrification of 412 towns/villages along a
Development Bank (AfDB)	<b></b>	550 km line (6 km buffer)
	Energy Access project	T&D project sequenced with rehabilitation of Mount Coffee hydropower
	Scaling-Up Renewable Energy Program (SREP) Liberia - Renewable Energy Electrification program (REEP) in south-east Liberia.	The AfDB's support is part of a larger multi-donor program that is aimed at supporting renewable energy investments that seek to improve access to electricity by using lower cost options, compared to diesel generators.
	Liberia Energy Sector: Capacity Assessment and Capacity Building Needs	Assess capacity building needs for the electricity sector, and develop plan/actions for addressing the constraints to the implementation of ongoing and future investment programs
US Government (USAID)	Liberia Energy Sector Support Program (LESSP)	To increase access to affordable, renewable energy services in graphically focused rural and urban areas in order to foster economic, political and social development.
	Beyond the Grid (BTG): Electrifying Liberia' Rural Population centers	A proposed follow-on program to the LESSP, which is also sub-initiative of president Obama's Power Africa Initiative with the objective to substantially strengthen the institutional capacity of the RREA to promote increased access to electricity service in rural areas of Liberia and manage the rural electrification investment program under the SREP.
Norway	Liberia Electricity Corporation (LEC) Management Contract and Grid Investment Program Institutional	Financing of a Management Contract which is a vehicle for the grid investment program. The contract stipulates connection of 33,000 new customers by 2015, which will re-commercialize and bring LEC connections back to pre-war levels The program is aimed at institution capacity
	Cooperation/Capacity Building in the Ministry of Lands, Mines and Energy	building and strengthening of the energy and water resources sector from the period 2010 to 2015 in order to contribute to the economic and social development of Liberia.
	International Energy+ Partnership	Cooperation Aimed to Increase Access to Sustainable Energy and Reduce Emissions of Greenhouse Gases through the Use of Renewable Energy and Energy Efficiency
GIZ – the Energizing development (EnDev)	Renewable Energy Country Program for Liberia	Working with RREA and other partners to support and promote renewable energy and energy efficiency, including training in solar energy and improved cook stoves.
UNIDO/GEF	GEF Project on RE	With regard to the NREAPs, UNIDO is establishing a UNIDO GEF project targeting RE. The World Watch institute will be supporting the NREAP

		development.
Multi-donor	Rehabilitation and	Rehabilitation of pre-war hydro-electric plant of
(Norway, KfW,	optimization of Mt.	64-MW Mount Coffee to 8oMW capacity.
EIB, GoL)	Coffee Hydropower	
	Plant	

### Background:

Liberia has a draft RE and EE policy developed since 2007 that has not yet been adopted. The Renewable Energy and Energy Efficiency Partnership (REEEP) provided the financial support to the Ministry of Lands, Mines and Energy in the formulation of this policy, while the Center for Sustainable Energy Technology (CSET) provided cofounding and managed the project. It is essential to finalize this RE and EE policy as part of the overall ongoing action plan.

Moreover Liberia has enormous renewable energy potential. Studies on alternative energy sources indicate that the country is endowed with biomass, hydro and solar resources that if fully developed could meet all the critical energy target needs across the country for the planning period and beyond.

Liberia also has a National Energy Policy document: "National Energy Policy (NEP) – an Agenda for Action and Economic and Social Development" adopted by the Cabinet in 2009. The principal objective of the National Energy Policy as stated in the policy document is "to ensure universal access to modern energy services in an affordable, sustainable and environmentally-friendly manner in order to foster the economic, political, and social development of Liberia."

Reference to Renewable Energy and Energy Efficiency, the National Energy Policy of 2009 specifically states that the GOL shall, among others also have the objective to establish energy efficiency standards for all government and commercial buildings and industrial facilities and standards for importation of fuel-efficient vehicles and energy-efficient light bulbs and home appliances. The NEP is also intended to minimize and eliminate loss, theft, and corruption and to promote international best practices in wholesale and retail energy transactions and in the granting of licenses and concessions. The policy also commits the GOL to the development and utilization of all forms of energy to be done on a least-cost basis. Financial, economic, social, and environmental costs shall all be taken into consideration. The NEP supports the collective global effort to control harmful greenhouse gas emissions responsible for climate change and will seek to balance the environmental costs and benefits of all energy programs, while reducing greenhouse gas emissions, improving energy efficiency and raising the share of electricity production from renewable energy to approved target levels.

The National Energy Policy (NEP) also states that it shall be the policy of the GOL to facilitate and accelerate the economic transformation of rural Liberia by establishing a semi-autonomous agency dedicated to the commercial development and supply of modern energy services to rural areas with an emphasis on locally available renewable resources. The agency, to be called the Rural and Renewable Energy Agency (RREA), has already been organized and made functional under the oversight of the Energy Regulatory Body (ERB) and the policy direction of the MLME. The RREA's mandate includes integrating energy into rural development planning; promotion of renewable

energy technologies; facilitating delivery of energy products and services through rural energy service companies (RESCOs) and community initiatives; and facilitating the funding of rural energy projects including managing a Rural Energy Fund (REFUND) that will provide low interest loans, loan guarantees, and grants as targeted subsidies to ensure access by the poor.

The National Action Plan processes for the implementation of the ECOWAS RE and EE Policies and the UN SE4ALL Initiative in Liberia is intended to promote investments in sustainable energy services and improve the energy access situation. The action plan shall be backed by concrete laws, incentives and measures as well as a clear financing investment strategy.

The main Actors include the following: The Consultants – (National Consultant and the International Expert), and ECREEE Team for Liberia, working with the Local Technical Team and Steering Committee shall assist the Ministry of Lands, Mines & Energy and the Focal Point Institution (Rural and Renewable Energy Agency of Liberia (RREA) Collect baseline data for supporting the decisions/setting up of the targets. The Action Plan Process is planned to proceed as follows:

# a. Assessment of Historical data on RE installed/generation capacity, demand, peak load, population with electricity access, etc;

This data collection process shall include but not be limited to a review of previous studies conducted by GOL and some national and international organizations, including previous work done in Liberia. Actors in this process include but not limited to – Winrock International, JICA, Devcon, World Bank, USAID, EU, UNDP, NORAD, LISGIS, MLME, and the RREA, etc. all of which will be consulted by the Consultant and the Technical Team Members for the baseline data assignment;

### b. A review of Plans and policies in place for the energy sector in Liberia;

These include but not limited to a review of the National Energy Policy, RREA Act, Proposed Energy Law, RE and EE Policy, Proposed Electricity Law, Structure of Energy Institutions – both public and private, the role of the International Partners, NGOs, Investors, etc.

## c. Review of existing RE technologies in Liberia: Review previous studies;

These include but not limited to Cook Stoves, Solar Energy (PVs, Solar Water heaters), biomass projects, charcoal & fuel-wood production and distribution, residential and industrial/commercial applications and mini-, micro-, and major hydro-power projects, etc.

# d. Identification of Information gaps and required studies and Development of Renewable Energy, Access, and Gap Analysis.

The Consultant shall assist the MLM&E and the RREA in the development of Renewable Energy, Access, and Gap Analysis. This includes but not limited to review of draft gap analysis studies, reports, plans and targets.

- e. Development of Energy Access Scenarios up to 2030 and Setting up of Targets; ECREEE Templates will be used.
- f. Elaboration of recommendations for policy, incentives and measures at the National level.

The Consultant shall also work with the MLM&E and the RREA in the elaboration of recommendations for policy, incentives and measures at the National level. A Technical Working Team had been organized to include Counterparts from the MLME and RREA to work along with the Consultants on the various aspects of the process.

# g. Organization of Validation and Data Review workshops - Organize and hold National Validation Workshop

For the Validation and Data Review workshops, an Expert Group or Steering Committee consisting of Government Institutions, Private Sector Representatives, Civil Society, NGOs involved in Renewable Energy and International Partners have been organized to convene at appropriate times in the process.

- h. Preparation of Reports the Validation process and validation reports will be followed by:
  - Preparation of Final Reports;
  - Preparation of Brochures; and
  - Preparation of Power Point Presentations

### Status of the Se4ALL Action Agenda and the RE and EE Action Plans:

An SE4ALL Rapid Assessment Gap Analysis Draft Report was completed in March 2013. The Gap Analysis provides a quick brief look at the energy situation in Liberia and reviews the state of the country in terms of the three SE4ALL goals, the main challenges and opportunities for major investments, and the required policies and enabling environments. The Action Plans Process now being undertaken is the next stage of activities that set the basis and background of the SE4ALL Action Agenda activities in Liberia.

For the Action Plans, the project activities have commenced and are currently ongoing

The National Inception Report to ECREEE has been submitted on the 3<sup>rd</sup> of June 2014 and the National Kick off Meeting took place on the 27<sup>nd</sup> of June 2014. Liberia is planning to establish a country expert group or build up on an existing group (e.g. inter-ministerial group) which will serve as the national steering committee (SC) for the development and review of the National Action Plans in close partnership with the Ministry of Energy and other key national stakeholders

#### **Inception Report**

The Inception Report was submitted on May 19, 2014 following successful planning meetings, organization of the Technical Committee and receipt of the letter of endorsement of the project and the Consultancy assignment from the MLME.

#### **Kick Off Meeting**

The Kick-Off Report was submitted on August 14, 2014, Photos file was submitted as an appendix document on the 14<sup>th</sup>.



# Relevant Outcome or Lessons Learned and Conclusions of the National High Level Kick-Off Meeting

- The Ministry of Lands Mines and Energy has embraced the NREAP, NEEAP and SE4ALL Action Agenda Project and sees it as a breakthrough in its efforts aimed at developing RE in Liberia. The project comes at the time when the Alternative Energy Bureau of the Ministry was seeking funding for its RE planning process.
- 2. The RREA, like the Alternative Energy Bureau welcomes the project pointing out that it falls in line with programs already earmarked for implementation. This project will lend the needed perspectives to be highlighted at the national level. The RREA also sees the Consultant's role as being helpful in its RE Planning process.
- 3. The LEC anticipates a breakthrough to buttress its efforts in the fight against power losses through technical, commercial and unspecified means.
- 4. The private sector participants in RE are desirous to see government policies, and regulations and incentives that encourage private sector participation at a major level in RE generation and distribution in Liberia.
- 5. The Women expressed strong desire to play a major role in the RE development and utilization in Liberia and urge the project to highlight their interests at the national level in the action plan.
- 6. The young people are looking keenly at the project to chart a course whereby they may gain professional experiences, training and jobs in the RE development program in Liberia.
- 7. As a lesson it is important to note that funding of the energy planning activities are a very essential component. While the provision of a Consultant is covered, timely founding of other operational aspects and the participation of the technical team members and the Steering Committee validation workshops is essential for a timely implementation of the project.

### Status of Data Collection/Baseline Report

Initial progress has been made in gathering historical data and baseline reports on the Liberian Energy Sector. The following reports, studies and documents have already been received:

18 documents/reports from RREA;

38 documents reports and templates from ECREE High-level workshops, e-mails and Website;

16 documents/reports from MLM&E

And other reference materials

The National Consultant has began consultations and contacts to visit various stakeholders, institutions and professionals in the energy sector of Liberia to collect remaining information.

### Status of the formation of the Country Expert Team

A Technical Project Committee has been organized and is operating. The Country Expert Team (Steering Committee (SC)) has been structured and reactivation process (Convening the SC, discussion of project, setting of Sub-Committees, distribution of tasks, TOR, etc) is our next target. The Country Expert group is build up on an existing group (e.g. inter-ministerial group) called the Renewable Energy Expert Group that previously existed. It will be reviewed to finalize the new "Renewable Energy & Energy Efficiency Action Plan Expert Group" which will serve as the national committee for review and validation of the Data to be collected, and the final report validate. (See Appendix 1: List of Steering Committee Members). It was emphasized at the Kick-off meeting that only committed people will be considered to be on the Renewable Energy & Energy Efficiency Action Plan Expert Group. The next action planned for the completion of the Country Expert Team or Steering Committee (SC) formation is for those agreed upon to be given letters of appointment or invitation from the Ministry of Lands, Mines and Energy. This will be followed by convening the SC for briefing and distribution of roles, tasks and TOR especially in the baseline data collection process. The SC will also convene for the Validation Workshops.

These meetings will require funding. We have submitted a budget for the projected meetings of the Technical Committee and the Steering Committee but have yet to receive a response from ECREEE.

### Upcoming and planned activities

- Develop the National RE and EE Baseline reports and the RE Scenario Report. Collect and validate the baseline data at a planned workshop (date to be confirmed).
- Draft the National Action Plans and discuss targets, measures, scenarios and actions in meetings with key stakeholders
- Present and discuss the draft National Action Plans in a workshop. (Technical Committee Review Workshop on the measures, targets and scenarios for RE&EE 2020/2030)

### **Timeline Revision Needed**

Presently, as mentioned in our transmittal letter to the Kick-Off report, there is an outbreak of the deadly EBOLA Virus Disease (EVD) Epidemic situation prevailing in Liberia which has resulted to the Government declaring a State of Emergency, Curfew, and other health and security measures (including a general compulsory leave to all government workers except "Essential Staff", reduced working hours, etc.). This situation is more than very likely resulting to event beyond the Consultant's control that may need review of the Implementation Timeline earlier submitted in the Inception Report.

# Mali: MLI

# National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Director of Energy	Mr. Ismail Touré
National Focal Person for ECREEE (NFI)	CNESOLER: Mr. Sékou Omar Traoré
National SE4ALL Country Focal Point	TBC
ECREEE	
ECREEE Team	Ibrahim Soumaila/Hyacinth Elayo/Karin Reiss
National consultant engaged by ECREEE	Mr. Bagui Diarra
International Experts engaged by ECREEE	Mr. Edgar Blaustein

# International Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	Apart from grants received through the ACP-EU Energy Facility, and the "Call for proposals in brittle countries" program for rural electrification in 5 countries including Mali, the EU has no specific support confirmed for the development of national action plans and SE4ALL. There will be a mission by the EU SE4ALL Technical Assistance team to the country.
World Bank	The World Bank is supporting the implementation of SE4ALL in Mali.  Also through the SREP "Scaling Up Renewable Energy Program in Low Income Countries", which is a target of the Strategic Climate Fund (SCF) program, which is also one of the two funds under the Investment Funds climate (FIC). It supports the development of solutions and renewable energy markets in the world. Mali was selected as a pilot country among the target program countries. SREP is underway in Mali and its support is crucial in the effective implementation of national action plans and SE4ALL program and the whole energy sector;  The joint World Bank project and International Finance Corporation "lighting Africa" aims to mobilize and support the private sector in the sustainable provision of modern off-grid lighting products, and creating together a sustainable business platform for modern off-grid lighting products to reach 250 million people in 2030. In 2013, the project has integrated a component on domestic lighting by certified Lighting Africa portable solar lamps and energy efficiency in the hybrid system project of SREP. Thus the project provides an
African Development Bank	enabling framework process.  ADB supports the development of the NREAPs under its project "PAPERM" which has three components: the first is to improve the political, legal, regulatory and institutional framework for promoting investments in renewable energy; the second is focused on capacity building, knowledge management, communication and advocacy for renewable energy; and the third will strengthen the process of monitoring and evaluation of the subsector as well as the programmatic approach under the SREP-Mali.
GIZ	GIZ hosts the PACT-GIZ or ELCOM (Municipal Electrification) whose objective is to ensure a project first access to electricity in rural areas of Mali through the

	support of municipalities for solar equipment major public infrastructure (CSCOM, schools and town halls) and the establishment of municipal sewage, solar charging batteries for individuals.
UN-Women	It is implementing, with the support of AMADER, the project "Support to the economic empowerment of rural women in the context of food insecurity and climate change in Mali", whose overall objective is to promote the use productive energy by rural women and the reduction of time spent on household chores in order to contribute to economic empowerment in the context of food insecurity and climate change.
IRENA/ Abu Dhabi Fund	<ul> <li>Supports a rural electrification project in 30 communities with hybrid systems in collaboration with AMADER;</li> <li>IRENA supports the implementation of the Atlas of renewable energy in Mali in collaboration with CNESOLER.</li> </ul>
KfW	• Supports the implementation of 14 rural electrification projects (central and mini-grids) with hybrid systems.

### Background:

The national final energy consumption in 2012 is 3157 Ktoe distributed between biomass energy (74.4%), petroleum products (21.5%) and electricity (4.1%). Renewable energy (hydro, solar, wind, etc.) provide a basis for electricity production, with 156 MW of hydro and 10 MW for solar PV and wind power. The average energy intensity is about 0.6 ktoe/billion GDP; The urban electrification rate in 2012 is 64.01%; The rural electrification rate is 7.20% (based subscription) and 17.78% (based Public Lighting); The final energy consumption per capita is around 0.210 toe/inhabitant in 2012.

Mali has put in place several structures that support the development of RE, EE, rural electrification and household energy. The energy sector is well managed by seven (7) Government departments, five (5) Central Services, five (5) custom services, and a regulator (CREE).

Other important actors in the energy sector include:

- The public concessionaire for the provision of electricity services of (Energy From Mali.SA);
- 2 companies providing decentralised electricity services (Yeelen Kura and KAMA-SA);
- Two private operators in the field of Rural Electrification (PCASER / AMADER); and
- 1 IPP "SOPAM ENERGY", whose electricity generation is based on thermal production and the electricity is sold entirely to the national utility.

In the existing framework, key structures related to the development of national action plans and SE4ALL are:

- CNESOLER: created in 1990, the center's mission is, among other things, the collection of data, research and development, production and marketing of appropriate technologies and equipment and the provision of training and support to artisan groups and small-tomedium enterprises;
- ii. DNE: created in 1999, is in charge of defining the elements of the energy policy, the overall planning and coordination of activities of energy actors;

- iii. CREE: created in 2000, is an autonomous and independent body that primarily supports the pricing of public service management is delegated to authorized dealers, consumer protection and respect of the competition;
- iv. AMADER: Established in 2003, the main mission is to control the consumption of domestic energy and community management of forests and the development of access to electricity in rural and suburban areas;
- v. ANADEB: Established in 2009, the mission of the agency is, among others, to ensure the continued availability of biofuels on the market, ensure cooperation between national and international partners in the field of biofuels, to participate in defining standards for biofuels and monitor their implementation;
- vi. AEDD: Established in 2010, the challenge is to achieve sustainable development through effective management of the environment, focusing on the preservation of biodiversity, the fight against desertification and climate change.

In addition to these various institutional changes, the Government of Mali in 2006 adopted the National Energy Policy, the overall objective is to contribute to the sustainable development of the country through the provision accessible to the greatest number of people to energy services lower costs and to the advancement of socio-economic activities.

This policy (which is currently being revised) contains sector targets:

- Secure and increase electricity coverage in the country from 14% in 2004 to 45% in 2010 and 55% in 2015;
- Increase the rural electrification rate from 1% in 2005 to 12% in 2010 and 55% in 2015;
- Promote the widespread use of RE technologies and equipment and increase the share
  of RE in the overall energy mix from less than 1% in 2004 to 6% in 2010 and 10% in
  2015;
- Develop the bioenergy industry, including production of biofuels for various uses (power generation, transportation, agriculture, etc.). This programme led to the creation of ANADEB and has set the following targets results:
  - 39.2 million liters of jatropha oil produced in late 2015 (10%);
  - 56 million liters of oil jatropha produced by the end of 2020 (15%);
  - 84 million liters of jatropha oil produced in late 2025 (20%); and
  - Annual output of 20 million liters of ethanol.
- Create and update information and a bank of reliable energy data system. This
  objective has produced every year since 2008 the Energy Information System.

In addition to the National Energy Policy, the Government of Mali in 2009 implemented reforms of the energy sector. This policy resulted in the separation of the electricity and water sectors, "". The tariff structure was also revised in 2009 and 2013.

The Government also adopted the following:

- National Strategy for the Development of Renewable Energy in 2006;
- National Strategy for the Development of Biofuels in 2008;
- National Strategy for the Development of Energy Management in 2010; and
- National Strategy for the Fight against Climate Change in 2011.

The National Action Plan 2013-2033 prepared by the CNESOLER (prior to this current assignment) aims at the following objectives:

- Increase the share of RE in the overall energy mix from 1% to 10% in 2033;
- Increase the share of RE in electricity production from 5% to 25% in 2033;
- Increase the share of bioenergy in renewables from 1% to 10% in 2033.

Also, the Government of Mali has established a favorable setting of the private sector. This framework is characterized among other things: i) Order No. 019 / P-RM by which it is separated from public service management of electricity and will guarantee free competition; ii) the establishment of the Agency for Investment Promotion; iii) the investment code; iv) promoting the framework of public-private partnerships, etc.

The regulatory framework for energy efficiency is non-existent for. It however exists for the RE subsector but inadequate to meet national and regional targets which favour an ambitious RE development.

#### STATUS OF ACTION PLAN PROCESS ACTIVITIES

The Inception Report of the implementation process in Mali has been sent to ECREEE following its approval by the Ministry of Energy on 30<sup>th</sup> May, 2014.

The National Kick off meeting took place on from 26th-27th June 2014. The report was submitted following its approval by the Ministry of Energy on 19<sup>th</sup> July, 2014.



The workshop recommended that the existing Multi-sectorial Committee on Energy, created in 2006 by ECOWAS, within the framework of the implementation of the ECOWAS / UEMOA White Paper on Energy Access of the, be retained as the "country Group" but re-constituted to ensure effective consultation and implementation of the action plan development process. The Committee was therefore given a broader mandate and expanded to include new members, bringing the total to 42. A Technical Secretariat composed of 13 members from various energy agencies was also created within the committee to deepen synergies with the National Consultant and facilitate the data collection and processing process. Within the framework for the development of the national action plans and based on a request by the Ministry of Energy, ECREEE has also engaged the National Consultant to support the Ministry to carry out the following activities:

 Prepare bid invitation documents for the development of RE power plants on a Build Own Operate and Transfer (BOOT) basis;

- o Review the National Energy Policy adopted in 2006; and
- o iii) Review of Ordinance No. 019 / P-RM on the organization of the electricity sector.

An overall schedule of meetings required to develop the action plans, and the above activities was prepared and sent to ECREEE on 17<sup>th</sup> July. The agenda and corresponding budget for the Kick-Off Meeting was also submitted, with ECREEE covering 25% of the total costs and the rest borne by the Ministry of Energy.

Preliminary meetings regarding data collection, measures and scenarios were initiated by the National Consultant in collaboration with the Ministry of Energy and the Multi-sectoral Committee respectively. The Director of Operations of the World Bank also provided useful information regarding partners providing technical and financial support to Mali's energy sector. Other relevant national data were also identified and collected.

In addition, prior to the commencement of the national action plans development process, Mali received in April 2013, the SE4ALL rapid assessment and gap analysis.

## Upcoming and planned activities

- Enhanced mobilization and effective structures Multi-sectoral Committee, sectors of transversal energy planning and sustained technical and financial partners before the end of September 2014 involvement; Stakeholder consultation?
- Collection and validation of data, measures and scenarios for the development of RE and EE before the end of October 2014;
- Development and validation of the NREAPs, NEEAPs and SE4ALL Action Agenda by the end of November 2014.

# Niger: NER

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	National Authorities
Director Of Energy	Mr. Issa Maidagi
National Focal Person for ECREEE (NFI)	Ministry of Energy: Mr. Bello NASSOUROU
National SE4ALL Country Focal Point	TBC (nomination is ongoing)
ECREEE	
ECREEE Team	Ibrahim Soumaila/Hyacinth Elayo/Karin Reiss
National consultant engaged by ECREEE	Mr. Yari Rabiou Hassane
International Experts engaged by ECREEE	Mr. Toby Couture and Mr. Mamadou Dianka

### Background

The majority of the populations in Niger are without access to electricity or the services it provides, with traditional biomass accounting for 80% of the domestic energy needs of the population, which in turn leads to overexploitation of wood resources. Conventional energy represents only a fraction of the final energy consumption, corresponding to less than 20% of the total energy consumption (17% for petroleum products and 3% for electricity).

Modern energy services are crucial to human well-being and to a country's economic development; The lack of access to modern energy services has resulted in the extreme poverty rates prevalent in the country. The government has therefore identified increase in electricity access as a priority in the fight against poverty and the attainment of the Millennium Development Goals (MDGs).

### Status of the Se4ALL Action Agenda and the RE and EE Action Plans:

Currently, a Steering Committee made up of relevant national stakeholders has been established to oversee the development of the National Action Plans. The first meeting of the Committee took place on the 22<sup>nd</sup> of May 2014. Furthermore, the National Kick off Meeting held on 21<sup>st</sup> July 2014 attended by over 100 participants working in the energy and related sectors. The workshop agenda was structured around three sessions. The opening session comprised three speeches from the Governor of Niamey; the representative of the ECREEE Executive Director, Mr. Ibrahim Soumaila; and the Honourable Minister for Energy and Petroleum of Niger, Mr. Foumakoye Gado.

The second session featured the following presentations:

- The process for the development of NREAP, NEEAP and SE4ALL, by Mr Ibrahim Soumaila, Representative of ECREEE;
- The energy situation in Niger, by Mr. Issa Maidagi, Director General for Energy of Niger;
- The energy balance of Niger, by Mr. Amadou Soumana, Expert at the Ministry of Energy;
   and
- Detailed Overview of Action Plan Development Activities and Methodology for Executing the Assignment, by Mr. Rabiou Hassan Yari, National Consultant

A question and answer (Q&A) session thereafter followed and valuable contributions and observations were provided.

At the end of the proceedings, participants made the recommendations aimed at deploying strategies to implement, facilitate and ensure ownership of the national action plan development process. The recommendations include: a) Government should:

- Ensure increased access and expansion of energy services for the rural population;
- Consider municipal development in its energy planning;
- Measure the level of attainment of the MDGs; and
- Reduce the country's dependence on imported fossil fuels through increased energy production from renewable resources.
- b) Civil society should:
- Build partnerships in the area of advanced technology and sustainable less business models;
- Participate in the monitoring of the achievement of the MDGs; and
- Promote the use of all energy resources and mobilize the partner community.

### c) The Private Sector should:

- Place emphasis on off-grid electrification;
- Establish more public private partnerships (PPPs) to address energy access and energy poverty.

#### d) The National Consultant should:

- Incorporate feedback from the participants;
- e) The technical and financial partners should:
  - Support Niger in the fight against energy poverty and the elimination of barriers to energy access:
  - Further build capacity of stakeholders.

#### Upcoming and planned activities

- Validation of baseline data and development of draft National Action Plans is expected to be completed by the 3rd of September, 2014.

# Nigeria: NGA

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Director Of Energy	Ministry of Power: Engr. Abayomi Adebisi
National Focal Person for ECREEE (NFI)	Engr. Faruk Yusuf Yabo
National SE4ALL Country Focal Point	Engr. Faruk Yusuf Yabo
ECREEE	
ECREEE Team	Hyacinth Elayo/Karin Reiss/ Ibrahim Soumaila
National consultant engaged by ECREEE	Dr. Afolabi Otitoju
International Experts engaged by	Roman Ritter and Austrian Energy Agency (Leonardo
ECREEE	Barreto, Cornelia Schenk, Andrea Jamek)

### International Other partners supporting the Action Plan Process

Partner	Type of Support
GIZ	Currently with the support of GIZ, Nigeria is reviewing all its policies related to RE and setting up incentives for RE, such as the feed in tariff system. A Baseline of EE in buildings has also been drafted by GIZ.  In course of its Nigerian Energy Support Programme, GIZ supports the Nigerian NREAP and NEEAP in the following way:  • Provision of information on the Nigerian energy sector (Institutional and Policy Mapping Study, Energy Sector Study) and baseline information (EE in buildings, SWH and industry)  • Comments on operationalizing the Action Plan templates
	Backstopping support to the National Consultant
	Support in hosting the validation workshop
European Union	Energy is a focal sector for EU with a priority on electricity access of Northern
	States. There will be a mission by the EU SE4ALL Technical Assistance team to the country.

## Background

Besides the drafted RE and EE policies, Nigeria has a Rural Electrification Strategy that has just been finalized. Nigeria is also one of the SE4ALL pioneer countries; the presidential launch of SE4ALL took place in 2012. The National Renewable Energy and Energy Efficiency Policy is at its final stage of approval by the Federal Executive Council of Nigeria. The Rural Electrification Strategy and Implementation Plan is also in the final stage of approval by the Federal Executive Council of Nigeria.

### Status of the Se4ALL Action Agenda and the RE and EE Action Plans

The National High-Level Kick-off event was held in conjunction with the Inauguration of the National Council on Power (NACOP) on 14th August 2014 (see Kick-off report for further details).

The data collection exercise has been concluded and a data validation workshop date was organised on 12<sup>th</sup> September 2014. The draft baseline report is currently at an advanced stage.

Nigeria adopted the existing structure i.e. the Inter-Ministerial Committee on Renewable Energy and Energy Efficiency at the Steering Committee. The thematic working groups were established based on this structure but other relevant Ministries, Departments, and Agencies (MDAs) that have key roles to play in developing the templates have been included.

## Upcoming and planned activities

Activities	Timelines
Workshop 1- Draft baseline and scenario report (Thematic Groups)	4 <sup>th</sup> September 2014
Workshop 2, validation of measures, targets, trajectories (Thematic Groups only)	4 <sup>th</sup> of September
Workshop 3 National Validation Workshop on the Measures, Targets and Scenarios for RE&EE 2020/2030 and Presentation of 1st draft of Action Agendas (ICREEE) Please Note that due to logistics reasons and time constraints the draft may be circulated round the ICREEE team and feedback integrated in preparation of final presentation. National Consultant to discuss this further with the FmoP team.	TBC
National workshop hosted by the Honorable Minister inviting ECREEE and partners, International Partners, ICREEE and other stakeholders. The event will mark a pre-approval stage of the documents and ensure that the Nigerian version aligns with regional expectations	End of October 2014 (Date to be confirmed
Finalise the Action Plan documents and submitting same to ECREEE	November 2014

# Senegal: SE

# National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	National Authorities
Director Of Electricity	Ministry of Energy and Renewable Energy development:
	Mr. Ibrahima Niane
National Focal Person for ECREEE	Ministry of Energy and Renewable Energy development
(NFI)	: Mr. Ibrahima Niane
National SE4ALL Country Focal Point	Mr. Ousmane Fall Sarr , Mme Sow Fatou Thiam
ECREEE	
ECREEE Team	Ibrahim Soumaila/Hyacinth Elayo/ Karin Reiss
National consultant engaged by ECREEE	Mr. Ngom Emile
International Experts engaged by ECREEE	Mr. Edgar Blaustein, Ms. Sofia Martinez, IDAE

## Other International partners supporting the Action Plan Process

Partner	Type of Support
KFW	Solar plant of 8,5MWp at Disez (special economic area), 3,4 MWp Hybrid Solar diesel plants for Kidira, Goudiri, Médina Gounass, Saloum Islands where there are pure diesel plants.
World Bank	The World Bank is extensively involved, and is supporting the development of the Investment Prospectuses and funding strategy, as part of its SE4ALL-TAP. The WB is also supporting efforts on rural electrification in the country as well as energy sector governance and management.
GIZ	National strategy on energy efficiency
UEMOA	20Mwp solar plant in Touba
United Arab Emirate	15MWp solar plant in Niakhar
Private companies	Power purchase contract with Senelec for a total of 150MW wind power and 180MWp for solar was signed in December 2013.
IFDD	Energy efficiency in administrative buildings
ISDB	Solar and hybrid power plants in 143 localities
European Union	Energy access for 50, 000 people

## Background:

In Senegal, the energy sector is characterized by a dependence on petroleum imports. The high level of energy dependence of the country places a heavy burden on public finances in particular in the electricity sector.

In addition, there is a huge gap between rural and urban areas. A large proportion of households in peri-urban and rural areas have no access to modern energy services. Rural energy access rate is 26%. In response to the energy poverty and security issues prevalent in the country, the Senegalese government developed a policy to improve access to modern energy services.

The Senegalese Agency for Rural Electrification (ASER) has been in operation since 1999.

In 2011, Government created the Senegalese agency for economy and energy efficiency (AEME) to promote energy efficiency and Ecovillage National Agency to promote clean energy.

The National Agency for Renewable Energy (ANER) was also created in 2013 to promote the use of RE, including bioenergy in all sectors.

There was a Feasibility Study for Solar installations carried out by UEMOA which was validated in Dakar in July 2014.

### Status of the SE4ALL Action Agenda and the RE and EE Action Plans:

The National Inception Report was submitted to ECREEE on the 4<sup>th</sup> of June 2014. The expert group and the National Steering Committee (SC) for the development and revision of the National Action Plans is taken to be the CIMES (Inter-sectoral Committee with synergies between actors in the energy sector and other strategic sectors) .The National Kick -off -Meeting to launch the process took place on 18<sup>th</sup> July 2014 (report already submitted to ECREEE). Data collection is currently underway.

### Upcoming and planned activities

- Collection and validation of baseline data is expected to be carried out by 15<sup>th</sup> October 2014.
- Preparation of the National Action Plans and discussions of the objectives, actions with key stakeholders will take place by the 15<sup>th</sup> of November 2014.
- Presentation and discussions of the draft National Action Plans in a workshop is planned for no later than the 15<sup>th</sup> of December 2014.

# Sierra Leone: SLE

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	
Director Of Energy	Mr. Benjamin Kamara
National Focal Person for ECREEE (NFI)	Ministry of Energy : Mr. Robin Mansaray
National SE4ALL Country Focal Point	Mr. Benjamin Kamara
ECREEE	
ECREEE Team	Hyacinth Elayo/Karin Reiss/ Ibrahim Soumaila
National consultant engaged by ECREEE	Dr. Patrick Tarawalli
International Experts engaged by	Mr. Roman Ritter; Mr. Leonardo Barreto, Ms.Cornelia
ECREEE	Schenk, Austrian Energy Agency

### Other partners supporting the Action Plan Process

Partner	Type of Support
European Union	Sharing knowledge based support with the national expert group in the action
	plan process
African	MoE request to support capacity building for SE4ALL programmes in the
Development	country and sharing knowledge-based support with the national expert group
Bank	in the action plan process
UNDP	Sharing knowledge-based support with the national expert group in the action
	plan process
UNIDO	Sharing knowledge-based support with the national expert group in the action
	plan process

### **Background**

Sierra Leone has been selected as a focus country for the SE4ALLAfrica Hub. AfDB will support Sierra Leone on the development of the SE4ALL Action Agenda. Sierra Leone has also requested support from ECREEE for the development of the policy and the plans for RE and EE as they plan to develop an RE policy as soon as possible.

ECREEE will be supporting the development of the National Action Plans in close cooperation with the Ministry of Energy and other national and regional key stakeholders;

### Status of the Se4ALL Action Agenda and the RE and EE Action Plans:

Sierra Leone submitted its National Inception Report and the National Kick off Meeting took place on the 20<sup>th</sup> of June 2014. The national consultant distributed the drafts of the baseline report, NREAP and NEEAP of Sierra Leone for review and comments to the Ministry of Energy, National Expert Group and further stakeholders on 27th October 2014. However, As a result of the national public health emergency and the global public health emergency due to the deadly ebola outbreak Sierra Leone has asked for an extension on the development of the three action plans scheduled to be finalized at the end of December 2014.

# Upcoming and planned activities

- Develop the National EE Baseline Report and the ECOWAS Energy Efficiency Action Plans (EEEAPs)
- Develop the National SE4ALL Action Agenda considering the validated template from September/October

# Togo - TGO

### National and ECREEE Action Plan Implementation Team

Function	Name
National Authorities	National Authorities
Director Of Energy	Mr. Abiyou Tcharabalo
National Focal Person for ECREEE (NFI)	Ministry of Energy: Mr. Traoré K. TCHAKPIDE
National SE4ALL Country Focal Point	TBC
ECREEE	
ECREEE Team	Ibrahim Soumaila /Hyacinth Elayo/Karin Reiss
National consultant engaged by ECREEE	Mr. Tiem Bolidja
International Experts engaged by ECREEE	Mr. Toby Couture and Mr. Mamadou Dianka

### Other International partners supporting the Action Plan Process

Partner	Type of Support
European Union	Energy is a focal sector for the EU in Togo. EU is available to support the reforms in Togo and review the institutional framework, studies, training and financing of projects in the energy sector with particular emphasis on the RE. A consultant has been engaged to conduct a needs assessment in the process. The EU SE4ALL Technical Assistance team is setting up a capacity building programme targeting CEET, the Ministry of Energy and the regulator (ARSE) with the creation of a rural electrification agency and a rural electrification fund.
African Development Bank	AfDB declared its intention to support Togo in the energy sector
UNDP	UNDP supports the Ministry of grassroots development in the establishment of multifunctional platforms. UNDP conducted a gap analysis in 2012.
UEMOA	UEMOA finances projects in the energy sector through its Development Fund for Energy and Development Program for Renewable Energy and Energy Efficiency (PRODERE). 22 villages are benefiting from solar electrification.
AFD	AFD finances the development of an electrification master plan of Togo and has pledged to support Togo in organizing a donors' conference on financing projects from the Master Plan.

### **Background**

Togo is a state of 57,000 square kilometers in West Africa bordered by Ghana to the west, Benin to the east, Burkina Faso to the north and the Atlantic Ocean to the south. According to the last General Census of Population and Housing (RGHP) conducted in November 2010, Togo has a population of 6.2 million and growing at 2.8% per year.

Togo imports almost 70-80% of its electricity from neighboring Ghana, Ivory Coast and Nigeria. The main challenge for the sector is to ensure improved access to affordable and stable supply of diversified energy sources including clean and renewable energy from local resources.

The national rate of household energy access was 26% in 2013. The rural area energy access rate is 5%. Analysis of access to electricity at first glance shows that this rate has seen a marked increase in all poverty quintiles in urban and rural areas. However, significant disparities between urban and rural areas in different regions remain.

The sub-sector of renewable energy is characterized by the absence of laws and regulations as well as the lack of an institutional and organizational framework.

The government of Togo is currently drafting policies and strategies to support the development of RE and EE projects devoted to electrification and access to energy in rural and peri-urban areas.

An Energy Policy has been developed in 2011 but not yet adopted In view of the institutional and technical developments in the electricity sub-sector on one hand and the lack of capital constraints associated with privatization of productive sectors of the economy on the other hand, the electricity sector has undergone profound changes in 2000 with the adoption of the law 2000-012.

This law has liberalized the production of electrical energy throughout the country. However, even though production activities are performed for the purpose of generating electricity, they are exploited as part of a public service. Thus, production is subject to the requirements of public service and operation to go through the signing of a concession agreement between the state and the third-party operators.

Transmission and distribution of electricity may be entrusted by the State to one or more public or private entities through one or more franchise agreements. Small concessions may be granted in the framework of decentralized rural electrification.

In addition, an Electrification Master Plan is being implemented by SNC Lavalin and covers the period 2014 - 2028. This plan will provide options for off-grid electrification and provide the basis for the SE4ALL Action Agenda.

#### Status of the Se4ALL Action Agenda and the RE and EE Action Plans:

The National Inception Report has been submitted to ECREEE on 11th August 2014 and the National Kick off Meeting was carried out on 12th August 2014. The launch was attended by delegates from the five economic regions of Togo. National consultant N.C has established the Country Expert Group. The draft Ministerial Act for the creation of the group has been finalized and letters have been sent to the relevant institutions to nominate members. N.C completed the data collection exercise and organized the data validation workshop.

#### Upcoming and planned activities

A tour of cities of the five economic regions of Togo will commence from 15<sup>th</sup> - 21<sup>st</sup>
 September 2014 to sensitize local authorities, civil society groups, and other stakeholders on the national action plan development process.