



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

Concept note

ECOWAS Renewable Energy Investment and Business Initiative 1st Edition of the RE Investment and Business Forum

27th and 28th of September 2012, Dakar, Senegal



2012 INTERNATIONAL YEAR OF
SUSTAINABLE ENERGY
FOR ALL

Co-organizers



*An ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) activity
jointly organized with African Development Bank (AfDB)*



Introduction

The ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) is starting an ECOWAS Renewable Energy Investment and Business Initiative (EREI) and the first milestone is the organization with its finance partners, of an Investment and Business Forum for Renewable Energy Projects in the ECOWAS region. This Forum is part of an effort to fulfill the ECREEE's mandate to attract investments on Renewable Energies (RE) laid out in the *ECOWAS White Paper on improving access to energy services* for population in the region, with a focus on rural and peri-urban areas.

Notwithstanding the abundant RE resources within the ECOWAS region, it is generally acknowledged that without major investments in sustainable energy frameworks and infrastructure in West Africa, the region energy access, energy security and climate objectives cannot be achieved simultaneously in the forthcoming decades. Major investments are required to enhance the development of renewable energy markets in the ECOWAS region.

The mid-term objectives of the EREI are:

- To foster and endorse investment to promote RE infrastructure projects in West Africa
- To facilitate the execution of RE investment projects in the region;
- To link up different stakeholders involved in the finance and development of RE infrastructure projects in West Africa
- To decrease the misperceptions on investment of RE projects in West Africa through the appraisal from ECREEE, an specialized agency of the ECOWAS Regional Government
- To create a link between project promoters and financial partners and potential investors of these infrastructure projects
- To become a meeting point for stakeholders interested by the RE sector of West Africa
- To finance preparatory and feasibility activities of RE Infrastructure Projects in the region
- To show the RE power sector in West Africa more attractive for Direct Foreign Investment (DFI)
- To provide reliable and updated information about existing and identified RE projects in the region

II. Background

The RE investment initiative is undertaken in the context of encouraging development in the ECOWAS region showing its RE sector as an investment opportunity.

II.1 West Africa RE sector as an investment opportunity

The RE sector in West Africa shows good investment opportunities for the following reasons:

- The energy market is continuously growing in the ECOWAS Member States. However, the capacity installed increases at a lower rate than the demand growth. The difference in supply



and demand pattern leads to deficit in supply. So, there is a demand to be met and energy supply infrastructures need to be increased;

- The global fossil fuels markets have been characterized by high prices and volatility since 2003. Therefore, the former model for providing energy services using fuels may not be able to meet growing demands for energy in the region, as it is neither sufficient nor affordable. At the same time, RE technologies costs are decreasing continuously in the last years and are expected to continue dropping
- New regulatory framework is under elaboration at regional level as well as national level in many countries. Countries such as Cape Verde, Ghana and Senegal have adopted RE Law.

II.2 Main challenges to investments in West Africa RE sector

Capital costs impacting on the electricity purchase price

The energy price target of the ECOWAS White Paper strategy is of particular importance when it comes to RE. For energy services to be provided at *affordable prices* there is a need for production at competitive cost. For renewable projects, this means to lower cost of capital as that is the major part of the project cost. The structure of this capital is basically a mix of Equity, Debt and Grants. The misperceptions of risk on those capital components are impacting capital cost and could be lowered with reliable information on project status. By creating a link between project promoters and its financial partners and potential investors in the renewable energy projects of the region, ECREEE's aim is to mobilize financial support for these projects.

PPA Guarantee

Two challenges, in particular have to be addressed in the communication to promote investment on RE projects in West Africa: the guarantee in the capital investment and the return expected. Both are summed as PPA to be paid during the project lifetime. Once an investor assesses its risk and returns and takes decision to invest, the main question is to know who will pay to reimburse the investment and to guarantee the return. That guarantee is of particular interest in West Africa because of financial difficulties faced by power utilities and because of their ownership by Governments which have many more challenges to deal with. Fortunately, the issue of a guaranteed PPA is a major component of RE regulatory projects which are under development in some countries of the Region. Till that policies are fully applicable, concerning the capital security, there are guarantee institutions such as the Multilateral Investment Guarantee Agency (MIGA) completed by many more risk-hedges available from the private sector.



II.3 Incentives to Capital investment in the market

The Public sector contribution to RE finance

Governments and public institutions have a crucial role to play for RE deployment in West Africa. There are still misperceptions on cost of RE technologies and related risk factors which influence that cost. The IEA-RETD study (2011) had concluded that deployment of large scale RE projects needs support from public institutions, namely governments and development and investment banks. The contribution of public sector should include followings:

- Awareness raising by governments to disseminate reliable information on RE technologies, costs and related risks and demonstration that investment on RE can be advantageous in the long term. The Government can also lead by example to facilitate public and corporate acceptance of RE technologies by installing RE technologies on public buildings.
- Governments have influential place in Boards and Committees of investment and development Banks that they can use on RE favorable orientation lending policies.
- Tailored Policies on strategic parts of RE technologies value chain: Because RE technologies are still in a process of innovation, there should be tailored policies on value chain components which can promote a strategic deployment of RE technologies taking into account the inverse evolution of value on product and services that product allows to access.

The private sector contribution to RE finance

The amount of investment needed for RE deployment in the region justifies implication of private sector which can be leveraged by public contribution. Private sector can be commercial banks, Energy Services Corporate (ESCOs) and pension funds. The later are of particular interest in the context of financial crisis where many soft services sectors loose much attractiveness. The RE infrastructure projects need high upfront investment which is easy to mobilize by those funds and long term return of the investment can satisfy those organizations.

Therefore, the private sector encouraged by public sector involvement can contribute to attract investment in the region RE sector.

III. The ECOWAS Renewable Energy Investment and Business Forum

The ECOWAS RE Investment and Business Forum (the Forum) is the showcase of the EREI, where periodically; investors, lenders and promoters of RE projects in West Africa will meet under the umbrella and sponsorship of ECOWAS Governments, through its specialized agency ECREEE. For the first edition planned on 26 and 27 of September in Dakar (Senegal), three sessions are planned in the agenda.



Session 1: Roles of different stakeholders in RE projects in West Africa

The focus of this part is to present the role of public and private institutions on RE deployment considering existing initiatives in the region. The Government of Senegal passed a RE Law in 2010 and is managing a portfolio of projects which includes exploitation of wind resources in the northern part of the country. The European Union Delegation in Burkina Faso is financing a major PV investment of 20 MW. In 2012, VRA and the Public Utility and Regulatory Committee (PURC) of Ghana agreed on purchase of electricity from a 2 MW solar PV power plant. In 2011, Cape Verde, through CABEOLICA project, inaugurated the largest wind farm of the region (25 MW). The project investment was funded by EIB and AfDB loans and fund equities from the African finance corporation, Finfrund, Infracore and Cape Verde Government. In 2008, ADDAX initiated The Makeni ethanol power project (MEPP) in Sierra Leone to be operational in 2013. The project aims at production of bio-ethanol for domestic use, power to the grid and energy exports.

Session 2: Group discussions and Networking cocktail

Many of the Finance institutions targeted by the Forum have different investment windows differentiated by project promoter nature, whether it is public or private. Also, those institutions have different financial products according to whether the project is commercially viable or not. This session aims to provide project promoters a platform to sell their project to appropriate audience as well as to share experience with other promoters having similar needs.

The networking cocktail, important part of the Forum activities aims to create a convivial ambiance to allow promoters and finance institutions to discuss business in one-to-one approach.

Session 3: ECOWAS RE investment potential

The ECOWAS region is endowed with huge untapped RE resources, exploitation of which demands that these resources are properly estimated. For this reason ECREEE, in partnership with USAID and with technical assistance of Nexant Inc launched the assessment of solar and wind resources of the region¹. The Bioenergy crops potential in the region is assessed in partnership with Quinvita under the ECOWAS bioenergy program. Those resources evaluation should provide to investors reliable and useful information on RE investment opportunities existent in West Africa. Results of those evaluation will be available on the ECOWAS Observatory for RE and EE to be launched in October 2012 at Accra (Ghana). As part of effort to provide reliable and useful information to promoters and investors, it is proposed during this session to discuss impacts of RE infrastructures on national grids as well as decentralized and isolated grids. Discussions will be based on case studies in the region and recommendations at the end of the session aim to provide policy makers with regulatory actions to be undertaken to allow successful deployment of RE technologies in the region.

¹ Evaluation covers 14 of the 15 ECOWAS member countries, Cape Verde is not included in the assessment.



IV. Expected results of the Forum

The aim of the forum is to raise funds for the thirty four (34) projects of the region identified to be technically and economically feasible. Annexed to this concept note are results of feasibility analysis of those projects. Also to discuss some technical issues related to the investment action as the capital cost and the PPA guarantee. The activities to be undertaken during the meeting should provide the following results:

- The communication bridge between promoters of RE projects and financial partners is established;
- Awareness raising on the change of approach in the Power Sector for RE in urban and Rural Electrification is done;
- Financial partners interested to provide capital to the thirty four (34) selected projects are listed;
- Actions to be undertaken in the short and mid terms as follow-up to the forum are identified.

V. Targeted participants

The following Institutions, Banks and Funding Agencies are identified as potential investors on RE projects in West Africa region and are targeted to participate to the Forum.

- Abu Dhabi Fund for Development
- African Fund of Guarantee and Economic Cooperation
- African Finance Corporation (AFC)
- Agence Française de Développement (AFD)
- American Council on Renewable Energy (ACORE)
- APIX – Senegal
- Austrian Development Bank (OEEB)
- Austrian Development Agency (ADA)
- Banque Ouest Africaine de Développement (BOAD)
- Brazil (BNDES)
- China Development Bank
- China EXIM Bank
- COFIDES
- Department For International Development (DFID-UK)
- ECOWAS Bank for Investment and Development (EBID)
- ECOWAS Commission (Infrastructures Commissionaire and Private Sector Director)
- ECOWAS Regional Electricity Regulation Authority (ERERA)
- Energy Sector Management Assistance Program (ESMAP)
- EU Commission
- European Investment Bank (EIB)




- Finnfund
- German Federal Ministry of Economic Cooperation (BMZ)
- German Financial Cooperation (KfW)
- Infrastructure Trust Fund (ITF)
- International Financial Corporation (IFC)
- International Renewable Energy Agency (IRENA)
- Islamic Development Bank
- Japan International Cooperation Agency (JICA)
- Ministry of Energy and Mines of Senegal
- OPEC Fund for International Development (OFID)
- Programme for Infrastructure Development in Africa (PIDA/NEPAD Coordinating Agency)
- Private Infrastructure Development Group (PIDG)
- Spanish Cooperation Agency for International Development (AECID)
- Société Nationale d'Electricité du Sénégal (SENELEC)
- United Nations Environment Program (UNEP)
- United Nations Framework on Climate Change (UNFCCC)
- Union Économique et Monétaire Ouest-Africaine (UEMOA)
- United Nations Industrial Development Organization (UNIDO)
- US Agency for International Development (USAID)
- US Trade and Development Agency (USTDA)
- Volta River Authority of Ghana (VRA Ghana)
- West African Power Pool (WAPP)
- World Bank
- World Bank Multilateral Investment Guarantee Agency (MIGA)

Promoters of RE ECOWAS Projects



VI. Agenda of the Forum

VENUE: Hotel King Fahd Palace (Dakar)

Wednesday, 26 th September, 2012	
Welcome evening	
19:30 – 22:00 	<p>Special welcome and networking cocktail for project promoters and financiers</p> <p>Lounge Bar du King Fahd Palace King Fahd Palace Hotel Pointe des Almadies Tel: +221 33 869 69 69 Dakar, Senegal</p>

Thursday, 27 th September, 2012	
ECOWAS RE Investment projects Pipeline	
08:30 – 09:00	Opening and Welcome Addresses, ECOWAS and AfDB
09:00 – 09:30	Tour de table of the assistants
09:00 – 10:00	Presentation of ECOWAS RE Investment Initiative (EREI), ECREEE Presentation of AfDB: Experience on financing RE infrastructures in Africa, AfDB
10:00 – 10:20	Coffee break
10:20 – 12:30	The roles of different stakeholders in RE Investment Projects in West Africa <i>Chairman</i> <ul style="list-style-type: none"> • ECOWAS Commission <i>Speakers</i> <ul style="list-style-type: none"> • Case Study: Role Governments to promote RE investments (<i>Senegal</i>) • Case Study: Role of the Utility in RE projects (off-taker): VRA (Ghana) • Case Study: CABEOLICA Project (Cape Verde) • Case Study: ADDAX Project (Sierra Leone) • Case Study: 20 MW PV plant funded by the EU (Burkina Faso) Discussion
13:00 – 14:00	Lunch
14:00 – 15:00	Presentation of RE Infrastructure Projects Appraisal Report, ECREEE
15:00 – 16:30	Discussion into two (02) groups: Group 1: Private and public commercial projects, <i>Chairman</i> , EIB Group 2: Public and private non-commercial projects, <i>Chairman</i> , FED (Burkina Faso)



16:30 – 17.00	Summary of the discussions, ECREEE, AfDB Follow-up actions, ECREEE, AfDB
17:00 – 17:15	Closing of the fund-raising meeting, AfDB

Friday, 28th September, 2012	
Change of Paradigm in urban and rural electrification: ECOWAS RE Investment opportunities	
08:30 – 10:00	<p>RE infrastructures in Urban areas</p> <p><i>Chairman</i></p> <ul style="list-style-type: none"> American Council on Renewable Energy (ACORE) <p><i>Speakers</i></p> <ul style="list-style-type: none"> Distributed power generation with RE and grid parity; NET-METERING as a policy option for urban roof-top systems, IDAE Case Study of Cape Verde, ECREEE, PROSOLIA Financial Product for roof-top PV system in Dakar, BCAA <p><i>Discussion and recommendation for policy makers and investors</i></p>
10:00 – 10:20	Coffee break
10:20 – 12:30	<p>RE infrastructures in Rural areas</p> <p><i>Chairman</i></p> <ul style="list-style-type: none"> International Renewable Energy Agency (IRENA) <p><i>Speakers</i></p> <ul style="list-style-type: none"> RE Micro-grids for rural electrification, benefits and challenges for policy makers and financiers, TBD Case Study: Yéleen Kura or Millennium from Mali, TBC RE for Rural Electrification initiatives in West Africa. Orientations for financiers; Denis Rimbaud-Masson, IED <p><i>Discussion and recommendation for policy makers and investors</i></p>
Closing of the Forum, ECREEE	

Saturday, 29th September, 2012	
Field Visit (organized by AfDB)	
TO BE CONFIRMED	
07:00	Pick up from the Venue
Morning	Visit to distributed biogas installations



Forum Secretariat

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