



ECOWAS SUSTAINABLE ENERGY WEEK

"TOWARDS A VIABLE AND ROBUST ENERGY MARKET IN THE ECOWAS REGION"

17 - 19 OCTOBER 2016

FIESTA ROYALE, ACCRA – GHANA

FINAL REPORT



I. INTRODUCTION

1. The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the ECOWAS Regional Electricity Regulatory Authority (ERERA), the West Africa Power Pool (WAPP), the West African Gas Pipeline Authority (WAGPA) and the Department for Energy and Mines of the ECOWAS Commission, jointly organized the maiden edition of the ECOWAS Sustainable Energy Week from 17th to 19th October 2016 in Accra, Ghana.
2. The workshop was organized under the theme: "Towards a Viable and Robust Energy Market in the ECOWAS Region" and was supported by the Austrian Development Cooperation (ADC), the Spanish Agency for International Development Cooperation (AECID) and the United Nations Industrial Development Organization (UNIDO).
3. The meeting took place against the background of the energy access challenges facing the ECOWAS region, despite its significant conventional and renewable energy resources, and the adverse implication this situation continues to pose for the achievement of the region's sustainable development goals. Efforts aimed at improving the energy access situation and establishing a functional regional energy market lead to the establishment of specialized ECOWAS energy institutions - WAPP, ERERA, WAGPA and ECREEE.
4. The meeting also took place against the background of the promising sustainable energy developments in the ECOWAS region, particularly following the adoption of the ECOWAS Renewable Energy Policy (EREP) and the ECOWAS Energy Efficiency Policy (EEEP) by the Authority of ECOWAS Heads of State and Government in July 2013. The regional RE&EE policies represent a voluntary contribution of ECOWAS to the attainment of the targets of the United Nations' Secretary-General's Sustainable Energy For All (SE4ALL) Initiative.
5. The main objective of the Forum was to promote exchange of ideas and cooperation to support the acceleration of a robust regional energy

market and to improve the current policy and regulatory landscape for the sustainable energy sector amongst the 15 ECOWAS countries. The conference facilitated interactions and forged partnerships between ECOWAS policy makers, the private sector and financial institutions.

Specifically, the Forum aimed to:

- Assess the current status of the regional electricity market;
- Present the regional perspective of the national Renewable Energy and Energy Efficiency action plans;
- Present the status of the development of SE4ALL investment prospectuses in each country, including project portfolios
- Discuss on various on-going initiatives for energy efficiency promotion;
- Showcase available instruments by the partners and investment firms
- Discuss the acceleration in the implementation of grid connected renewable energy plants and the private sector involvement in rural electrification in West Africa;
- Present the Regional Bioenergy Policy and its role and benefits in achieving the ECOWAS Sustainable Energy Goals.

6. The workshop was attended by over 100 participants, including the Directors for Energy, the Directors for Environment, and the National SE4ALL Focal Points from all 15 ECOWAS Member States, as well as other regional and international experts.

7. The following institutions were represented:

- The Department for Energy and Mines of the ECOWAS Commission
- The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)
- The ECOWAS Regional Electricity Regulatory Authority (ERERA)
- The West Africa Power Pool (WAPP)
- The West African Gas Pipeline Authority (WAGPA) and
- Ministries of Energy of ECOWAS Member States
- Ministries of Environment of ECOWAS Member States
- The Spanish Embassy in Ghana

- The German Embassy in Ghana
- The European Union (EU) Delegation to Ghana
- The USAID Mission for West Africa
- The African Development Bank (AfDB)
- The International Renewable Energy Agency (IRENA)

The list of participants is attached to this report as Annex 1.

II. OPENING CEREMONY

8. The opening remarks came from the ECOWAS Commissioner for Energy and Mines, Dr. Morlaye Bangoura, who, on behalf of the President of the ECOWAS Commission, welcomed all participants. He expressed deepest gratitude to all the partners for their support to the ECOWAS Commission. He commended all the ECOWAS Member States for their efforts at ensuring the adoption of sustainable energy technologies as indicated in their respective NREAPs and NEEAPs and the SE4ALL Action Agendas. Dr Bangoura went further to reiterate the important role of the various ECOWAS energy agencies WAPP, WAGPA, ECREEE and ERERA in the establishment of a viable regional energy market.
9. In her speech, Mrs. Safiatou Alzouma, representing IRENA, commended the theme of the workshop and explained the importance of it to the activities of IRENA which is supporting the implementation of the West Africa Clean Energy Corridor (WACEC) and the desire of IRENA to support the alleviation of the region's acute energy situation.
10. Mr. Alexandre Deprez, Mission Director for USAID-West Africa, noted in his speech that, with the looming threat of climate change impacts on the ECOWAS region, the importance of clean energy cannot be underestimated. He commended the leadership of ECOWAS Commission and its institutions for the workshop which he noted will showcase the various energy support and funding mechanisms available for the region.

Concluding, he reiterated the need for the region to embrace and work with the “Power Africa Initiative” and to achieve its aims for the people in Africa.

11. Mr. Ignacio Burrull, Head of Cooperation, European Union Delegation in Ghana noted that, adopting renewable energy is a guaranteed way to achieve sustainable energy services and noted that the European Union has, since 2007, provided over 1.1 Billion Euros to the ECOWAS region for energy access activities and programs.
12. Mr. Christoph Retzlaff, the German Ambassador to Ghana in his speech noted that it was a very promising sign that many stakeholders were taking part in the maiden edition of the ECOWAS Sustainable Energy Week and commended the efforts of bringing together all the various ECOWAS energy agencies to work towards a robust energy market. He also noted that Germany had technical expertise to support the ECOWAS region to achieve its sustainable energy needs.
13. In her speech, the Ambassador of the Kingdom of Spain in Ghana, H.E Mrs. Maria Jesus Alonso Jimenez, remarked that the Spanish government has so far committed 7 million Euros to ECREEE from its inception. She further noted that Spain will continue to extend its support to ECREEE in its future development and progress as the region’s sustainable energy centre, as well as support the ECOWAS Member States to implement concrete energy projects (move from Power Points to Power Plants).
14. The Ghanaian Deputy Minister for Power, Mr. John Jinapor, who officially opened the workshop noted that the need for the establishment of a viable regional energy market was long overdue. He placed special emphasis on the need for inter-connection of high voltage lines and the extension of the West Africa Gas Pipeline to Cote D’Ivoire as planned. He placed further emphasis on the development of clean, efficient and affordable cooking energy services to minimize the dependence of the people on biomass energy sources, which are used with traditional methods leading to several negative consequences. He also recommended the adoption of energy

efficiency methods to safeguard and forestall wastages from generated power.

III. CONDUCT OF DELIBERATIONS

15. The workshop was divided into 12 plenary sessions. Each session was moderated, featured invited presenters and question and answer (Q&A) sessions.

Session 1-Establishment of sustainable regional power markets

The discussions on the establishment of sustainable regional markets highlighted the historical efforts at establishing a regional base of energy market. The strategy for a regional energy market has to be on pooling regional resources to be guided by regulations to ensure compliance of principles of implementation. Subsequent presentations centered on the regulations of establishing each energy sector agency or institution and focused on the need for collaboration.

On the side of the WAPP, it was pointed out that there is a schematic structure that governs electricity distribution and determines cost etc. The ECOWAS Commission has a laid down Master Plan under the WAPP called the WAPP Master Plan included in which there is the WAPP business plan to ensure the distribution of electricity to the 14 inland ECOWAS states. According to the Master Plan, there is a total requirement of over 26 Billion US dollars for the period 2012 to 2019 where the 14 continental states of the ECOWAS will be interconnected.

In the ensuing deliberations, it was noted that the ECOWAS Commission is committed to the effective implementation of policies and regulations that have been put forward by the various energy agencies to ensure realization of the overall objective of a regional energy market.

Session 2-Financial solvency of WAPP member utilities

The second session of the day was on financial solvency of WAPP member utilities. The session actually sought to assess the financial capabilities and creditworthiness of companies and agencies that transmit and distribute produced electricity in various countries.

The presentations and deliberations indicated that the sector has experienced a downward trend and losses as a result of non-payment of bills ranging from individuals to the government institutions leading to a major drop in incomes. Imbalance between operation and capital available leads to rampant load shedding in many of the ECOWAS countries. The general consensus was that adequate and appropriate billing systems have to be incorporated to ensure the effective functioning of electricity companies and consequently, a robust regional energy market.

Launch of the West African Clean Cooking Alliance-WACCA, Awareness Campaign

The West Africa Clean Cooking Alliance –WACCA awareness campaign was formally launched by the Commissioner of Energy and Mines (Dr. Morlaye Bangoura) of the ECOWAS Commission with the support of the Executive Director of ECREEE. In his remarks, Dr. Bangoura emphasized the menace associated with the traditional use of biomass and to the environment and the health of mainly women and children. He lauded the initiative which started in 2012 and called private individuals, civil society organizations and non-governmental organizations to support the ideals of the initiative to ensure it achieves its target of universal access to clean, efficient, affordable cooking services to the people of the ECOWAs region by 2030.

Session 4-Sharing experiences in the promotion of private investment in clean energy mini-grids

The session focused on sharing experiences in the promotion of private investment in clean energy mini-grids. The deliberations highlighted the fact that though some countries were making positive advances, the private sector continues to face immense challenges to develop its business, including problems associated with securing financial credits to undertake renewable energy projects. To many commercial and investment banks, renewable energy technologies are new with little knowhow and so see it as a high risk venture, which makes advancing financial credits very difficult. The need for private

investors to be accorded financial support by investment banks was highly recommended.

The session concluded with the presentation of some forthcoming ECREEE initiatives on access to sustainable electricity services that will contribute to mitigating some of the identified barriers.

Session 5 – Action agendas and IP advancements by ECOWAS Member States

This session featured the presentation by representatives of the Governments of Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Benin and Burkina Faso on the national action agendas and the progress made in the elaboration of their respective national Investment Prospectuses.

Session 6- Supporting the Implementation of the IPs

The session focused on the various opportunities available to strengthen the capacity of ECOWAS Member States in the area of development of bankable energy projects.

IRENA was of the view that strengthening capacity in this area cannot be overemphasized. IRENA has therefore developed several tools to help countries to design, develop and finance their projects. These includes the Project Navigator, the Sustainable Energy Marketplace and the IRENA-ADFD fund.

CAMCO Clean Energy is running several projects to help support the development of clean energy in Africa. These include:

- Green Africa Power with a 121 million pounds facility to support RE development in sub-Saharan Africa;
- Renewable Energy Performance Platform (REPP) facility to provide grants for RE projects which are up to 1MW;
- Results Based Financing (RBF), where grants could be provided to help RE projects as a risk mitigation instrument.

African Development Bank (AfDB) has facilities to support the promotion and development of sustainable energy in the African continent and is available to compliment the assistance that ECREEE and other partners are offering to the ECOWAS region.

The Islamic Development Bank (IsDB) has several projects in sub-Saharan Africa and currently working in other areas such as climate change and offering technical support for countries to strengthen their capacities. The Bank is also providing over \$1.2 Billion so far for RE projects.

Session 7- Accelerating Implementation of Low Carbon Climate Resilient Projects

This session highlighted measures to accelerate the implementation of low climate resilient projects in the ECOWAS member states. The presentations by the panel members centered on the need to harmonize the following in order to achieve the goal of accelerating implementation of low carbon emission, climate resilient projects:

- Streamlining national institutional arrangements to assign specific responsibilities and enhance the formation of inter-ministerial committees to plan and implement projects;
- Identifying appropriate financing was seen as very crucial for the implementation of the NDCs. Number of areas including multi-lateral financing have to be identified.
- Governments realizing the importance of climate change and implementing the directives on green economy and Green Climate Fund for financial assistance.
- Policies and regulatory frameworks have to be put in place to cover targeted implementation of low emission climate resilient projects.

Session 8- The Acceleration of the Grid-Connected Renewable Energy Market in West Africa

The session deliberated on the ECOWAS Member State's efforts at ensuring grid-connected renewable energy power generation.

In the first part of the session, devoted to utility scale RE power generation, the following trends were noted:

- ECOWAS countries have put forward RE policies and legal frameworks and other enabling structures to move forward in this direction e.g. policies on feed-in-tariffs, power purchase agreements, net-metering are in place in Ghana, Senegal, Burkina Faso, Cabo Verde;
- Collaborations with some development partners such as GIZ and UNDP is leading to development of utility scale RE power production;

- Negotiations with Independent Power Producers (IPPs) to involve private power promoters in this sector are becoming prominent in various countries, such as Ghana, Mali, Senegal;
- Senegal has experienced an evolution from unsolicited proposals to a 100 MW IPP tender for solar PV
- Ghana shared its experience with the 20 MW Solar PV IPP tenders and provided relevant information on another competitive bidding of 50 MWp about to be completed by Bui Hydro

The second part of the session targeted distributed RE generation. Ghana shared its experience with net metering while Cabo Verde presented how the government is working on the operationalization of the distributed generation framework. Finally Wilkins Engineering shared its experience with grid-connected PV installations in Ghana.

The session was concluded with the presentation of the ECREEE/ GIZ Technical Assistance Facility for Grid-Connected RE Projects and the launch of the development of and training on a toolbox for renewable energy tariff design in West Africa in collaboration between the EUEI Partnership Dialogue Facility (EUEI PDF) and ECREEE.

Session 9- West Africa Clean Energy Corridors

In order to take advantage of the abundant potential RE resources in the Africa continent in general and the West Africa sub-region in particular, the West Africa Clean Energy Corridor (WACEC) has been initiated alongside the IRENA led Africa Clean Energy Corridor (ACEC). There is a potential to meet the growing power demand in the region by increasing the electrical grid interconnection.

Efforts are well advanced in putting in place the projects that will form part of the West Africa Clean Energy Corridor. The measures currently being taken include: zoning and resource assessment; country and regional planning; enabling frameworks for investment; capacity building and awareness raising and political support. Efforts are also being made to identify and specify appropriate support measures and providing targeted assistance to ECOWAS Member States.

Following the ECREEE presentation of the WACEC initiative, IRENA shared the experiences they learnt from the ACEC's implementation as well as their plans to support the WACEC initiative. The European Union Technical Assistance Facility

(EU TAF) also presented the key milestones recorded within their support to ECREEE in the implementation of the solar component of the WACEC.

Session 10 – Action Agendas and IP Advancements by ECOWAS Member States

This session featured the presentation by representatives of the Governments of Cabo Verde, Cote D'Ivoire, The Gambia, Niger, Nigeria, Senegal, Sierra Leone and Togo on the national action agendas and the progress made in the elaboration of their respective national Investment Prospectuses.

Session 11- Regional Energy Efficiency initiatives

This session featured presentations on energy efficiency related to the consolidation of national energy efficiency action plans and the achievements of regional energy efficiency initiatives through ECREEE; the project activities to reduce electricity distribution losses through WAPP, the role of the Regulator in applying energy efficiency in Ghana by the Ghana Energy Commission. It also included a presentation on ECREEE's bioenergy program and the official launch of the collaboration between the National Renewable Energy Laboratory of US (NREL) and ECREEE.

Session 12- Status and Perspective of the Regional Electricity Market Development

The session examined the historical background of the development of the regional electricity market, highlighting the Energy Charter Treaty signed in December 1994 and went into effect in April 1998.

The ECOWAS regional electricity market is currently operating based on the following assumptions:

- Producers are able to export energy on a competitive basis or by sale to a regional energy trade exchange. (without going through a single buyer);
- Distribution and large end-user companies are able to import energy on a competitive basis or by buying from a regional energy exchange system (Eligible customers);
- A company in the power sector buys and sells power in the region on a competitive basis (competitive regional electricity market);
- Purchases / sales of electricity conducted under bilateral contracts (PPA),

Specific barriers identified in the development and smooth running of the regional electricity market include:

- Exports and imports are predominantly controlled by national electricity companies or companies acting as "unique buyer" who have monopoly on cross-border electricity trade;
- Inability of contracting parties to promote access to and transfer of energy technology on a commercial and non-discriminatory basis to assist effective trade in energy products and investment;
- Lack of access to open capital markets in encouraging the flow of capital to finance energy trade, for instance Contracting Parties' failure to adopt and maintain programs that provide investors with access to public loans, grants, guarantees or insurance that facilitate trade or investment within the area of other Contracting Parties.

IV. CONCLUSIONS AND RECOMMENDATIONS

The main recommendations of the meeting include:

- The ECOWAS Commission, WAPP, ERERA, WAGPA and ECREEE should deepen and improve their coordination efforts in order to ensure effective implementation of strategies aimed at achieving universal access to energy for the region;
- Greater private sector participation in the quest for solutions to the energy situation in the region should be encouraged. ECOWAS Member States are encouraged to attract private sector investment by establishing favorable regulatory environments;
- Sourcing climate finance and other forms of finance should be undertaken by Member States to facilitate implementation of low carbon emission, climate resilient projects in the region;
- Policies to include capacity building, institutional framework formulation, involving PPP, IPPs, Net Metering, FiTs etc. should be formulated by Member States;
- There should be clarity on the tariffs regulation which should be backed by policies and regulations;
- Commercial banks should play a greater role in the provision of funds for mini-grid projects, while the initial costs should be minimized through governments providing some subventions to lower the cost of equipment;
- Concessionary financing should be explored to support private sector engagement in the production and distribution of electricity.

Accra, 19th October 2016

VOTE OF THANKS

THE PARTICIPANTS AT THE MAIDEN EDITION OF THE ECOWAS SUSTAINABLE ENERGY WEEK HELD FROM OCTOBER 17TH TO 19TH 2016 IN ACCRA, GHANA HEREBY EXPRESS THEIR SINCERE APPRECIATION TO THE GOVERNMENT OF GHANA, THE ECOWAS COMMISSION, THE ECOWAS CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECREEE), THE ECOWAS REGIONAL ELECTRICITY REGULATORY AUTHORITY (ERERA), THE WEST AFRICA POWER POOL (WAPP), THE WEST AFRICAN GAS PIPELINE AUTHORITY (WAGPA), THE AUSTRIAN DEVELOPMENT AGENCY (ADA), THE SPANISH AGENCY FOR INTERNATIONAL DEVELOPMENT COOPERATION (AECID), THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION (UNIDO) AND THE GLOBAL ENVIRONMENT FACILITY (GEF) FOR THE CORDIAL AND WARM HOSPITALITY ACCORDED THEM DURING THEIR STAY AND ESPECIALLY THE EXCELLENT WORKING CONDITIONS THAT FACILITATED THE SUCCESS OF THEIR MEETING.

<i>Annex 1</i>	<i>List of Participants</i>
<i>Annex 2</i>	<i>Agenda</i>
<i>Annex 3</i>	<i>Plenary session's presentations</i>