

# Capacity Building Workshop on Biochar Plus

Banjul, The Gambia - 13 August 2014



## Promoting Biochar Technology in the ECOWAS Region



**Bah F. M. Saho**  
Renewable Energy Expert, ECREEE

# Challenges

- Low Access rate to Sustainable energy
- widespread and unsustainable utilization of traditional biomass
- almost 80% of the total energy consumption comes from the traditional biomass.
- In addition, over 90% of the population uses wood and charcoal for domestic cooking.

# Challenges

- The region's over-dependence on natural forest resources is a driver of deforestation, desertification and increased GHG emissions.
- Inefficient production and use of resources
- unsustainable use of wood resources is
  - ✓ damaging to public health
  - ✓ reduces the time available for women and children to pursue other economically beneficial activities, such as education and entrepreneurship.

# BACKGROUND: RE & EE POTENTIALS

Yet RE & EE Potentials exist & can play an important role in simultaneously addressing the energy and environment challenges in West Africa

## RE potentials so far unexploited

- ✓ 23,000 MW of feasible large and small hydropower potential (16% exploited);
- ✓ **Huge potential for all forms of bioenergy (especially waste for energy for cooking & electricity);**
- ✓ Average solar radiation of 5-6 kWh/m<sup>2</sup> per day throughout the year;
- ✓ Considerable wind power potential in some countries;

## EE potentials so far unexploited

- ✓ Wide range of options to improve supply and demand side efficiency (including energy saving)
- ✓ e.g. **Cleaner & Efficient production & Utilization (cleaner & efficient cookstoves);**
- ✓ e.g. **Technical and commercial losses** in the electricity system;

# CONSTRAINTS/BARRIERS

- **Financial/Economics:**

- ✓ Although significant cost reductions have been achieved, a variety of renewable energy technologies (RETs) still tend to be more expensive than their conventional competitors;
- ✓ Lack of large scale projects at regional level to take advantage of RE resource endowments and economies of scale;
- ✓ Lack of innovative financing mechanisms.

- **Policy and Institutional Issues:**

- ✓ Absence of political targets for RE in many countries;
- ✓ Non-existent or weak policy measures for level playing field in many countries;
- ✓ Weak national agencies with unclear responsibility for RE in many countries

# CONSTRAINTS/BARRIERS

- **Capacity Building & Technology Transfer**
  - ✓ Inadequate skilled technical manpower in many countries.
  - ✓ Limited or no local manufacturing due to small national markets.
  - ✓ Limited R&D with little or no linkages to entrepreneurial/manufacturing sector.
- **Information and Knowledge Sharing:**
  - ✓ Lack of reliable and adequate information and data in the countries for planning and investment;
  - ✓ Where it is available, it not readily available for the public;
  - ✓ Lack of awareness for adoption

# Focussed Areas for Promotion

Tailored policy, legal and regulatory frameworks created and implemented



Business and Investment Promotion



Capacities are strengthened and applied



Knowledge management, awareness raising, networks and advocacy strengthened



# Policy Enhancement: ECOWAS RE & EE Policy

- The ECOWAS Renewable Energy Policy (EREP) & the ECOWAS Energy Efficiency Policy (EEEP);
- WACCA Regional Action Plan Framework
- National Energy Cooking Energy Action Plans being developed
- Regional policies represent a voluntary contribution of ECOWAS to the SE4ALL Initiative
- The voluntary targets provide strong national commitments



SUSTAINABLE ENERGY  
FOR ALL



# Capacity Building/Sensitization

- **Conduct capacity building programs, especially the artisans.**
- **Support start-up activities**
- **Conduct sensitization campaigns to increase the understanding of the technology, uses and benefits**

**Build the capacity of market enablers and players to develop and produce**

**Harvest and share knowledge and information on good (and poor) practices and communicate progress made in scaling up access to energy services**

**Promote research, development, demonstration and dissemination of RE&EE technologies and services, as well as facilitate academic exchange**

**Enhance knowledge and technology transfer through linkage programs with other universities, research institutions/centres**

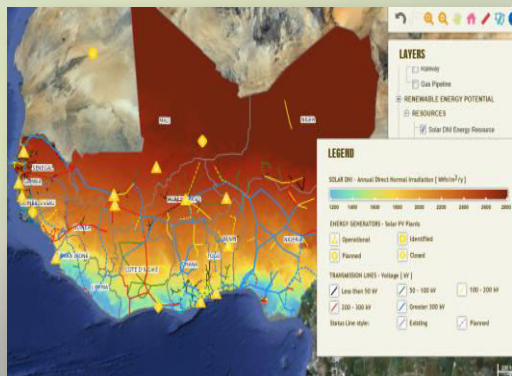
# Networking and Knowledge Management: ECOWREX

**ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX)**  
– to mitigate barriers to information and knowledge sharing – established  
October 2012

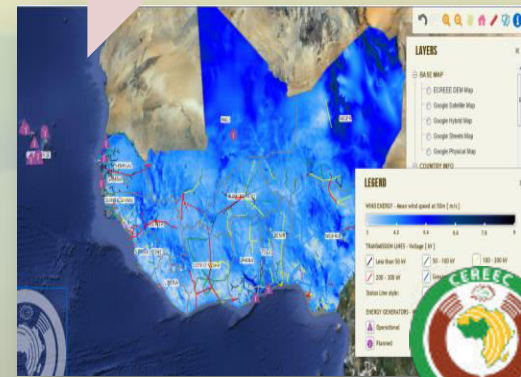
A web-based platform providing reliable and targeted information on the energy resources and support infrastructure in the ECOWAS Region.

A technology for data capture, storage, analysis, presentation and sharing

Build a spatial framework for planning and analysis, to support in decision making and project planning.



[www.ecowrex.org](http://www.ecowrex.org)



# Local Production/Investment Opportunities

- **Artisans, small and medium scale enterprises**
- **Establishment of financing mechanisms for the SMEs**
- **Provide counselling and nurture the process**

Better understanding of the business environment and sound knowledge investment opportunities in the region for promoters and investors

Lighthouse projects are materializing in the region

Access to capital finance facilitated to promoters by linking them to financiers

industry is strengthened by establishment of additional service providers and improvement of the capacities of those already existing

# Thank You! Merci! Obrigado!

HIGH LEVEL ENERGY FORUM

**SUSTAINABLE ENERGY FOR ALL**  
IN WEST AFRICA

Jointly organized by



Global Forum on Sustainable Energy  
GFSE - [www.gfse.at](http://www.gfse.at)



Supported by

