



AfricaSolar 2014 - 2nd edition

The African Solar market, strengths and weaknesses

- **Date : 20 - 22 November 2014**
- **Venue : Conference Room Ouaga 2000, Ouagadougou, Burkina Faso**

I. Context

The African continent has significant and diverse energy resources, but only a quarter (1/4) of its population has access to modern and clean energy.

Solar energy, one of the most important energy resources within Africa, is largely unexploited and implementation of solar projects has been facing huge investment costs and low level of market development.

Energy production systems that will ensure the energy needs of for the rapidly growing of African population should be more sustainable and preserve environment. The increasing of energy costs, the depletion of natural resources and the impact of excessive use of fossil fuels and wood energy make solar energy a strategic investment for energy security and the future of Africa.

Taking the case of Burkina Faso, the energy balance shows that more than 82% of energy consumption comes from biomass (wood and charcoal) for the purpose of heating, cooking and even lighting.

This excessive use of wood as energy sources results in a loss of approximately one hundred thousand (100,000) to one hundred ten thousand (110,000) acres per year, of our natural environment.

However, nowadays, the technologies that enable the use of the sun's heat for heating and cooking are developed and solar equipment can validly replace wood and charcoal.

However, despite this abundant potential and opportunities offered by the solar resource, we notice that the solar market in Africa is still very embryonic although

the technology costs experienced a significant reduction on the international market.

Regarding this situation, it is important that the stakeholders involved as well as experts carried out some reflections for a sustained development of solar energy within Africa.

II. Objectives of "AfricaSolar 2014"

The second edition of "AfricaSolar" conference is in the continuity of the first one held on 13th-15th December 2012 under the topic "Solar Energy: Challenges, opportunities and constraints for Africa". The first edition has assessed the solar potential of Africa, the stakeholders involved, the funding mechanisms and policies put in place for the development of the solar industry within the continent.

This second edition will be an opportunity for scientists, experts, policy makers and investors to discuss around relevant topics and share their different experiences. Relevant recommendations from "AfricaSolar 2014" are expected in order to promote solar market development within Africa.

Specifically, AfricaSolar 2014 will outline the assessment of different solar technologies; the opportunities offered by each of them and also evaluate the solar market in Africa in order to identify its strengths and weaknesses.

In other words, this edition will provide appropriate answers to the following questions:

- What are the main bottlenecks of the African solar market development despite the continent huge solar energy potential?
- What are the opportunities and possible solutions that could help expanding the use of solar technologies (solar thermal and photovoltaic) within the continent?

Financial and institutional partners: WAEMU, ECOWAS, African Union , European Union, Taiwanese Cooperation , French Ministry of Foreign Affairs, Environment Agency and Energy Management (ADEME) , the French Development Agency (AFD), International Agency for Renewable Energy , APROFA , African Development Bank (AfDB) , World Bank, ECOWAS, Ecowas Centre for Renewable Energy and Energy Efficiency (ECREEE) , Institute for Energy and Environment (IEPF) , UNDP, the Union of Producers, Transporters and Distributors of Electric Power in Africa (UPDEA) , West African Power Pool (WAPP)

Scientific partners : CNRST , CEA - INES , DLR , GREAH (University of Le Havre) ,
KNUST , ANSOLE , LOCIE (University of Savoie) , Solar Energy Laboratory (University
Felix Houphouët- Boigny) , CEAS

Topics:

- I- **Electricity and heat production in Africa: which suitable solar technology?**
 - PV and CPV: current and future PV cells, progress of the global market
 - Thermal low temperature: improvement for which real applications?
 - CSP: mini grids versus macro- grids, how Africa could contribute?

- II- **Solar energy and access to energy in rural areas**
 - Issues of rural electrification in Africa
 - Solar thermal applications: drying, cooking etc.

- III- **Energy storage: which economic assets for Africa?**
 - The electricity storage: technologies and limits regarding Africa
 - Thermal storage
 - ✓ Conventional storage materials : technologies and limits regarding Africa
 - ✓ Eco- materials for storage : Sustainability issues

- IV- **Solar energy and energy efficiency**
 - Smart Hybrid Systems: comparative technico-economic optimization approach
 - Life cycle analysis of solar projects and stakeholders commitment for recycling: European experiences and lessons for Africa
 - Eco- habitat
 - Solar systems integration to African buildings

- V- **Role of politics, investors and private companies in the development of solar industry in Africa**
 - Case study of Ghana and Cape Verde
 - Experience of South Africa
 - African banks and private investors for solar energy development
 - Private sector as driving force for solar energy development: what support from national, sub-regional and / or continental policy makers?

Proposals for roundtables thematic:

- 1- Solar industry contribution in job creation
- 2- The role of education in solar energy development
- 3- How could solar energy contribute in reducing households and small enterprises electricity bills?

Side events:

- 1- Launch of ANSOLE - Burkina (African Network of Solar Energy)
- 2- Launch of the solar professionals association of Burkina Faso
- 3- Visit of solar research facilities of 2iE (Kamboinse campus)

Submitting of papers for communication:

- Deadline for abstracts submission: **August 31st, 2014**
- Date of abstracts selection and response to authors: **September 30th, 2014**
- Deadline for submission of papers / posters selected: **October 15th, 2014**