



# SOLAR ENERGY: ISSUES, POTENTIALS AND CONSTRAINTS FOR AFRICA

## 1<sup>ST</sup> INTERNATIONAL CONFERENCE

Ouagadougou-December 13-15 , 2012

Conference hall, Ouaga 2000

### Temptative Agenda

The Conference is organized with the financial support of the Taiwanese cooperation, French Ministry of Foreign Affairs, ECOWAS, WAEMU and European Union.





**December 13, 2012**

**7h30-** Arrival and registration of participants

**9h30** Opening Ceremony

**9h30** *Coffee break*

**10h00** Key note lecture

### PLENARY SESSION 1: Solar resource in Africa : fiction or reality, what potential ?

Evaluation of the solar resource : Satellite and ground data (focus on Africa)

**10h30-** Modeling tools for the assessment of the solar resource in West Africa

**11h30** Solar in the World: What stakes, what challenges?

Standards and measuring equipments for solar radiation data

**11h30** Discussions

**12h00** *Lunch*

### PLENARY SESSION 2 (I) : Solar technologies in the world

#### PV and thermal solar systems

**13h30-** From solar cells to PV modules

**14h30** Prospective solar PV technologies

The issue of storage : technologies and limits

**14h30** *Coffee break*

Grid connected solar PV systems

**14h45-** Off-grid solar PV systems

**15h30** Concentrating solar PV (CPV)

#### Solar Thermal Systems : high and low temperatures

**15h30-** CSP of small sizes: about ten kiloWatts

**16h15** CSP of high sizes : about ten MégaWatts

Thermal storage: what materials, what advantages?

**16h15** Discussions

**16h45** *Coffee break*

#### Applications of Solar technologies

**17h00-** Solar cooling in Africa

**17h30** Solar pumping systems in rural areas



## Solar hybrid systems

- 17h30-18h15** Hybrid Solar PV/biomass/diesel  
Hybrid CSP/biomass/gaz/diesel  
Application of off-grid solar systems to rural electrification
- 18h15** Discussions

**December 14, 2012**

### PLENARY SESSION 2 (II) : Solar technologies in the world

Feedbacks on solar achievements experiences in Africa

- 8h30-12h00** Experience from the maghreb  
Experience from South Africa  
Experience from West Africa
- 12h00** Discussions
- 12h30** Lunch

### PLENARY SESSION 3: Constraints of solar market development in Africa: political framework, role of the private sector, financing and human resources.

- 14h00-17h30** Energy policy of African countries/tariffication policy : case of the ECOWAS region  
State of legislations in Africa for the development of the solar market : case of the WAEMU zone  
Financial mechanisms for solar projects/public-private partnership  
The role of the private sector and the private investment  
What human resources for the development of the solar market in Africa?
- 17h30** Discussions

**Decembre 15, 2012**

### Round tables

- 8h00-10h00** **Round table 1** : Political and institutional frameworks in the energy sector in Africa (Focus in Solar energy) **Round table 2** : Financing of solar projects, public and private partnership, role of the private sector **Round table 3** : Development of the solar sector : scientific and technological challenges
- 10h00** Coffee break
- 10h30** Departure from the conference hall to 2iE-Kamboinsé
- 11h30** Visit of the research center « Sustainable Energy and Habitat » of 2iE
- 12h30** Lunch
- 14h00** Return to the conference hall
- 15h00** Synthesis of discussions and general conclusion of round tables
- 16h30** Closing ceremony



## INQUIRIES AND REGISTRATIONS

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### *Institutional partners*

*French Environment and Energy Management Agency (ADEME), French Development Agency, International Agency for Renewable Energies, APROFA Solar, Mayor Association of Burkina Faso, ECOWAS, African Development Bank, World Bank, ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREEE), Francophone Institute of Energy and the Environment (IEPF), United Nation Programme for Development (UNDP), Savoie Technolac Energies-Innovation-Campus, African Union, African Union of Producers, Transporters and Distributors of electrical Energy (UPDEA), West African Power Pool*

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