

ADVANCED RETSCREEN TRAINING WORKSHOPS FOR SUSTAINABLE ENERGY EDUCATION AND IMPLEMENTATION



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Introduction

- Recognizing that the supply of a skilled workforce is a critical element in the transfer of technology and due to the enormous needs for institutional and human resource development,
- UNESCO launched Renewable Energy Education and Training Program as an instrument to help the international community address this issue
- To help rural communities to remove barriers to the diffusion, distribution, and development of renewable energy technologies.
- Promote Capacity building, training and education
- Enhance Energy efficiency programs

THE Context

- About 1.4 billion people do not have access to grid connected electricity.
- The potential of renewable energy is generally greater than the demand in most countries around the world, particularly in developing countries
- The intergovernmental Panel of Experts (Abou Dhabi, UAE, 2011), indicated that less than 2.5% of the available renewable energy technologies are exploited in the world

OBJECTIVES

- Promote institutional and human capacity building to reflect the needs for education for professionals at different levels of responsibility
- Strengthen national competencies by favoring exchange of knowledge and best practices;
- Enhancing the use and application of renewable energy sources.
- Develop a network of train-the trainers



Participants learning to use sizing software to determine the exact energy needed for a given project, during a one-day practical session at this year's solar school

Main activities

- Organization of training programs at different levels, including:
 - Continuing training for professionals: (decision and policy makers, researchers, engineers, university teachers, technicians)
- Design and field implementation of training tools and learning-teaching
- Promotion of national/regional training centres of excellence at the regional level
 - Setting of standards and definition of energy training curricula



Practical training to assess solar radiation and simulate a solar installation. This session was organized at the CDER in Morocco during the 2001 summer school

http://portal.unesco.org/science/en/files/4137/10980872981Solar_School

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2. RETSCREEN SOFTWARE

- **RETScreen Clean Energy Project Analysis Software** is a unique decision support tool
- Developed with the contribution of numerous experts from government, industry, and academia.
- The software can be used worldwide to evaluate the energy production and savings, costs, emission reductions, financial viability and risk for various types of Renewable-energy and Energy-efficient Technologies.
- The software (available in multiple languages) also includes product, project, hydrology and climate databases
- A detailed user manual, and a case study based college/university-level training course

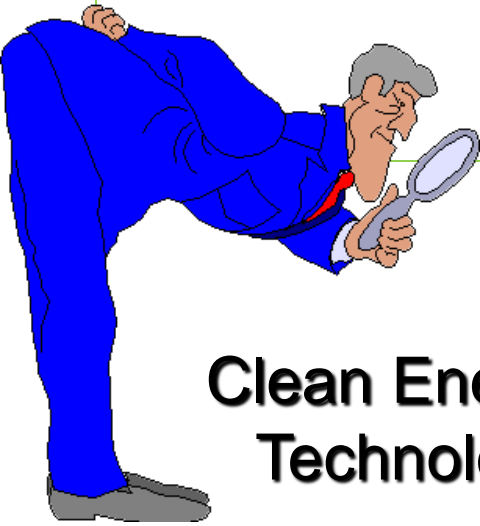
2.1 OBJECTIVES OF THE TRAINING

- **The overall objective** of the RET Screen workshop is to build up a regional train-the-trainers network on RE&EE project appraisal in the region.
- The RETScreen evaluation tool will be one tool apart of others being applied by the network (e.g. HOMER etc.)
- **The specific objective** of the workshop is to provide training on financial RE&EE project analysis by applying the RETScreen Software Tool
- To ensure **high-quality training and follow-up** support for the participants.

2.2 Beneficiaries

- **Direct beneficiaries and participants** of the workshops are RE&EE training institutes from all ECOWAS countries, the National Focal Institutions (NFIs), staff and private sector experts.
- The training includes a certification exam in the use of RETScreen.

2.3 DEFINITION



**Clean Energy
Technologies**

Energy Efficiency

- Using less energy resources to meet the same energy needs

Renewable Energy

- Using non-depleting natural resources to meet energy needs

➤ How much do these studies typically cost?



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Merci