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REGIONAL ONLINE TEACHING & TRAINING ON RENEWABLE ENERGY TECHNOLOGIES FOR PROFESSIONALS, PRACTITIONERS AND UNIVERSITIES IN ECOWAS MEMBER STATES

13- 16 OCTOBER 2020

Concept note and Agenda

1. Background

ECREEE was established in 2010 in response to the energy poverty crisis faced by the West Africa region, and the need to mitigate the effects of climate change. The goal of West African leaders was to reduce the daunting energy deficit and promote renewable energies and energy efficiency in the region given its large and diverse potential of renewable energy sources (solar, wind, ocean, biomass, and biofuels, green hydrogen, etc.). Thus, ECREEE developed the ECOWAS Renewable Energy Policy (EREP) and the ECOWAS Energy Efficiency Policy (EEEP) adopted by the ECOWAS Ministers of Energy at the ECOWAS High Level Energy Forum, which took place from 29 to 31 October 2012 in Accra, Ghana.

For the implementation of these policies, ECREEE has defined its vision and five-year strategic plan. Building the Capacity of West African stakeholders on renewable energy and energy efficiency issues is key to achieving this vision. .

The region is faced with capacity and skills gaps among policy and decision makers and shortage of technical expertise and knowledge on renewable energy and energy efficiency. In addition to capacity building at the policy level, there is a need for technical and vocational training in renewable energy and energy efficiency.

Thus, ECREEE integrates capacity development components in renewable energy and energy efficiency programs and projects. In addition, ECREEE is implementing a regional skills certification program, which is currently limited to installers of photovoltaic systems.

In view of these initiatives, it is critical to work with universities and technical vocational institutions to enhance offerings in theoretical and technical training in the region for renewable energy and energy efficiency. The region needs to produce RE and EE engineers and technicians. Efforts are thus made to establish partnerships with various institutions, universities and technical and professional institutes in order to develop and implement programs to fill the gaps and meet the needs of the ECOWAS region.

It is therefore within this framework that ECREEE is organizing, in collaboration with AMENET, UAM and Universidade Jean Piaget de Cabo Verde, four days online renewable energy training seminar, which will take place from 13 to 16 October 2020. The training will be focused on:

- Renewable hydrogen
- Renewable gases. Biogas and Bio methane
- tidal stream energy
- Wind energy

Transversal topics such as climate change, rural electrification, and RE auctions will be under debate as well.

2. Objectives of the regional training Seminar

The overall objective of the seminar is the transfer of North-South skills and knowledge by strengthening capacities of professional and practitioners from public & private sector in ECOWAS Region on various topics on renewable energy and Climate change.

The specific objectives are:

- To ensure clean energy technologies transfer
- To Share experience in renewable energy technologies such as bioenergy, tidal stream energy, etc.
- Inform participants about the state of green hydrogen production technologies and prospects for Africa through some case studies
- to share experiences on rural electrification in remote regions of Africa
- To share experience of adaptation project to the Climate Change in the power sector
- To teach participants on how to promote cost-efficient development, drive costs down and ensure transparency for renewable energy projects through Renewable energy auctions

3. Expected outcome/deliverables

- Clean energy technologies transfer is ensured
- participants' capacities are strengthened on rural electrification in remote regions of Africa
- participants master the instruments for promoting renewable energies that are Renewable energy auctions
- the participants have increased their experience in development of climate change adaptation projects in the power sector

4. Participants/Target group

- Professionals and practitioners from public & private sector public & private sector from the ECOWAS English speaking countries.
- Universities of ECOWAS Region

5. Language of training.

Language of training and all training materials will be in English

6. Certificate

Certificates will be issued to those who have attended all training sessions

7. Expert biographies

Experts below who are working in outstanding international Universities, Scientific Research Centers, and Energy companies, will deliver the **TEACHING/TRAINING ACTIVITY**:

- **Juan Puertas**, Industrial engineer, expert in Renewable energy, Coordinator of Energy Committee Catalonia's Industrial Engineers.
- **Jose Manuel Dominguez Cerdeira**, Industrial Engineer of SEFI, Renewable gases. Biogas and Biomethane. Healthy, efficient and sustainable energies
- **Carmen Guinea**, Industrial engineer of Naturgy, a multinational group operating in 28 countries and with more than 18 million customers. Case studies
- **Pablo del Río**, Senior Researcher, PhD in Economics, High Scientific Research Center (CSIC), Renewable energy auctions
- **Gonzalo Piernavieja**, Engineer, I+D Director of the Institute of Technology of Canary Islands (ITC), Canary Islands as platform for the clean energetic technologies transfer to Africa.
- **Daniel Henríquez**, Engineer, Chief of the EERR Department of the Institute of Technology of Canary Islands (ITC), ITC experiences on rural electrification with EERR in remote regions of Africa (Micronetworks; Custa Valley; CLIMARISK, etc.).
- **Santiago Díaz**, Engineer, Chief of a Section of the EERR Department of the Institute of Technology of Canary Islands (ITC), Impact Chains of Energy and Adaptation of the power sector to the Climate Change (SOCLIMPACT Project); ITC Activities in the western coast of Africa (ENERMAC y ACLIMAC Projects).
- **Lara Lázaro**, PhD in Economics. London School of Economics (LSE), International Elcano Institute, On Climate change Geopolitics.
- **Alejandro Marques de Magallanes**, MBA, Manager, Magallanes Project, Power generation from tidal stream energy
- **Emilio Menéndez**, Engineer, Honorary Professor, University Autonomous of Madrid (UAM), Electricity in Africa: Options for "Renewable Energies"

Agenda UTC

TUESDAY 13/10/2020	10:00H-11:00H Renewable hydrogen Juan Puertas, Engineer	WEDNESDAY 14/10/2020	10:00H-11:00H Case studies Carmen Guinea, Naturgy
	11:00H-12:00H Renewable gases. Biogas and Biomethane Healthy, efficient and sustainable energies Jose Manuel Dominguez Cerdeira, SEFI		11:00H-12:00H Electricity in Africa: Options for "Renewable Energies" Emilio Menéndez, Honorary Professor, UAM
THURSDAY 15/10/2020	10:00H-11:00H <ul style="list-style-type: none"> Canary Islands as platform for the development of green energy technologies and transfer to the African continent: Gonzalo Piernavieja, R&D Director of ITC 20 minutes. ITC experiences on Microgrids and rural electrification with RES in Africa: Daniel Henríquez, Head of Section. Renewable Energies department. ITC 20 minutes. Climate Change and adaptation plans for African countries and insular electrical systems (SOCLIMPACT, ENERMAC and ACLIEMAC Projects): Santiago Díaz, Head of Section. Renewable Energies Department 20 minutes. 	FRIDAY 16/10/2020	10:00H-11:00H Alejandro Marques de Magallanes, Manager Magallanes Project Power generation from tidal stream energy
	11:00H-12:00H Climate change Geopolitics Lara Lázaro, Instituto Elcano		11:00H-12:00H Renewable energy auctions Pablo del Río Senior Researcher, CSIC