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## Renewable energies and climate change

Identify the existing options to make the increase in energy demand in the Mediterranean and African countries compatible with the challenges of climate change, through renewable energies and integration with the EU.

### RENEWABLE ENERGIES, ENERGY EFFICIENCY and CLIMATE CHANGE

### SPECIAL FOCUS ON EURO-MEDITERRANEAN-AFRICAN INTEGRATION

### TRAINING ONLINE ACTIVITY

UNIVERSITY AUTONOMA OF MADRID, UNIVERSITY OF STOCKHOLM, AIX-MARSEILLE UNIVERSITY AND ECREEE-AMENET-CIVIS-CERMI<sup>1</sup>

18<sup>th</sup> to 22<sup>nd</sup>, OCTOBER 2021

#### 1. AIMS AND SCOPES

This proposal on **RENEWABLE ENERGIES, ENERGY EFFICIENCY AND CLIMATE CHANGE** is based on the “Sustainable Development Goals”, in particular, those tightly linked to the Renewable Energies and Climate Change. That is to say: *GOAL 6: Clean Water and Sanitation; GOAL 7: Affordable and Clean Energy; GOAL 11: Sustainable Cities and Communities; GOAL 12: Responsible Consumption and Production; and GOAL 13: Climate Action.*

At the same time, this proposal is at the core of our institutional ambitions in the Covid-19 context.

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<sup>1</sup> **CIVIS** is made up of Aix-Marseille University, University of Athens, University of Bucharest, Université Libre de Bruxelles, University Autonoma of Madrid, Sapienza Università di Roma, Stockholm University, University of Tübinga and University of Glasgow. **AMENET** is the African, Mediterranean and Europe Jean Monnet Network. **ECREEE** is the ECOWAS Centre for Renewable Energy and Energy Efficiency. And **CERMI** is Renewable Energy and Industrial Maintenance Center for Renewable Energies and Industrial Maintenance.



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It is possible for COVID to facilitate transformative changes in certain areas. The reduction in economic activity has led to a reduction in the use of fossil fuels and GHG emissions. However, these short-term effects will inevitably return to similar levels with the recovery.

Given that the current production model is not sustainable, this crisis should be used to redesign productive activity. This redesign should be based on a reduction in the use of water, fossil fuels, and an increase in sustainable electricity generation, more efficient productive systems that limit the increasing use of transportation and ensures the transformation of services, with more intensive use of Information and Communication Technologies (ICTs). The use of ICTs can allow enhancing more responsible consumption and production systems. This will make some of the usual work trips less necessary and help to achieve more sustainable cities. In this way, the pandemic would be used as a turning point in the necessary productive transformation, generating new opportunities.

Post COVID-19 management of regional integration and the overall implementation of the sustainable development agenda will require intense collaboration between countries, universities and civil society stakeholders to enhance the gains from trade and regional integration. Currently, most economies are in a recession. The knowledge and resources to reverse the current state of the economy are not far-fetched and require that priority be given to mainstream sustainable development and climate action.

## 2. BACKGROUND

The **objective is to train and do research in response to the energy transition faced by the EU, the Mediterranean & Sub-Saharan region in Africa, and the need to mitigate the effects of climate change.** This target implies 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, biofuels, green hydrogen, etc.). Building the capacity of the EU, Mediterranean& Sub-Saharan 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 (RE) and energy efficiency (EE). In addition



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to capacity building at the policy level, there is a need for technical and vocational training, based on a strong scientific support in these relevant projects and initiatives.

In view of these initiatives, it is critical to work with universities and technical RE and EE implementation institutions such as the *ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)* to enhance offerings in theoretical and technical training/research in the region for renewable energy and energy efficiency. The region needs to train RE and EE technicians, policy and decision makers, as well the private and business sectors. 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 Western Africa region.

It is therefore within this framework that this consortium of Universities is organizing this event in collaboration with the ECREEE-AMENET-CIVIS-CERMI. This event is a five days online renewable energy training/research workshop, which will take place on the week of 18th to 22nd, October 2021.

### **3. EXPECTED OUTCOME/DELIVERABLES**

- Ensuring clean energy technologies transfer for RE and EE
- Strengthening participants' capacities on rural electrification in remote regions of Africa
- Promoting participants' mastery of renewable energy instruments such as Renewable energy auctions and funding
- Increasing participants experience in development of climate change adaptation projects in the power sector

### **4. PARTICIPANTS/TARGET GROUP**

- Post-graduate students, (Master and doctoral students)
- Professionals and practitioners from public & private sectors
- African and European Universities of the Mediterranean & Sub-Saharan region



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## 5. PROFESSORS AND EXPERTS

Professors and experts, who are working in outstanding international Universities, Scientific Research Centers, and Energy companies (Naturgy, Iberdrola), will deliver the lectures of the workshop.

From one side, experts and participants come from CIVIS universities (in particular, from the University Autónoma of Madrid, the University of Stockholm and the Aix-Marseille University), with the collaboration of the University of Tangier-Tétouan, University of Nouakchott, University of Dakar, University of Ghana-Legon, Kwame Nkrumah University of Science and Technology, University Jean Piaget of Cape Vert, and the Universities of Kinshasa, Goma and Bukavu. From another side, experts and participants come from regional organizations like the EU and the ECOWAS (in particular, *ECOWAS Centre for Renewable Energy and Energy Efficiency, ECREEE*).

Additionally, in this event, the Africa, Mediterranean, and Europe Jean Monnet Network, EU (AMENET), made up of fourteen European, Mediterranean and African universities will actively participate, bearing in mind that the University Autónoma of Madrid is the coordinator and leader of the network.

## 6. APPLICATION AND SELECTION PROCESS

Applicants must fill in the **online application form** <https://forms.gle/JrqLZgQb2AVLwzVh7> **no later than ~~27th~~ 30<sup>th</sup> September (extended period)**.

**Alternatively**, they can **send a short CV and a letter of motivation** for their interest in the course to: [civis.renewable2021@gmail.com](mailto:civis.renewable2021@gmail.com).

The inclusion of a **reference letter from a supervising professor**, as well as the **thesis project of doctoral students**, will be positively valued.

**Applicants finally admitted** will receive a **confirmation message the first week of October**.

**SEE THE DETAILED PROGRAMME ON THE NEXT PAGE**



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**ECREEE**  
TOWARDS SUSTAINABLE ENERGY

## RENEWABLE ENERGIES, ENERGY EFFICIENCY and CLIMATE CHANGE

### RESEARCH&TEACHING ACTIVITY

UNIVERSITY AUTONOMA OF MADRID, UNIVERSITY OF STOCKHOLM, AIX-MARSEILLE  
UNIVERSITY AND ECREEE-AMENET-CIVIS-CERMI AMENET

**MONDAY 18<sup>th</sup> October, 2021**

10:00H-11:00H (CET Time)

**Mediterranean Observatory for Energy, Dr. Sohbet KARBUZ, Director,**

**Hydrocarbons and energy security**

11:00H:00H (CET Time)

**Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT), Luis ARRIBAS,**  
**Wind energy**

<b>TUESDAY 19<sup>th</sup></b> October, 2021	10:00H-11:00H (CET Time) <b>Juan PUERTAS</b> , Engineer <ul style="list-style-type: none"> <li><b>Renewable hydrogen.</b></li> </ul>	<b>WEDNESDAY 20<sup>th</sup></b> October, 2021	10:00H-11:00H (CET Time) <b>Ignasi MALLOL</b> , Engineer, Naturgy <ul style="list-style-type: none"> <li><b>Biomethane production.</b> <b>Case studies.</b></li> </ul>
	11:00H-12:00H (CET Time) <b>Salim BELYAZID</b> , University of Stockholm <ul style="list-style-type: none"> <li><b>Sustainable biomass provision for the transition to a biobased economy .</b></li> </ul>		11:00H-12:00H (CET Time) <b>Pablo DEL RÍO</b> , CSIC <ul style="list-style-type: none"> <li><b>Renewable energy auctions</b></li> </ul>
<b>THURSDAY 21<sup>th</sup>,</b> October 2021	10:00H-11:00H (CET Time) <b>Lotfi CHRAIBI</b> , University of Tangier <ul style="list-style-type: none"> <li><b>Sustainable development and climate change adaptation: Morocco case.</b></li> </ul>	<b>FRIDAY 22<sup>nd</sup>,</b> October 2021	10:00H-11:00H (CET Time) <b>Cristina PEÑASCO</b> , University of Cambridge <ul style="list-style-type: none"> <li><b>Energy efficiency.</b></li> </ul>
	11:00H-12:00H <b>Jerome ROSE</b> , Aix-Marseille University <ul style="list-style-type: none"> <li><b>Impact of renewable energies on the non- renewable resources.</b></li> </ul>		11:00-12:00H (CET Time) <b>Sergio LUJÁN</b> , Generaciones Fotovoltaicas de la Mancha (GFM) <ul style="list-style-type: none"> <li><b>Photovoltaic solar energy.</b></li> </ul>