



Cierro de Investigaciones Energéticas, Medioambientales y Tecnológicas



Capacity Building Programme On Sustainable Energy Solutions For Islands

Train the Trainer Online workshop

From 12 to 23 September, 2022 CIEMAT VIRTUAL CENTRE





OBJECTIVE

Centro de Investig: Energéticas, Medio: y Tecnológicas

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By looking for the sustainability and appropriation of the already developed "Capacity Building Programme On Sustainable Energy Solutions For Islands" a training covering its methodological, structural and technological aspects has been developed. The main objective is to facilitate the use and management of the modules composing the Online Program in a virtual e- learning environment.

This workshop consists of two five-day online modules that will address aspects related to the delivery of the training program modules and to the virtual learning environment, Moodle platform. These modules can be taken and certified independently, or take the full workshop and be certified as a whole.









INTRODUCTION

The "Online Capacity Building and Certification Program on Sustainable Energy Solutions for Islands and Territories in the Pacific, Caribbean, Africa and Indian Ocean", presents training itinerary to foster access to a high-quality technical scientific knowledge.

The program was developed under the umbrella of the Global Network of Regional Sustainable Energy Centres (GN-SEC) by the United Nations Industrial Development Organisation (UNIDO), the Small Island Sustainable Energy and Climate Resilience Organisation (SIDS DOCK) and the Spanish Centre for Research in Energy, Environment and Technology (CIEMAT).

The Online Capacity Building Program has been conceived to respond to the urgent need for affordable training and certification programs on sustainable energy for islands facing the challenge of 100% renewable energy. This is done through the use of a solid program of nine online modules which describe and analyses, using a deep and technical approach, the following technologies and energy issues: Solar Photovoltaics, Solar Thermal and Ocean Energy technologies, Bioenergy, Energy Efficiency and Thermal Optimization in buildings, Minigrids and Energy Storage in Insular Power Systems, E-mobility and an overview on Energy, Climate Change Mitigation and Resilience in island regions.

The target audience comprises different profiles from the general public to professional and qualified persons working within the sustainable energy sector. The program is designed to building capacity needed to boost the energy sector.

The program has been developed by fulfilling CIEMAT's quality criteria in terms of scientific and technical expertise, Information and Communication Technologies (ICT) tools, methodological and pedagogical resources.

The program is available free of charge and is disseminated by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE), the Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE) and the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE). Currently, it is available in English, Spanish and Portuguese.

The "Online Capacity Building Program on Sustainable Energy Solutions for Islands" is **100% online** and follows an **e-learning methodology** providing the benefits and virtues of online training as a greater scope bringing knowledge to isolated and remote areas.

Learning takes place in an **e-learning platform** and delivery can be done either in **self-study** as **tutored e-learning modalities**.







Further information is available at: <u>https://www.gn-sec.net/content/online-capacity-building-program-sustainable-energy-islands</u>, and; <u>https://training.gn-sec.net/</u>.

TRAIN The TRAINER ONLINE WORKSHOP

One of the key objectives of the project is the sustainability and appropriation of the online training program by the Regional Sustainable Energy Centers and other Institutions and agents involved interested in its operation, use and projection.

To assist in the process of management of the Capacity Building Programme, CIEMAT organizes an online workshop composed of two modules and targeted to the key stakeholders involved in the operation and management of the "Online Capacity Building Program on Sustainable Energy Solutions for Islands".

The **Workshop is divided into two five-day modules** that will address aspects related to the delivery of the training program modules and to the virtual learning environment, Moodle platform.

Total duration of the activities is estimated at twenty one hours, distributed between the two courses.

This workshop admits enrollment in the modules independently or in the complete training.

The objective is to facilitate the use and management of the modules in the Moodle virtual e- learning environment.

The two courses will be held **100% online** on CIEMAT's Moodle e-learning platform, through **tutored methodology** and in **English language**.

Experts from the Knowledge Management and Training Division and the Renewable Energy Department of the CIEMAT will be in charge of guiding the training process.





WORKSHOP PRORGRAM

MODULE ON "DELIVERING E-LEARNING COURSES", 11 HR.

Objective: the program addresses aspects related to the e-learning methodology and the delivery of the Capacity Building Programme online modules. A case study of one of the modules will be presented through a webinar.

Theoretical Part (5 hour)

- 1. Video presentation: course structure and study plan
- 2. Module 0. Presentation of the Knowledge Management and Training Division and the Online Capacity Building Programme on Sustainable Energy Solutions for Islands.
- 3. Module 1. Train the Trainers. Introduction to e-learning courses
- 4. Module 2. E-learning courses design and planning.

Practical Part: Learning how to teach an e-learning course (5 hour)

- 5. Practical case: Structure, plan and schedule a course
- Recorded Webinar. Modes of delivery of the Online Capacity Building Program Modules. Tutoring of the sample module: "Efficient Energy use and Thermal Optimization in Buildings". Expert: Silvia Soutullo Castro, Senior Researcher in the Energy Efficiency in Buildings R&D Unit of CIEMAT.
- 7. Webinar Forum: exchange ideas and debate

Results and Conclusions (1hour)

- 8. Survey
- 9. Conclusions Forum



MODULE ON "LMS MOODLE MANAGEMENT" 10 HR.

Objective: the course is intended to learn the management of the Moodle virtual environment from the point of view of tutor, coordinator and training manager.

Theoretical Part (4 hour)

- 1. Video presentation: course structure and study plan
- 2. Module 0. Presentation of the Knowledge Management and Training Division and the Online Capacity Building Programme on Sustainable Energy Solutions for Islands.
- 3. Module 1. Learning Management System. LMS

Practical Part: Learning how to teach an e-learning course (5 hour)

- 4. Practical case: Setting up a course in Moodle Platform
- 5. Recorded Webinar. How to set up a course in Moodle platform.
- 6. Webinar Forum: exchange ideas and debate

Results and Conclusions (1hour)

- 7. Survey
- 8. Conclusions Forum









METODOLOGY

The two modules are delivered through **tutored e-learning methodology**. Learning is guided by tutors and coordinators responsible for accompanying the participants and guiding the learning process.

A work plan is proposed with recommended dedication time for the study of the different contents and activities, but it is the participant who sets his own rhythms of study and dedication according to his/her needs.

Study materials are accessible from the e-learning platform, which offers a variety of materials formats and tools to facilitate the learning process. Theory and practice will be addressed in a collaborative and communication environment with tutors and colleagues.

EVALUATION AND CERTIFICATION

The study and passing of the activities and exercises proposed in each of the modules, will lead to the issuance and delivery of a certificate of achievement granted by CIEMAT and UNIDO.

FREE REGISTRATION

https://agenda.ciemat.es/e/TTT

End date of registration: September 8, 2022

RECIPIENTS

This online Workshop is essentially addressed to training institutions, universities, energy research centers, and other institutions in the energy sector potentially providers or receivers of training in sustainable energy solutions.

Target Profiles: training managers, expert teachers, in the field of energy, IT staff, education and training coordinators, and agents responsible for the dissemination of education and training programs.

Aimed at English-speaking regions.



REQUIREMENTS TO APPLY:

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Documentation to apply:

- Fill out the registration form providing the required information
- Attach a personal motivation letter for the training
- Attach a declaration of commitment to get the most of the training

Selection of applications: candidates will be selected considering the suitability of the profile, motivation and commitment for the training.

CONTACT:

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TEACHING TEAM AND COORDINATION

Cristina Llorente Herranz

Virtual Education and Training coordinator in the Knowledge Management Division of CIEMAT. Capacity Building projects Coordinator. M.Sc. in Applied Physics from Autonomous University of Madrid-UAM (2003), the Teaching and pedagogical Certificate at Complutense University of Madrid (2004), finished the M.Sc. in Nuclear Technology at CIEMAT and UAM (2005). With numerous courses in computer science she began working at the Education and Training Unit and Virtual Classroom of CIEMAT in 2006, developing content for courses for Radioactive Waste, Radiation Protection, and Train Virtual Trainers, and coordinating online courses and lecturing virtual and face-to-faces courses to date. She has also participated, in several national and international educational projects, like ENETRAP- projects, EURAD, DEVCO, IAEA, etc.

Lara de Diego Chica

Virtual Education and Training coordinator in the Knowledge Management Division of CIEMAT. Capacity Building Projects Coordinator. M.Sc. in Biology, Complutense University of Madrid, UCM (200). Pedagogical Aptitude Course (CAP) in 2001, Professional Expert Course: E-Learning: Online Education (UNED) in 2007. Education and training coordination in CIEMAT's Virtual Classroom and Training Unit since 2006. Development and management of Capacity Building, Train the Trainers and Educational Cooperation for Development Projects, in the area of renewable energies, energy efficiency, environment and biomedicine in collaboration with national and international institutions: UNIDO, IRENA, WORLD BANK, IAEA, AECID, and FIIAPP.