

ECOWAS Centre for Renewable Energy & Energy Efficiency



ECOWAS Certification of Sustainable Energy Skills (ECSES) Scheme

INTRODUCTION

In fulfilment of its mandates, the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) with the support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), International Renewable Energy Agency (IRENA) and other partners has established a Regional Certification Scheme (RCS) known as the ECOWAS Certification of Sustainable Energy Skills (ECSES) scheme to promote professional competency and address the quality assurance gaps that exist along the renewable energy (RE) and energy efficiency (EE) value-chain.

The rationale behind this Action is that for successful RE and EE market and projects, there is a need for quality assurance at various levels. This includes quality assurance of equipment e.g. through the establishment and enforcement of product standards. However, high-quality products will only provide the desired services if RE and EE systems are designed, installed and maintained by highly qualified individuals. The certification of skills is considered essential because certification gives the reassurance that professionals have the competencies and capacities required to complete a job safely and effectively. More specifically, certification is a way to promote the quality and safety of systems.

The ECSES scheme is based on a Job-Task-Analysis (JTA) that was developed by all ECOWAS member states and with inputs from stakeholders and industry experts. ECREEE also aligns all the structures and procedures of the certification system to the requirements of ISO/IEC 17024:2012 “conformity assessment-General requirements for bodies performing certification of persons”. This will provide the possibility for sustainable energy professionals to obtain credentials that are recognized internationally and regionally. The ECSES scheme’s credentials positively impact career by giving:

THE CANDIDATE

- training courses and certification that is acknowledged in all ECOWAS countries;
- enhanced skills, reputation, credibility, and consumer confidence;
- mobility to other ECOWAS countries, regional platform, the credentials provides the “passport” to national and regional sustainable energy project, recognition and professional competitive advantage and job market in the ECOWAS region;

THE INDUSTRY

- availability of competent and efficient workforce;
- increased credibility and confidence to the clean technology by the potential investors (better system performance and reduced risks);
- satisfied customers (efficient installations, less technical failures, lower operational costs).

This scheme is currently covering only technicians/professionals of off-grid solar PV systems, but will gradually be extended to other clean technology professionals. The regional certification scheme is designed to test the competencies of candidates. Candidates who will demonstrate the requisite skills, abilities, and knowledge typically required in installing and maintaining off-grid solar PV systems in this competency-based examination will be awarded the credentials of the Regional Certification Body (RCB). The paramount process for getting certified is illustrated in the figure below.



APPLICATION

Eligibility requirement of applicants are met (experienced or inexperienced qualifications)



EXAMINATION

Participate in a competency-based exam (practical and written) at the ECSES examination centres



CERTIFICATION

Successful candidates that meet the pass mark are awarded ECSES credentials

The stages of the competency-based examination are practical and written as illustrated in figure below. An applicant can only be certified after passing the written and practical examination. The examinations are designed to assess the competencies of the candidates based on the JTA.



TARGETED COMPETENCIES

List of competencies covered by the ECSES Scheme for off-grid solar PV technicians/professionals:

- Working Safely with Photovoltaic Systems
- Understanding Solar Energy and PV Systems Basics
- Understanding PV System Design
- Installing Mechanical and Electrical PV Components
- Installing Cables, Connectors and Protective Devices
- Completing System Installation, Testing and Commissioning
- Conducting Maintenance and Troubleshooting Activities

ELIGIBILITY REQUIREMENT

In brief, it requires that an applicant must be at least 18 years of age:

- with at least two (2) years of practice as a solar technician; or
- with at least two (2) years of practice as an electrician; or
- Applicants holding Diploma, Bachelor, Master degree and beyond in fields of engineering, or architecture are also eligible for programme.
- NB: It is recommended that all applicants review sample examinations that can be found here

Written Examination: <http://www.ecreee.org/certification>

Practical Examination: <https://www.youtube.com/watch?v=xEvPEdBkKYM>

CENTRES/INSTITUTION SELECTED BY ECSES SCHEME FOR THE TRAINING OF INEXPERIENCED PERSONS:

It is not a prerequisite for candidates that want to participate in the regional examination to have completed a training course with one of the registered Training Centres, however, candidates who are looking for training in solar PV courses can contact the following centres that are registered:

- DENG Solar Training Centre (DSTC)
- Centre for Renewable Energy Entrepreneurship and Innovation (CREEI)
- Koforidua Technical University (KTU)
- University of Energy and Natural Resources (UENR)

DATES

Deadline for submission of application: 12 June 2019

Date of written examination: 18 June 2019

Date of the practical examination: 19-21 June 2019

APPLICATION

- Please fill the regional certification application form and submit online at [Application Form](#) or
- Download this [Form](#) ,fill & email it to certification@ecreee.org or submit it at the exam centre.

NB: The registration fee is GHC1000.

SCHOLARSHIP FOR WOMEN

Women's Technical Exchange Program (WTEP) Scholarship: In order to facilitate gender balance, ECREEE is encouraging women to apply to its certification program. Support will be provided to a selected number of female applicants found to be eligible for scholarship support. This support will be provided through ECREEE's initiative on Women's Technical Exchange Program, established to facilitate learning and knowledge sharing between women groups and associations involved in energy within and outside the region. Click [here](#) for more information on WTEP.

Programme de Bourse pour les Femmes Installateurs (PBFi): In the framework of the 'Amélioration de la Gouvernance du Secteur des Energies Renouvelables et de l'Efficacité Énergétique' (AGoSEREE-AO), cofinanced by the Union European and BMZ, GIZ and ECREEE are also encouraging Women's participation through PBFi scholarship opportunity for women to get the train and certified by RCB.

NB: Please you can select WTEP or PBFi scholarship when you are applying for the programme [here](#).

CONTACT

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International Renewable Energy Agency

