

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 address the quality assurance gaps that exist along the renewable energy (RE) and energy efficiency (EE) value-chain and to support the development of the RE and EE market in the ECOWAS member states.

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 technicians/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 representatives of all ECOWAS member states and with inputs from stakeholders and 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 clean technology 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 installing and maintaining off-grid solar PV systems in the competency-based examination will award the credentials. The paramount process for getting certified is illustrated in the figure below.



The stages of the examination are practical and written illustrated in figure 2. 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 with a Diploma, Bachelor, Master degree and beyond in fields of engineering, or architecture are eligible for programme.
- NB: It is recommended that all applicants undertake the sample examination that can be found at http://www.ecreee.org/certification

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:

- 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: 14 July 2019 Date of written examination: 18 January 2019 Date of the practical examination: 19, 10 and 21 July 2019

APPLICATION

• Regional certification application form can be filled online at http://con-imedia.net/myecses

• The registration fee is GHC1000. Payment can be done online or into the bank account that you will receive via email once you complete the application form.

NB: The programme is offering full scholarship to women that want to be certified the Regional Certification Body under the Women's Technical Exchange Programme.

CONTACT

The Brew-Hammond Energy Centre Kwame Nkrumah University of Science and Technology (KNUST) Email: tecknust@gmail.com Telephone: (+233) 3224 93186 / (+233) 2091 05213 Website : https://energycentre.knust.edu.gh/

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) Email: certification@ecreee.org Tel: (+238) 2604633 www.ecreee.org/certification









cooperation germany – ecowas zusammenarBeit deutschland – ecowas







