**About the Project**

Investigating the feasibility and sustainability of decentralised renewable energy systems in improving electricity access in Sub-Saharan African communities.

**Project Description**

The United Nations through its Sustainable Development Goals has targeted the provision of "Affordable, reliable, sustainable, and modern energy for all’ by the Year 2030. Several issues have however hampered the achievement of this target especially in Sub-Saharan African Low Income Countries, which have the most populations without electricity access. This project will directly address such issues and provide a means to support rural communities in acquiring, owning, installing, operating and maintaining renewable energy systems to meet their electricity needs.

The project will be initially be developed via collaboration between research carried out in IT Sligo (including those of the contribution of the advertised position ) and with Malawian researchers and stakeholders, to put forward a demonstrable process and supporting structures which can be used to achieve sustained electrification in low Income communities in Sub Saharan countries.

The project outcomes is intended to eventually be demonstrated in four pilot rural community sites in Malawi, which by the end of the project will own and operate their own renewable energy systems.

**Project Objectives:**

• To develop an adaptable replicable framework focused on the concept of community driven sustainable renewable energy implementation for low income communities.

• To develop an overview understanding of the technological, social and economic factors affecting the realisation of electricity accessibility in such communities and maintenance of generation structures.

• To contribute to the production of user friendly tools that will encourage the uptake of renewable energy technologies.

• To evaluate the overall societal, economic and environmental impact of the implementation of renewable energy technologies on such communities.

**Research Team**

The project involves a collaboration amongst Dr Ehiaze Ehimen at IT Sligo and Dr. Esther Phiri at Malawi University of Business and Applied Sciences (MUBAS).

**APPLICANT REQUIREMENTS**:

Suitable applicants should have achieved a 2:1 degree (BSC/B.Engr) or better in a relevant engineering or technology discipline and have an interest in renewable energy, sustainable technologies, rural development and impact assessment.

**FUNDING SOURCE**:

Suitable applicants should have achieved a 2:1 degree (BSC/B.Engr) or better in a relevant engineering or technology discipline and have an interest in renewable energy, sustainable technologies, rural development and impact assessment.

The successful applicant will be awarded a maintenance grant of €16,000 p.a. (less €3,000 registration fee) and up to €4,000 p.a. for expenses as approved The study will be carried out under the CEANGAL project, which is funded under Strand 2B of the COALESCE Award 2021. The funding is provided by the- Department of Foreign Affairs Better World Awards 2020 and the Irish Research Council.

**DURATION**:

Funding will be initially for a maximum of 2 years full time Master’s registration. This research has potential to transition into a PhD up to a maximum of 4 years.

**To Apply**

Please send by email to Dr Ehiaze Ehimen (ehimen.ehiaze@itsligo.ie) and CC Veronica Cawley ([cawley.veronica@itsligo.ie](mailto:cawley.veronica@itsligo.ie) )

With

1) A detailed cover letter

2) A full curriculum vitae

3) Academic transcripts for each year of study

4) Contact details of two academic referees

Applicants whose first language is not English must submit the original certificate of completion of an English test.

Please insert the subject line ‘Renewable Energy Award 2021’ with your electronic correspondence.

Closing Date for Applications: 17:00 local time, 15th December 2021.