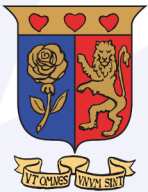


Opportunities for Capacity Building and Knowledge Sharing in Humanitarian Energy – An African Perspective



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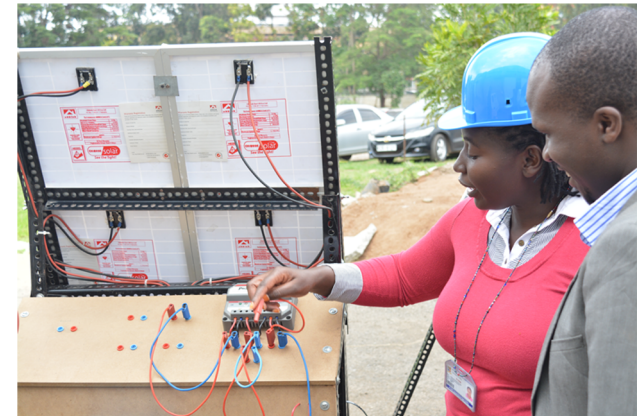
Introduction

- SERC is an energy research centre which was founded in 2012
- **Focal areas:** Solar PV & Thermal, Bioenergy, Energy Efficiency
- **What we do:**
 - Training
 - Testing of Solar PV products
 - Research and Consultancy in the energy industry



Training Courses

- Monthly training programs
- Solar PV Course
 - Tier 1 - Stand alone DC
 - Tier 2 - Stand alone AC
 - Tier 3 - Grid connected and Standalone Hybrid PV
- Biogas
- Bioenergy
- Energy Management
- Solar Water Pumping
- Tailored Trainings
- Coming up: Training on design of mini grids, small hydro and heating





Experience



Mahama Refugee Camp, Rwanda Source: Caritas

Solar PV Microgrids for Enterprises in Humanitarian Settings



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- We used Mahama refugee camp in Rwanda as a case study.
- The project was funded by GCRF.
- The main aim was to determine the socio-economic impact of connecting business enterprises in refugee camps using solar PV microgrids rather than the conventional fossil fuel-based microgrids.

Solar Street Lighting Project Kakuma Refugee Camp



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- The aim of the project was to provide a detailed plan including GPS coordinates for an envisaged street lighting system.
- The study included a viability assessment of solar standalone streetlights, risk analysis and recommendations on the most suitable approach for each specific area.



Source: IKEA Foundation

External Training Courses



- SERC developed curricula for Solar PV training courses in Somalia and South Sudan.
- The training in Somalia was funded by the ILO in 2018.
- The South Sudan Training was funded by the Norad grant.



Partnership

- SERC will be a training partner and will train ICRC Staff on Electrical Engineering Principles.
- The Electrical Installation Basics fits as an introductory course for solar PV trainees who do not have a background in Electrical Engineering.
- Development of a potential training course for engineers who need practical training in Electrical Engineering installation.
- Equipment can be used to train Engineering School students.

