

### Mzuzu University

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# Test and Training Centre for Renewable Energy Technologies (TCRET)

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# Sharing practical experiences of deploying Renewable Energy in Malawi



#### **Purpose of the Presentation**

- > Introduction to TCRET
- ➤ What TCRET does
- ➤ Highlights of some of the achievement





#### Some History

- TCRET- Test and Training Centre for Renewable Energy Technologies.
- Centre of Excellence in the Faculty of Science, Technology and Innovation
- Established in 2003 at Mzuzu University by the Malawi Government through the Department of Energy Affairs with funding from UNDP
- A subcomponent of Barrier Removal to Renewable Energy in Malawi (BARREM) Project
- Department of Energy Systems- BSc Renewable Energy Technologies



#### **TCRET Vision**

A reputable and functional Centre of Excellence in energy systems contributing to sustainable energy generation and utilisation in Malawi and beyond.



#### **TCRET Mission**

To provide high quality training, testing and complementary services in energy systems through innovative continuance professional development programmes, research and consultancy in Malawi and beyond.



#### **TCRET Specific Obectives**

- (i) To provide certificate level training in renewable energy technologies for technicians, engineers, policy makers and planners in order to build sufficient human capacity to promote RETs and ensure informed decision-making in energy systems in Malawi and beyond;
- (ii)To promote collaborative research knowledge between staff of TCRET, local renewable energy industries and reputable regional and international institutions;
- (iii)To provide consultancy services to both the private and public sectors on RETs and energy systems; and
- (iv)To provide testing services of renewable energy equipment to be marketed in Malawi by renewable energy technologies suppliers and industry.

#### TCRET Consultants

#### **Range Services Offered**

- > Training in RETs
- Consultancy in designing Renewable Energy Systems
- ➤ Energy surveys and audit



#### Some of TCRET Achievements

- TCRET has trained more than 480 technicians and 200 engineers in renewable energy technologies
- The centre has collaborated in offering tailor made short courses with institutions such as UNDP, MERA, SADC, ESAMI and Department of Energy Affairs etc
- The establishment of Department of Energy Systems (DES) in 2004 is an outcome of TCRET. The department now offers training at bachelor's degree with plans for master's degree at advanced level.
- So many research work has been done in collaborations with international institutions such as University of Strathclyde in Scotland and University of Loughborough and Sheffield University in England etc.



#### Some of TCRET Achievements cont...

- With support from British High Commission, TCRET installed 11 biogas digesters in Choma/Chigwere area, and implemented a solar PV project in Kapita area Inkosi Khonolo in Mzimba district.
- 12 biogas digesters in Mchinji district with support from Scottish Government, Universuty of Strathclyde through Malawi Renewable Energy Acceleration Program (MREAP) project.
- TCRET has worked as a consultant in design and specifications of institutional biogas systems for secondary and primary schools in a project that was implemented by CCODE. The centre has also worked on biogas projects with financial support from VSO, mini grids design. These projects have enabled TCRET consultants to gain significant experience in RE technologies.
- TCRET has worked as a consultant in feasibility assessments and mini grids design.



# Most Recent Training Women Technician and Engineers in RETS



















#### **Current Engagements**

- Community Energy Systems and Sustainable Energy Transitions in Ethiopia, Malawi and Mozambique (CESET)- Community Energy Resilience
- ➤ SAVE Project
- ➤ Save the Children International Green Jobs
- Oxfam base line survey



## Thanks for Listening!







