

ELECTRIFICATION WORKING GROUP

Achievements, Experiences, Challenges, Plans and Budget

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MSc (MSOM), BSc Hons (MEng)
Convenor EWG
RURAL ELECTRIFICATION AGENCY - ZIMBABWE

EWG MEMBERSHIP



- Memory Zvipore(Convener)
- Hendri Geldenhuys (D. Convener)
- Tankiso Motsoikha(Secretary)
- Benson Oungo
- David Mbewe
- Kennedy Sichone
- Naomi Gichuhi Kariuki
- Jacqueline Chauke
- Arthur Beyako
- Charles Tarusenga

- REA Zimbabwe
- Eskom SA
- LEC Lesotho
- REA Kenya
- ESCOM Malawi
- ZESCO Zambia
- KPLC Kenya
- AMEU SA
- SNEL DRC
- ZESA Zimbabwe

OBJECTIVES OF THE EWG



- Information gathering, analysis and dissemination on low cost electrification practices in the region.
- Improve access to electricity in both rural and urban areas through cost effective, safe and quality technologies.

ACHIEVEMENTS



- Successfully held 2 meetings every year with at least 80% attendance.
- SWER Training in South Africa in Nov 2007
 - 13 delegates
- Production of a SWER Training DVD in Nov 2008.
 - We thank all our sponsors
- Electrification Technology Workshop in Lesotho May 2009.
 - 60 delegates

EXPERIENCES



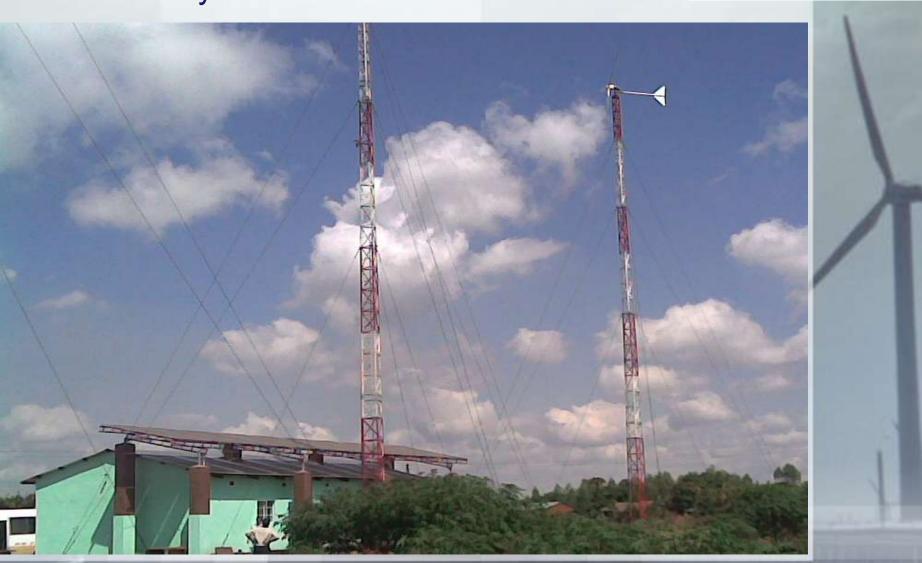
Solar Mini-grid



EXPERIENCES

THE POWER INSTITUTE FOR EAST & SOUTHERN AFRICA

Solar/Wind Hybrid



EXPERIENCES

SWER





CHALLENGES

Vandalism / theft

June 2007



October 2008



CHALLENGES



Funding constraints

- Training
- Implementation of pilot projects
- Maintenance



LESSONS LEARNT



- Technology transfer and skills development to all PIESA members is paramount.
- Substantial reduction of electrification costs by use of low cost technologies e.g. SWER
- Acceleration of rural electrification requires all member organisations to promote alternative energy technologies.

PLANS 2010-2013



- SWER pilot project in Zimbabwe.
- Implementation of SWER projects in all PIESA member countries.

 Skills development and capacity building in the pilot SWER project in Zimbabwe and implementation throughout member countries.

PLANS 2010-2113



- Research and recommend appropriate off-grid technologies (solar, mini-hydro, wind, hybrid, biogas etc) for member countries.
- Implement off-grid pilot projects in member countries.

BUDGET



- SWER pilot project in Zimbabwe US\$1 million
 - A typical example from Lesotho
 - 15km from main grid
 - 200 households
 - US\$400 000
 - Capacity per household 10amps
 - Zimbabwe to cover about 40km from grid
- Implementation of SWER projects in all
 PIESA member countries US\$1million per country

BUDGET



- •Skills development and capacity building in the pilot SWER project in Zimbabwe and implementation throughout member countries US\$ 20 000
- •Research and recommend appropriate off-grid technologies (solar, mini-hydro, wind, hybrid, biogas etc) for member countries US\$ 5 000
- •Implement off-grid pilot projects in member countries US\$ 80 000 per country

RECOMMENDATION



- PIESA and IERE should continue working hand-in glove in technology transfer and skills development.
- Funding options for the implementation of pilot projects should be considered by IERE, PIESA and all interested parties.

RECOMMENDATION



- PIESA to encourage member countries to implement cost effective technologies.
- Study visits to IERE countries to see cost effective technologies.



Thank you