

# **ELECTRIFICATION WORKING GROUP**

**Achievements, Experiences,  
Challenges, Plans and Budget**

Memory Zvipore

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

## Solar Mini-grid





# EXPERIENCES

## Solar/Wind Hybrid



# EXPERIENCES

## SWER





# CHALLENGES

Vandalism / theft

*June 2007*

*October 2008*





## Funding constraints

- Training
- Implementation of pilot projects
- Maintenance

- 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.

- 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.

- 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.



- 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

- 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**