Institutionalizing energy training on rural electrification: lessons learned from Ethiopia

Dr. Harald Schützeichel
Some reasons why we need a professional training - not only product sales training:
Holistic approach

Management

Finance

Training

Customer-Service

Technology

Sustainable Off-Grid Solutions
Sustainable Energy supply: Ethiopia

- **22,500** Installed solar systems
- **410k $** End user microfinance loans
- **14** Rural Solar-Centers for service / maintenance
- **83** Villages permanently supported by the Solar-Centers
- **154** Village schools with solar light
- **35** Rural health clinics with solar fridges for cooling medicine
Start 2007: “Rural Solar Energy Technician"

This training programme, which is unique in this form in Africa, consists of three modules:
- solar technology
- management
- practical application

Duration: 6 months

Curriculum approved by Ethiopian Government.

64 students passed successfully the course since 2007
Solar manager - profession for women!

Mena Hainemaikel
- Working for our organisations since 2004
- Leading management position as "Solar Inspector" since 2007

Haregewoin Amare
- 2008: exam as "Rural Solar Energy Manager"
- Working for our organisations since 2008
- Today leading manager for product assembling and quality check
"Light version" for organisations outside Ethiopia

- Two weeks training in Ethiopia
- Individual study of the training manual
- One week "start-up-support" by one Ethiopian trainier in your home area
- Permanently coaching of your solar business by our Ethiopia experts
Other courses since 2007

- Train the Trainer course
- Course for lecturers of Ethiopian Universities
- Awareness creation for governmental energy offices
- Course for Ethiopian Micro Finance Institutions
- Training for Solar Technicians in Kenya, Philippines, Tanzania, Malawi

Equipment

- Training facilities in rural area (Rema): School room and accommodation for 25 students
- Training facilities in Addis Ababa: School room and accommodation for 30 students
- High quality test laboratory for batteries, panels, lighting
Published in 2009:
Training Handbook for rural solar energy

rural electrification with photovoltaics
published by Stiftung Solarenergie
178 Pages, 96 Diagrams
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To order: order@stiftung-solarenergie.org
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Contents:
The Principle of Solar Energy
Meteorology
Solar Cells and Modules
Batteries
Charge Controllers
Testers and Monitoring Devices
Loads
Customer Relationship
Maintenance and Services
Planning a Small Electrical System
Thank you.