

SOLAR PV TRAINING KIT

ROBINSON J. MUSEMBI
DEPARTMENT OF PHYSICS
UNIVERSITY OF NAIROBI

The Solar Academy

Objectives:

- Targets PV panel assemblers, importer, vendor, technician, contractor, system owner, solar PV system installation and consumer devices.
- Guarantee the quality of system & their components.

Structure of Players of PV Industry

	Body	Mandate
1	ERC	Licensing Technicians
2	NITA	Trade Test on skills Accreditation before licensing Curriculum dev.
3	KIE	Curriculum dev.
4	KEBS	Standards enforcement
5	Universities	Academic programmes Short professional courses PV testing & standards labs
6	Polytechnics & tech. inst	Training of technicians
7	Others (e.g. KEREAA)	Advocacy private-public partnership Institutionalization of training Standardization of private based PV training

Energy Regulatory Commission Licensing

Class	Limits of Licensing
T1	<ul style="list-style-type: none">• PV installation for single module single battery• Up to 100 Wp• DC only
T2	<ul style="list-style-type: none">• Medium size• Multiple module/batteries• Up to 300 Wp• Including AC
T3	<ul style="list-style-type: none">• Advanced installations• Grid tied PV• Hybrid PV systems

Theory training

- Basics of solar Electricity
- Introduction to photovoltaics
- Solar cells and modules
- Solar cell characteristics
- System configuration and mounting
- Storage batteries

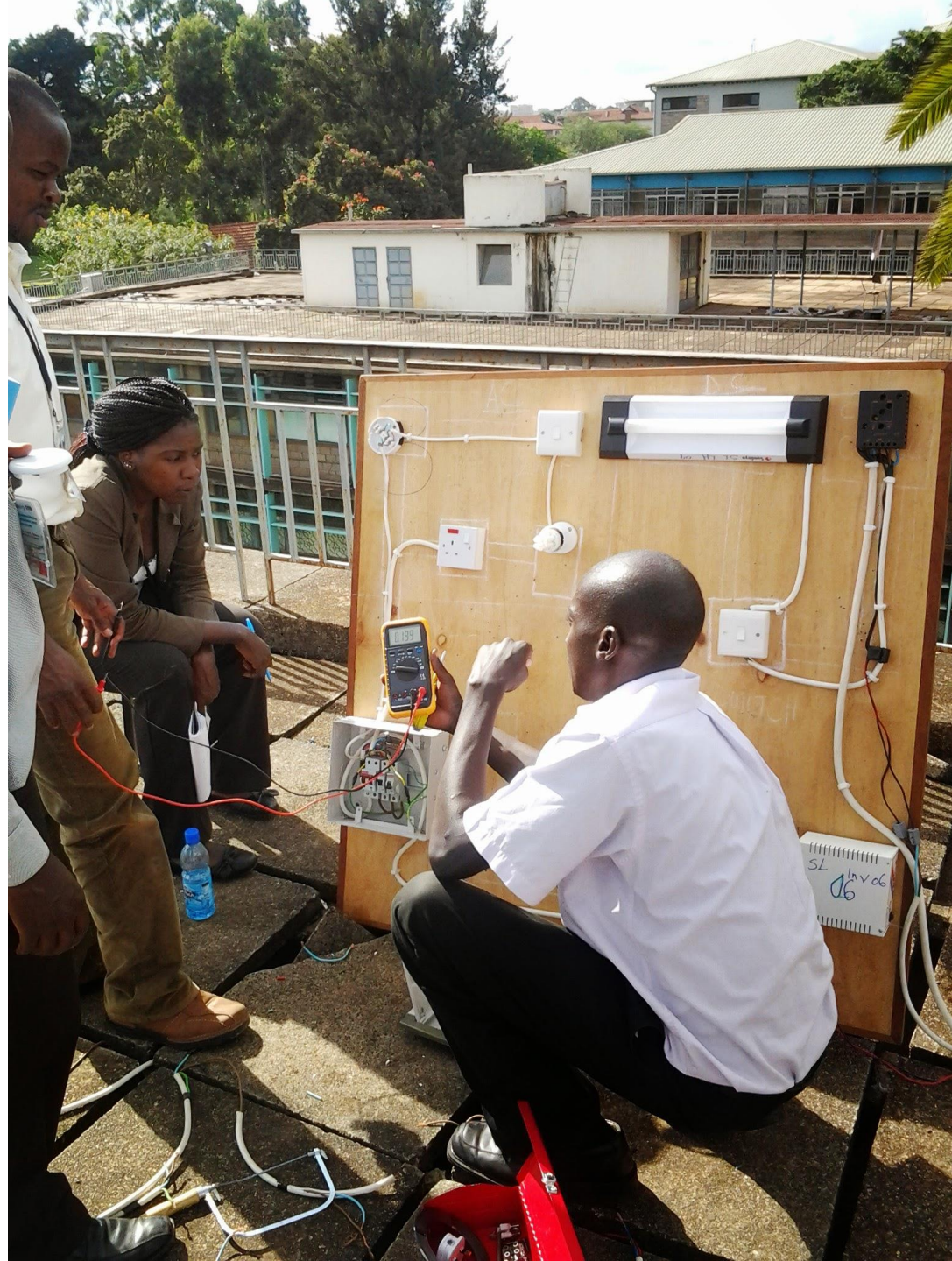
Theory training

- Power conditioning
- Solar appliances
- System Design and sizing
- PV system installation and commissioning
- System maintenance





















Number of People trained

- 1200 T1 and T2 technicians
- Entrepreneurs
- Private practitioners
- Polytechnics
- Universities