Quality Assurance for Off-Grid Solar and World Bank Group’s Lighting Global Program

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Off-Grid Solar Energy Systems

- Cost-effective solution
- Variety of system types, prices, and quality levels
- **Quality assurance needed** to protect buyer interests and avoid market spoiling
Key Principles for Lighting Global QA

1) Ensure that products are **durable** and perform as advertised through rigorous testing

2) Publish results for products that **meet the standards** through the Lighting Global website to ensure transparency

3) Seek a reasonable **balance between quality and affordability** when setting standards

4) Maintain a predictable, **stable framework** so that stakeholders know what to expect
Countries and country programs that reference IEC TS 62257-9-5 and LGQA

ECOWAS has adopted a QA frameworks that references IEC TS 62257-9-5 (the standard was recently adopted, but it has not been published yet).

ECOWAS Countries:
Benin, Burkina Faso, Liberia, Gambia, Ghana, Guinea, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo, and Cape Verde.
Almost 100 Pico-Solar Products Are Listed on the Lighting Global Website (these are a few)

- Fosera
- Lagazel
- Shamba Technologies
- d.light
- Zhejiang Holley
- All Weather Solar Tech
- Barefoot Power
- Greenlight Planet
- Schneider Electric
- Nokero
- Speedtech Energy
- Nadji Bi.
- Omnivoltaic Power
- EcoZoom

https://www.lightingglobal.org/products/
Lighting Global has Expanded its QA framework to include solar home system kits

- Lighting Global’s focus is on plug-and-play solar home system (SHS) kits
- The test methods cover SHS kits up to 350 W
- Eight products (of 11 tested) have met the standards and are listed on the Lighting Global website; additional tests are ongoing
- The SHS kit methods will be submitted for addition to IEC TS 62257-9-5 soon

Mobisol
Zimpertec
Omnivoltaic
Fosera
SolarWorks

www.lightingglobal.org/products
Rigorous and Harmonized QA Effort is Essential for Long Term Off-Grid Solar Success

Harmonized QA means:
- QA programs utilize single set of (IEC) test methods and standards
- Companies test their products once at a qualified lab and then can enter multiple markets

Harmonization benefits companies, governments, & end-users by keeping costs low & allowing innovative products quick market entry

*2015 sales are projected based on first half sales