

Lighting Global Quality Assurance Advisors Training Workshop

Dar es Salaam, Tanzania

5-7 December 2017

DAY 2



Advisors Training Workshop

Agenda

- Opening
- Pico-PV and Solar Home System Kit Basics
- Technical Training
- **All About Lighting Global Quality Assurance**
- Standards Adoption and Effective Compliance Programs
 - An overview of standards and labeling programs
 - Developing standards to ensure success
 - Safeguarding success
- Plan of Action
- Closing

Learning Objectives for this Morning

- Understand the purpose and goals of the QA Program
- Be able to communicate the value of the QA Program to specific types of stakeholders
- Understand how key aspects of the QA Program work

Agenda for this Morning

1. Pre-test on LG QA
2. LG QA log frame or theory of change
3. LG QA activities: the four pillars of QA
4. LG QA value proposition (group activity)
5. LG QA team and partner organizations
6. LG QA processes
7. Telling the LG QA story (group activity)

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Pre-test on Lighting Global QA

1. What are three distinct points in a product's lifecycle at which it might be tested?
2. How many samples are needed for each individual test under the Lighting Global Quality Test Method (QTM)?
3. After how many months does a product's quality-verified status expire?
4. What are six key parts of a holistic approach to standards adoption and implementation?
5. What are three advantages and three disadvantages of creating a government-owned test facility?
6. Why would it be harmful to require that samples from every product shipment be tested?
7. What is a preferred alternative to testing samples from every product shipment?
8. What are the three "lines of defense" against poor quality products?
9. What are the four pillars of Lighting Global QA?
10. In the Lighting Global QA framework, what's the difference between a pico-PV product and a SHS kit?
11. Name at least five requirements of the Lighting Global Quality Standards.

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Mission or Purpose

Lighting Global Quality Assurance catalyzes off-grid solar markets to power the world's poorest people.

Lighting Global standards ensure confidence in a life-enhancing new generation of off-grid solar products, inspiring innovation & protecting buyers.

Our Vision – What does success look like?

A competitive global market where quality products are the default option



Consumers are satisfied with their purchases, so markets are not spoiled



More households achieve higher levels of energy access faster

Metrics of Success

A competitive global market where quality products are the default option



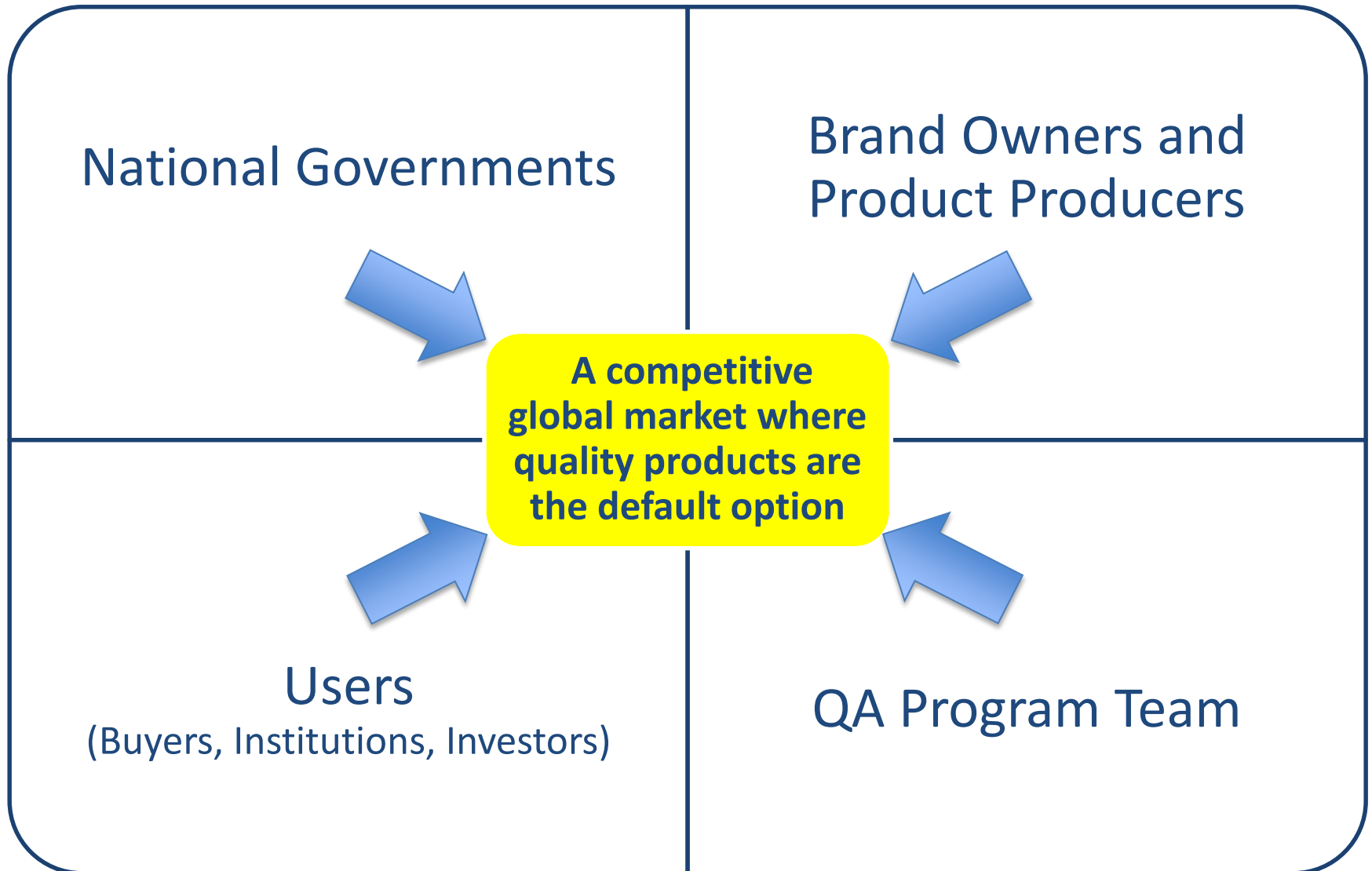
Consumers are satisfied with their purchases, so markets are not spoiled



More households achieve higher levels of energy access faster

- Sales of quality products
- Market share of quality products
- Consumer satisfaction
- Number of households with energy access

Desired Outcomes or Strategic Objectives



Strategic Objectives

National Governments

- Adopt and maintain quality standards that are aligned with global standards
- Implement *effective* compliance programs
- Adopt favorable tax and duty policies
- Avoid protectionism

Brand Owners and Product Producers

- Increase number and variety of QV products and companies
- Commit to good business practice, ensuring products meet standards throughout certification period
- Healthy partnership in building markets and the QA program

Users (Buyers, Institutions, Investors)

- Make QA a fundamental part of their business strategy
 - Buy and distribute only QV products
 - Require QV products in their programs
 - Invest in companies with QV products
- Be partners in building markets and promoting the QA program

QA Program Team

- Demonstrate value to stakeholders
- Increase efficiency of program operations
- Ensure sustained and diversified funding for program
- Minimize risk

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The Four Pillars of Quality Assurance

- A. Administer a product certification program
- B. Promote and help to implement good policy
- C. Drive uptake of quality products
- D. Develop and promote market and product intelligence

The Four Pillars of Quality Assurance

A. Administer a product certification program

- Maintain test methods and quality standards
- Provide training and technical support to a network of independent test labs
- Coordinate qualification testing and product certification, including designing test plans, reviewing test reports, creating spec sheets, and issuing verification letters
- Ensure program integrity by evaluating products once they are on the market
- Measure and evaluate program processes and impacts
- Engage with all key stakeholder groups around program design and implementation, forge partnerships, and raise funds

The Four Pillars of Quality Assurance

B. Promote and help to implement good policy

- Educate national governments about global test methods and quality standards and the benefits of harmonization
- Document and share global best practice related to standards adoption and implementation
- Provide technical assistance to governments and their consultants

The Four Pillars of Quality Assurance

C. Drive uptake of quality products

- Help purchasers, program administrators, and investors identify quality products
- Support consumer awareness campaigns
- Consider introducing a global quality label

The Four Pillars of Quality Assurance

D. Develop & promote market and product intelligence

- Research issues related to the design, production, and marketing of quality products
- Publish Technical Notes and Eco Design Notes
- Present findings at industry conferences
- Contribute to twice annual sales and impact data reports
- Contribute to biennial off-grid solar market trends report

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Beneficiaries of Lighting Global QA

- Manufacturers
- Financial Institutions/Investors
- Distributors/Retailers
- International Development/Aid Agencies, Humanitarian / Relief Agencies
- Governments – policy makers, regulators, rural electrification program administrators, compliance/customs officials
- Consumers
- Test Laboratories

Value Proposition

Group Activity

- Divide into seven groups. Each group works together to articulate the value of QA for a particular audience or type of stakeholder.
- Now we will hear from each group and comment on what they came up with.

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QA Team

ACTIVITY	KEY PERSONNEL
Test Methods & Quality Standards Management	Arne Jacobson, Meg Harper, Kristen Radecsky, Tom Quetchenbach
Test Lab Network Management	Kristen Radecsky, Scott Toyama
Certification Test Administration	Kim Thorpe, Luli Sosa
Market Surveillance	Jiayang Li, Luli Sosa, Chris Carlsen
Communications and Fundraising	Katherine Duncan, Corinne Schneider
Government & Institutional Engagement	Chris Carlsen, Arne Jacobson, Sam Grant, Eric Gibbs, Nicole Kearney
Industry Engagement and Sectoral Support	Elisa Lai, Sam Grant, Chris Carlsen, Kevin Gauna
Operations	Arne Jacobson, Meg Harper, Ari Reeves, Luli Sosa, Erick Gonzalez, Mike Spiak

QA Program Partners



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QA Processes

- A. Developing and maintaining test methods and quality standards
- B. Building test lab capacity
- C. Qualifying and disqualifying products
- D. Ensuring program integrity

A. Developing and Maintaining Test Methods and Quality Standards

- Identify needs
- Develop options for addressing these needs
- Request feedback from stakeholders
 - Ad hoc consultations
 - Industry meetings
 - Public requests for written comment
- Propose changes:
 - Test Methods – through IEC TC 82 JWG1
 - Quality Standards – maintained by IFC

B. Building Test Lab Capacity

- The role of labs in the Lighting Global network
- Written agreements with labs
- Space, equipment, personnel, knowledge
- Upfront training, ongoing technical support
- Sources of funding

C. Qualifying and Disqualifying Products

Company contacts the Quality Assurance (QA) team

QA team provides information about the Lighting Global program

Company confirms interest in having a product tested

QA Team works with company to develop an appropriate test plan

QA Team asks company to complete an online Manufacturer Information Form

QA Team uses product details to develop test plan and draft a Testing Agreement

QA Team prepares and sends Testing Agreement (*which includes the test plan*)

QA Team sends Testing Agreement, invoice, and link to Random Sampling Form to the company

Company returns signed agreement; fills form; selects & signs contract with lab

C. Qualifying and Disqualifying Products (continued)

QA Team coordinates random sampling

QA team contacts sampling agent, notifies lab, and forwards test plan and other details

Sampling agent performs sampling & creates report; company ships samples to test lab

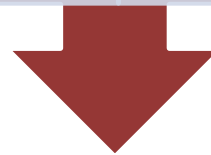


Product testing

[Note: company must pay program fee to CLASP and testing fee to the lab.]

Test lab tests product and sends test report to QA Team

QA Team reviews report, evaluates results, and prepares cover letter for Company



QA Team notifies company of final results

[Note: QA team only sends results after all fees have been paid.]

If product meets standards, QA Team lists product on website and prepares SSS and VL

If product fails, QA Team sends description of failure and suggestions for improvement

D. Ensuring Program Integrity

- Take action against companies that falsely claim their products are quality verified
- Coordinate market check testing to verify that QV products continue to meet standards
- Revise and update program policies to clarify our procedures and what is expected of companies, e.g., Conditional Pass and Market Check Testing policies

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Telling the Lighting Global QA Story

Group Activity

- Take the pieces of paper from the plastic bag. Arrange them in a sequence and piece together the story of what the QA program is.
- Now we will hear each group's QA story.

Telling the QA Story (1 of 4)

Lighting Global Quality Assurance contributes to achieving the goal of universal **energy access** by helping **retailers, investors, procurement programs,** and other **buyers** easily identify quality **off-grid solar products** and **reduce risk**. It is part of a broader market development program called **Lighting Global**, run by the **World Bank Group...**

Telling the LG QA Story (2 of 4)

...At the core of the program are widely accepted **test methods** and **quality standards** that can be used to evaluate **pico-solar products** and **SHS kits** with solar modules **up to 350 watts peak**. The test methods are described in **IEC Technical Specification 62257-9-5**. Competent laboratories have obtained **ISO 17025 accreditation** to these test methods...

Telling the LG QA Story (3 of 4)

...A **manufacturer** that wants to have a product tested contacts **CLASP**, which operates the QA program in partnership with the **Schatz Energy Research Center** and GOGLA. The product is **randomly sampled** and tested by one of the accredited labs in the Lighting Global **network of test labs**. The QA Team reviews the results, and if the product meets the standards, it is added to the list of quality-verified products on the **Lighting Global website**...

Telling the LG QA Story (4 of 4)

...With rigorous qualification testing backed up **market check testing**, you can trust that quality-verified products will meet consumers' **expectations** for quality. Governments looking to **protect consumers** by blocking **poor-quality products** from entering the market are encouraged to adopt **mandatory national standards** that are fully harmonized with the global standards.

Why Lighting Global Quality Standards?

- There are no other standards for these products.
- Over 30 million units meeting the standards have been sold across more than 12 countries.
- There are already more than 130 products on the market that have been tested and shown to meet the standards.
- \$___ has been invested over X years in developing the standards and test methods.
- There is an established network of labs capable of carrying out the underlying test methods.
- The standards are built upon widely accepted IEC test methods.
- The standards are backed by market surveillance.