

DEBRIEF

Lighting Global Quality Assurance Advisors Training Workshop

Dar es Salaam, Tanzania

5-7 December 2017



Agenda for today

1. Overview and highlights
2. Country-specific action plans
3. Lessons for next time
4. Next steps

Welcome!

Purpose:

- Build capacity to advise governments and others

Participants:

- QA Team and other champions of quality

Content:

- Products, markets, QA program, national standards adoption and implementation

Format:

- Both a training and a workshop with presentations, discussions, exercises, and role-playing games

Participants

- Ari Reeves (QA Team)
- Chris Carlsen (QA Team)
- Nicole Kearney (QA Team)
- Sam Grant (QA Team)
- Nyamolo Abagi (QA Team)
- Naomi Waguri (QA Team)
- Ruth Kimani (QA Team)
- Melissa Basque (WB)
- Jan Friedrich Kappen (WB)
- Federico Guerio (WB)
- Mbuso Gwafila (WB)
- Ian Muir (WB)
- Ewa Klimowicz
- Alfons Kurt (GIZ)
- William Rubasharaza (GIZ)
- Itotia Njagi (IFC)
- Nana Asamoahmanu (IFC)
- Andrew Mnzava (IFC)
- Henry Massawe (IFC, TBS)
- Collin Gumbu (IFC)
- Patrick Tonui (GOGLA)
- Matthew Matimbwe (TAREA)
- Michael Gatari (University of Nairobi)
- Mathias Mailu (University of Nairobi)
- Lindah Kriinya (University of Nairobi)
- ...plus about a dozen TBS staff who joined us on the first day only

Learning Objectives

- Gain a basic understanding of off-grid solar products and markets
- Be familiar with global test methods and quality standards and know what they achieve
- 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
- Understand the benefits of harmonized standards
- Understand best practice for standards adoption and implementation
- Be able to communicate case studies highlighting challenges and how they have been addressed
- Know what kinds of support the QA Team can provide and how to get it

Agenda

- Day 1 at Tanzania Bureau of Standards
 - Opening
 - An Introduction to Off-Grid Solar Products
 - Technical Training
- Day 2 and 3 at a hotel in Dar
 - All About Lighting Global Quality Assurance
 - Standards Adoption and Implementation
 - An overview of standards and labeling programs
 - Developing standards to ensure success
 - Safeguarding success
 - Developing a Plan of Action for QA in Each Country
 - Closing

Materials

- Lighting Global Quality Assurance in brief
- Lighting Global Quality Assurance (fact sheet)
- Quality Standards for Off-Grid Solar Products
- [Technical Notes Issue 25: Benefits of Harmonizing Test Methods and Quality Standards](#)
- Pre-Shipment Conformity Assessment for Pico-PV Products
- The Role of Testing in National Standards Programs for Off-Grid Solar Products

- [Providing Energy Access through Off-Grid Solar: Guidance for Governments](#)
- [Technical Notes Issue 20: Procurement of Off-Grid Lighting Products – Guidance for Aid Organizations and Governments](#)
- [Quality Assurance for Off-Grid Solar Powered Lights: A Brief Guide for Institutional Buyers](#)
- [Pico-PV Quality Standards](#)
- [Solar Home System Kit Quality Standards](#)

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.

Telling the Lighting Global QA Story

- 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.

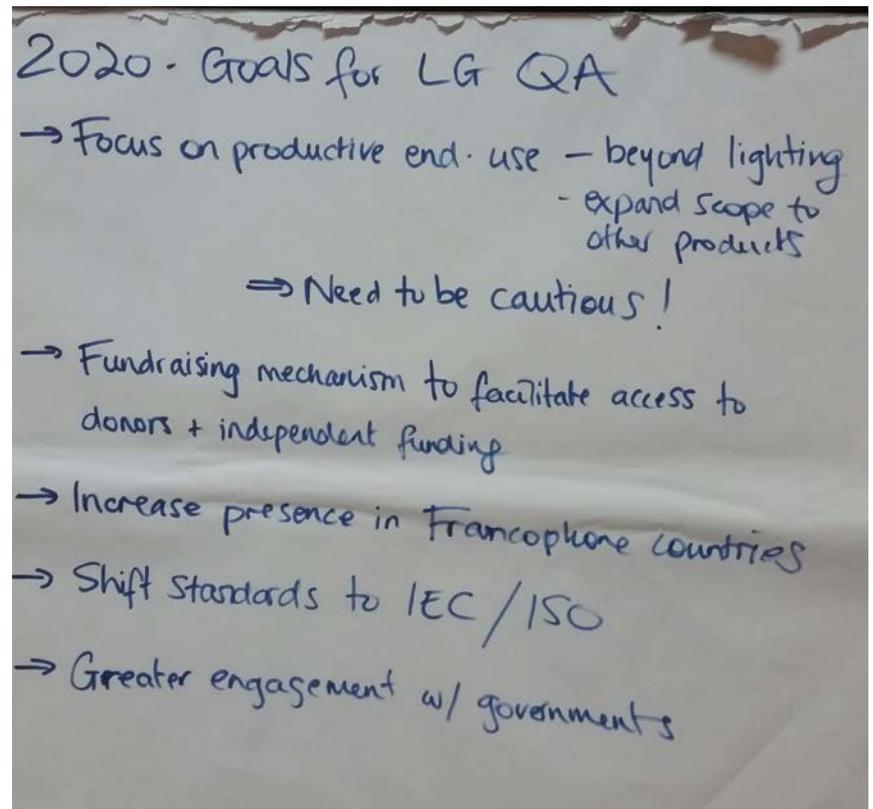
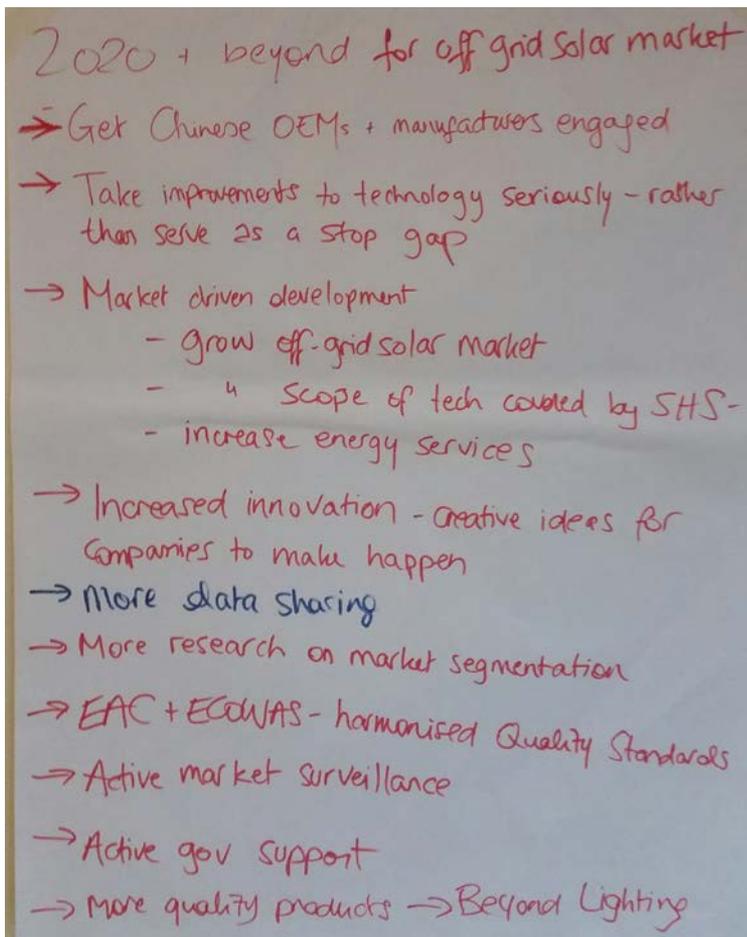
Why Lighting Global Quality Standards?

- 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.

Group Discussion

Vision for 2020:

What does success look like and how do we get there?

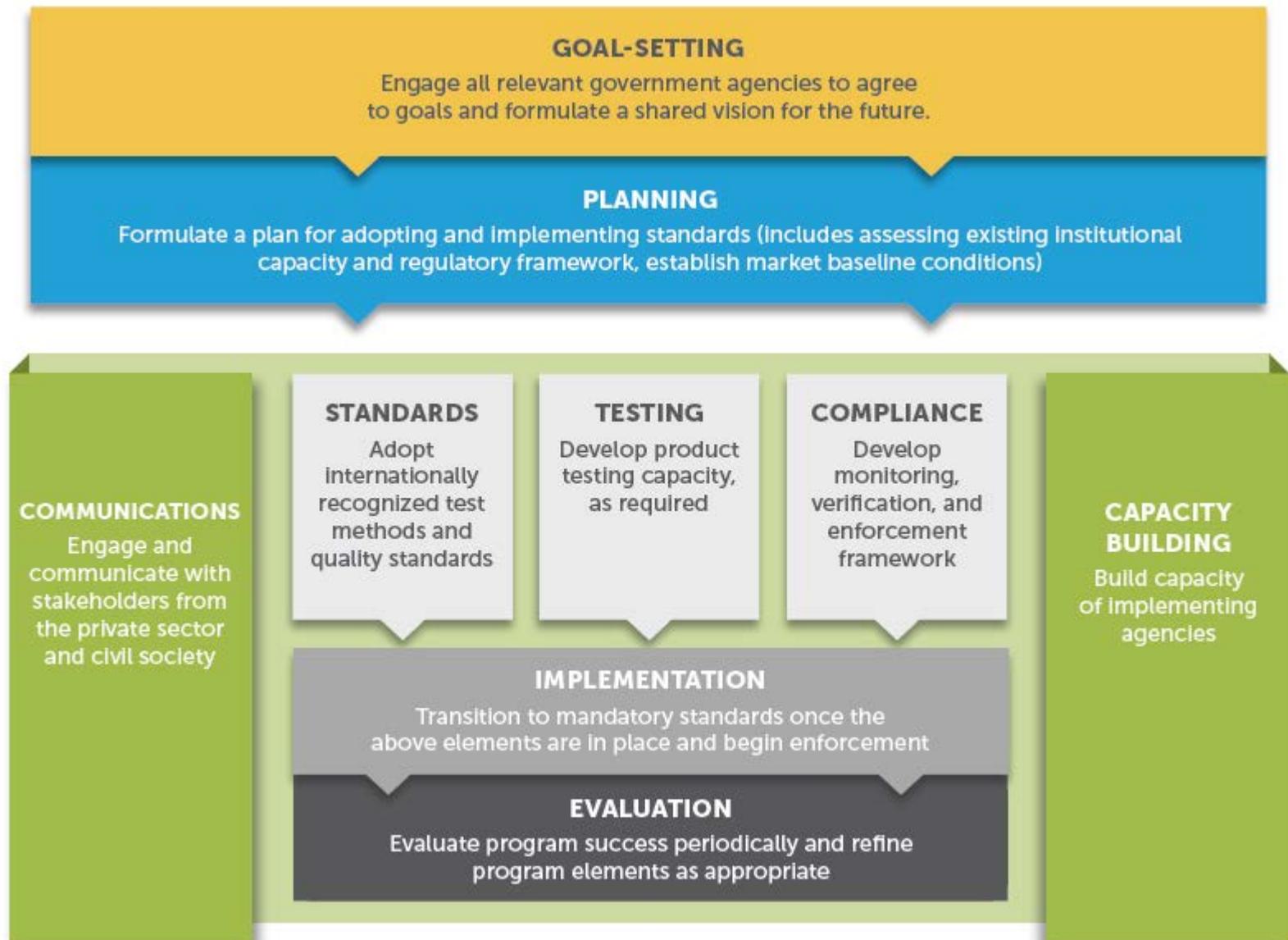


Designing and Implementing Standards to Prevent Non-Compliance

Three lines of defense against poor quality products



A Holistic Approach To Standards Adoption And Implementation



Drew on experience in...

- India
- Australia
- Kenya
- Ethiopia
- ...and elsewhere

Initial Program Considerations: Prerequisites – Technology

Was the technology ready to be regulated?

(After being rejected in 2010, conditions were right in 2014, LG/ WBG Team got go-ahead from
KEBS)

- *Availability* – does the technology exist? **Yes**
- *Awareness* – does the market know about the technology? **Yes**
- *Accessibility* – does the market have easy access to the technology? **Yes**
- *Affordability* – is the technology affordable? **Yes**
- *Acceptance* – are the form, fit and function of the technology acceptable? **Yes**

Source: “Five A’s...” Delve,
Wilkins, Garcia-Lopez & Scholand

Initial Program Considerations: Prerequisites - Sociopolitical

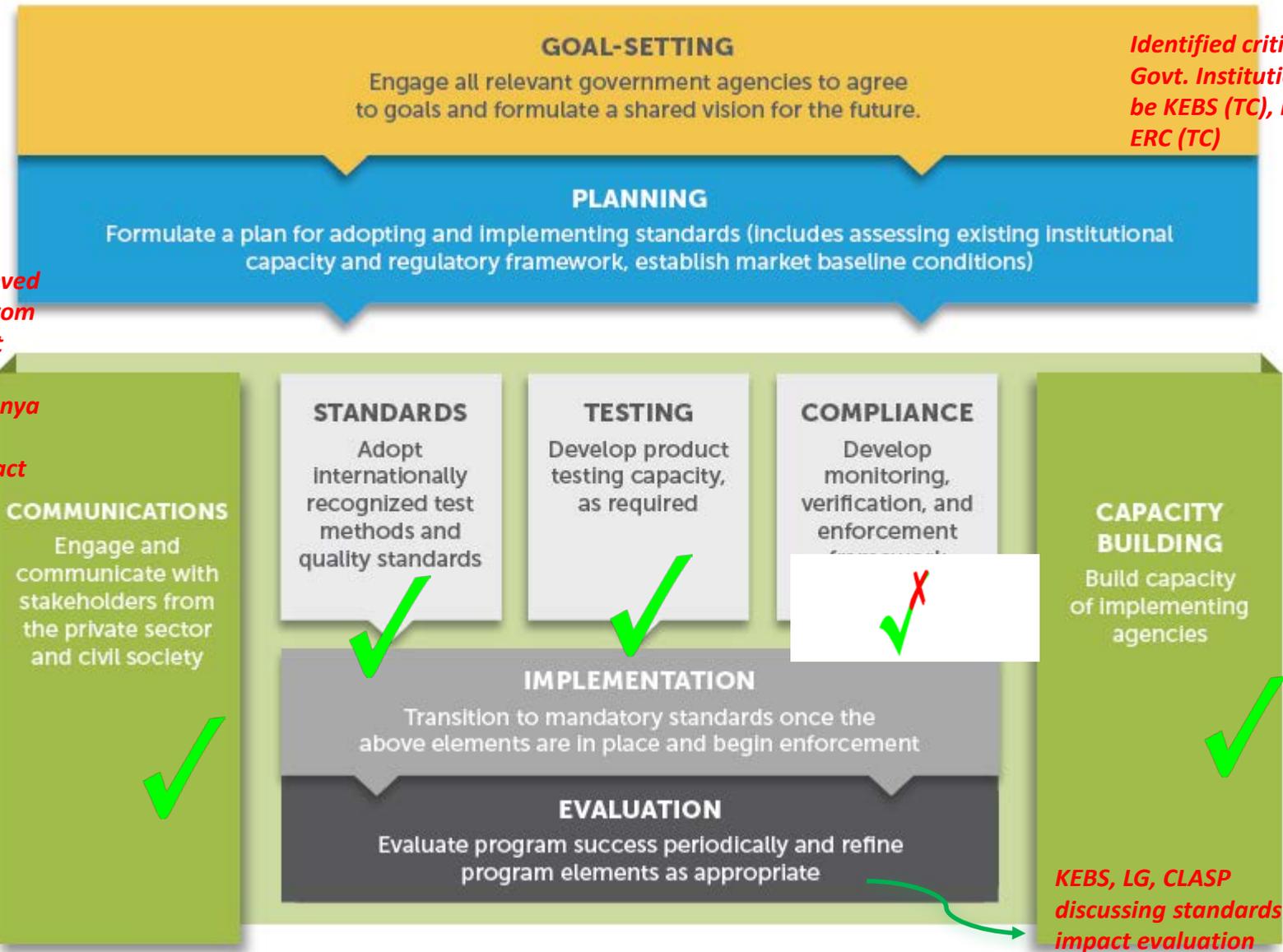
Was the country ready to regulate? *Imperfect situation*

- *Political will* – is there high level political support?
- *Institutional, financial & human resources* – are there sufficient resources to run a program?
- *Legislative frameworks* – are there existing legal and authoritative resources to build on or use?
- *Physical / facilities resources* – does the program have access to quality testing labs, or other necessary facilities?
- *Well-organized consumer / advocacy groups* – are there organizations in place to support the program and represent consumer needs?
- *Thriving manufacturing sector / distributors / retailers* – are there business to business relationships in place, and can they represent the industry in the rulemaking process?

Identify and Clarify Key Roles and Responsibilities

Responsibility Area	Potential Authorities
Strategy & Policy	Ministry (MOEP)
Standards Development	Standards Bureau (KEBS)
Regulations	Ministry, Energy Agency (MOEP, ERC)
S&L Program Administrator	Ministry, Standards Bureau, Energy Agency (MOEP, KEBS, PVOC, ERC)
S&L Program Communication	Ministry, Standards Bureau, Energy Agency, Enforcement Agency (KEBS, LG)
Compliance	Energy Agency, Standards Bureau, Enforcement Agency, Standards Bureau, etc (KEBS –PVOC, Surveillance)
Testing & Research Centre	National or International Test Labs or Universities (International Labs exist, ISO 17025 Accreditation ongoing : UON.....)

An Holistic Approach To Standards Adoption And Implementation



KEBS well experienced in adopting IEC standards. Achieved buy-in of KEBS from MD and relevant structures. Devolution of Kenya Govt had an unexpected impact

KEBS, LG, CLASP discussing standards impact evaluation

Action Plan – Madagascar

- Hire a local consultant
- Identify a local champion (institution/representative)
- Convene a meeting of the relevant stakeholders
- Encourage adoption of voluntary standards linked to VAT / Duty exemptions

Support from QA Team:

- Translate documents into French
- Engage relevant stakeholders at conference in Hong Kong
- Train the local consultant
- Support the local consultant in developing a roadmap
- Attend stakeholder workshops
- Provide ongoing technical support on quality standards

Action Plan – Rwanda

- Work with government to develop a compliance program strategy, including testing capacity needs
- Convene donors and government stakeholders to determine jointly how to invest in this compliance program
- Develop a database to capture all national sales data
- Conduct additional research to better understand roles and relationships between government institutions

Support from QA Team:

- Train the Off-grid Working Group on standards implementation
- Provide technical support on quality standards for SHS kits
- Share workshop materials with the EU Delegation to Rwanda

Action Plan – Uganda

- Determine which standards are applicable to Uganda setting – develop a realistic timeline for standards adoption
- Identify a technical specialist on the ground to follow and steer the process
- Discuss with UNBS how the \$1m donor funding will be allocated
- Define the business case for building a new test lab
- Find a ‘purpose’ for the national trade association – industry self-regulation?

Support from QA Team:

- Provide training and support to the local technical specialist
- Determine what additional support will be needed over the next 12 months

Action Plan – ECOWAS / ROGEP

- Conduct market research in each of 19 countries to identify key players, determine status of standards adoption, and assess market readiness
- Consider adopting voluntary national quality standards, to be linked to financing under ROGEP

Support from QA Team:

- Review ToR for the market assessment and provide guidance to the consultant who will conduct that assessment
- Work with consultant to ensure all relevant data are collected
- Provide documents and short presentations in French to support discussions with national governments
- Attend and present at the regional workshop in May
- Regroup and rethink our regional strategy

Action Plan – Tanzania

- Clarify which products require PVoC vs. destination inspection
- Notify local PVoC representatives that compulsory standards are in place and train them to recognize pico-PV products
- Continue to track the market share of sub-standard products
- Support adoption of regionally harmonized quality standards
- Consider adopting national standards for SHS kits (timing TBD)

Support from QA Team:

- Send slides describing proposed changes to quality standards for pico-PV products
- Support the development and implementation of a market surveillance plan
- Provide initial draft of national standards for SHS kits

Action Plan – Kenya

- KEBS will work with the EAC to harmonize Pico standards.
- KEBS will begin discussing adoption of SHS standards in the new year.
- Revised Pico standards will be gazetted along with several other standards by next February.
- KEBS Market Surveillance team plans to visit 8 regions to do market surveillance in the new year for a variety of high priority products. These checks will be done with scanners.

Support from QA Team:

- Support training of four PVoC companies on new standards before they are gazetted
- Help KEBS address feedback from stakeholders and EAC TC on pico standards
- Prepare presentation for online retailers selling solar for Feb. workshop
- Provide initial draft of national standards for SHS kits
- Work with the Market Surveillance unit at KEBS to better understand the potential to piggy-back on planned market checks

Lessons

- Ask participants to prepare brief presentations in advance on the situation in “their” country
- Present key points multiple times in different ways so they sink in
- Reduce total amount of content, focus on most important material
- Distribute agenda in advance
- End at 4:00 pm each day, allowing participants to do other work thereafter
- Set expectations up front: we will take breaks and end early so participants can pay attention throughout

Next Steps

- Make workshop materials available online
- Prepare talking points on LG QA value propositions
- Translate materials into French
- Provide participants with regular updates on LG QA
- Create a template for assessing institutional and market readiness for standards implementation
- Submit funding proposals to World Bank
- Prepare for government event in HK on 24 January
- Plan additional workshops
- Hold conference call to follow-up in about 6 months