Webinar “International Electrotechnical Commissions’ discount packages to access sustainable energy standards for rural electrification”
14 May 2013
International Renewable Energy Agency

Founding Conference: January 2009, Bonn, Germany
1st Assembly: April 2011, Abu Dhabi, UAE

The intergovernmental renewable energy agency

Mandate: Sustainable deployment of the six renewable energy (RE) resources: Biomass, Geothermal, Hydro, Ocean, Solar, Wind

Location: Headquarters in Abu Dhabi, United Arab Emirates
Innovation and Technology Centre, Bonn, Germany

Mission: Accelerate deployment of renewable energy

Membership: 160 affiliates - 109 ratified
Benefits for Member Countries

• Providing a detailed technical basis for laws and regulations
• Supporting public and private tendering processes
• Accessing latest technology developments and best practices
• Facilitating access to financing by mitigating project risks
• Supporting technology markets based on sound quality and health & safety (H&S) requirements
## IRENA’s Analysis on RE Standardisation

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SAMPLE OF RECOMMENDATIONS</th>
</tr>
</thead>
</table>
| Promotion and knowledge dissemination | • Facilitate access to standards and the understanding their inter-relationship  
• Document evidence on the impact of standardisation |
| Strategic framework for standardisation in the renewable energy sector | • Mechanisms to establish a strategic overview forum  
• Stakeholders’ engagement in the ISO SAG-E |
| Support for broader stakeholder engagement in standardisation | • Engagement from developing countries in the standardisation process  
• Options for using the latest communication technologies for engagement |
| Specific projects related to standards development | • Bridge gap of international standards for the evaluation of competencies (installation, grid integration)  
• Incorporate environmental impact |
Standardisation & Quality Infrastructure (QI)

Value chain

National quality infrastructure

International QI system

Applicable to all products and processes.

ISO 9000, ISO 14000, HACCP, etc.

Product certification CE, GS, etc.

National standards
International standards

Certificates

Testing, analysis
Inspections

Verifications
Reference materials
Calibration

ISO Guide 62, 65, etc.

Accreditation

ISO 17025

e.g. IAF ILAC
PAC APLAC

Certification
products
processes

Standards

ISO, CODEX
ACCSQ

Comparison measurements
Proficiency tests

Test laboratories

Traceability

Metrology

Calibration laboratories
Metrology in chemistry
Verification system

Diagram: Survey of the national quality infrastructure

http://www.ptb.de/de/org/q/q5/docs/broschueren/broschuere_QI_2008e.pdf
Standards supporting national RE regulations

Standards can be linked to national regulations and national incentive schemes for RET (e.g. FiT) to assure that good quality products are promoted.

Result: National RET markets created based on high quality products
No quality infrastructure…. 

...result

Lack of confidence in the technology

Source: https://www.wind-watch.org
Quality Infrastructure for small-scale RET

Balance cost/benefits

- Performance
- Reliability
- H&S
- Bankable projects

-Cost
- Local capacity
- Awareness

Guidelines to establish national QI
2013 Solar water heaters and small wind turbines
Not only RE product standards but RE system standards (I)

Gap: installation and post-installation
What is the result of deploying systems with good quality products, but not properly installed?

Use of standards not only to assure good quality products (e.g. PV cell or wind turbine), but good quality systems: including skills for designing, installing and maintaining the whole RET system.
Access to information is crucial

IRENA’s project
Standards
Information
Platform

National and International:
- Standards
- Patents

Optimize access to key info (time & cost)

Adapt technical specifications

Promote the importance and benefits

Encourage cooperation among countries

Simplify classification schemes of patents
Developing countries engagement

Use of existing mechanisms
- IEC Affiliate Country Programme
- ISO committee on developing country matters - DEVCO

Development of new mechanisms
- Use of virtual meetings
- Standard users – TC forums

Costs
- Reduction in standards cost
  - IEC 62257 series discounted price
- Funding mechanisms
Quality Infrastructure is crucial for a sustainable deployment of RET at a global scale – let us all contribute to continue building it up

Francisco Boshell
fboshell@irena.org
www.irena.org

Download report for free at: