Scaling-up solar PV deployment: implementing projects with assured quality

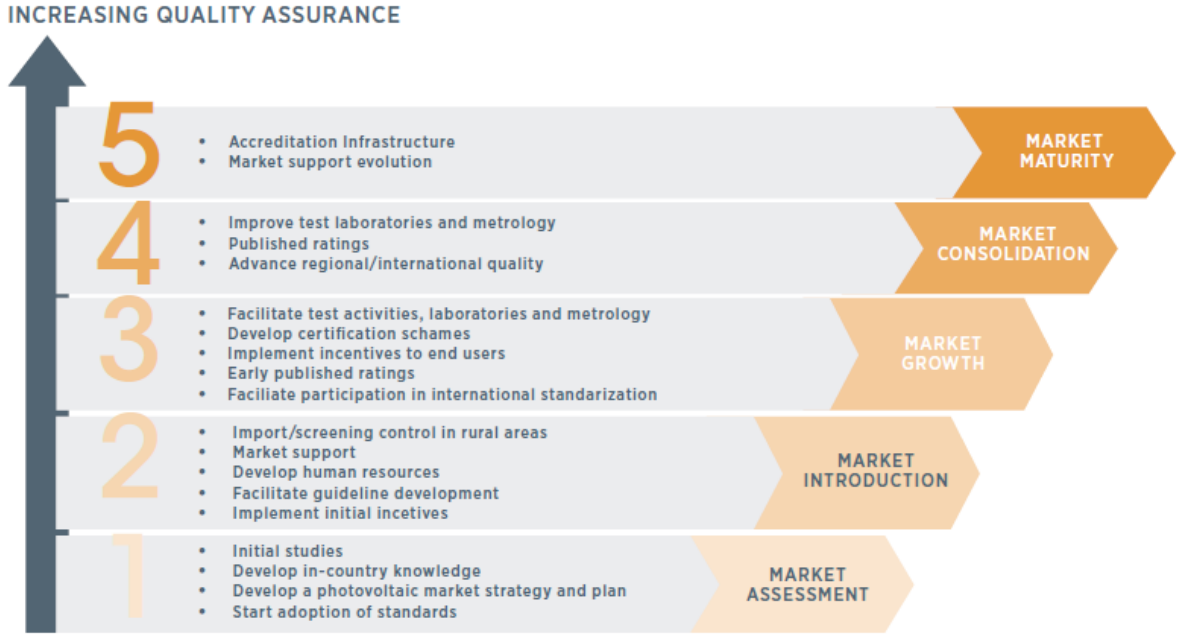
Asia Clean Energy Forum 2018
Deep Dive Workshop (DDW)
8 June 2018 (Friday), 2018 / 9:00 a.m. - 1:00 p.m.

Background

The competitiveness of renewable energy technologies is improving rapidly, also highlighted by recent price developments, including in the field of PV technologies. The next challenge for a major scale-up in markets is to assure, to all stakeholders, that these technologies will deliver the anticipated services, with the expected performance, during their lifetime.

The necessary scale-up in PV deployment will therefore need to be underpinned by systematic quality assurance, requiring a physical and institutional infrastructure, so-called Quality Infrastructure (QI). QI comprises the institutional network and legal framework within which standards are formulated and implemented, including other elements such as metrology, testing, certification and accreditation of a technology. IRENA, with support from its partner organisations, has developed comprehensive guidelines and tools, an example is shown in Figure 1, to support countries in developing and maintaining such a quality infrastructure for PV systems, based on international best practices.

Figure 1 Steps in quality infrastructure development linked to market maturity indication



Experience has shown that the implementation of a quality infrastructure accelerates future investments in PV projects, lowers capital costs, improves overall performance, extends module lifespans and lowers the resulting electricity costs.

Objective of the Workshop

Growing PV markets require that the service provided by PV systems meet the expectations from users and stakeholders in terms of performance, safety and durability. The workshop aims at sharing best practices in assuring quality for PV systems based on experts' experience as well as IRENA's tools and guidelines. Experts will explain technical challenges and risks with performance and durability of PV systems in Asia. Also, they will showcase step by step approaches on how to develop and implement quality infrastructure, and its impact in the bankability of PV projects for different markets. The audience will have the opportunity to raise any questions and interact with the speakers in different segments across the workshop.

Tentative Programme

Time	Topic	Speakers
	Opening	
09:00 - 09:10	Welcome and introduction to the workshop	Opening by IRENA: Francisco Boshell
	Session 1: Role of Quality Infrastructure (QI) in PV Markets	
09:10 - 09:25	Quality Infrastructure boosting PV Markets	Francisco Boshell, Analyst for RE Technology, Standards and Markets, International Renewable Energy Agency (IRENA)
09:25 - 09:40	The importance of Standards and Quality Assurance to support financing of PV projects	Susumu Yoneoka, Energy Specialist (Smart Grids) Energy Sector Group Asian Development Bank
09:40 - 09:55	Integration of quality infrastructure into public policy and regulation in South Asia	Vimal Mahendru. Ambassador of IEC for mini-grids, IEC
09:55 -10:05	**Open mic: questions, highlights, experiences from the Audience**	
	Session 2: QI mitigating technical risks for PV	
10:05 -10:20	Reliable warranty insurance: A key metric of sustainable PV projects	Ronald Sastrawan, Senior Risk Analyst Munich Re
10:20 -10:35	Why PV quality matters in Asia?	Dr. Alex Li. Head of Jinko Solar's Asia-Pacific Technical Service, Jinko Solar
10:35 –11:00	Coffee Break	
11:00-11:15	PV System: Quality Control, Test, Risk Evaluation and Management	Hui YU, General Manager, China General Certification Center
11:15 -11:30	Resilient Photovoltaic Systems	Kyle Datta, General Partner Ulupono Initiative
11:30 – 11:40	**Open mic: questions, highlights, experiences from the Audience**	
	Session 3: Implementing effectively QI	
11:40 – 11:55	Good practices in testing and certification for PV systems in Asia	Sebastian Petretschek Vice General Manager | Head of Independent Engineering Asia | Solar/ Fuelcell Technology Greater China, TÜV Rheinland
11:55 – 12:10	Enhance your analysis and projects with the web tool INSPIRE (**In**ternational **S**tandards and **P**atents **i**n **R**enewable **E**nergy)	Alessandra Salgado, Associate Professional, IRENA
12:10 – 12:25	The PV module reliability scorecard	Alfredo Jakub. Senior Consultant, Clean Technology Centre, DNV GL

12:25 – 12:50	**Ask the expert** Topic: How to build up QI in countries with different context and market maturity? Moderator: Vimal Mahendru	
	Closure	
12:50 –13:00	Key messages	Francisco Boshell, Analyst for RE Technology, Standards and Markets IRENA
13:00 –13:05	Group photo	