



QI4GT Fund in the Framework of the PTB Project: Quality Infrastructure for Increased Trade in the Eastern Partnership Countries

QI4GT Armenia Photovoltaic Standards: Overview

Lead Applicant:

National Body for Standards and
Metrology (Armstandard)

Additional Partner:

Energy Saving Foundation

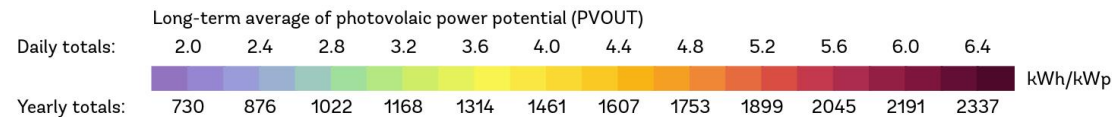
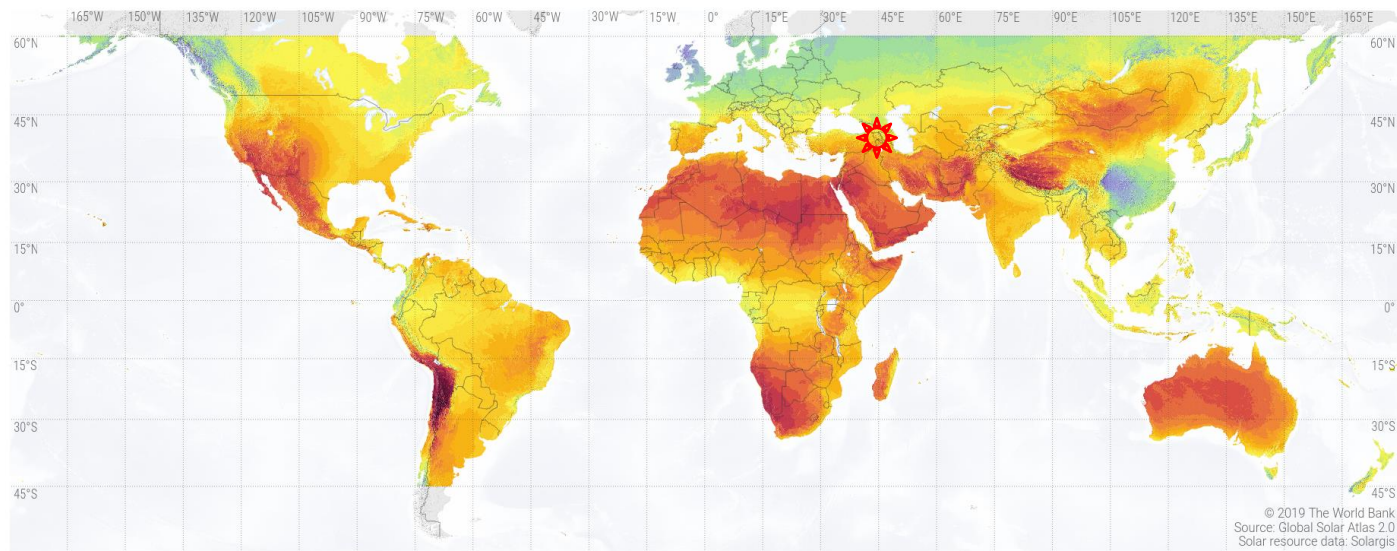


Project goal:

Improve the quality and productivity of solar PV projects (investments or systems) in Armenia through introduction and application of technical standards and international best practices in quality infrastructure (QI) services for the design, development, commissioning and monitoring of PV installations.

😊 FACTS

SOLAR RESOURCE MAP PHOTOVOLTAIC POWER POTENTIAL



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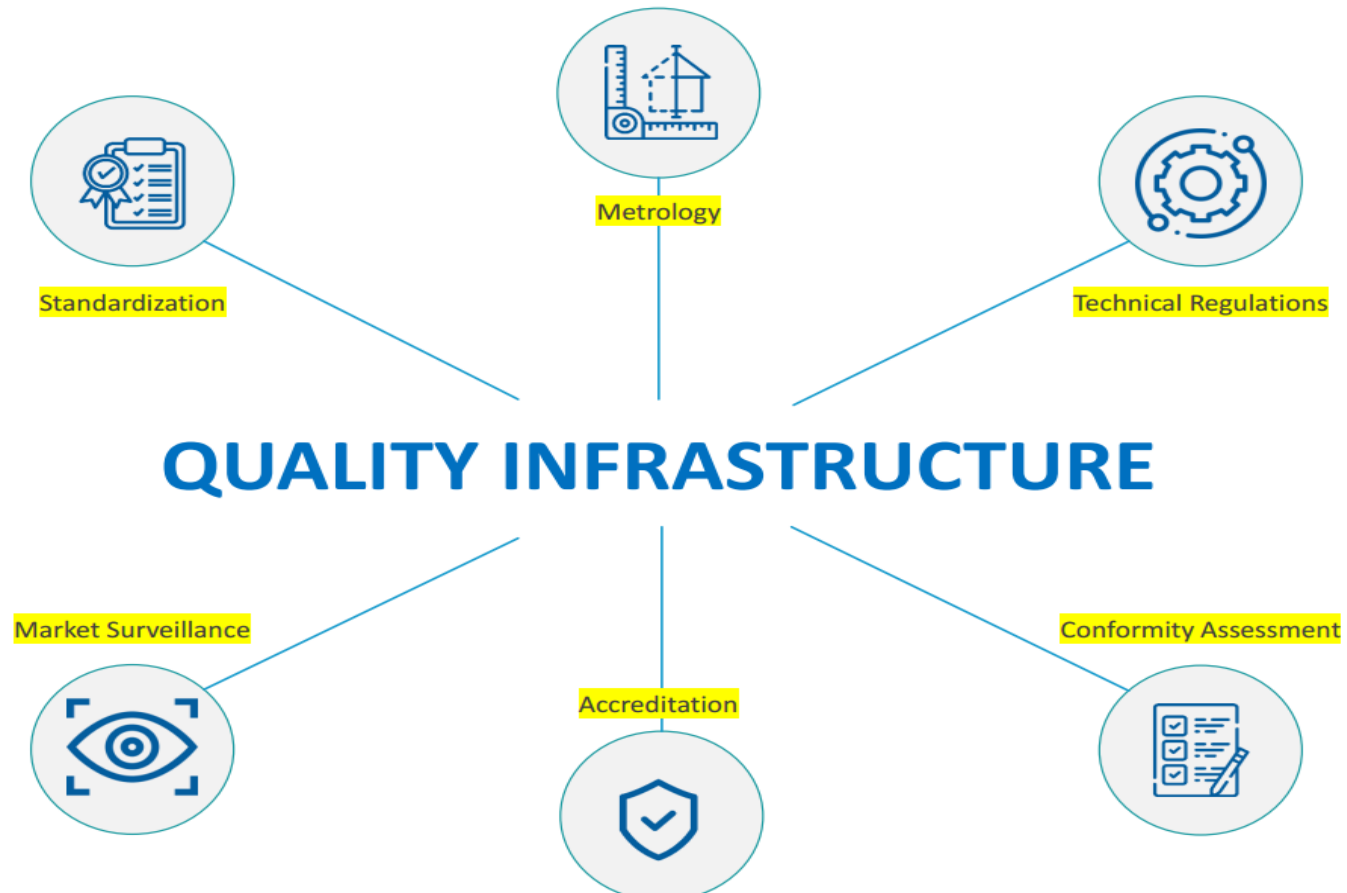
😊 FACTS

- ☀️ Armenia has significant solar energy potential; according to SOLARGIS solar resource data series, the Global Horizontal Irradiance (GHI) varies between 1200 to 1700 kWh/m²/year which is above the European average of 1,000 kWh/m²/year.
- ☀️ Armenia has prioritized renewable energy development as a means of climate change mitigation and energy security promotion in its Energy Sector Development Strategy up to 2040.
- ☀️ The government has recently prioritized the construction of solar power plants over other types of renewables through net metering provision, feed-in tariff, enabling of energy communities and liberalization of electric market rules.
- ☀️ Armenia's PV market experienced a rapid growth after introduction of the net-metering scheme and the concept of autonomous electrical power production and introduction of licensing scheme for commercial PV plants.
- ☀️ As of early June 2023, there were 12,195 autonomous power producers, APP (220.5MW) connected to the national grid and 1175 APPs (16.7MW) were being commissioned.

😊 BUT...

- ☀ The proper technical regulation and standardization has not yet been developed in Armenia and require state engagement for ensuring the quality, efficiency and reliability of the solar power plants being designed and built every year.
- ☀ There are very few solar and relevant standards.
- ☀ The broader solar system, including the mounting, efficiency, design, electrical safety requirements as well as the commissioning, technical inspections, and maintenance and monitoring during operation needs to be put in place.
- ☀ There are no national capacities for testing, certification, inspection etc. yet. For the moment, PV modules are shipped abroad for certification and testing purposes.

QI4GT Armenia Photovoltaic Standards: Role QI



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Standardization:

- Working group plan and participants identified for PV standardization
- Mapping of main PV standards and support of adoption process in Armenia

Metrologs:

- Consultancy for PV stakeholders on calibration/ traceability

Accreditation:

Conformity Assessment:

- Identification of testing needs of PV stakeholders

QI4GT Armenia Photovoltaic Standards: Main activities

Output 1: **Technical Committee** (TC) subcommittee for PV is functional.

- Working group roadmap and participants identified until 22.1.2023
- TC/ Working group is supported after selection of main standards



QI4GT Armenia Photovoltaic Standards: Main activities

Output 2: **Gap analysis** of international and local requirements for PV is conducted.

- Gap analysis report: QI for PV Systems in Armenia presented on 22.1.2023
- Common field visit to PV plant and PV manufacturer on 22.1.2023



QI4GT Armenia Photovoltaic Standards: Main activities

Output 3: Capacities, awareness, upscaling of **experiences** for QI or PV is increased.

- QI4PV Global Exchange: 5 events 02-07/2023 open for registration
- EaP exchange of experience, publicity brief etc





There are strong interlinkages and synergies between all 3 outputs, so that the mentioned activities cannot be seen as stand-alone activities, but rather in close interaction with the other outputs

Thank you very much for your attention!