



**India**

**Strengthening Quality Infrastructure  
for the Solar Industry**

**Objective** The project aims at improving the scope and increasing the use of quality infrastructure (QI) services needed for assuring the quality and reliability of solar energy systems by taking into account international good practices.

**Approach** The project has been conceived as a multi-level approach with a focus on the meso level, mainly by strengthening the institutional competences of QI service providers. More specifically, the following areas are targeted: (1) Strengthening capacities of the Indian metrology system relevant for the solar sector (2) Supporting conformity assessment bodies to use and set up quality assurance procedures for solar energy systems and components (3) Informing standardization bodies and regulatory agencies on international requirements and good practices for quality assurance in the solar sector (4) Awareness raising and qualification of companies and public institutions with regard to quality aspects in the sector.

The main project partner is the Ministry of New and Renewable Energy (MNRE) as political partner and the National Institute of Solar Energy (NISE) as implementation partner. Further implementation partners include the National Physical Laboratory (NPL) for primary reference solar cell calibration plus a variety of well established QI institutions in India.

**Impact** The project supports the sustainable achievement of the Jawaharlal Nehru Solar Missions' political goals. Aiming at installing 100 GW of solar generating capacity until 2022, a central precondition is the use of premium-quality and secure solar energy systems which are complying to international standards. This in turn makes it necessary for the national quality infrastructure to render internationally recognized and demand-oriented services which comprise metrology and standardization as well as conformity assessment, certification and accreditation. The envisaged activities to promote QI services increase the basis for assuring the quality and safety of solar cells and solar-operated instruments. Ultimately, investment security is increased as well. Significant contributions to limit the increase in greenhouse gas emissions occur simultaneously as negative impacts of non-renewable energy sources are being reduced.

**Cooperation** Within the scope of German Development Cooperation the project is part of the program for the promotion of renewable energies and energy efficiency in India. Close cooperation is especially envisaged with the Indo-German Energy Programme (IGEN) implemented by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit).

**Financing** Federal Ministry for Economic Cooperation and Development (BMZ)

**Duration** 2014 – 2019

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