Your challenges
Successful long-term power production and meeting the planned return on investment are the goals of any power plant project. Photovoltaic (PV) power plants require regular maintenance and inspection to ensure that components and grid connectivity installations function correctly. The slightest defect or failure in a minor critical component could result in undesired downtime. Besides voluntary regular inspection to ensure expected operation of your PV power plant, the different local legal requirements for PV plants call for mandatory inspections following a specific schedule. Operators, owners and investors of solar power assets require inspections to be carried out with a high level of technical expertise in order to receive evaluations and recommendations for maintenance and repair activities.

What is an in-service inspection?
In-service inspections help to implement regular checks of PV power plant status, operational availability and reliability. They assist owners, operators and investors to optimise shutdown periods to increase power production and ensure financial stability.

Why are in-service inspections important for your business?
In-service inspections are necessary to ensure that your solar power assets deliver the expected power output and meet the planned return on investment of the project. They also help you to meet regulatory requirements for mandatory inspections. Inspections from a service provider with a strong brand reputation can ensure a high level of acceptance of your reports and certificates. The timely recognition of repair needs will minimise costs, ease constraints on public funds and significantly extend the life of your PV power plant.

How can we help you?
TÜV SÜD provides regular inspections, performance verification and preventive failure analyses to help you maximise productivity, reduce costly downtime and meet regulatory requirements.
Our in-service inspection services

- **Inspection of regular maintenance**
  TÜV SÜD conducts inspections in line with the detailed test procedures and to-do lists provided in the directives for the regular maintenance of PV systems.

- **Identified problem analysis**
  Our evaluation takes into consideration the client’s description of problems and the first check of all available documents and monitoring data.

- **Visual inspection**
  TÜV SÜD’s experts conduct a visual inspection of the PV plant to identify its status and basic issues affecting its ability to function reliably and safely.

- **System and component inspection**
  TÜV SÜD offers inspections for a wide range of PV systems, including roof-mounted systems (medium-sized systems for residential and industrial roofs) and large ground-mounted systems. We also offer detailed measurements of component parameters.

- **Definition of improvement measures**
  We provide a proposal for detailed improvement measures according to the identified technical and organisational problems.

Your business benefits

- **Save money and ensure reliability** – with regular preventive inspections to avoid costly defects and unexpected shutdown periods.

- **Minimise risks** – by providing up-to-date maintenance recommendations to ensure the functionality of components and grid connectivity installations.

- **Gain certainty** – with TÜV SÜD as a reliable partner for grid operators, ensuring performance of your PV plant.

- **Enjoy global support** – through TÜV SÜD’s strong presence and high level of knowledge in global PV markets, backed up by our experts in local areas.

### Why choose TÜV SÜD?

TÜV SÜD is widely known as an independent third-party solutions provider that produces impartial and reliable reports on PV plants. We offer world-class expertise with in-depth familiarity of international directives and regulations. Our extensive global network enables us to provide immediate and cost-effective support with premium TÜV SÜD quality in most markets. TÜV SÜD is a one-stop provider of end-to-end solutions for all types of PV power plants. Our experts come from a variety of different engineering disciplines, with long-standing experience in the inspection of technical installations and a thorough understanding of legal requirements. We have a service portfolio covering the whole lifecycle of PV power plants, giving us deep knowledge of critical components and structures as well as typical defects.

### Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and assessment services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East, Asia and Africa. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

### Related services

TÜV SÜD provides the following related services:

- Performance ratio assessment
- Diagnosis of malfunctions
- Performance monitoring
- Assessment for refinancing