Unlocking the potential of photovoltaic power

Minimizing risk and maximizing the promise of your PV power plant across its entire lifecycle
Understanding and evaluating the risks and mitigation measures associated with the solar industry is vital for investors, operators and other PV power plant stakeholders. Technological, resource, project, counterparty, financial and regulatory risks can compromise the safety of PV power plant or lead to a loss of revenue. EPC (engineering, procurement & construction) partners involved in PV projects have to deal with uncertain weather conditions, quality in workers’ competencies and manufacturers resources, which impacts their ability to deliver quality installations on time. PV plant operators need to comply with industry safety standards while ensuring maximum power output and minimizing costs.

A qualified and trusted expert
TÜV SÜD is a qualified and trusted expert in the PV power plant sector. Our experts help forecast the long term competitiveness of solar projects and assist investors in making informed decisions. We identify and mitigate risks from conception to operation through to decommissioning and ensure investment certainty. We assist EPCs in supplier evaluation, serve as an inspection partner by performing compatibility testing, and report on asset performance on PV projects to ensure reliability. We support operators with periodic in-service inspections – maximizing power output and profitability for PV plants without compromising safety, compliance standards or regulations. TÜV SÜD’s industry insight and expertise helps assess plant operational problems and ensure cost and operational efficiency.

Expert insight ensures long-term PV success
Hundreds of completed plants prove TÜV SÜD’s PV proficiency

Successful renewable energy projects are critical to economic success and global energy security
The clean energy market is growing rapidly. One of the fastest growing sectors is solar, where developments in photovoltaic (PV) technology promise tremendous environmental and economic advantages. Harnessing the demand and opportunities offered by PV power projects requires a thorough understanding of both the technological complexities and commercial risks. TÜV SÜD supports the entire lifecycle of any PV power plant project, from feasibility studies, quality assessment, commissioning, through to ongoing operation, asset transaction and decommissioning.
Comprehensive solutions for safe, efficient and reliable photovoltaic power plants

TÜV SÜD’s fully customised and integrated solutions cover the whole asset lifecycle. We enable your PV power plant to optimise performance and achieve maximum efficiency, thus ensuring bankability, safety and quality. With more than 200 PV plant projects completed globally, TÜV SÜD’s established PV hubs and skilled teams worldwide help manage your PV projects independently and impartially.

### ASSET LIFECYCLE

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### INSPECTION & TESTING

| • COMPONENT TESTING | • QA / QC INSPECTION | • QA / QC INSPECTION |
| • GRID COMPATIBILITY TESTING | • POST-SHIPMENT INSPECTION | • POST-SHIPMENT INSPECTION |
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| | | • FINAL ACCEPTANCE TEST (FAT) |
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### CERTIFICATION

| • CERTIFICATION PV PLANT LEVEL I | • CERTIFICATION PV PLANT LEVEL II |
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### TRAINING

| • EXPERT TRAININGS AND SEMINARS | • EXPERT TRAININGS AND SEMINARS | • EXPERT TRAININGS AND SEMINARS | • EXPERT TRAININGS AND SEMINARS | • EXPERT TRAININGS AND SEMINARS | • EXPERT TRAININGS AND SEMINARS |
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### Our accreditations

- IEC 62108
- IEC 61215
- IEC 61724
- IEC 61646
- IEC 61730-1
- IEC 61730-2
- IEC 62446
- IEC 61850
- DIN EN1090-1

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Supporting the photovoltaic power plant sector globally
Over 800 locations in 40 countries around the world

Why choose TÜV SÜD?

**World-class expertise**
With over 145 years of experience, TÜV SÜD offers solutions that are backed by best-practice cases and real-world scenarios. As a holistic service provider and a project implementation expert, we offer you world-class insight, intelligence and expertise on a local, regional and global scale.

**Independent and Impartial expert reports**
TÜV SÜD’s worldwide reputation as an independent third-party technical service provider ensures objective, reliable and realistic expert reports you can rely on during critical decision-making. We assess each project impartially, ensuring that you get customized assessments and unfiltered information.

**Bankability services**
Our bankability and due diligence services offer assistance and expert assessment related to investment in PV power plants, to put together a quality bankable PV project. We provide you with the expert technical support – from site and project assessment through to installation and commissioning – you need in order to enhance investment security.

**International accreditation**
TÜV SÜD’s testing and certification services ensure that your products and systems meet rigorous national and international performance standards and safety requirements. TÜV SÜD certification provides your business partners with a reliable basis for making key decisions.

**Global presence**
With over 800 locations in Europe, the Americas, the Middle East, Asia and Africa, TÜV SÜD is represented in all of the world’s major economic regions. Our specialists are expert partners for international investors, planners, designers, constructors, component manufacturers and operators, providing local knowledge coupled with global expertise.

Your business benefits

**Save money and time** – We support your PV power plant project from end-to-end, saving time and minimizing the financial risks involved in such expensive and technically complex developments.

**Mitigate risk** – TÜV SÜD takes a holistic approach, covering the whole asset lifecycle. We assess your site and review contracts to provide planning certainty.

**Enhance competitive edge** – We provide insight and foresight about developments in national and international standards. Our third-party certification also demonstrates your commitment to quality and increases the overall acceptance level of your projects.

**Complete solutions** – With a profound technological understanding of what makes PV power plants work – both entire systems and their components – our experts can provide the certification and operational expertise you need, whether you are an investor, developer or plant owner and operator.

**Expert partnership** – TÜV SÜD’s experts are recognised by numerous authorities, both nationally and internationally.
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.

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