Your challenges
Engineering, procurement and construction (EPC) contractors, owners/operators and financers of photovoltaic (PV) power plants need a reliable overview of the energy yield of their projects. During the planning stage, stakeholders of new PV power plants require an assessment of the potential yield in a given location. Sellers and buyers of existing PV power plants need to consider the real performance data and expected energy yield of the plant. When a power plant project does not perform according to project design, stakeholders need an independent recalculation to determine the real level of energy losses compared with the initial expectation.

What are yield studies?
Yield studies assess the potential of your PV power plant by studying possible installations for optimal performance and calculating its performance ratio. A study covers parameters such as performance ratio, energy yield value (annual summary as well as details for particular months), and expected energy losses of the system. An independent site visit can provide an evaluation of the overall suitability of the location and the chosen technology.

Why are yield studies important for your business?
Yield studies provide PV power plant stakeholders with an overall view of the project’s energy output and future cash flow. A yield study is one of the crucial documents for all EPCs, owners/operators and financers involved in the project.

How can you prepare for yield studies?
Stakeholders need to provide basic technical parameters (type/model of applied modules and invertors, inclination, type of mounting structures, GPS coordinates) to ensure that the study data is reliable.
How can we help you?
TÜV SÜD’s experts are well versed in legal requirements and have longstanding international hands-on experience in yield studies services. We provide you with a fully independent overview of the PV power plant during the design, construction and operation stages of a project.

Our services

- **Site assessment**
  TÜV SÜD experts perform a site visit to assess potential obstacles (trees, mountains, buildings) that can negatively impact plant operation and its future yield.

- **Meteorological data**
  TÜV SÜD confirms the completeness and adequacy of meteorological and climatic data that are used as inputs to the yield study calculation. We use the most accurate meteorological data sources, whether from ground stations or satellite, and compare with other independent sources available for the location (e.g. Meteoronorm, NASA, PVGIS).

- **Energy losses**
  Our experts provide not just a summary but also a detailed quantification of the volume and types of system losses.

Your business benefits

- **Benefit from our independent approach** – which ensures a transparent and unbiased view of potential risks of your project.

- **Work with a reliable partner** – with decades of experience in technical assessment and PV. Our solid track record ensures that we are fully accepted by financial institutions, EPCs and other involved parties.

- **Strengthen your asset value** – by partnering with a globally renowned third-party service provider.

- **Enjoy global support** – from our strong international and regional network, providing you with our high level of knowledge in global PV markets, as well as expert staff with the best local knowledge.

Why choose TÜV SÜD?
TÜV SÜD has a strong reputation as an independent and impartial technical service provider, ensuring that our clients receive unfiltered information and assessments they can rely on. We bring international expertise together with local knowledge, with in-depth familiarity of all relevant international directives and regulations. Our offices are located in all key markets to provide immediate and cost-effective support.

TÜV SÜD provides a wide range of PV plant services based on an interdisciplinary approach that draws from many related engineering disciplines and decades of experience in international public, private and joint-sector projects. Our service portfolio supports you throughout the entire lifecycle of your PV installation, from design review and PV component testing through to final inspection, operation or decommissioning support.

Choose certainty. Add value.
TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and knowledge 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:

- Site assessment
- Feasibility study / Design review
- Construction Monitoring and Financial Monitoring
- Performance Acceptance Test (PAT) and Final Acceptance Test (FAT)
- EPC and O&M contract evaluation