

Investment Confidence



Who We Are

CEA is a global technical services and solutions provider for the solar and energy storage industries. We help our clients and partners mitigate risk and optimize investment returns as they deploy solar energy solutions worldwide.

Experience & Reliability Matters

The CEA team has leveraged its extensive upstream and downstream experience to help clients ensure successful PV project execution around the globe.

- Founded in 2008 with a 13 year track record as an independent QA services provider
- North American owned and operated in China with global teams present in 13 countries
- Combined 150 years of leadership team experience
- ISO 9001 certified since 2015



PV Product Focus

- Crystalline and thin film modules
- Racking and tracker solutions
- Energy storage systems
- Transformers
- String and central inverters
- Other Balance of System components

Client Base

- EPCs
- IPPs
- Developers
- Installers
- Financial institutions
 Project owners
- Other downstream partners



Engineering Services

PV farm owners and IPPs face many technical challenges throughout the development and construction of renewable energy CEA's Engineering projects. Services can provide comprehensive technical support to utilize upstream quality control and ensure that the system design and construction will result in an solution optimized that maximizes profitability and minimizes risk.

- **Project Development**
- **Engineering and Construction**
- Operation and Maintenance (O&M)
- Project Sale and Acquisition & More

Quality Assurance

CEA's experienced on-the-ground and international team of quality control engineers and account managers offers an unparalleled quality assurance presence that can protect solar investments and ensure future energy-producing viability for the life of the product.

- Pre-Production Quality Control
- 24/7 In-Line Production Monitoring (IPM)
- Post-Production Pre-Shipment Inspection (PSI)
- **Container Loading Reviews Third** Party
- Testing Labs & More

Factory Audit

CEA's Factory Audit Process (CFAP) provides industry leading insights into the processes, production and quality standards at any solar factory globally. Since 2008, CEA has been performing independent due diligence audits on over 350 crystalline and thin film module manufacturing facilities in over countries.

- Pre-Production
 - QC System Implementation
 - Employee Management
- **During Production**
 - Materials Management
 - o Process Management
 - o Equipment Management
- **Finished Product**
 - Traceability
 - o Claims Management
 - o Laboratory Management & More

Other Value Added Services:

Supply Chain Management, Technical Due Diligence, Financial Due Diligence, Supplier Benchmarking Program, Supplier Market Intelligence Program, and other standard and customized Services.

PROJECT REFERENCES



Service Type: Quality Assurance

Product: Racking Project Size: 1100 MW **Location:** United Arab Emirates

CEA Value Added:

Supported the development of a comprehensive quality assurance plan. Performed BOM review, in-line production monitoring and preshipment inspection at a racking manufacturing site in Switzerland for a top 10 global solar EPC.



Service Type: QA & Engineering

Product: Module

Services

Project Size: 108 MW Location: USA

CEA Value Added:

CEA completed full scope in-line production monitoring on behalf of the EPC over a course of more than three months across BYD Solar's own facilities and three OEMs in China. Performed onsite module issue tracking and resolution on behalf of the project developer.



Service Type: QA & Engineering Services Product: Inverter, MV transformer & switch

gear, UPS

Project Size: 130 MW Location: Australia

CEA Value Added:

Project included a total of 69 inverters, 23 MV transformers, 23 MV switchgear modules, 23 switchboard modules, 23 auxiliary transformers and 23 UPS modules; all underwent inspections for visual, and safety defects including confirmation of protection circuits, proper machine functionality, on-site and remote communication, as well as assembly's mechanical integrity developer.