Solar Quality Assurance
Securing Your Investment

An investment in renewable energy is an investment in the future. And, as with any investment, the return must be secured with thorough planning and ongoing oversight. Cadmus’ renewable energy experts have been guiding clients through each stage of their solar projects for more than 10 years. Our quality assurance process and extensive technical insight can help ensure a long, profitable future for your organization’s renewable energy assets.

Maximize your system’s performance

Solar photovoltaic (PV) arrays are some of the most affordable and accessible means for organizations to generate their own renewable energy. A poorly installed PV system, however, can have numerous issues that impact the system’s ability to safely and reliably generate electricity. Poorly installed systems will have higher maintenance costs, lower-than-expected energy output, and reduced customer satisfaction—and may even pose a safety hazard.

These common missteps can be avoided with the assistance of an experienced quality assurance team. A robust quality assurance process minimizes costs associated with ongoing operations and management and reduces the risk of failure, downtime for maintenance, or safety hazards. This results in tangible benefits to project owners and investors, who can be confident in project cash flows and the bankability of distributed solar assets.

Trusted, experienced professionals

At Cadmus, we train our inspectors to identify potential problems that can compromise the safety, durability, or performance of PV systems, ensuring your system returns the maximum value for your organization from day one.

Cadmus has conducted more than 2,000 detailed PV inspections for public and private sector clients and continues to conduct more than 1,200 per year. Our experts are well versed in the common mistakes installers make and routinely spot them before an installation is completed.

PV Inspection Results:
Systems by Severity of Issues Found

Cadmus’ research has shown that 75% of solar PV inspections reveal issues, ranging from incidental to critical.

Our team includes licensed electricians, NABCEP-certified solar installers, registered professional engineers, and experts in solar technologies as well as system design, installation, monitoring, education, and troubleshooting. Cadmus’ energy experts also include authorities in clean energy finance who support the U.S Department of Energy, states, municipalities, and private organizations.

We routinely troubleshoot such common issues as:
- Inadequate overcurrent protection
- Improper grounding methods
- Damaged or incorrectly installed equipment

Our employees are highly skilled professionals who regularly perform field inspections, system design reviews, and technical trainings throughout the United States. We have built respectful, cooperative working relationships with hundreds of installers nationwide.

Cadmus offers full-service inspection services, eliminating the need for multiple contractors and contacts. With Cadmus as your single-source provider, you can access more than a dozen field inspectors and an extensive network of vetted subcontractors.
Cadmus is an employee-owned consultancy committed to helping our clients address complex challenges by applying diverse skills and experiences in a highly collaborative environment. By assisting our clients in achieving their goals, we create social and economic value today and for future generations. Founded in 1983, we leverage our staff’s exceptional expertise in the physical and life sciences, engineering, social sciences, strategic communication, architecture and design, law, policy analysis, and the liberal arts to provide an array of research and analytical services in the United States and abroad. See more at www.cadmusgroup.com.

Extensive data, efficient process

Cadmus’ PVQUEST (PV Quality Evaluation and Scoring Tool) database allows us to catalog and analyze over 500 of the most common PV installation issues, which yields better feedback and training opportunities for our clients.

Our innovative field data collection system uses the latest in remote access cloud computing technology to rapidly report field inspection results. This means we can produce reports more quickly, rapidly analyze inspection data to identify trends and common installation issues, and provide timely feedback to system installers and owners.

About Our Experience

Cadmus has conducted solar quality assurance services for a range of clients, including:

- New York State Energy Research and Development Authority (NYSERDA)
- Massachusetts Clean Energy Center
- Rhode Island Renewable Energy Fund
- Various municipal and other clients

On each inspection, Cadmus’ solar experts review the system with an eye towards maintaining long-term, reliable performance of the entire system—from the modules to the point of interconnection. Our inspections include a close review of:

- Equipment selected
- Solar resource and generation
- Attachment and structural considerations
- Electrical design and execution
- Code compliance

For many clients, quality assurance is an ongoing process that begins at project conception. We understand this and support our clients with a variety of related services throughout the project concept, design, and construction phases:

- Owner’s engineer/representative
- Contract review/negotiation
- Design and plan review
- Construction/remediation oversight
- Failure investigation
- Commissioning and troubleshooting
- Ongoing measurement and verification

To learn how Cadmus can help you, contact:

Shawn Shaw | (617) 673-7106 | shawn.shaw@cadmusgroup.com