

SolSmart Permitting and Inspection

Regional Training for Dane County & CARPC
1/26/2024

Acknowledgement and Disclaimer

- Acknowledgment: This material is based upon work supported by the Department of Energy, Office of Energy Efficiency and Renewable Energy (EERE), under Award Numbers DE-EE0009950 & DE-EE0009951.
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What is SolSmart?

- SolSmart is a national designation and technical assistance program that has helped over 500 local governments make it faster, easier, and more affordable for residents and businesses to go solar.
- The SolSmart Designation recognizes communities that have taken key steps to address local barriers to solar energy and foster the growth of mature local solar markets.
- **Technical assistance is available at no cost.**

SolSmart Designees in the Region

SolSmart Bronze

- Fitchburg
- Portage County
- Sheboygan
- Racine
- Bayfield County
- Bayfield

SolSmart Silver

- Egg Harbor
- La Crosse County
- Plover
- Amherst
- Ashland
- Ashland County

SolSmart Gold

- Stevens Point
- Wauwatosa
- Wood County
- La Crosse
- Bayside
- Milwaukee
- Wisconsin Rapids
- Madison
- Eau Claire



INTERSTATE RENEWABLE ENERGY COUNCIL

Independent leadership. Trusted clean energy expertise.



NATIONALLY DISTINGUISHED. LOCALLY POWERED.



Benefits of Solar



SolSmart Actions

- **Increase transparency**
 - Post a permitting checklist online
 - Develop a solar landing page
- **Increase understanding**
 - Provide training on solar PV to staff working in permitting and inspection
 - Train planning staff on planning and zoning best practices for solar PV
- **Reduce barriers**
 - Decrease permit turnaround time
 - Codify that solar PV is a by-right accessory use in the zoning ordinance

Designation Structure

There are four levels of designation: Bronze, Silver, Gold, and Platinum. Communities achieve designation by meeting prerequisites as well as meeting other elective criteria.



Access to Best Practices

The SolSmart Program Guides summarize best practices for local governments, counties and regional governments.

<https://solsmart.org/resource/solsmart-program-guide>



Customized Support



Technical Assistance is tailored around the goals and priorities of your community. It can include expert review of materials, webinars, trainings and 1:1 consultations.

Templates and Examples

Communities are provided with templates, checklists, community examples and guidance documents.

SolSmart Guidance and Template

CE-1 Post a solar landing page on local government's website with information that may include the community's solar goals, educational materials and tools that promote solar, and resources for solar development (e.g. permitting checklist, application forms, zoning regulations, etc.). (Required for Silver)

Objective:
A solar landing page is a way to provide residents, businesses, and solar installers with important information about your community's solar energy policies, processes, goals, and metrics from one centralized location. It is also a way to educate community members about solar energy topics like financing options and consumer protection best practices. Information and resources posted should be made available in multiple languages, as appropriate for your community, and should be available to community members in print form if requested.

The CE-1 criteria is completed when the solar landing page is publicly accessible on the local government's webpage. Opportunities for the community to achieve additional points have been called out via comments throughout the template.



Space for tags and/or contact information:
(Office/Department | Name | Address | Phone Number | Email Address | Website)

Rooftop Solar Photovoltaic (PV) System Field Inspection Checklist

This checklist provides basic guidelines for inspecting most residential rooftop solar PV systems (15 kW and smaller). Ground-mounted systems, systems with energy storage, building-integrated systems, and commercial systems, for example, would not be fully covered by this checklist. The intent of using the checklist is to provide transparent and well-defined information to estimate the number of inspections and accelerate project completion for most PV systems. These guidelines are not exhaustive.

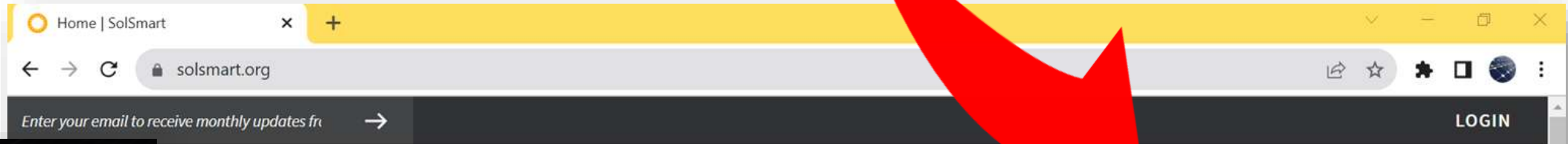
Make sure all PV disconnects and circuit breakers are in the open position and verify the following:
Helpful tip: Update the following checklist to include any relevant state or local code requirements.

1. All work done in a neat and workmanlike manner (NEC 110.12)
2. PV module model number, quantity, and location according to the approved plan.
3. Array mounting system and structural connections according to the approved plan and manufacturer's instructions.
4. Roof penetrations flashed/sealed according to the approved plan and manufacturer's instructions.
5. Cabled cables are properly secured, supported, and routed to prevent physical damage.
6. Conduit installation according to NEC 600.110 and the approved plan.
7. Conspicuous access according to NEC 602.4 and the approved plan.
8. Roof-mounted PV mounting system and modules have sufficient fire classification (NEC 602.4.2)
9. Grounding/bonding of rack, modules, inverters, and other electrical equipment according to the manufacturer's instructions.
10. Equipment installed, listed, and labeled according to the approved plan and manufacturer's instructions (e.g., PV modules, inverters, dc-to-ac converters, rapid shutdown equipment).
11. For grid-connected systems, inverter is marked "interactive," or documentation is provided to show that inverter meets utility interconnection requirements.
12. Conductors, cables, and conduit types, size, and markings according to the approved plan.
13. Overcurrent devices are the type and size according to the approved plan.
14. Disconnects according to the approved plan and properly located as required by the NEC.
15. Inverter output circuit breaker is located at opposite end of bus from utility supply of load center and/or service panelboard. If panel is center-fed, inverter output circuit breaker can be at either end of busbar (NEC 705.13(B)) (not required if the sum of the inverter and utility supply circuit breakers is less than or equal to the panelboard bus rating).
16. PV system markings, labels, and signs according to the approved plan.
17. Connection of the PV system equipment grounding conductors according to the approved plan.
18. Access and working space for operation and maintenance of PV equipment such as inverters, disconnecting means and panel boards (not required for PV modules) (NEC 110.20)
19. The rapid shutdown system is installed and operational according to the approved plan and manufacturer's instructions (NEC 691.12)

SOLSMART Solar PV Field Inspection Checklist Version 1.1 (October 2017)

How to get started!

Go to [SolSmart.org](https://solsmart.org)



Get Started

Fields with * are required.



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OUR COMMUNITIES ▾

RESOURCES ▾

JOIN SOLSMART



We're Helping Local Governments Become

For Today: Focus on Permitting & Inspection

- Most local governments have direct oversight of the permitting and inspection policies and procedures within their jurisdiction.
- Communities that implement permitting best practices provide solar developers and installers with a transparent, efficient, and cost-effective approval process.
- Well-trained staff and simplified permit applications can reduce staff time needed to review permits which allows them to focus on other priorities.
- Clear inspection procedures ensure compliance with applicable state and local codes while protecting public health and safety.