

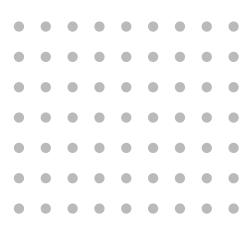


PROGRAM GUIDE

June 2023







solsmart.org

SolSmart – Standard Pathway Program Guide

Welcome to SolSmart!

Congratulations on taking action to expand opportunities for solar in your community! In the next ten years, the amount of solar energy in the U.S. is expected grow dramatically- by 2033 there is likely to be five times more solar installed than there is today! 1 By implementing solar-friendly policies, not only can you help accelerate this transition to clean energy, but you can also ensure your community is poised to take advantage of the many benefits. Becoming SolSmart-designated means you are helping your residents save money, protecting natural resources, bolstering local resilience and increasing job opportunities in the clean energy sector. Through SolSmart, your community will get access to free technical assistance and learn how to implement strategies that make solar more affordable and accessible to all residents. Your SolSmart designation will send a signal that your community is "open for solar business," encouraging growth of local solar companies and other sustainability-minded businesses.



Recognizing Local Solar Achievements

Since 2016, nearly 500 communities across the U.S. have received SolSmart designation. Together, we are making solar more affordable, attaining local clean energy goals and creating jobs and opportunities for all Americans to share in the benefits of clean, renewable energy!

This guide is a comprehensive resource to help you implement solar best practices in your community and gain national recognition by earning Solsmart designation! This guide will help you to navigate the "Standard Pathway," which is applicable to most local governments that have authority over permitting, planning, zoning and/or inspection processes. Local governments that do not control these processes should refer to the SolSmart Modified Pathway Program Guide. Regional Organizations, including Regional Planning Commissions and Councils of Governments, should refer to the Regional Organization Program Guide.

The SolSmart program will connect you with solar best practices from across the country and provide clear guidance on how to implement these actions. Along the way you will receive points for the actions you take and achieve recognition as a Bronze, Silver, Gold or Platinum SolSmart-designated community! Throughout this process, our technical assistance providers are available to provide support at no cost. Please complete this form to connect with a technical assistance provider and get started on the path to SolSmart designation.

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¹ Solar Energy Industries Association, *Solar Market Insight Report 2022 Year in Review*, March 2023, available at https://www.seia.org/research-resources/solar-market-insight-report-2022-year-review

I. SolSmart Overview

Across the United States, communities are increasingly using solar energy to power their homes and businesses and enjoying the benefits of clean, reliable, and affordable electricity. Rapidly declining prices for solar and related technologies have brought vast amounts of solar energy into the mainstream within a few short years. Homeowners, businesses, schools and local governments are using solar energy to drastically reduce their utility costs, while also reducing the environmental impact of their energy use. As natural disasters become more frequent and intense, distributed solar and energy storage is also bolstering energy resilience.

Local and regional governments play an important role in establishing policies, procedures and programs that impact solar deployment in communities. When local governments create barriers to solar in their local plans, permitting and other policies, either intentionally or unintentionally, they can hinder solar development. Alternately, when local governments provide a supportive environment for solar energy and take steps to streamline permitting, inspection and zoning processes, they expedite the installation of solar PV systems and help make it more affordable for residents and businesses.

Action at the local level is also fundamental to ensuring that solar programs are equitable and inclusive and ultimately deliver shared benefits to all Americans. SolSmart is committed to the goals of the federal <u>Justice40 initiative</u> to provide equitable opportunities for underserved communities which face barriers including fossil dependence, energy burden, environmental and climate hazards, and socio-economic vulnerabilities. SolSmart criteria reflect the importance of developing equitable and inclusive solar policies and programs.

The SolSmart program has two key components. First, the program provides no-cost technical assistance to help local governments follow national best practices to expand solar energy use in their jurisdictions. Second, it recognizes and celebrates these communities with SolSmart designations of Bronze, Silver, Gold or Platinum. SolSmart is led by the International City/County Management Association (ICMA) and the Interstate Renewable Energy Council (IREC) and funded by the U.S. Department of Energy Solar Energy Technologies Office (SETO).

Local Policies are Important to Reducing Cost

While the cost of solar panels and equipment has decreased considerably, there are still significant opportunities to reduce "soft costs." "Soft costs" refer to business or administrative processes that increase the time and money it takes to install a solar energy system — costs that are then passed on to customers. These include costs associated with sales and marketing, permitting processes, planning, zoning considerations, financing and a wide variety of other factors. Overall, these soft costs represent about 65% of the total cost of a solar energy system.¹

The U.S. Department of Energy's Solar Energy Technologies Office (SETO) funds <u>SolSmart</u>, to help communities remove administrative barriers, streamline processes and improve local policies in ways that further local goals and reduce solar soft costs.

¹ U.S. Department of Energy, Soft Costs Webpage, available at https://www.energy.gov/eere/solar/solar-soft-costs-basics

Designation Levels

The SolSmart program has developed a set of designation criteria based on established best practices that encourage the growth of solar energy at the local level. The criteria for the Standard Pathway are organized into five categories – Permitting and Inspection, Planning and Zoning, Government Operations, Community Engagement and Market Development. Within each category, SolSmart provides clear guidance and templates to help communities put these practices into action. Some of the criteria are prerequisites, while others are elective. Each criterion has a corresponding point value. Upon meeting the prerequisites and reaching a sufficient number of points in each category, a participant qualifies for SolSmart designation.

There are four levels of SolSmart designation for local governments. Below are the requirements for each level. Communities that earn 60% of the available points in a category are additionally eligible for a special recognition award.



Bronze	60 Total Points	3 Prerequisite Criteria
	 □ 20 Points in Permitting & Inspection □ 20 Points in Planning & Zoning □ 20 Points from any other category 	 □ Solar Statement (PR-1) □ Solar permitting checklist (PI-1) □ Zoning review (PZ-1)
Silver	100 Total Points	4 Prerequisite Criteria
	□ Complete bronze designation requirements	 □ Permit staff training (PI-2) □ Inspection staff training (PI-3) □ Zoning clarification (PZ-4) □ Solar landing page (CE-1)
Gold	200 Total Points	3 Prerequisite Criteria
	□ Complete silver designation requirements	 □ Permit turnaround time (PI-4) □ Zoning accessory use (PZ-5) □ Zoning barrier removal (PZ-6)
Platinum	350 Total Points	4 Prerequisite Criteria
	□ Complete gold designation requirements	 □ Instant permitting (PI-5) □ Post metrics (PI-6) □ Install solar (GO-1) □ Community partnerships (CE-2)

Criteria Categories

Below is a summary of each category and the types of actions that are recognized as best practices in each.

Permitting and Inspection | 28 Criteria | 275 Points

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. Many of the criteria in the permitting and inspection category can be verified by providing information in a detailed permitting checklist. Verification of trainings for permitting and inspection staff and documented improvements to inspection processes are also part of ensuring a transparent and efficient permitting and inspection process.

Planning and Zoning | 26 Criteria | 215 Points

Local government planning and zoning regulations can help facilitate the rapid expansion of solar energy and associated technologies, including energy storage and electric vehicles, within a community. Communities can utilize planning and zoning regulations to increase opportunities for rooftop and ground-mounted solar energy while also advancing other community goals including affordable housing, economic development, clean transportation and the protection of natural and cultural resources. Plans should set forth a vision for the community's clean energy future, while zoning codes should provide clear and transparent regulations on the development and use of solar energy within the jurisdiction. *Many of the criteria in the planning and zoning category can be verified by providing a link to a community's codes, ordinances, and community plans.*

Government Operations | 14 Criteria | 185 Points

Local governments can lead the way by installing solar energy on public facilities and land. Communities can engage with their local utility to discuss goals for solar energy, net metering, interconnection, and community solar. These actions are high impact and can directly lead to an increase in solar energy deployment. *Many of the criteria in the government operations category can be verified by providing documents demonstrating installed solar capacity such as news articles about solar installations, dashboards/metrics showing solar production, and contracts that demonstrate solar project construction.*

Community Engagement | 13 Criteria | 90 Points

Local governments can be an important and trusted source of information for residents, businesses, and solar installers. Providing clear, high-quality information, public education and inclusive engagement opportunities can help residents and businesses interested in solar energy make informed decisions. Local governments can support more equitable outcomes by partnering with community organizations and developing goals and strategies that meet the needs of disadvantaged communities. *Many of the criteria in the community engagement category can be verified by providing information about a community's solar energy goals, strategies and partnerships on a local government's solar webpage.*

Market Development | 10 Criteria | 155 Points

Local governments can collaborate and partner with organizations to promote solar development within their jurisdiction. Supporting a community solar program, promoting a solarize group-buy campaign, or partnering with a local financial institution can make solar energy more affordable and accessible for homes and businesses while improving business opportunities for solar installers. *Many of the criteria in the market development category can be verified by providing news articles about the local government's role in supporting solar development or by providing official documents that established policies or programs.*

II. Criteria Overview

The SolSmart Standard Pathway contains 92 criteria, each of which is a specific action that local governments can implement to encourage solar energy development in their community. Each criterion has a corresponding point value ranging from 5 to 20. A detailed description with relevant templates, examples and resources to help you achieve each criterion is available in Section IV.

Criteria Identifier	Criteria Points	Program Participation Prerequisite Criteria
PR-1	Req'd	Provide a document that demonstrates your local government's commitment to pursue SolSmart designation.

Criteria Identifier	Criteria Points	Permitting and Inspection Criteria
PI-1	Req'd	Post an online checklist detailing the required permit(s), submittals, and steps of your community's permitting process for residential rooftop solar PV. (Required for Bronze)
PI-2	10	Train permitting staff on best practices for permitting solar PV and/or solar and storage systems. Training must have occurred in the past two years. (Required for Silver)
PI-3	10	Train inspection staff on best practices for inspecting solar PV and/or solar and storage systems. Training must have occurred within the past two years. (Required for Silver)
PI-4	20	Post an online statement confirming a three-business day turnaround time for residential rooftop solar PV. (Required for Gold)
PI-5	20	Demonstrate pathway for instant/automatic approval of residential rooftop solar PV systems (e.g., using SolarAPP+). (Required for Platinum)
PI-6	10	Post community metrics related to the number of solar PV and solar + storage permits & inspections processed by the community annually, average annual permitting & inspection timelines. (Required for Platinum)
PI-7	5	Adopt a standard solar PV permit application form aligned with best practices.
PI-8	5	Distinguish between solar PV systems qualifying for streamlined and standard permit review.
PI-9	5	Require no more than one permit application form for a small rooftop solar PV system.
PI-10	20	Provide an online process for solar PV permit submission and approval.
PI-11	5	Receive a demonstration of an instant or automated platform (e.g., SolarAPP+) and discuss how it might be implemented in the permitting process.
PI-12	20	Exempt or waive fees for residential solar PV permit applications.
PI-13	5	Exempt or waive fees for residential solar PV permit applications for LMI customers.
PI-14	5	Demonstrate that residential permit fees for solar PV are \$500 or less.
PI-15	10	Demonstrate that commercial permit fees for solar PV are based on cost-recovery and capped at a reasonable level so fees do not become a net revenue source. (e.g. fees cover the cost of the staff time required to review and process the permit application).
PI-16	10	Post an online checklist detailing the required permit(s), submittals, and steps of your community's solar plus (e.g., battery storage, and/or electric vehicle charging) permitting process.
PI-17	10	Post an online checklist detailing the required permit(s), submittals, and steps of your community's permitting process for primary use ground-mount solar and include any additional state required permits.
PI-18	10	Post solar PV inspection requirements online, including the inspection process and what details inspectors will review.
PI-19	10	Require no more than one inspection for small rooftop solar PV.
PI-20	10	Offer inspection appointment times in lieu of appointment windows for solar PV.
PI-21	10	Provide an online process for solar PV inspection scheduling.
PI-22	10	Show that the community has implemented virtual, photo, or another innovative inspection practice with solar and/or solar plus storage.

PI-23	10	Post solar plus (e.g., battery storage and/or electric vehicle charging) inspection requirements online, including the inspection process and what details inspectors will review.
PI-24	10	Train fire and safety staff on solar PV and/or solar and storage systems. Training must have occurred in the past two years.
PI-25	10	Train fire and safety staff on specific plans and procedures for responding to an emergency at a large-scale solar PV system within the jurisdiction. (This may include a walk-through of the site, coordinated with the project's owner/operator). Training must have occurred in the past two years.
PI-26	10	Share site specific solar PV and/or solar and storage permit data, including addresses, with first responders and their departments. (e.g. through software that allows users to view searchable, filterable data about a specific site and system).
PI-27	5	Clearly identify all local amendments to model codes where local code deviates from model code for solar and solar plus storage. Summarize those local amendments on a public webpage.
PI-28	10	Demonstrate that current model code (IRC, IBC, and NEC) cycle is implemented in the community for solar and solar plus storage (codes must be the most recent editions (or penultimate edition)).

Criteria Identifier	Criteria Points	Planning and Zoning Criteria
PZ-1	Req'd	Review zoning requirements and identify restrictions that intentionally or unintentionally prohibit solar PV development. Compile findings in a memo. (Required for Bronze). Examples include: height restrictions, set-back requirements, screening requirements, visibility restrictions, etc.
PZ-2	5	Present PZ-1 memo findings to planning commission or relevant body.
PZ-3	5	Draft proposed language for changes to zoning code based on PZ-1 memo and PZ-2 dialogue. Involve planners and/or local zoning experts and/or the public (e.g., through community-based organizations) in the creation of the draft language.
PZ-4	0	Post an online document from the Planning/Zoning Department that states accessory use solar PV is allowed by-right in all major zones. (e.g. via a zoning determination letter). (Required for Silver unless Gold Requirement PZ-5 is achieved. If PZ-5 is achieved, PZ-4 is not necessary.)
PZ-5	10	Codify in the zoning ordinance that accessory use rooftop solar PV is explicitly allowed by-right in all major zones. (Required for Gold, PZ-4 is optional)
PZ-6	10	Ensure the zoning ordinance language does not include intentional or unintentional barriers to accessory use rooftop solar PV, including but not limited to aesthetic or performance standards, screening requirements, limits to visibility, excessive restrictions to system size or rooftop coverage, glare or glint regulations, and subjective design reviews. (Required for Gold, PZ-4 is optional)
PZ-7	5	Ensure the zoning ordinance permits small ground-mounted solar PV as an accessory use in at least one zoning district.
PZ-8	5	Ensure the zoning ordinance exempts small ground-mounted solar PV from certain restrictions on accessory uses (e.g. setbacks, coverage or impervious surface calculations, or other restrictions).
PZ-9	5	Ensure the zoning ordinance establishes a clear regulatory pathway for large-scale solar PV (e.g. through a special use permit or through inclusion among allowed conditional uses).
PZ-10	10	Ensure the zoning ordinance includes a native perennial vegetation and/or habitat-friendly ground cover standard for large-scale solar PV.
PZ-11	5	Ensure the zoning ordinance enables co-location of solar PV with an agricultural use such as grazing, apiaries, or crops (agrivoltaics).
PZ-12	5	Ensure the zoning ordinance requires a decommissioning plan that outlines the terms and conditions for a large-scale solar PV system's proper removal at the end of its useful life cycle or in the event of cessation of operation. (The decommissioning plan may include steps to remove the system, requirements for disposal and/or recycling of system components, and restoration as needed to allow for return to agriculture or other land use).

PZ-13	5	Ensure the zoning ordinance establishes solar energy zones and/or solar overlays for large-scale solar PV.
PZ-14	10	Require new construction to be solar ready in at least one zoning district by adopting Appendix U (International Code Council), Appendix RB (International Energy Conservation Code), or another mechanism.
PZ-15	20	Codify a solar requirement for new construction and/or retrofits meeting a specific threshold, in at least one zoning district.
PZ-16	10	Require new construction affordable housing and multifamily housing to be solar ready.
PZ-17	10	Provide clear guidance for the installation of solar PV in areas such as historic properties, flood zones or special overlay districts.
PZ-18	10	Train planning and zoning staff on best practices in planning and zoning for solar PV. Training must have occurred in the past two years.
PZ-19	5	Post an online fact sheet that provides an overview of what zoning allows for solar PV under what conditions and in which districts (e.g. types and sizes of solar systems permitted, the processes required, and other relevant information).
PZ-20	10	Include specific solar PV goals, metrics, and strategies in the most current published version of relevant local plans (e.g., energy plan, climate plan, comprehensive plan).
PZ-21	5	Draft new or updated language and provide a timeline for the inclusion of specific solar PV goals, metrics, and/or strategies into existing and/or future plans.
PZ-22	5	Share solar PV progress towards achieving targets or metrics from PZ-20 on the solar landing page.
PZ-23	10	Include specific large-scale solar PV goals, metrics, and strategies in the most current published version of relevant local plans (e.g. energy plan, climate plan, comprehensive plan).
PZ-24	20	Develop a solar PV assessment that identifies community-wide feasibility for solar PV development within a jurisdiction (differentiate between large-scale, municipal, etc.)
PZ-25	10	Enable solar rights through a local solar access ordinance.
PZ-26	20	Codify in the zoning ordinance that accessory use energy storage systems are explicitly allowed by-right in all major zones.

Criteria Identifier	Criteria Points	Government Operations Criteria
GO-1	20	Install solar PV on local government facilities and/or local government-controlled land. (Required for Platinum)
GO-2	10	Discuss community goals for solar PV, net metering, community solar, and/or interconnection processes with the local utility and explore areas for future collaboration.
GO-3	10	Coordinate with regional organizations and/or local governments to engage utilities on advancing solar policies such as utility procurement of solar PV, green tariffs, and/or interconnection process improvements.
GO-4	20	Demonstrate coordination between local government inspectors and utility staff to reduce Permission to Operate timeline for solar PV.
GO-5	10	Conduct feasibility analysis for solar PV on local government facilities and/or local government-controlled land.
GO-6	20	Install solar PV integrated with other technologies such as battery storage or electric vehicle charging on local government facilities and/or local government-controlled land.
GO-7	20	Install solar PV on local government-controlled brownfields and/or under-utilized properties.
GO-8	10	Require new local government facilities and/or facility retrofits meeting a specific threshold to be solar ready.
GO-9	20	Procure solar energy for municipal operations through an offsite physical PPA, virtual PPA, green tariff or similar structure.
GO-10	5	Obtain a Community Benefits Agreement with solar developer for solar installation.
GO-11	10	Post metrics related to the number of municipal solar PV or solar PV plus storage/EV installations and installed capacity, municipal solar PV energy procured (ownership, PPAs, community solar offtake), and percent (%) of municipal energy usage offset by renewable energy.

GO-12	10	Directly install or provide technical or financial support for the installation of solar PV on affordable housing, multifamily housing, community-based organizations, and/or resilience hubs.
GO-13	10	Train local government staff on regulatory and (where applicable) wholesale market barriers to solar deployment and potential engagement pathways to address these barriers. Training must have occurred in the past two years.
GO-14	10	Train local government staff on best practices and issues regarding solar interconnection with the local utility. Training must have occurred within the past two years.

Criteria Identifier	Criteria Points	Community Engagement Criteria
CE-1	10	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)
CE-2	20	Establish partnerships with local community-based organizations or other organizations focused on serving disadvantaged communities within your community to define your community's solar equity goals, develop implementation strategies, and establish a plan for tracking and reporting on progress. (Required for Platinum)
CE-3	5	Post online resources about residential and commercial solar PV financing options and incentives.
CE-4	5	Post online resources about consumer protection and solar PV.
CE-5	5	Post an online summary of state policies related to a property owner's solar access and solar rights, including links to state-level policy.
CE-6	5	Post an online summary of state policies related to Homeowner Associations (HOAs) ability to regulate and/or restrict solar PV, including links to state-level policy.
CE-7	5	Post online resources about solar installers and/or solar quote platforms for solar PV.
CE-8	5	Post an online solar map for your community.
CE-9	5	Post an online dashboard or summary of solar PV metrics for your community, including total installed solar PV capacity, solar PV + storage installations, and community solar and/or solarize subscribers (if applicable). Metrics should identify solar PV adoption in disadvantaged communities as well.
CE-10	5	Distribute solar job training and career opportunities in coordination with local colleges and/or workforce development organizations.
CE-11	5	Demonstrate local government support for local solar projects through speeches, press releases, opinion articles, etc.
CE-12	10	Discuss solar PV goals and/or strategies for increasing solar PV development, including large-scale solar plans, solar access, and/or solar adoption in disadvantaged communities, within an appropriate committee, commission, taskforce, and/or working group. (e.g., solar is a recurring agenda item during monthly sustainability commission meetings).
CE-13	5	Support a solar informational session and/or solar tour explaining solar PV opportunities and policies. Show that session/tour was made accessible to all members of the community including those in disadvantaged communities. Session/Tour must have occurred within the last 2 years.

Criteria Identifier	Criteria Points	Market Development Criteria
MD-1	20	Demonstrate activity in state regulatory and/or legislative proceedings regarding solar PV.
MD-2	20	Support a community-wide group purchase program (e.g., Solarize). Program must have occurred within the last 2 years.
MD-3	10	Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community-wide group purchase program through program design and/or financing support options.
MD-4	20	Support a community solar program.

MD-5	10	Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community solar program through program design and/or financing support options.
MD-6	20	Provide residents with Community Choice Aggregation/Energy that includes solar PV as a power generation source.
MD-7	10	Provide a PACE financing program that includes solar PV as an eligible technology.
MD-8	20	Provide local incentives or locally-enabled finance (e.g. a revolving loan fund) for solar PV and/or solar PV + technologies (e.g., battery storage and/or electric vehicle charging).
MD-9	5	Provide local incentives for solar PV to low-to-moderate income (LMI) households, disadvantaged communities, Disadvantaged Business Enterprises (DBEs), Minority and Women Owned Business Enterprises (MWBEs), and/or non-profit organizations that provide community services.
MD-10	20	Partner with financial institutions and/or foundations to offer loans, rebates, grants, or other incentives for solar PV projects. (Financial institutions could include entities such as a local or regional bank, CDFI, or credit union).

Criteria Identifier	Criteria Points	Innovative Action Criteria
IA-1	Varies	The actions identified in the categories above represent many of the most common and impactful efforts communities are taking to make going solar easier and more affordable for residents and businesses. However, we know that communities across the country are developing innovative ways to promote and deploy solar energy. If your community has taken action that was not captured in any of the criteria above, please share it with us.

III. SolSmart Technical Assistance and Designation Process

Any local government, regardless of previous solar experience, is eligible for SolSmart designation. To request a call with a member of the SolSmart program, please <u>complete the contact form on SolSmart.org.</u>

Once the local government decides to pursue SolSmart designation, they need to complete a Solar Statement and submit it to the SolSmart team. The Solar Statement demonstrates the community's commitment to work with the SolSmart program and achieve designation. The local government will be connected with one of our technical assistance providers who will work with community to

To earn national recognition from the SolSmart Program, a community must provide documentation of the actions it has implemented. This may include a combination of signed memos, web links, program materials, policy documents, etc. as appropriate. Section IV of this Program Guide provides a detailed description of each SolSmart criterion with resources to support implementation and guidance on documentation and verification that will be required by SolSmart. review community's goals and processes. This review helps determine how close the community is to designation and any additional technical assistance to achieve designation. The local government will work with their technical assistance provider to develop a plan, identify which criteria they will meet to achieve their desired designation level, and implement best practices in the community. Once they have completed the required actions, the local government can submit for designation.

Once the local government is ready for designation review, the submission is reviewed by the Designation Program Administrator within two weeks and the local government is notified of their designation by email.

Designation Pathways

There are three pathways to SolSmart designation:

Local governments that control permitting, inspection, planning, and zoning use the **Standard Pathway (as summarized in this guide).**

Local governments that do not control permitting, inspection, planning, and/or zoning use the **Modified/County Pathway**. This pathway is appropriate for certain counties that do not have control over one or more of those processes.

Regional organizations such as regional councils or councils of government use the **Regional Organization Pathway**.

Local governments are encouraged to celebrate and publicize their designations and to post information about SolSmart on their own websites. Many SolSmart designees have held events, shared photos and videos, and taken other actions to publicize their achievements. The designation email contains a Designation Toolkit with template press release, sample social media, and SolSmart Designation logos. SolSmart will also recognize local governments on the SolSmart website, on social media, and in the SolSmart newsletter.

IV. Criteria Detail and Verification Guidance

The SolSmart criteria are based on specific best practices that local governments and community stakeholders can implement to encourage solar energy development in their community. This section provides a detailed description of each criterion, recommended verification for designation review, community examples, templates, and/or resources.

The following provides an overview of the information that is provided for each SolSmart criterion:

Criterion Identifier	Criterion Points	Criterion Language	
Objective a	nd description	on.	
	nded Verific ggested opti	cation: ons to verify how the community has achieved the criterion.	
	y Examples amples of ho	ow other communities have completed the criterion.	
Templates ● Lin		late(s) that can help complete a criterion.	
Resources • Lin	· -	websites, reports, guidebooks, etc. that provide guidance related to the criterion.	

Solar Statement

PR-1 Req'd Provide a document that demonstrates your local government's commitment to pursue SolSmart designation.

Local governments interested in pursuing SolSmart designation must indicate their commitment to supporting solar development in their community by completing the PR-1 Solar Statement Prerequisite. The solar statement should be signed by a representative of the local government. It is preferred that the statement is signed by a department executive or an elected official, but it does not need to go through an official approval process. The solar statement demonstrates your community's commitment to pursue SolSmart designation. If possible, please place the solar statement on your local government's letterhead. While the PR-1 is a commitment to the program, the best practices included in the template provided are goals to strive for and non-binding to the criteria you can pursue.

The solar statement should address the items listed in the bullets below. The statement does not need to be more than one page in length.

Recommended Verification:

- Provide a signed solar statement that includes:
 - A commitment to participate in the SolSmart designation process
 - A statement of solar goals, areas of focus or community priorities (e.g. streamlining the permitting processor supporting a non-profit led solar initiative)
 - A statement of support for solar development to be inclusive and equitable for all residents
 - Past achievements or programs related to solar PV and/or renewable energy
 - A commitment to tracking metrics related to solar PV and/or provide a benchmark of available solar metrics (e.g. the number of installed systems, capacity, growth in residential installations, etc.)
 - A commitment of staff time and resources to improve the local market for solar PV

Community Examples:

- Hilliard, OH | SolSmart Silver
- Hopkins, MN | SolSmart Bronze
- Madison, NJ | SolSmart Bronze

Templates:

SolSmart Solar Statement Template | SolSmart

Permitting and Inspection

PI-1 Req'd

Post an online checklist detailing the required permit(s), submittals, and steps of your community's permitting process for residential rooftop solar PV. (Required for Bronze)

Providing a set of requirements for the local solar permitting process (for both residential and commercial solar) on an easy-to-find local government webpage represents a major step toward overcoming informational barriers. An online solar permit checklist can be a simple way for a community to accelerate permit approval timelines and save staff time by reducing the number of inquiries received from solar installers and requests for additional information associated with incomplete permit applications. Such checklists typically detail all the plans and forms required for approval and system design requirements.

Recommended Verification:

Provide a link to the online solar PV permitting checklist.

Community Examples:

- Chapel Hill, NC | SolSmart Gold
- Philadelphia, PA | SolSmart Gold

Templates:

SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- Solar PV Systems: Job Aids for a Consistent Plan Review Process | Interstate Renewable Energy Council (IREC)
- <u>California Solar Permitting Guidebook (4th Edition)</u> (pg. 22-24)
- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-2	10	Train permitting staff on best practices for permitting solar PV and/or solar and storage systems. Training must have occurred in the past two years. (Required for Silver)	
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Regular solar PV training, at least every few years, is a best practice to ensure permit technicians and plan reviewers are up-to-date on new procedures, codes, and products within the solar industry. Trainings increase staff knowledge of solar energy systems and ensures they know the best procedures for permit application review and processing to ensure applications and supporting documents are compliant with building and electrical codes. Increased staff knowledge can improve processing efficiency, thereby reducing demands on staff time and resources. Local governments can require staff to attend full or half-day workshops (either live or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.

Recommended Verification:

• Provide a signed memo with details about the permit training including name of training, name of trainer, attendees (name, title, department), date and time, location, agenda, and presentation/slides.

Templates

SolSmart Training Verification Memo | SolSmart

Resources:

- Permitting Training Module 1 | IREC Solar PV Structural Plan Review Primary Resource
- Permitting Training Module 2 | IREC Solar PV Electrical Plan Review- Primary Resource
- Permitting Training Module 3 | IREC Solar PV Plan Review Test

 Primary Resource
- Solar + Storage, A Guide for Local Governments | SolSmart Webinar

PI-3 Train inspection staff on best practices for inspecting solar PV and/or solar and storage systems. Training must have occurred within the past two years. (Required for Silver)	
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Regular solar PV training, at least every few years, is a best practice to ensure field inspectors are up-to-date on new procedures, codes, and products within the solar industry. Trainings increase staff knowledge of solar energy systems and ensures they know the best procedures for field inspections to ensure compliance with applicable state and local building and electrical codes. Increased staff knowledge can improve inspection efficiency, thereby

reducing demands on staff time and resources. Local governments can require staff to attend full or half-day workshops (either live or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.

Recommended Verification:

• Provide a signed memo with details about the inspection training including name of training, name of trainer, attendees (name, title, department), date and time, location, agenda, and presentation/slides.

Templates:

• SolSmart Training Verification Memo | SolSmart

Resources:

- Solar PV Field Inspection Basics Series | Interstate Renewable Energy Council (IREC)
- Solar + Storage, A Guide for Local Governments | SolSmart Webinar

PI-4 Post an online statement confirming a three-business day turnaround time for residential rooftop solar PV. (Required for Gold)

Implementing a streamlined permitting process for small-scale solar PV systems (≤10-15 kW) along with other efforts increase process efficiency and reduce permit turnaround times can result in significant time and cost savings for staff, solar installers, and solar customers.

Recommended Verification:

Provide a link to a webpage outlining a permitting pathway for small PV systems of less than three days.

Community Examples:

- Alexandria, VA | SolSmart Gold
- Roseville, MN | SolSmart Gold

Templates:

• SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- California Solar Permitting Guidebook (4th Edition) (pg. 22-24)
- <u>National Simplified Residential PV and Energy Storage Permit Guidelines</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments
- SolarTRACE | National Renewable Energy Laboratory (NREL)

PI-5 Demonstrate pathway for instant/automatic approval of residential rooftop solar PV systems (e.g., using SolarAPP+). (Required for Platinum)

Most residential solar systems are simple and standardized, but the high volume of applications can be time consuming for local permitting departments. Online automated platforms (e.g., SolarAPP+) offer a convenient and efficient way to manage solar permitting. These platforms can help local governments to stay up to date with relevant codes, catch errors, improve communication with applicants, accelerate approval for standardized PV systems, and improve record keeping.

Recommended Verification:

- Provide a link to the online automated platform
- Utilize SolSmart Solar Permitting Checklist (see PI-1) to summarize instructions for using the automated platform

Community Examples:

- Pima County, AZ | SolSmart Gold
- Sacramento County, CA | SolSmart Gold
- Sonoma County, CA | SolSmart Gold

Templates:

SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- SolarAPP+ Benefits National Renewable Energy Laboratory (NREL)
- Register for SolarAPP+ | National Renewable Energy Laboratory (NREL)
- SolarAPP+ Communities | National Renewable Energy Laboratory (NREL)
- SolarAPP+ Performance Case Studies | National Renewable Energy Laboratory (NREL)

PI-6	Post community metrics related to the number of solar PV and solar + storage permits & inspections processed by the community annually, average annual permitting &
	inspection timelines. (Required for Platinum)

Posting metrics publicly provides transparency and allows community members to understand how the community is progressing toward its goals. This is an important way to create accountability and will help identify the need to implement further actions if goals are not being met. Metrics must be updated annually at a minimum, but communities should strive for quarterly updates.

Recommended Verification:

• Provide a link to this information posted on the community's website or solar landing page. Include date when the information was last updated and when tracking began.

Community Examples:

Natick, MA | SolSmart Gold

Resources:

• <u>SolarTRACE</u> | National Renewable Energy Laboratory (NREL)

PI-7 5 Adopt a standard solar PV permit application form aligned with best practices.

Developing a solar-specific permit (or combining building and electrical permits with revisions to collect information unique to solar energy systems) and posting application materials online can save time and money for those completing the forms (and their customers) and the local government staff reviewing and approving these applications.

Recommended Verification:

• Provide a link to the standard solar PV permit application form.

Community Examples:

- Evanston, IL | SolSmart Gold
- Salt Lake City, UT | SolSmart Bronze

Templates:

• SolSmart Solar Permit Application Template | SolSmart

Resources:

- New York State Unified Solar Permit Application | New York State Energy and Research Development Authority (NYSERDA)
- Simplified Solar Permitting Process | SolSmart
- <u>National Simplified Residential PV and Energy Storage Permit Guidelines</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-8 5 Distinguish between solar PV systems qualifying for streamlined and standard permit review.

Recognizing the relative simplicity and similarities of small-scale solar photovoltaic (PV) systems (≤10-15 kW in size) can allow local jurisdictions to establish processes to expedite review and approval of these systems while maintaining its commitment to ensuring public safety. Establishing a separate, streamlined process for small-scale PV systems based on proven national best practices can reduce the time required to review and approve qualifying applications, saving time and money both for the local government and the solar customer.

Recommended Verification:

- Provide a link to a document or web page outlining a streamlined and standard permit review policy.
- Provide details in an e-mail or other written documentation from a permitting official or staff member describing the policy is also acceptable.

Community Examples:

- Philadelphia, PA | SolSmart Gold
- Putnam County, GA | SolSmart Silver

Templates:

SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

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 <u>National Simplified Residential PV and Energy Storage Permit Guidelines</u> | Interstate Renewable Energy Council (IREC)

PI-9 5 Require no more than one permit application form for a small rooftop solar PV system.

Since rooftop solar energy systems impact both the structural and electrical aspects of the buildings on which they are installed, many local jurisdictions require both building and electrical permits. However, residential rooftop systems with minimal structural impacts can be safely permitted without a building permit application. Relevant design aspects for systems qualifying for only one application form include (but are not limited to): mounting system features, static and dynamic loads of the system, type of roofing material and waterproofing methods, and compliance with zoning and fire codes.

Recommended Verification:

Provide a link to the permit application form used for small rooftop solar PV systems.

Community Examples:

- Berkeley, CA | SolSmart Gold
- Fitchburg, WI | SolSmart Bronze

Resources:

- New York State Unified Solar Permit Application | New York State Energy and Research Development Authority (NYSERDA)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-10 20 Provide an online process for solar PV permit submission and approval.

Online permit submittal, review, and approval can eliminate solar installer trips to the permitting office and reduce the amount of time permitting staff need to spend entering information from paper application forms into an online database. Online systems can also ensure all required information is submitted prior to any review, saving staff time by ensuring only completed applications are reviewed. Online permit platforms can allow for multiple staff to review materials at the same time and to track progress in the review and approval process.

Recommended Verification:

- Provide a link to the online platform and instructions for submission and approval.
- If an email-based online process is used:
 - 1) Provide details from building officials or staff describing the process; and
 - 2) Provide a copy of a sample email with personal and confidential information removed.

Community Examples:

- Madison, WI | SolSmart Gold
- Missoula County, MT | SolSmart Silver

Resources:

- <u>National Simplified Residential PV and Energy Storage Permit Guidelines</u> | Interstate Renewable Energy Council (IREC)
- <u>Solar Automated Permit Processing (SolarAPP+)</u> | National Renewable Energy Laboratory (NREL)
- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-11 5 Receive a demonstration of an instant or automated platform (e.g., SolarAPP+) and discuss how it might be implemented in the permitting process.

Online automated platforms (e.g., SolarAPP+) offer a convenient and efficient way to manage solar permitting. Receiving a demonstration of a platform is an opportunity to learn how it can help local governments to stay up to date with relevant codes, catch errors, improve communication with applicants, accelerate approval for standardized PV systems, and improve record keeping.

Recommended Verification:

Signed memo that includes date, attendees, presenter, summary of discussion topics and next steps

Resources:

- Automated Permitting Flyer | SolSmart
- <u>Instant Permitting Example</u> | State of California, California Energy Commission
- Register for SolarAPP+ | National Renewable Energy Laboratory (NREL)
- <u>SolarAPP+ Communities</u> | National Renewable Energy Laboratory (NREL)
- SolarAPP+ Performance Case Studies | National Renewable Energy Laboratory (NREL)

PI-12	20	Exempt or waive fees for residential solar PV permit applications.		
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In addition to state and federal incentives, local governments can also incentivize solar development within their jurisdictions. Exempting or waiving permit fees for solar energy systems can incentivize community members to install solar by lowering the overall cost of the system. Communities that receive PI-12 also receive PI-14 (but do not also receive PI-13).

Recommended Verification:

 Provide a link to the permit fee schedule or other officially approved document that shows solar PV permit fees are exempt or waived.

Community Example:

- Superior, CO | SolSmart Bronze
- Boone, NC | SolSmart Gold

Resources:

- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-13 5 Exempt or waive fees for residential solar PV permit applications for LMI customers.

One way to further reduce the barriers for LMI residents to install solar PV systems, is to exempt or waive permit fees. Communities that receive points for PI-12 cannot also receive points for PI-13.

Recommended Verification:

 Provide a link to the permit fee schedule or other officially approved document that shows solar PV permit fees are exempt or waived with detail on the income qualifications.

Resources:

 Rooftop Solar Incentives Remain Effective For Low- And Moderate-Income Adoption | National Renewable Energy Lab (NREL)

PI-14 5 Demonstrate that residential permit fees for solar PV are \$500 or less.

Many local governments permit solar systems through existing permitting processes and permit fees for solar are often calculated according to value-based methods typically associated with building permits (where the fee is a certain percentage of the overall project cost). Due to the higher cost of solar installations relative to comparable projects, fees calculated by a value-based method can become expensive and exceed the cost of the staff time required to review and issue the permits. For residential systems, capping solar permit fees under \$500 or establishing a flat fee, can ensure permit fees cover staff costs without unnecessarily increasing project costs.

Recommended Verification:

 Provide a link to the permit fee schedule or a document that outlines the permit fees applied to a solar installation.

Community Examples:

- Naperville, IL | SolSmart Silver
- Sacramento, CA | SolSmart Gold

Templates:

- SolSmart Solar Residential Fees Template Memo | SolSmart
- SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- <u>National Simplified Residential PV and Energy Storage Permit Guidelines</u> | Interstate Renewable Energy Council (IREC)
- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

		Demonstrate that commercial permit fees for solar PV are based on cost-recovery and	
PI-15	10	capped at a reasonable level so fees do not become a net revenue source. (e.g. fees	
		cover the cost of the staff time required to review and process the permit application).	

Many local governments permit solar systems through existing permitting processes and permit fees for solar are often calculated according to value-based methods typically associated with building permits (where the fee is a certain percentage of the overall project cost). Due to the higher cost of solar installations relative to comparable projects, fees calculated by a value-based method can become expensive and exceed the cost of the staff time

required to review and issue the permits. For commercial systems, basing fees on a cost-recovery method can ensure permit fees cover staff costs without unnecessarily increasing project costs.

Recommended Verification:

- Provide a link to the permit fee schedule or a document that outlines the permit fees applied to a solar installation.
- Provide a narrative that explains the costs incurred in processing the permits (this should include estimates
 of the amount of staff hours for each stage of the process and the hourly cost of staff time). This narrative
 should show that the fee is not significantly higher than these costs.

Community Examples:

- Naperville, IL | SolSmart Silver
- Sacramento, CA | SolSmart Gold

Templates:

- SolSmart Solar Commercial Fees Template Memo | SolSmart
- SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

Post an online checklist detailing the required permit(s), submittals, and steps of your community's solar plus (e.g., battery storage and/or electric vehicle charging) permitting process.

Local governments can support "solar plus" technologies, including energy storage and electric vehicle charging, by providing clear information about permitting. An online permit checklist can be a simple way for a community to accelerate permit approval timelines and save staff time by reducing the number of inquiries received from installers and requests for additional information associated with incomplete permit applications. Such checklists typically detail all the plans and forms required for approval and system design requirements.

Recommended Verification:

• Provide link to online permitting checklist for solar plus, EV charging or other "solar plus" technologies.

Community Examples:

- Rocklin, CA | Not Designated
- Sonoma, CA | Not Designated
- Orlando, FL | SolSmart Gold
- Windsor, CA | Not Designated

Resources:

- <u>Battery Energy Storage System Model Permit</u> | New York State Energy and Research Development Authority (NYSERDA)
- National Simplified Residential PV and Energy Storage Permit Guidelines | Interstate Renewable Energy Council (IREC)
- Solar + Storage, A Guide for Local Governments | SolSmart Webinar
- Storage Permitting Resources | Sustainable CUNY Smart Distributed Generation Hub
- EVSE Permitting and Inspection Guidelines | New Buildings Institute

PI-17 Post an online checklist detailing the required permit(s), submittals, and steps of your community's permitting process for primary use ground-mount solar and include any additional state required permits.

Providing a set of requirements for the local solar permitting process for primary use ground-mount solar on an easy-to-find local government webpage represents a major step toward overcoming informational barriers. An online solar permit checklist can be a simple way for a community to accelerate permit approval timelines and save staff time by reducing the number of inquiries received from solar installers and requests for additional information associated with incomplete permit applications. Such checklists typically detail all the plans and forms required for approval and system design requirements.

Recommended Verification:

• Provide a link to the online ground-mount solar PV permitting checklist.

Community Examples:

- Town of Hollis, NH | Not Designated
- Orange County, CA | Not Designated

Resources:

• Solar@Scale Guidebook (pg. 88-100) | ICMA and APA

PI-18 10 Post solar PV inspection requirements online, including the inspection process and what details inspectors will review.

Providing an online list of inspection requirements will reduce informational barriers between inspectors and solar installers, helping to ensure that all items in the inspection process have been adequately addressed before inspectors arrive on site. These checklists can be used to highlight "common mistakes" made by installers.

Recommended Verification:

• Provide a link to the online document outlining the inspection process and requirements.

Community Example:

- Harrisonburg, VA | SolSmart Bronze
- Ramsey County, MN | SolSmart Bronze

Templates:

SolSmart Rooftop Solar Photovoltaic (PV) System Field Inspection Checklist | SolSmart

Resources:

- Model Inspection Checklist for Residential Rooftop PV | Interstate Renewable Energy Council (IREC)
- Inspection Checklist | Institute for Building Technology and Safety (IBTS)
- Field Inspection Checklist | New York State Energy and Research Development Authority (NYSERDA)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments
- Job Aids for a Consistent Plan Review Process | Interstate Renewable Energy Council (IREC)

PI-19 10 Require no more than one inspection for small rooftop solar PV.

Inspections of standard rooftop solar energy systems installed on existing homes should be consolidated into a single inspection trip. Any inspections should be limited to the electrical, structural, and fire safety aspects of the system; excessive reviews add to the time and cost of the inspection process while doing little to ensure system efficiency or further protect public health or safety. Building and Fire Authorities can enter into agreements allowing for a single agency to conduct all inspections for systems meeting certain design standards.

Recommended Verification:

• Provide details about the solar PV inspection process that includes information on the type of inspections (and which departments are involved) and total number inspection trips required.

Community Examples:

- Lake in the Hills, IL | SolSmart Gold
- South St. Paul, MN | SolSmart Bronze

Templates:

SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- Field Inspection Checklist | New York State Energy and Research Development Authority (NYSERDA)
- Job Aids for a Consistent Plan Review Process | Interstate Renewable Energy Council (IREC)
- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-20 | 10 | Offer inspection appointment times in lieu of appointment windows for solar PV.

Though inspections of standard rooftop solar PV systems can take as little as 30 minutes to complete, inspection appointment windows can be up to four or more hours long. Replacing appointment windows with scheduled appointment times will ensure the inspector and installer are both prepared for the inspection to occur when they arrive on site. This can save time and money for both the local government and the installer (and for solar customers as well).

Recommended Verification:

 Provide details about the solar PV inspection process that includes information on inspection appointment times and how to request an appointment.

Community Examples:

- Coventry, CT | SolSmart Gold
- <u>Pulaski County</u>, <u>VA</u> | SolSmart Gold

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Templates:

SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

- Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-21 | 10 | Provide an online process for solar PV inspection scheduling.

Similar to online permit submittal, review, and approval processes, an online option for scheduling and managing inspection requests can promote process efficiency and reduce demands on time and resources for local government staff.

Recommended Verification:

- Provide a link to the online platform for inspection scheduling.
- If an email-based online process is used:
 - 1) Provide details from building official or staff describing the process.
 - 2) Provide a copy of a sample email with personal and confidential information removed.

Community Examples:

- San Leandro, CA | SolSmart Silver
- Raleigh, NC | SolSmart Silver

Resources:

- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments

PI-22 Show that the community has implemented virtual, photo, or another innovative inspection practice with solar and/or solar plus storage.

Innovations that help to streamline the inspection process can ensure that systems are properly installed while reducing time and expense. Communities may utilize these practices for systems of a certain type (i.e., residential) or size.

Recommended Verification:

- Include details on virtual, photo, or another innovative inspection practice in the community's Inspection Checklist (PI-1); or
- Describe the innovative practices in a signed memo.

Community Examples:

- Tampa, FL | SolSmart Bronze
- Pima County, AZ | SolSmart Gold
- County of Los Angeles | Not designated

Resources:

- Construction Photo Resource | NY- Sun
- Inspection Guide for PV Systems For One- and Two- Family Dwellings | County of Los Angeles

PI-23 Post solar plus (e.g., battery storage and/or electric vehicle charging) inspection requirements online, including the inspection process and what details inspectors will review.

Providing an online list of inspection requirements will reduce informational barriers between inspectors and energy storage installers, helping to ensure that all items in the inspection process have been adequately addressed before inspectors arrive on site. These checklists can be used to highlight "common mistakes" made by installers.

Recommended Verification:

• Provide a link to the online document outlining the inspection process and requirements.

Community Examples:

Palo Alto, CA | Not Designated

Templates:

SolSmart Energy Storage Field Inspection Checklist Template | SolSmart

Resources:

 <u>Battery Energy Storage System Electrical Checklist</u> | New York State Energy and Research Development Authority (NYSERDA)

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- Solar + Storage, A Guide for Local Governments | SolSmart Webinar
- EVSE Permitting and Inspection Guidelines | New Buildings Institute

PI-24 10 Train fire and safety staff on solar PV and/or solar and storage systems. Training must have occurred in the past two years.

Regular solar PV training, at least every few years, is a best practice to ensure firefighters and first responders are up-to-date on new procedures, codes, and products within the solar industry. Though fires caused by rooftop solar PV systems are extremely rare, firefighters responding to fires caused by other means need to take special precautions when a solar PV system is present. Training fire safety staff on how to identify and avoid potential hazards can help ensure the safety of first responders and reduce misconceptions or discomfort around increased solar deployment.

Recommended Verification:

Provide a signed memo with details about the fire and safety staff training including name of training, name
of trainer, attendees (name, title, department), date and time, location.

Templates:

• SolSmart Training Verification Memo | SolSmart

Resources:

- Firefighter Safety and Photovoltaic Systems (Training Course) | UL
- Photovoltaic (PV) Systems | National Fire Protection Association (NFPA)
- Solar + Storage, A Guide for Local Governments | SolSmart Webinar
- Solar PV Safety for Firefighters | Interstate Renewable Energy Council (IREC)
- Fire Safety for Solar PV | SolSmart Webinar
- Fire Safety for Solar PV | SolSmart Slide Deck

PI-25
10
Train fire and safety staff on specific plans and procedures for responding to an emergency at a large-scale solar PV system within the jurisdiction. (This may include a walk-through of the site, coordinated with the project's owner/operator). Training must have occurred in the past two years.

Though fires and other emergencies at large-scale solar PV systems are extremely rare, fire and safety staff should partner with a large-scale solar system owner/operator to ensure first responders have a standard operating procedure (SOP) outlining how to address a fire or rescue operation at the large-scale solar project. The solar system owner/operator should work with fire responder to ensure SOPs are established and that the fire and safety staff have received any necessary training. Along with a basic understanding of solar PV and fire safety, firefighters and safety staff should be familiar with the project site and characteristics, including where to enter the site, location of system components, if battery storage is present at the site, and proper shutdown procedures. First responders should also know key points of contact for the project in case of an emergency.

Recommended Verification:

- Provide a signed memo with details about emergency response plans and procedures.
- Provide a link to the requirement in the community's code of ordinances.

Community Examples:

- Putnam County, GA (e,9) | SolSmart Silver
- York, ME (pg. 178 f,3) | Not Designated

Templates:

SolSmart Training Verification Memo | SolSmart

Resources:

- <u>Fire Fighter Safety and Emergency Response for Solar Power Systems</u> | The Fire Protection Research Foundation
- Solar PV Safety for Firefighters | Interstate Renewable Energy Council (IREC)

PI-26 Share site specific solar PV and/or solar and storage permit data, including addresses, with first responders and their departments. (e.g. through software that allows users to view searchable, filterable data about a specific site and system).

Fire and safety staff can benefit from having access to the locations of permitted solar PV systems. This gives fire departments advanced knowledge about homes or business that have on-site solar and allows them to development a plan before arriving onsite.

Recommended Verification:

- Provide details about the process for information sharing, including how fire and safety staff received the data
- Provide a link to the platform that allows fire and safety staff to access the data.

Community Examples:

- Adams County, CO | SolSmart Gold
- Freeport, IL | SolSmart Gold

Resources:

- Solar PV Construction: Codes, Permitting, and Inspection | SolSmart's Toolkit for Local Governments
- Solar PV Safety for Firefighters | Interstate Renewable Energy Council (IREC)

PI-27 Clearly identify all local amendments to model codes where local code deviates from model code for solar and solar plus storage. Summarize those local amendments on a public webpage.

Sometimes local codes must deviate from model codes for reasons specific to that community. Informing the public which local codes differ and why increases transparency and trust. Post on the community's website or solar landing page a table summarizing the current model code adopted by the community and list amendments relevant to solar PV and energy storage.

Recommended Verification:

Provide a link to this information posted on the community's website or solar landing page.

PI-28 10 Demonstrate that current model code (IRC, IBC, and NEC) cycle is implemented in the community for solar and solar plus storage (codes must be the most recent editions (or penultimate edition)).

The safe and reliable installation of solar PV systems and their integration with the nation's electric grid requires timely implementation of the foundational codes and standards governing solar deployment. The codes, which are typically updated every three years, are not necessarily adopted as soon as they are published. State and local governments generally adopt the codes on schedules related to state and local governmental processes. This variability makes it more difficult (and costly) for a solar installer to operate across multiple jurisdictions. Therefore, states and localities are encouraged to update their codes to more effectively regulate solar development.

Recommended Verification:

• Provide a link to this information posted on the community's website or solar landing page.

Planning and Zoning

PZ-1 Req'd

Review zoning requirements and identify restrictions that intentionally or unintentionally prohibit solar PV development. Compile findings in a memo. (Required for Bronze). Examples include: height restrictions, set-back requirements, screening requirements, visibility restrictions, etc.

A community's zoning ordinance and land use regulations create statutory limits on what individuals may do with their property as a matter of right and often provides additional processes to consider special exceptions. Land use regulations often contain use standards that provide additional requirements for certain types of development. Local governments should be aware of any restrictions that could intentionally or unintentionally prohibit solar energy development within their community and consider removing those barriers to promote easier and more equitable solar deployment. Often, removing restrictive zoning language can save property owners time and money because they can avoid going through a more extensive process to have their solar system considered.

Recommended Verification:

Provide a signed SolSmart Zoning Review Memo.

Community Examples:

• Gurnee, IL | SolSmart Bronze

Resources:

- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-2 5 Present PZ-1 memo findings to planning commission or relevant body.

The zoning ordinance review memo can be the starting point for ordinance amendments to remove barriers to solar or add language that could promote development. Presenting the findings of the memo to a relevant commission or body can start conversations about updates to solar energy regulations within the community. If the relevant commission or body is interested in updating the zoning ordinance, they can direct staff to draft recommendations.

Recommended Verification:

 Provide meeting minutes, meeting agenda, or materials prepared for the meeting (e.g., handouts and slides) that demonstrate a discussion about the zoning review.

Community Examples:

- Gurnee, IL | SolSmart Bronze
- Council Bluffs, IA | SolSmart Gold

Resources:

- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-3 5

Draft proposed language for changes to zoning code based on PZ-1 memo and PZ-2 dialogue. Involve planners and/or local zoning experts and/or the public (e.g., through community-based organizations) in the creation of the draft language.

A local government interested in enabling solar energy development should consider including basic solar information in the zoning ordinance such as a purpose, definitions, clarification on accessory use and primary use solar, and use standards. Zoning codes that contain no or little information about solar energy can complicate the process for homes and business that want to install a solar energy system. Including basic information about solar energy improves transparency of processes and clarity of development requirements and can enhance the growth of the local solar market in an organized and efficient manner. The local government should provide education to the public about the drafted changes to the zoning code and how that impacts residents.

Recommended Verification:

 Provide draft language of the proposed zoning ordinance changes that clarify solar energy requirements, address gaps identified by PZ-1 memo, and remove barriers to solar development.

Community Examples:

Lafayette, CO | SolSmart Gold

Resources:

- Renewable Energy Ordinance Framework: Solar PV | Delaware Valley Regional Planning Commission (DVRPC)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-4 PZ-4 Post an online document from the Planning/Zoning Department that states accessory use solar PV is allowed by-right in all major zones. (e.g. via a zoning determination letter). (Required for Silver unless Gold Requirement PZ-5 is achieved. If PZ-5 is achieved, PZ-4 is not necessary.)

Including solar energy in the zoning ordinance provides the highest level of policy certainty and clarity. A zoning ordinance change that codifies accessory use solar as an allowed or by-right use is a best-case scenario. However, this may be impractical or politically difficult to achieve in the short term, or outside of a zoning update cycle. Instead of an ordinance change, local governments may write and publish a zoning determination letter clarifying that accessory use solar is an allowed or by-right use in all major zones. This clarification removes uncertainty and can increase solar adoption and lower costs for residents and businesses.

Recommended Verification:

- Provide a link to an online document (and the parent webpage) that clarifies that accessory solar PV is an allowed or by-right use in all major zones.
- This document should:
 - 1) show that the process does not involve staff discretion, special permits, conditional permits, use permits, or variances
 - 2) have language that demonstrates its applicability in all major zones
 - 3) be made public; and
 - 4) be dated and signed by a Department or Committee head.

Community Examples:

- Egg Harbor, WI | SolSmart Silver
- South Miami, FL | SolSmart Silver

Resources:

- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-5 Codify in the zoning ordinance that accessory use rooftop solar PV is explicitly allowed by-right in all major zones. (Required for Gold, PZ-4 is optional)

A community's zoning ordinance and land use regulations create statutory limits on what individuals may do with their property as a matter of right. Zoning often provides additional processes, which can be long and costly, to consider special exceptions when a proposal is inconsistent with current land use regulations. Codifying solar as an accessory use and as an allowed or by-right use in all major zoning categories provides policy certainty and clarity which can promote easier and more equitable solar deployment. It can increase solar development and save property owners time and money because they can avoid going through a more extensive process to have their solar system considered.

Recommended Verification:

• Provide a link to the zoning ordinance, use table, and/or land use regulations that codify solar as an accessory use and is an allowed, permitted or by-right use. Please indicate the relevant section(s).

Community Examples:

- Lansing, MI (pg. 36) | SolSmart Silver
- Philadelphia, PA (Section 14-604.7.a) | SolSmart Gold
- Pepperell, MA | SolSmart Gold

Resources:

- Best Practice Guidance for Solar and Zoning Accessory Use | SolSmart
- Georgia's Model Solar Ordinance | Georgia Tech Strategic Energy Institute
- Model Solar Energy Local Law (NY) | New York State Energy Research and Development Authority (NYSERDA)
- <u>Model Zoning for the Regulation of Solar Energy Systems</u> | Massachusetts Department of Energy Resources
- Renewable Energy Ordinance Framework: Solar PV | Delaware Valley Regional Planning Commission
- Solar Model Ordinance | Grow Solar Toolkit
- <u>Template Solar Energy Development Ordinance for North Carolina</u> | North Carolina Clean Energy Technology Center (NCCETC)
- Are You Solar Ready? | National Renewable Energy Laboratory (NREL)
- Best Practices in Zoning for Solar | National Renewable Energy Laboratory (NREL)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-6 10 Ensure the zoning ordinance language does not include intentional or unintentional barriers to accessory use rooftop solar PV, including but not limited to aesthetic or performance standards, screening requirements, limits to visibility, excessive restrictions to system size or rooftop coverage, glare or glint regulations, and subjective design reviews. (Required for Gold, PZ-4 is optional)

While communities may set standards to further regulate the design, size, use, and placement of rooftop solar PV systems, it is important to ensure these do not intentionally or unintentionally impose barriers to accessory use rooftop solar. For example, such standards can increase system costs/reduce production (e.g. screening, visibility limits), go beyond a local government's jurisdiction (e.g. limits on electricity production/ consumption), perpetuate myths about solar PV (e.g. glare, aesthetics), be subjective (e.g. glare, aesthetics, design reviews), and/or open up the community to legal battles.

Recommended Verification:

Provide a link to the zoning ordinance or land use regulations regarding accessory use rooftop solar.
 Please indicate the relevant section(s) that describe the review process, standards, or related exemptions applicable to accessory use rooftop solar.

Community Examples:

- Brownsville, TX | SolSmart Silver
- Plymouth, IN (pg. 204, 210 D.2.a) | SolSmart Gold
- Philadelphia, PA | SolSmart Gold

Resources:

- Best Practice Guidance for Solar and Zoning Accessory Use | SolSmart
- Model Zoning for the Regulation of Solar Energy Systems | Massachusetts Department of Energy Resources
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-7 5 Ensure the zoning ordinance permits small ground-mounted solar PV as an accessory use in at least one zoning district.

Sometimes a property is not suitable for rooftop solar because the building has structural limitations, or the rooftop is shaded. In this case, a small ground-mounted solar PV system can still allow the property owner to install solar and enjoy the benefits. Permitting or allowing small ground-mounted solar PV as an accessory use in at least one zoning district—can promote easier and more equitable solar deployment. It can increase solar development and save property owners time and money because they can avoid going through a more extensive process to have their solar system considered.

Recommended Verification:

Provide a link to the zoning ordinance or land use regulations that allows small ground-mounted solar PV
as an accessory use. Please indicate the relevant section(s).

Community Examples:

- Philadelphia, PA | SolSmart Gold
- La Crescent, MN | SolSmart Gold

Resources:

- Best Practice Guidance for Solar and Zoning Accessory Use | SolSmart
- <u>Model Zoning for the Regulation of Solar Energy Systems</u> | Massachusetts Department of Energy Resources
- Renewable Energy Ordinance Framework: Solar PV | Delaware Valley Regional Planning Commission (DVRPC)
- Best Practices in Zoning for Solar | National Renewable Energy Laboratory (NREL)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-8	Ensure the zoning ordinance exempts small ground-mounted solar PV from certain restrictions on accessory uses (e.g. setbacks, coverage or impervious surface calculations, or other restrictions).	5	PZ-8
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Opportunities for small ground-mounted PV may be limited if they are subjected to certain restrictions such as setbacks, lot coverage, and impervious surface ratios. These types of regulations are normally applied to accessory

structures like sheds, garages, or accessory dwelling units which can have a greater impact on neighbors when built up against a lot line or covering a larger percentage of the lot. Solar is less obtrusive and contains pervious surfaces underneath the panels and it can be exempted from certain restrictions to promote easier and more equitable solar deployment.

Recommended Verification:

 Provide a link to the zoning ordinance or land use regulations that exempts small ground-mounted solar PV from certain restrictions on accessory uses. Please indicate the relevant section(s).

Community Examples:

- Edina, MN | SolSmart Gold
- Swarthmore, PA | SolSmart Bronze

Resources:

- Best Practice Guidance for Solar and Zoning Accessory Use | SolSmart
- Model Zoning for the Regulation of Solar Energy Systems | Massachusetts Department of Energy Resources
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-9 Ensure the zoning ordinance establishes a clear regulatory pathway for large-scale solar PV (e.g. through a special use permit or through inclusion among allowed conditional uses).

A local government should consider including large-scale solar regulations in their zoning ordinance or land use regulations to provide clarity and consistency to the development process. Including the type of district (e.g. commercial, industrial, low productivity agricultural land) where development is allowed, the type of applicable permit(s) (e.g. conditional use permits, use permits), and use standards or special regulations provide solar developers with a clear set of guidelines and a more predictable approval process.

Recommended Verification:

• Provide a link to the zoning ordinance or land use regulations that establishes a regulatory pathway for large-scale solar PV development. Please indicate the relevant section(s).

Community Examples:

- Freeport, IL | SolSmart Gold
- La Crosse, WI | SolSmart Gold
- Chisago County, MN | SolSmart Silver

Resources:

- Model Zoning for the Regulation of Solar Energy Systems | Massachusetts Department of Energy Resources
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)
- Are You Solar Ready? | National Renewable Energy Laboratory (NREL)
- Land Use Considerations for Large-scale Solar | SolSmart Issue Brief
- Planning for Solar Energy | American Planning Association (APA)
- Solar@Scale Guidebook | ICMA and APA
- Top Five Large-scale Solar Myths | National Renewable Energy Laboratory (NREL)

PZ-10 10 Ensure the zoning ordinance includes a native perennial vegetation and/or habitat-friendly ground cover standard for large-scale solar PV.

Large-scale solar projects cover many acres that can be used for the dual purpose of providing clean, renewable energy and growing native perennial vegetation or habitat-friendly ground cover. Planting native perennial vegetation under solar PV systems can improve soil health and water retention, while providing habitat for pollinators and native species.

Recommended Verification:

 Provide a link to the zoning ordinance or land use regulations that includes language about a native perennial vegetation and/or habitat-friendly ground cover requirement or standard. Please indicate the relevant section(s).

Community Examples:

• Stearns County, MN (6.54.1 H) | SolSmart Silver

St. Joseph County, IN | SolSmart Gold

Resources:

- Minnesota Solar Model Ordinance | Great Plains Institute (GPI)
- Model Solar Energy Local Law (NY) | New York State Energy Research and Development Authority (NYSERDA)
- <u>Land Use Considerations for Large-scale Solar</u> | SolSmart Issue Brief
- State Pollinator-friendly Scorecards | Fresh Energy
- Pollinator Habitat Aligned with Solar Energy (PHASE) | University of Illinois
- Innovative Solar Practices Integrated with Rural Economies and Ecosystems (InSPIRE) | National Renewable Energy Lab (NREL)
- Solar Pollinator Habitat Resources | AgriSolar Clearinghouse

PZ-11	_	Ensure the zoning ordinance enables co-location of solar PV with an agricultural use	Ī
PZ-11	5	such as grazing, apiaries, or crops (agrivoltaics).	

Large-scale solar projects cover many acres that can be used for the dual purpose of providing clean, renewable energy and co-locating with forms of agriculture. Co-locating solar PV with agriculture creates an additional revenue stream for farmers and can enhance yields, soil health, and water retention while improving system efficiency by reducing air temperature near the panels. Allowing co-location of solar PV with agricultural land use can also increase resident support of renewable energy in regions where agriculture is a primary source of income.

Recommended Verification:

• Provide a link to the zoning ordinance or land use regulations that includes language enabling the colocation of solar with an agricultural use. Please indicate the relevant section(s).

Community Examples:

- Leon County, FL | SolSmart Gold
- San Luis Obispo County, CA (D.9) | Not Designated

Resources:

- Illinois Solar Model Ordinance | Great Plains Institute (GPI)
- Indiana Solar Model Ordinance | Great Plains Institute (GPI)
- AgriSolar Clearinghouse Information Library | National Center for Appropriate Technology (NCAT)
- Case Studies | National Center for Appropriate Technology (NCAT)
- <u>Co-Location of Solar and Agriculture Webinar</u> | National Renewable Energy Laboratory (NREL)
- <u>Land Use Considerations for Large-scale Solar</u> | SolSmart Issue Brief
- Center for Pollinators in Energy | Fresh Energy
- <u>Innovative Solar Practices Integrated with Rural Economies and Ecosystems (InSPIRE)</u> | National Renewable Energy Lab (NREL)
- Dual-Use Solar and Agriculture | University of Massachusetts Amherst

PZ-12 Ensure the zoning ordinance requires a decommissioning plan that outlines the terms and conditions for a large-scale solar PV system's proper removal at the end of its useful life cycle or in the event of cessation of operation. (The decommissioning plan may include steps to remove the system, requirements for disposal and/or recycling of system components, and restoration as needed to allow for return to agriculture or other land use).	
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A community's zoning ordinance can require a decommissioning plan that clearly outlines the roles, responsibilities, terms, and conditions to ensure the local government will not be responsible for the removal of a large-scale solar PV system. Decommissioning is the responsibility of the system owner and requiring a plan can alleviate concerns that a local government will be unnecessarily burdened with system removal.

Recommended Verification:

Provide a link to the zoning ordinance or land use regulations that includes language about a
decommissioning plan for large-scale solar PV. Please indicate the relevant section(s).

Community Examples:

- La Crosse, WI | SolSmart Gold
- Will County, IL | SolSmart Gold

Resources:

- Model Solar Energy Local Law (NY) | New York State Energy Research and Development Authority (NYSERDA)
- <u>Template Solar Energy Development Ordinance for North Carolina</u> | North Carolina Clean Energy Technology Center (NCCETC)

- A Survey of Federal and State-Level Solar System Decommissioning Policies in the United States |
 National Renewable Energy Laboratory (NREL)
- <u>Decommissioning Solar Panel Systems</u> | New York State Energy Research and Development Authority (NYSERDA)
- <u>Land Use Considerations for Large-scale Solar</u> | SolSmart Issue Brief

PZ-13 5 Ensure the zoning ordinance establishes solar energy zones and/or solar overlays for large-scale solar PV.

A community's zoning ordinance and land use regulations could establish a solar energy zone or overlay. This strategy can encourage solar development on favorable sites and reduce the project development timeline by streamlining permitting and zoning requirements.

Recommended Verification:

• Provide a link to the zoning ordinance or land use regulations that establish solar energy zones and/or solar overlays for large-scale solar PV. Please indicate the relevant section(s).

Community Examples:

- Framingham, MA (pg. 96) | SolSmart Silver
- Wellesley, MA (pg. 101) | SolSmart Silver

Resources:

- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-14 Require new construction to be solar ready in at least one zoning district by adopting Appendix U (International Code Council), Appendix RB (International Energy Conservation Code), or another mechanism.

Local governments can proactively plan for increased solar deployment by requiring new construction to be solar ready which can reduce the installation costs if a solar system will be installed at some point in the future. Solar ready buildings are designed and engineered in such a way that allows for the easy installation of a future solar system. The International Code Council (ICC) has developed model codes and standards for solar ready construction.

Recommended Verification:

Provide a link to the adopted code(s) or language that requires new construction to be solar ready.

Community Examples:

- El Paso, TX | SolSmart Gold
- Warrenville, IL | SolSmart Gold

Resources:

- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments
- Solar Ready Construction Guidelines | Mid-America Regional Council (MARC)

PZ-15 20 Codify a solar requirement for new construction and/or retrofits meeting a specific threshold, in at least one zoning district.

Local governments can proactively promote solar development by requiring a solar installation on new construction, and/or retrofits. Installing solar on new construction is cost-effective and can rapidly increase solar deployment in a community. A solar requirement can be mandated at a local level in the code of ordinances or, as in the case of California, at the state level.

Recommended Verification:

• Provide a link to the adopted code(s) or language that requires solar on new construction or retrofits.

Community Examples:

- Santa Monica, CA | SolSmart Gold
- South Miami, FL (Section W) | SolSmart Silver

Resources:

- Better Roofs Ordinance | San Francisco Planning Department
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-16 10 Require new construction affordable housing and multifamily housing to be solar ready.

While affordable housing and multi-family housing projects may not be able to install solar at the time of construction due to upfront costs or other challenges, they can be designed and built to ensure they are ready to support solar in the future. Local governments can require these buildings to be designed and engineered in such a way that reduces the cost and complexity of solar installation. The International Code Council (ICC) has developed model codes and standards for solar ready construction.

Recommended Verification:

Provide a link to the adopted code(s) or language that requires new construction to be solar ready.

Community Examples:

• Austin, TX (pg 4) | SolSmart Gold

Resources:

- Appendix U | International Residential Code (IRC)
- Appendix RB | International Energy Conservation Code (IECC)
- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments
- Solar Ready Construction Guidelines | Mid-America Regional Council (MARC)

PZ-17 10 Provide clear guidance for the installation of solar PV in areas such as historic properties, flood zones or special overlay districts.		
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Many communities contain historic properties or historic districts that aim to preserve a community's character and heritage. These properties and districts are often regulated by specific design guidelines that outline how a historic property may be modified. These guidelines can include the best methods to incorporate a solar energy installation while maintaining the historical nature of the structure and surrounding neighborhood and provide a clear review process.

Recommended Verification:

- Provide a link to the zoning ordinance or land use regulations that includes guidance on the installation of solar PV on historic properties and in special overlay districts. Please indicate the relevant section(s).
- Provide a link to guidance for the installation of solar PV on historic properties and in special overlay districts.

Community Examples:

- Ann Arbor, MI | SolSmart Silver
- Park City, UT | SolSmart Gold
- Pima County, AZ | SolSmart Gold

Resources:

- Best Practice Guidance for Solar and Zoning Accessory Use | SolSmart
- Implementing Solar PV Projects on Historic Buildings and in Historic Districts | National Renewable Energy Laboratory (NREL)
- Installing Solar Panels on Historic Buildings | North Carolina Clean Energy Technology Center (NCCETC)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-18	10	Train planning and zoning staff on best practices in planning and zoning for solar PV. Training must have occurred in the past two years.	
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Regular solar PV training, at least every two years, is a best practice to ensure planning and zoning staff are up-to-date on strategies for incorporating solar into plans, ordinances, and development regulations. Training staff in planning and zoning best practices for solar can help them to evaluate the options available for reducing barriers to solar and enable them to customize these best practices to their local context. Training can help staff develop clear, transparent, well-defined, and consistent planning and zoning regulations and processes that provide certainty for property owners and solar developers. Local governments can require staff to attend full or half-day workshops (either live or online) and provide or create resources designed to help staff keep up with advances in solar planning and zoning best practices.

Recommended Verification:

 Provide a signed memo with details about the planning and zoning training including name of training, name of trainer, attendees (name, title, department), date and time, location, agenda, and presentation/slides.

Templates:

SolSmart Training Verification Memo | SolSmart

Resources:

- Best Practices in Solar Planning and Zoning | SolSmart Webinar
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments
- Solar@Scale Webinar Series, Session 5 | ICMA and APA

PZ-19

Post an online fact sheet that provides an overview of what zoning allows for solar PV under what conditions and in which districts (e.g. types and sizes of solar systems permitted, the processes required, and other relevant information).

A community's zoning ordinance and land use regulations create statutory limits on what individuals may do with their property as a matter of right and often provides additional processes to consider special exceptions. Land use regulations often contain use standards that provide additional requirements for certain types of development. However, these regulations can sometimes be unclear and difficult to access, especially for topics like solar PV. Posting an online fact sheet that summarizes zoning regulations for solar represents a major step toward overcoming informational barriers.

Recommended Verification:

 Provide a link to the fact sheet, zoning determination letter, or other online document that clarifies and summarizes how the zoning ordinance and land use regulations regulate solar energy.

Community Examples:

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- San Diego County, CA | SolSmart Gold
- Sedona, AZ | SolSmart Bronze

Resources:

<u>Planning, Zoning & Development</u> | SolSmart's Toolkit for Local Governments

PZ-20

Include specific solar PV goals, metrics, and strategies in the most current published version of relevant local plans (e.g., energy plan, climate plan, comprehensive plan).

Planning documents provide the foundation for a community's vision for how and where it would like future development to occur. Development is governed largely by the components of the comprehensive plan and guided by the policies and strategies outlined in other functional plans such as a Climate Action Plan or Sustainability Plan. These planning documents should align to have solar energy goals, metrics, and strategies that promote solar development in an organized and efficient manner.

Recommended Verification:

Provide a link to the relevant plans that incorporate solar PV goals, metrics, and/or strategies. Please
indicate the relevant section(s).

Community Examples:

- Ann Arbor, MI | SolSmart Silver
- Philadelphia, PA | SolSmart Gold

Resources:

- Integrating Solar Energy into Local Plans | American Planning Association (APA)
- Solar Power in Your Community | Office of Energy Efficiency and Renewable Energy
- Energy Transitions Playbook | Office of Energy Efficiency and Renewable Energy
- Local Government Strategies for 100% Clean Energy | SolSmart Webinar
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-21

Draft new or updated language and provide a timeline for the inclusion of specific solar PV goals, metrics, and/or strategies into existing and/or future plans.

Planning documents provide the foundation for a community's vision for how and where it would like future development to occur. Comprehensive, sub-area, and functional plans also provide policy guidance to the local government as it weighs how future development aligns with other objectives. Communities that would like to promote solar development in an organized and efficient manner should draft solar energy goals, metrics, or strategies for inclusion in new or updated plans.

Recommended Verification:

 Provide draft language of the proposed plan changes that relate to solar energy and a timeline for inclusion in future plans.

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Community Examples:

- Chatham County, NC | SolSmart Gold
- South St. Paul, MN | SolSmart Bronze

Resources:

- Solar Resource Development Requirement | Metropolitan Council (Met Council)
- Integrating Solar Energy into Local Plans | American Planning Association (APA)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-22		Share solar PV progress towards achieving targets or metrics from PZ-20 on the solar landing page.	
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Publicly reporting progress toward solar goals helps to create transparency and accountability. These metrics allow local governments to see the impacts of their policies and identify the need to adjust their strategies. To be meaningful, metrics should be updated annually at a minimum, but communities should strive for quarterly updates. Please specify the reporting period for which the reported metrics apply.

Recommended Verification:

 Provide a link to the relevant information on the solar landing page. Include date when the information was last updated.

Community Examples:

- Cambridge, MA | SolSmart Bronze
- <u>Madison, NJ</u> | Not designated

Resources:

• State and Local Planning for Energy (SLOPE) | National Renewable Energy Lab (NREL)

PZ-23 Include specific large-scale solar PV goals, metrics, and strategies in the most current published version of relevant local plans (e.g. energy plan, climate plan, comprehensive plan).

Planning documents provide the foundation for a community's vision for how and where it would like future development to occur. Development is governed largely by the components of the comprehensive plan and guided by the policies and strategies outlined in other functional plans such as a Climate Action Plan or Sustainability Plan. These planning documents should align to have large-scale solar energy goals, metrics, and strategies that promote solar development in an organized and efficient manner.

Recommended Verification:

• Provide a link to the relevant plans that incorporate large-scale solar PV goals, metrics, and/or strategies. Please indicate the relevant section(s).

Community Examples:

- Stearns County, MN | SolSmart Silver
- Santa Barbara County, CA | SolSmart Bronze
- City of Boise, ID | SolSmart Gold

Resources:

- Solar@Scale Guidebook | ICMA and APA
- Planning for Utility Scale Solar Energy Facilities | American Planning Association (APA)
- Mapping Opportunities for land based renewable energy generation in Ontario: a guidebook for local planners and analysts | Community Energy Knowledge-Action Partnership
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-24	20	Develop a solar PV assessment that identifies community-wide feasibility for solar PV	
		development within a jurisdiction (differentiate between large-scale, municipal, etc.)	Ш

Local governments can proactively identify sites that are favorable for solar PV projects. Identifying sites that have high solar potential and the best characteristics for large-scale solar development can reduce potential conflicts between solar and other land uses and speed up the project development timeline.

Recommended Verification:

• Provide a link to the PV assessment.

Community Examples:

- Mountain Iron, MN | SolSmart Bronze
- Santa Clara County, CA | Not Designated

Resources:

- Solar Development on Public Facilities and Under-Utilized Land | SolSmart's Toolkit for Local Governments
- Decision Support Tools for Local Solar Planning and Development | Solsmart Webinar
- Solar Project Development Pathway- Site and Opportunity Assessment | U.S. Environmental Protection Agency (EPA)
- System Advisor Model (SAM) | National Renewable Energy Lab (NREL)

PZ-25 | 10 | Enable solar rights through a local solar access ordinance.

In some states, local governments have jurisdiction to enable solar rights through an ordinance. A solar rights or access ordinance protects a property owner 's right to sunlight, ensuring a solar installation has access to the sunlight it needs to generate electricity. A solar access ordinance can also remove restrictive covenants for solar PV in relevant zones.

Recommended Verification:

• Provide a link to the zoning ordinance or land use regulations that protects solar rights and access. Please indicate the relevant section(s).

Community Examples:

- Ashland, OR | Not Designated
- Freeport, IL | SolSmart Gold

Resources:

- Best Practices in Zoning for Solar | National Renewable Energy Laboratory (NREL)
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-26 20 Codify in the zoning ordinance that accessory use energy storage systems are explicitly allowed by-right in all major zones.

A community's zoning ordinance and land use regulations create statutory limits on what individuals may do with their property as a matter of right. Zoning often provides additional processes, which can be long and costly, to consider special exceptions when a proposal is inconsistent with current land use regulations. Codifying residential energy storage as an accessory use and allowed or by-right use in all major zoning categories provides policy certainty and clarity which can promote easier and more equitable energy storage deployment. It can increase energy storage development and save property owners time and money because they can avoid going through a more extensive process to have their energy storage system considered.

Recommended Verification:

• Provide a link to the zoning ordinance or land use regulations that codify energy storage as an accessory use and allowed or by-right use. Please indicate the relevant section(s).

Resources:

- <u>Battery Energy Storage Model Law</u> | New York State Energy Research and Development Authority (NYSERDA)
- NYC Energy Storage Systems Zoning Guide | Sustainable CUNY Smart Distributed Generation Hub

Government Operations

GO-1 20 Install solar PV on local government facilities and/or local government-controlled land (Required for Platinum)

Local governments can lead by example and install solar on their facilities and/or land to achieve clean energy goals. Solar installations can generate revenue for local governments, deliver electricity cost savings, and serve as an educational tool for community members. Local governments are encouraged to install solar at highly visible locations to maximize the educational value.

Recommended Verification:

Provide news articles, a press release announcing the commissioned system, or webpage that summarizes
the details of the installation(s) including total number of systems, size, location, visibility and photos. A
signed contract for project installation is also an acceptable form of verification.

Community Examples:

- Johnson County, IA | SolSmart Gold
- New York City, NY | SolSmart Gold

Resources:

- Procurement Guidance | American Cities Climate Challenge Renewables Accelerator
- <u>Solar Decision Support and Resources for Local Governments</u> | National Renewable Energy Laboratory (NRFL)
- Solar Development on Public Facilities and Under-utilized Land | SolSmart's Toolkit for Local Governments
- Solar Power Purchase Agreements: A Toolkit for Local Governments | Interstate Renewable Energy Council (IREC)

GO-2 Discuss community goals for solar PV, net metering, community solar, and/or interconnection processes with the local utility and explore areas for future collaboration.

Local governments can leverage their relationship with electric utilities to encourage increased support for, and development of, solar energy. Local governments and utilities can partner to provide community solar programs, solar incentives, and help improve the solar interconnection process. Utilities can also help local governments meet municipal or community-wide renewable energy goals by procuring large amount of solar energy.

Recommended Verification:

• Provide meeting minutes (including a list of follow-up action items), e-mail correspondence, meeting agenda, materials prepared for the meeting (e.g., handouts and slides), or other evidence that at least one meeting occurred with your local utility.

Community Examples:

- Minneapolis, MN | SolSmart Gold
- Missoula, MT | SolSmart Silver

Resources:

- Engagement Guidance | American Cities Climate Challenge Renewables Accelerator
- Making Solar & Electrification Policies Mutually Beneficial | SolSmart Webinar
- Procurement Guidance | American Cities Climate Challenge Renewables Accelerator
- Solar & Electrification, A Beneficial Partnership | SolSmart Issue Brief
- <u>Utilizing City-Utility Partnership Agreements to Achieve Climate and Energy Goals</u> | World Resources Institute (WRI)

GO-3

Coordinate with regional organizations and/or local governments to engage utilities on advancing solar policies such as utility procurement of solar PV, green tariffs, and/or interconnection process improvements.

Local governments can find strength in numerous as they advance ambitious energy transformation goals. Collaborating with other local governments and/or regional organizations (such as Councils of Government and Regional Planning Councils) allows resources, expertise, and staff to be pooled together which can enhance efforts to work with utilities. Networks of communities and utilities can provide opportunities to share best practices and common strategies through peer-to-peer learning. They can also help build coalitions and advocate for state policy.

Recommended Verification:

 Provide details about your community's participation in coordinated efforts between local governments and/or regional organizations to engage utilities with the goal of advancing solar initiatives.

Community Examples:

- <u>Lake Forest</u>, <u>IL</u> | SolSmart Bronze
- Salt Lake City, UT | SolSmart Bronze

Resources:

- Engagement Guidance | American Cities Climate Challenge Renewables Accelerator
- Engagement Tracker | American Cities Climate Challenge Renewables Accelerator
- PJM Cities & Communities Coalition | World Resources Institute (WRI)
- Procurement Guidance | American Cities Climate Challenge Renewables Accelerator
- <u>Utilizing City-Utility Partnership Agreements to Achieve Climate and Energy Goals</u> | World Resources Institute (WRI)
- Municipal Franchise Agreements and Clean Energy Objectives | National Renewable Energy Lab (NREL)

GO-4	20	Demonstrate coordination between local government inspectors and utility staff to
		reduce Permission to Operate timeline for solar PV.

A solar system that has not been granted permission to operate (PTO), is not allowed to produce electricity which can have economic impacts for the system owner. To reduce economic loss, local governments can coordinate with the electric utility to ensure solar PV systems can begin operation as soon as it has been confirmed that the systems are properly constructed and connected to the grid. Consolidating and/or coordinating local government inspections and utility interconnection inspections can save time and money for solar installers and property owners.

Recommended Verification:

 Provide details about the coordination process and explaining how this process reduces the time between inspection and Permission to Operate

Community Examples:

- Leon County, FL | SolSmart Gold
- Mount Prospect, IL | SolSmart Gold

Resources:

• <u>Utility Engagement</u> | SolSmart's Toolkit for Local Governments

GO-5 10 Conduct feasibility analysis for solar PV on local government facilities and/or local government-controlled land.

Local governments can lead by example and install solar PV on their facilities and/or land to achieve clean energy goals and generate electricity cost savings. The first step is conducting a feasibility analysis to discover which rooftops or grounds have the highest solar potential and best characteristic for a solar installation. A feasibility analysis can be done using outside consultants, or with tools provided by federal agencies, such as the Department of Energy (DOE). An RFP can then be issued for the most favorable sites. Communities that receive GO-6, GO-7 or GO-8 may also receive GO-5 if they completed a feasibility analysis as part of the project development process.

Recommended Verification:

Provide a link to the feasibility analysis or details about the feasibility analysis that was conducted – who
conducted, what were the sites, when was it conducted, what were the recommendations and next steps.

Community Examples:

- Asheville, NC | SolSmart Gold
- Mountain Iron, MN | SolSmart Bronze

Resources:

- Decision Support Tools for Local Solar Planning & Development | SolSmart Webinar
- <u>Solar Project Development Pathway Site and Opportunity Assessment</u> | Environmental Protection Agency (EPA)
- Solar Development on Public Facilities and Under-utilized Land | SolSmart's Toolkit for Local Governments
- System Advisor Model (SAM) | National Renewable Energy Laboratory (NREL)

GO-6 Install solar PV integrated with other technologies such as battery storage or electric vehicle charging on local government facilities and/or local government-controlled land.

Solar can provide unique benefits when paired with other distributed energy technologies. Co-locating solar with other technologies can improve resilience, provide demand-charge reductions, and charging electric vehicles with a renewable source of energy.

Recommended Verification:

 Provide a news article, a press release announcing the commissioned system, or webpage that summarizes the details of the solar installation(s) integrated with other technologies including total number of systems, size, location, technologies used, and photos.

Community Examples:

- Duluth, MN | SolSmart Gold
- Montgomery County, MD | SolSmart Gold
- Boulder, CO | SolSmart Gold

Resources:

- Best Practices for Solar & Electric Bus Charging at Transit Agencies | SolSmart Webinar
- REopt: Renewable Energy Integration & Optimization | National Renewable Energy Laboratory (NREL)
- Solar and Electric Vehicles: A Guide for Local Governments | SolSmart
- Solar & Electric Vehicle Best Practices for Local Governments | SolSmart Webinar

GO-7	20	Install solar PV on local government-controlled brownfields and/or under-utilized properties.	Г
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As large, open spaces with limited future uses, brownfields, landfills, and other under-utilized lands are favorable locations for solar PV systems. Local governments can lease these lands for solar development to increase locally installed solar capacity while generating land lease revenue.

Recommended Verification:

 Provide a news article, a press release announcing the commissioned system, or webpage that summarizes the details of the installation(s) including total number of systems, size, location, and photos.

Community Examples:

- Cary, NC | SolSmart Silver
- Eau Claire, WI | SolSmart Gold

Resources:

- <u>Developing Solar on Brownfields</u> | SolSmart Webinar
- RE-Powering America's Land | Environmental Protection Agency (EPA)
- Solar Development on Public Facilities and Under-utilized Land | SolSmart's Toolkit for Local Governments
- The Guide to Developing Solar Photovoltaics at Massachusetts Landfills | Massachusetts Department of Energy Resources

GO-8 10 Require new local government facilities and/or facility retrofits meeting a specific threshold to be solar ready.

Local governments can lead by example and require new facilities or those completing a retrofit to be solar ready. Solar ready construction can reduce the installation costs if a solar system will be installed at some point in the future. Solar ready buildings are designed and engineered in such a way that allows for the easy installation of a future solar system.

Recommended Verification:

 Provide a link to adopted code(s) or language that require new construction and/or retrofits of local government facilities to be solar ready.

Community Examples:

Montgomery County, MD | SolSmart Gold

Resources:

 <u>Solar-Ready Building Design: A Summary of Technical Considerations</u> | National Renewable Energy Laboratory (NREL)

GO-9		Procure solar energy for municipal operations through an offsite physical PPA, virtual PPA, green tariff, or similar structure.	
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To meet climate and energy goals, local governments can procure a large amount of solar energy through an appropriate structure, depending on the types of contracts allowed by state and utility regulations.

Recommended Verification:

 Provide a document such as a news article, contract, press release, or similar official document containing the details how the local government has procured solar energy.

Community Examples:

• Cincinnati, OH | Not Designated

• Denton, TX | SolSmart Gold

Resources:

- How Cities Benefit from Power Purchase Agreements | Center for Climate and Energy Solutions (C2ES)
- How Local Governments Can Buy Renewable Energy & Support Market Development | SolSmart Webinar
- Local Government Strategies for 100% Clean Energy | SolSmart Webinar
- Procurement Guidance | American Cities Climate Challenge Renewables Accelerator
- Municipal Solar Procurement | SolSmart Webinar

GO-10 5 Obtain a Community Benefits Agreement with solar developer for solar installation.

A community benefits agreement (CBA) is a contract between a developer and one or more community groups or organizations. The CBA outlines benefits the developer will deliver to the community in exchange for community support of the solar project. A CBA goes above and beyond a typical siting or development agreement, which commonly list annual local tax payments or local infrastructure upgrades (e.g. road repavement). Examples of common CBA benefits include jobs training programs, local hiring goals, and living wage requirements.

Recommended Verification:

A copy of the CBA or a public document that summarizes the details of the CBA.

Resources:

 <u>Community Benefit Agreement Toolkit</u> U.S. Department of Energy Office of Economic Impact and Diversity

GO-11 Post metrics related to the number of municipal solar PV or solar PV plus storage/EV installations and installed capacity, municipal solar PV energy procured (ownership, PPAs, community solar offtake), and percent (%) of municipal energy usage offset by renewable energy.

Posting metrics publicly provides transparency and allows community members to understand how the community is progressing toward its goals. This is an important way to create accountability and will help identify the need to implement further actions if goals are not being met. Metrics must be updated annually at a minimum, but communities should strive for quarterly updates. Please specify the reporting period for which the posted metrics apply.

Recommended Verification:

• Provide a link to this information on the solar landing page. Include date when the information was last updated and date tracking began.

Templates:

• SolSmart Solar Landing Page Template | SolSmart

Community Examples:

• Cambridge, MA | SolSmart Gold

Resources:

- State and Local Planning for Energy (SLOPE) | National Renewable Energy Lab (NREL)
- Electric Vehicle Charging Station Locations | Office of Energy Efficiency and Renewable Energy

Directly install or provide technical or financial support for the installation of solar PV on affordable housing, multifamily housing, community-based organizations, and/or resilience hubs.

Local governments can partner with community-serving organizations, housing developers and managers of resilience hubs to support the implementation of solar. Local governments may be able to offer technical support if they have relevant expertise for example in project development, energy or project finance. In other instances, local governments may be able to offer direct financial support to these projects.

Recommended Verification:

Provide links and/or a signed memo outlining the support provided.

Community Examples:

• Hillsborough County | Not designated

Resources:

- Process Guide for City-Community Collaboration | Greenlink Analytics
- <u>Clean Energy for Low Income Communities Accelerator Toolkit</u> | U.S. Department of Energy Better Buildings

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The Inflation Reduction Act: What does it mean for Affordable Housing (webinar) | Enterprise Community Partners

GO-13 Train local government staff on regulatory and (where applicable) wholesale market barriers to solar deployment and potential engagement pathways to address these barriers. Training must have occurred in the past two years.

Regular solar PV training, at least every two years, is a best practice to ensure local government staff are up to date on regulatory practices and wholesale markets. Trainings increase staff knowledge of solar energy system deployment and ensures they know the best procedures to address any barriers. Increased staff knowledge can improve involvement in the regulatory process, making their needs and concerns heard. Local governments can require staff to attend full or half-day workshops (either live or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.

Recommended Verification:

• Provide a signed memo with details about the regulatory and wholesale market training including name of training, name of trainer, attendees (name, title, department), date and time, location

Templates:

SolSmart Training Verification Memo | SolSmart

Resources:

• The Impacts of Wholesale Market Rules and Policies on Clean Energy Goals: A Primer for Local Governments | World Resources Institute

GO-14 Train local government staff on best practices and issues regarding solar interconnection with the local utility. Training must have occurred within the past two years.

Regular solar PV training, at least every two years, is a best practice to ensure local government staff are equipped to work with the local utility on interconnection issues. Trainings increase staff knowledge of the solar interconnection process to the grid, thereby decreasing time from installation to an active PV system. Local governments can require staff to attend full or half-day workshops (either live or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.

Recommended Verification:

 Provide a signed memo with details about the interconnection training including name of training, name of trainer, attendees (name, title, department), date and time, location

Templates:

• SolSmart Training Verification Memo | SolSmart

Resources:

- 2019 Model Interconnection Procedures | Interstate Renewable Energy Council (IREC)
- Toolkit and Guidance for the Interconnection of Energy Storage and Solar-Plus-Storage | Interstate Renewable Energy Council (IREC)
- Generic Technical Interconnection and Interoperability Requirements (TIIRs) | EPRI
- Solar Photovoltaics Guide | ConEdison
- <u>Guidelines for Generator Interconnection</u> | Eversource

Community Engagement

CE-1	10	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)	
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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. In addition, information and resources should be available to community members in print form if requested.

Recommended Verification:

• Provide a link to the solar landing page.

Community Examples:

- Olympia, WA | SolSmart Gold
- Pulaski County, VA | SolSmart Gold
- Tyngsborough, MA | SolSmart Gold

Templates:

• SolSmart Solar Landing Page Template | SolSmart

Resources:

- Homeowner's Guide to Going Solar (View in Spanish) | U.S. Department of Energy (DOE)
- Residential Consumer Guide to Solar Power | Solar Energy Industries Association (SEIA)

CE-2	20	Establish partnerships with local community-based organizations or other organizations focused on serving disadvantaged communities within your community to define your community's solar equity goals, develop implementation strategies, and establish a plan for tracking and reporting on progress. (Required for Platinum)	
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Community-based organizations can assist local governments to define and develop solar equity goals grounded in the needs and priorities of the community. Partnering with organizations that have strong ties with disadvantaged communities is an important way to ensure that solar projects and programs, as well as outreach efforts, are designed to meet the needs of those communities. For example, a local government, a CBO, and a local solar installer could come together to implement a solarize campaign customized to LMI households or to develop a targeted outreach strategy related to a community solar project. The partnership may have a scope that is broader than solar (for example, partnering on a range of climate-related goals or economic development initiatives) as long as it clearly includes solar deployment goals strategies. Developing a shared approach to tracking and reporting helps create transparency and accountability and can be an important component to building trust.

Recommended Verification:

 Signed memo summarizing the names of partner organizations, scope of the partnership, defined goals, outcomes (or intended outcomes), plan for tracking progress and next steps for the partnership.

Resources:

- <u>Integrating Equity into City Clean Energy Initiatives</u> | American Cities Climate Challenge Renewables Accelerator
- Solar with Justice | Clean Energy States Alliance
- From Community Engagement to Ownership | Urban Sustainability Director's Network (USDN)
- Process Guide for City-Community Collaboration | Greenlink Analytics
- Greenlink Equity Map | Greenlink Analytics
- Shared Accountability Guide and Framework | 100% Accountability Cohort
- Justice40 Screening Tool | Justice40 Initiative
- <u>Clean Energy for Low Income Communities Accelerator Toolkit</u> | U.S. Department of Energy Better Buildings

CE-3 Post online resources about residential and commercial solar PV financing options and incentives.		
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Many different financing options are available for residential and commercial solar PV. Local governments can play an important role in providing access to information about available options. Information and resources posted

should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.

Recommended Verification:

Provide a link to this information on the solar landing page.

Community Examples:

- Walnut Creek, CA | SolSmart Gold
- Wood County, WI | SolSmart Gold

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

- A Homeowner's Guide to Solar Financing: Leases, Loans and PPAs | Clean Energy States Alliance (CESA)
- <u>Database of State Incentives for Renewables and Efficiency (DSIRE)</u> | North Carolina Clean Energy Technology Center (NCCETC)
- Financing your solar panel system | EnergySage
- Homeowner's Guide to the Federal Tax Credit for Solar Photovoltaics (View in Spanish) | U.S. Department of Energy (DOE)

CE-4 5 Post online resources about consumer protection and solar PV.

Solar energy can be a new and complex topic for community members. Local governments can provide online guides and resources to help community members have a clear understanding of solar PV, allowing them to make informed decisions. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.

Recommended Verification:

Provide a link to a webpage containing consumer protection resources.

Community Examples:

- Alexandria, VA | SolSmart Gold
- James City County, VA | SolSmart Bronze

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

- Consumer Solar Checklist | Interstate Renewable Energy Council (IREC)
- EnergySage | EnergySage
- Residential Issues and Existing Regulatory Framework | SolSmart's Toolkit for Local Governments
- Solar Customer Resource Portal | Solar Energy Industries Association (SEIA)
- Solar Owner's Manual (View in Spanish) | Solar United Neighbors (SUN)

CE-5 Post an online summary of state policies related to a property owner's solar access and solar rights, including links to state-level policy.

Community members are often unaware that state policy could impact their property's solar rights. Solar rights and solar access are terms which describe the ability of property owners to utilize sunlight on their property. Each state has its own unique policy and enforcement regime. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.

Recommended Verification:

Provide a link to a webpage with summary of state policies relating to solar access and/or rights.

Community Examples:

- Torrance, CA | SolSmart Gold
- Wilmette, IL | SolSmart Silver

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

- Homeowners Associations and Solar Access | Solar United Neighbors
- <u>Database of State Incentives for Renewables and Efficiency (DSIRE)</u> | North Carolina Clean Energy Technology Center (NCCETC)

CE-6 Post an online summary of state policies related to Homeowner Associations (HOAs) ability to regulate and/or restrict solar PV, including links to state-level policy.

Homeowner Associations often aim to impose restrictive measures on solar PV systems. Community members should be aware of state policy that defines what HOAs are allowed and not allowed to do in terms of regulating solar PV systems.

Recommended Verification:

Provide a link to the summary of state policies relating to Homeowner Associations and solar PV.

Community Examples:

- Hallandale Beach, FL | SolSmart Silver
- Torrance, CA | SolSmart Gold

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

Homeowners Associations and Solar Access | Solar United Neighbors

CE-7 Post online resources about solar installers and/or solar quote platforms for solar PV.

More solar companies operating in your community means residents and businesses are faced with more choices as they consider who to select for their solar project. Providing relevant local information on active solar installers can help community members make the best choice given their circumstances. Information and resources posted should be made available in multiple languages as appropriate for your community. In addition, information and resources should be available to community members in print form if requested.

Recommended Verification:

 Provide a link to a webpage that contains information about local solar installers and/or solar quote platforms.

Community Examples:

- Denver, CO | SolSmart Gold
- Schaumburg, IL | SolSmart Silver

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

- <u>Board Certified Professionals Directory</u> | North American Board Certified Energy Practitioners (NABCEP)
- EnergySage | EnergySage
- Pickmysolar | Pick My Solar
- <u>Solar Buyer's Markets: Unlocking Lower Photovoltaic and Battery Prices on Online Quote</u> Platforms |
 National Renewable Energy Laboratory (NREL)

CE-8 5 Post an online solar map for your community.

Solar maps can be a helpful and visual way to communicate solar potential to community members. Solar maps can be customized depending on the goals and needs of the community. For example, solar maps can provide community members with an estimate of the solar potential of their rooftop, they can be used the location of solar installations within a community (which may help residents understand the extent of solar projects happening in different parts of the community), or they may be used to communicate the potential for different solar installations (i.e., residential, commercial, large-scale, community solar, etc).

Recommended Verification:

Provide a link to the solar map for your community.

Community Examples:

- Los Angeles County, CA | Not Designated
- Westminster, CO | SolSmart Gold
- Chicago, IL | SolSmart Gold

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

- Go Solar Ready | Ohio-Kentucky-Indiana Regional Council of Governments
- NY Solar Map | Sustainable CUNY Smart Distributed Generation Hub
- Project Sunroof | Google

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Post an online dashboard or summary of solar PV metrics for your community, including total installed solar PV capacity, solar PV + storage installations, and community solar and/or solarize subscribers (if applicable). Metrics should identify solar PV adoption in disadvantaged communities as well.

Key solar metrics such as the number of installations and total installed capacity can help communicate progress towards local and state renewable energy goals. Other related metrics could include the percentage of municipal energy provided by solar energy, installed capacity per capita and progress towards greenhouse gas emissions targets. In order to track progress toward equity goals, communities are encouraged to disaggregate data and report rates of solar PV adoption by income level or census track, as appropriate.

Recommended Verification:

 Provide a link to a webpage displaying solar PV metrics. Include date when the information was last updated and date tracking began.

Community Examples:

- Boulder, CO | SolSmart Gold
- Westminster, CO | SolSmart Gold

Templates:

• SolSmart Solar Landing Page Template | SolSmart

Resources:

- Solar Demographics Tool | Lawrence Berkeley National Laboratory
- Justice40 Screening Tool | Justice40 Initiative
- <u>Clean Energy for Low Income Communities: Metrics and Indicators | U.S. Department of Energy Better Buildings</u>
- State and Local Planning for Energy (SLOPE) | National Renewable Energy Lab (NREL)
- <u>Distributed Energy Resources in Ohio</u> | Ohio Public Utilities Commission

CE-10	5	Distribute solar job training and career opportunities in coordination with local colleges and/or workforce development organizations.
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Solar jobs have grown 12 times faster than the U.S. economy since 2014. As local solar markets grow, local governments can promote solar job opportunities with community colleges and workforce development organizations to ensure a well-trained, local workforce. This can be done via a jobs fair, posting solar job training information to the community and local colleges/workforce development websites

Recommended Verification:

Provide posted job descriptions, screenshots from employment websites or advertisement of job trainings.

Community Examples:

- Fitchburg, WI | SolSmart Bronze
- Washington, DC | SolSmart Gold

Templates:

SolSmart Solar Landing Page Template | SolSmart

Resources:

- Solar Career Map | Interstate Renewable Energy Council (IREC)
- Solar Ready Vets | Interstate Renewable Energy Council (IREC)
- Solar Workforce Development Pilot | St. Louis, MO
- Workforce Development | Grid Alternatives

CE-11 5 Demonstrate local government support for local solar projects through speeches, press releases, opinion articles, etc.

Local governments can encourage solar market growth by highlighting solar energy goals, initiatives, and success stories through various communications strategies. Share the links and/or videos of communications efforts on the community's solar landing page.

Recommended Verification:

Provide a link to this information posted on the community's website or solar landing page.

Templates:

SolSmart Solar Landing Page Template | SolSmart

Community Examples:

- Fayetteville, AR | SolSmart Gold
- <u>Louisville</u>, <u>KY</u> | SolSmart Gold

Resources:

Stakeholder Engagement | SolSmart's Toolkit for Local Governments

CE-12	10	Discuss solar PV goals and/or strategies for increasing solar PV development, including large-scale solar plans, solar access, and/or solar adoption in disadvantaged communities, within an appropriate committee, commission, taskforce, and/or working group. (e.g. solar is a recurring agenda item during monthly sustainability commission meetings).	
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An Environmental Advisory Council, Sustainability Committees, or Climate Action Taskforce is a great way to keep residents and key stakeholders actively engaged in community energy policy and development. These groups can assist in the development of solar energy goals and strategies, lead community-based solar initiatives, and provide communication and outreach support to inform community members about solar initiatives and plans.

Recommended Verification:

 Provide meeting minutes (including a list of follow-up action items) or materials prepared for the meeting (e.g., handouts and slides) from within the past year and provide documentation of the regularly scheduled frequency of these meetings.

Community Examples:

- Branford, CT | SolSmart Bronze
- Fairfield, CT | SolSmart Gold

Resources:

- Stakeholder Engagement | SolSmart's Toolkit for Local Governments
- Solar and Resiliency: Integrative Financing Strategies for SolSmart Communities | SolSmart Issue Brief
- Solar Power in Your Community | Office of Energy Efficiency and Renewable Energy

CE-13 Support a solar informational session and/or solar tour explaining solar PV opportunities and policies. Show that session/tour was made accessible to all members of the community including those in disadvantaged communities. Session/Tour must have occurred within the last 2 years.

An engaged and informed community can encourage solar market growth and increase the likelihood that local homes and businesses will pursue solar installations. Solar informational sessions and solar tours are ways to educate community members about solar energy and the processes involved with an installation. Hosting these sessions in disadvantaged communities, providing transportation, offering tours and materials in other languages, and partnering with a CBO are a few potential ways to increase participation and make these sessions more accessible to all residents.

Recommended Verification:

- Provide a link(s) to details about the solar informational session or tour such as an agenda, date, time, and location.
- Provide a signed memo describing efforts to make sessions inclusive, including presentational materials or tour itinerary, and information on the level of attendance.

Community Examples:

- Lower Merion, PA | SolSmart Bronze
- Sarasota County, FL | SolSmart Silver

Resources:

• Solar Tour Resources | National Solar Tour

Market Development

MD-1 20 Demonstrate activity in state regulatory and/or legislative proceedings regarding solar PV.

Local governments can provide an important voice into the development of state-level solar energy policy, strategies, and incentives. Government staff can track policy developments actively and develop appropriate strategies to interact with state regulators and legislators. Activities can include meetings with state regulators (PUC) or legislators, State Energy Office Officials, submitting written comment and feedback on state Requests for Information or Rulemakings, submitting formal comments or other participation in legal docketed proceedings, etc.

Recommended Verification:

 Provide a link to public comments on solar energy or related energy proceedings, the minutes and/or recordings of meetings attended by representatives of the local government, or a signed memo summarizing involvement in the proceedings.

Community Examples:

Ann Arbor, MI | SolSmart Silver

Resources:

- Engagement Guidance | American Cities Climate Challenge Renewables Accelerator
- Engagement Tracker | American Cities Climate Challenge Renewables Accelerator
- The Federal and State Context: Policies Affecting Solar Energy Development | SolSmart's Toolkit for Local Governments

MD-2 20 Support a community-wide group purchase program (e.g., Solarize). Program must have occurred within the last 2 years.

Local governments can support or host community group purchase programs for solar energy. Bulk purchasing can reduce the costs of solar installations for community members. These limited-time offers have had consistent success in providing discounts of up to 20% of installed costs for residential systems. To be eligible for MD-2, the local government must be an official partner and/or provide tangible support (staff time, resources, etc.) to the group purchase program.

Recommended Verification:

- Provide a link to a website where the Solarize campaign has been publicly announced.
- Provide details about the status of an ongoing solarize campaign or final metrics of a completed solarize campaign.

Community Examples:

Montgomery County, MD | SolSmart Gold

Resources:

- Procurement Guidance- Solarize | American Cities Climate Challenge
- How to Develop a Solarize Campaign | SolSmart Webinar
- Market Development and Finance | SolSmart's Toolkit for Local Governments
- Solarize Your Community | New York State Energy and Research Development Authority (NYSERDA)
- Solarize Mass | Massachusetts Clean Energy Center

MD-3 Define and implement a pathway specifically for low-to-moderate income (LMI) residents to participate in a community-wide group purchase program through program design and/or financing support options.

It can be particularly difficult for low-to-moderate income (LMI) households to participate in solar purchasing programs. These programs may require a minimum credit score, an upfront deposit, or have contract terms that present barriers for some residents. Local governments can help to identify these barriers and create strategies to overcome them, by providing incentives for income-qualified participants.

Recommended Verification:

• Link to information on solar landing page or provide signed memo summarizing the forms of financing support or program design elements that support LMI residents in solar PV group purchase program.

Community Examples:

- <u>Durham, NC</u> | SolSmart Gold
- Philadelphia, PA | SolSmart Gold

Resources:

- Procurement Guidance- Solarize | American Cities Climate Challenge
- Narrowing the Equity Gap through Solarize | Rocky Mountain Institute
- How to Development a Solarize Campaign | SolSmart Webinar
- Market Development and Finance | SolSmart's Toolkit for Local Governments

MD-4 20 Support a community solar program.

Community solar offers residents and businesses an opportunity to own or lease a portion of a solar project in exchange for economic benefits proportional to their share. These economic benefits are commonly delivered in the form of electricity bill credits. For renters, and homes or business that are not suitable sites for solar, community solar programs allow consumers to access solar without installing panels on their homes or business. Community solar can be provided by utilities, a third party, or a non-profit. To be eligible for MD-4, the local government must be an official partner and/or provide tangible support (staff time, resources, etc.) to the community solar program.

Recommended Verification:

• Provide a link to information about the community solar program, including any outreach materials and details about program design.

Community Examples:

- Austin, TX | SolSmart Gold
- Fort Collins, CO | SolSmart Gold

Resources:

- Community Solar | SolSmart's Toolkit for Local Governments
- <u>National Community Solar Partnership Technical Expertise and Capacity Building</u> | U.S. Department of Energy National Community Solar Partnership
- Expanding Solar Participation through Community Solar | SolSmart Issue Brief
- Expanding Solar Participation through Community Solar | SolSmart Webinar
- Procurement Guidance | American Cities Climate Challenge Renewables Accelerator
- Community Solar National Renewable Energy Laboratory (NREL)
- Community Solar Resources | U.S. Department of Energy

Define and implement a pathway specifically for low-to-moderate income (LMI) 10 residents to participate in a community solar program through program design and/or financing support options.

Community solar provides opportunities to open access to solar to low-to-moderate income households. To fully achieve this potential, a community program should design programs and financing to support low to moderate income participation, including savings from day one. It is also important to ensure that appropriate and trusted messengers are used and that offerings are designed to be flexible without long-term commitments.

Recommended Verification:

• Provide details that explain program design elements, including outreach and financing, that support LMI resident participation in a community solar program.

Community Examples:

- Denver, CO | SolSmart Gold
- Washington, DC | SolSmart Gold

Resources:

- Community Solar | SolSmart's Toolkit for Local Governments
- <u>Design and Implementation of Community Solar Programs for Low- and Moderate-Income Customers</u> |
 National Renewable Energy Laboratory (NREL)
- Procurement Guidance | American Cities Climate Challenge Renewables Accelerator
- Community Solar + | Rocky Mountain Institute
- <u>National Community Solar Partnership Technical Expertise and Capacity Building</u> | U.S. Department of Energy National Community Solar Partnership
- <u>Equitable Access to Community Solar: Program Design and Subscription Considerations</u> | National Renewable Energy Laboratory (NREL)
- Building with Benefits (Webinar Series) | U.S. Department of Energy

MD-6 20 Provide residents with Community Choice Aggregation/Energy that includes solar PV as a power generation source.

In some states, local governments can increase access to solar energy for their operations and their residents through community choice aggregation. Community Choice Aggregation allows local governments to aggregate energy demand within their jurisdiction and procure power from an energy supplier while the local utility provides transmission and distribution services. Many local governments utilize community choice to procure more renewable energy, including solar, than would be available from their local electric utility. States must have enabling legislation for local governments to provide community choice aggregation.

Recommended Verification:

 Provide a link to details about a Community Choice program (with solar PV as a power generation source) that is available for residents.

Community Examples:

- San Jose, CA | SolSmart Gold
- Somerville, MA | SolSmart Gold

Resources:

- <u>Community Choice Aggregation Toolkit</u> | New York State Energy and Research Development Authority (NYSERDA)
- Starting a New CCA | California Community Choice Association (CalCCA)
- Community Choice Aggregation | SolSmart Issue Brief
- Community Choice Aggregation: Challenges, Opportunities, and Impacts on Renewable Energy Markets |
 National Renewable Energy Laboratory (NREL)
- Using Community Choice Aggregation to Achieve Clean Energy Goals | SolSmart Webinar

MD-7 10 Provide a PACE financing program that includes solar PV as an eligible technology.

Property Assessed Clean Energy (PACE) financing is an on-bill financing mechanism which enables repayment of long-term, low-interest loans on property tax bills. PACE can be used to finance renewable energy and energy efficiency projects on residential and/or commercial properties, depending on the PACE financing program design. In order for residents and business to access PACE financing, it must be enabled at the state and local level.

Recommended Verification:

- Provide a link to the local ordinance creating a PACE program.
- Provide a link to the PACE program webpage.

Community Examples:

- Deerfield Beach, FL | SolSmart Silver
- Grand Rapids, MI | SolSmart Silver

Resources:

- Market Development and Finance | SolSmart's Toolkit for Local Governments
- Resources | PACENation

Provide local incentives or locally-enabled finance (e.g. a revolving loan fund) for solar PV and/or solar PV + technologies (e.g., battery storage, and/or electric vehicle charging).

In addition to state and federal incentives, local governments can also encourage solar development within their jurisdictions by providing tax exemptions, rebates, or other financial incentives. Some jurisdictions have enabled community finance through revolving loan funds or credit enhancement facilities for renewable energy projects. These actions can help lower the cost of solar for residents. To be eligible for MD-8, the incentives or financing program must be currently available to residents.

Recommended Verification:

- Provide a link to an ordinance creating local incentives or financing options.
- Provide a link to an application or form that are required for a solar PV system to be eligible for incentives or financing.

Community Examples:

- Loudoun County, VA | SolSmart Silver
- St. Louis Park, MN | SolSmart Silver

Resources:

• Market Development and Finance | SolSmart's Toolkit for Local Governments

Provide local incentives for solar PV to low-to-moderate income (LMI) households, disadvantaged communities, Disadvantaged Business Enterprises (DBEs), Minority MD-9 5 П and Women Owned Business Enterprises (MWBEs), and/or non-profit organizations that provide community services.

Local governments can support solar installations by LMI households, DBEs, and non-profit organizations by providing incentives such as low-interest loans, grants, on-bill financing and a variety of tax incentives and rebates. Local governments can expand solar programs to disadvantaged residents by implementing any number of these programs.

Recommended Verification:

- Provide a signed memo describing the local incentives and who is eligible to receive them.
- Provide a link to a webpage or press release with program information.

Community Examples:

- Boulder, CO | SolSmart Gold
- Portland, OR | Not Designated

Resources:

- Market Development and Finance | SolSmart's Toolkit for Local Governments
- Projects & Programs in Low-to-Moderate Income Communities | SolSmart Webinar
- Resources to Support Initiatives for Low-to-Moderate Income Communities I SolSmart Webinar
- Unlocking Solar for Low- and Moderate-Income Residents: A Matrix of Financing Options by Resident, Provider, and Housing Type | National Renewable Energy Laboratory (NREL)

MD- 10	20	Partner with financial institutions and/or foundations to offer loans, rebates, grants, or other incentives for solar PV projects. (Financial institutions could include entities such as a local or regional bank, CDFI, or credit union).	
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Loans, rebates, or grants can improve the financial prospects of a solar project, allowing more community members to install solar. Local governments can work with local financial institutions to offer and/or promote financing options for solar projects.

Recommended Verification:

- Provide link to financing options for solar energy.
- Provide a signed memo detailing how the local government partnered with the financial institution to offer a financial incentive for solar energy.

Community Examples:

- Lafayette, CO | SolSmart Gold
- Milwaukee, WI | SolSmart Gold

Resources:

Market Development and Finance | SolSmart's Toolkit for Local Governments

Innovative Action

The actions identified in the categories above represent many of the most common and impactful efforts communities are taking to make going solar easier and more affordable for residents and businesses. However, we know that communities across IA-1 **Varies** the country are developing innovative ways to promote and deploy solar energy. If your community has taken action that was not captured in any of the criteria above, please share it with us.

Innovative actions will be reviewed by a team of solar experts and each action may be worth up to 20 points.

Recommended Verification:

Provide a signed memo describing the innovative action and include any supporting documentation or links that provide additional details.

Community Examples:

- Grayslake, IL | SolSmart Bronze
 - The Grayslake Sustainable Business Initiative recognizes local businesses that are choosing to be more sustainable. Solar energy is emphasized by awarding a business automatic gold designation if they have installed a solar energy system.

- Montgomery County, MD | SolSmart Gold
 - Montgomery County's 4th Solar Co-op offered EV charging as an option through the solar co-op.
 This helps promote EV charging and can reduce costs through group purchasing.

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