

PROGRAM GUIDE





WWW.SOLSMART.ORG

AUGUST 2022

SolSmart Program Guide: Recognizing Local Solar Achievements!



Welcome to the SolSmart Program Guide, a comprehensive resource to guide local governments through the SolSmart designation and technical assistance process.

Why SolSmart?

Across the United States, communities are turning to solar energy for clean, reliable, and affordable electricity to power their homes and businesses. Rapidly declining prices for solar technologies have brought vast amounts of solar energy into the mainstream within a few short years. Millions of Americans now rely on solar to power the necessities of modern life.

In addition to keeping the lights on, solar energy provides many environmental, social, and economic benefits. It is a carbon-free electricity source that is an essential part of any strategy to reduce greenhouse gas emissions. An increasing number of communities are now using solar to meet climate change goals or renewable energy targets. At the same time, solar energy is a primary driver for job creation and economic growth. Interstate Renewable Energy Council's *National Solar Jobs Census* found that solar employs nearly 250,000 American workers as of 2019, and since 2010 the size of the solar workforce has grown by 167 percent.¹

Those who have taken advantage of the opportunity to install solar panels are finding that solar saves money. Homeowners, businesses, schools, and local governments are using solar energy to drastically reduce their utility costs. Meanwhile, in the face of costly natural disasters that threaten the reliability of the electricity grid, solar can be combined with battery storage to provide backup power and make communities more resilient.

Yet, solar "soft costs" have significant local impacts on the affordability of solar energy systems. "Soft costs" refer to business processes or administrative costs that can increase the time and money it takes to install a solar energy system — costs that are then passed on to customers. These costs arise due to sales and marketing, permitting processes, planning, and zoning considerations, financing, and a wide variety of other factors. Overall, these soft costs represent about 64% of the total cost of a solar energy system.²

To address solar soft costs at the local level, the U.S. Department of Energy's Solar Energy Technologies Office (SETO) funds <u>SolSmart</u>, a national designation and technical assistance program. SolSmart recognizes local governments that have taken key steps to address barriers to solar energy and provides no-cost technical assistance to accelerate the development of local solar energy markets.

SolSmart benefits three primary stakeholders at the local level. The first is solar customers that can enjoy a greater return on their investment if soft costs are reduced. Cumbersome local government processes can add up to \$2,500 or more to the cost of a homeowner going solar.³ Second, local governments benefit from the time and money saved by cutting red tape and making processes more efficient. For example, providing more accessible information on permit and inspection processes can decrease the volume of questions from installers and the number of incomplete applications, thereby reducing demands on staff time. Finally, local solar companies benefit from transparent and standardized processes that reduce barriers to entering the

¹ Interstate Renewable Energy Council, National Solar Jobs Census 2019, February 2020, available at <u>http://www.solarjobscensus.org</u>

² U.S. Department of Energy, *Soft Costs Webpage, available at* <u>https://www.energy.gov/eere/solar/soft-costs</u>

³ Jesse Burkhardt et al., "How Much Do Local Regulations Matter? Exploring the Impact of Permitting and Local Regulatory Processes on PV Prices in the United States," *Electricity Markets & Policy*, September 2014, <u>https://emp.lbl.gov/publications/how-much-do-local-regulations-matter.</u>

market, reduce administrative costs, and improve customer satisfaction.

As of June 2021, <u>more than 400 communities in 41 states plus the District of Columbia and U.S. Virgin</u> <u>Islands</u> have achieved designation as SolSmart Gold, Silver, or Bronze. The program's broad national reach is helping communities in all parts of the country make it faster, easier, and more affordable to go solar. The designation program is led by the International City/County Management Association, while the technical assistance program is led by Interstate Renewable Energy Council.

SolSmart Designation Criteria

SolSmart uses objective criteria based on established solar energy best practices to measure local government progress toward creating a solar-friendly community. Local governments that complete the necessary requirements are awarded SolSmart Bronze, Silver, or Gold Designation.



There are three levels of SolSmart designation for local governments. Below are the requirements for each level

Bronze	60 Total Points	3 Pre-requisite Credits
	 20 Points in Permitting & Inspection 20 Points in Planning & Zoning 20 Points from any Special Focus category 	 Complete the Solar Statement (PR-1) Complete solar permitting checklist (PI-1) Complete zoning review (PZ-1)
Silver	100 Total Points	3 Pre-requisite Credits
	Complete bronze designation requirements	 Complete permit staff training (PI-2) Complete inspection staff training (PI-3) Complete zoning clarification (PZ-4)
Gold	200 Total Points	2 Pre-requisite Credits
	Complete silver designation requirements	 Complete permit turnaround time (PI-4) Complete solar in zoning (PZ-5)

Special Award: Communities that earn 60% of the available points in a category are eligible for special recognition.

The SolSmart Designation Criteria is organized into 5 categories – 2 Foundation Categories and 3 Special Focus Categories. Below you will find a summary of the 5 categories and the number of credits and available points in each category.

	roundatione	ii Categories	
Permitting a	nd Inspection	Planning c	Ind Zoning
Credits: 20	Points: 205	Credits: 23	Points: 185

Special Focus Categories

Government Operations		Community Engagement		Market Development	
Credits: 10	Points: 160	Credits: 12	Points: 70	Credits: 10	Points: 155

Permitting and Inspection | 20 Credits | 205 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 completed 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 credits in the permitting and inspection category can be verified by providing information in a detailed permitting checklist. That publicly available document should be backed up by internal standard operating procedures that ensure a transparent and efficient permitting and inspection process.*

Planning and Zoning | 23 Credits | 185 Points

Local government planning and zoning regulations can help facilitate the rapid expansion of solar energy within a community while ensuring compliance with development standards. Communities can utilize planning and zoning regulations to provide maximum siting options for rooftop and ground-mounted solar energy while preserving community character and historic resources. Incorporating solar energy in local planning documents sets a community's vision for the integration of solar energy with other land uses. Zoning codes should contain language that provides clear and transparent regulations on the development and use of solar energy within the jurisdiction. *Many of the credits in the planning and zoning category can be verified by providing a link to a community's codes, ordinances, and community plans.*

Government Operations | 10 Credits | 160 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 that can directly lead to more megawatts of solar energy on the local grid. *Many of the credits 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 | 12 Credits | 70 Points

Local governments are an important and trusted source of information for residents, businesses, and solar installers. Posting information on the local government's website, providing public education, and engagement opportunities can help residents and businesses interested in solar energy make informed decisions. *Many of the credits in the community engagement category can be verified on a local*

government's solar webpage by providing information about a community's solar energy goals and processes in one centralized location.

Market Development | 10 Credits | 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 credits in the market development category can be verified by providing news articles about the local governments role in supporting solar development or by providing official documents that established policies or programs.*

SolSmart Technical Assistance and Designation Process

Any local government, regardless of previous solar experience, is eligible for SolSmart designation.

The first step for any local government interested in pursuing SolSmart designation is to connect with one of our technical assistance providers through a <u>consultation call</u>. During this call, our technical assistance providers (TA provider) will describe the program and process, learn about a community's solar goals, and identify the applicable SolSmart Designation Criteria for the local government. The consultation call and all technical assistance is provided at no-cost because of a grant through the U.S. Department of Energy.

Once the local government decides to pursue SolSmart designation, they need to complete a Solar Statement and return it to a technical assistance provider. The Solar Statement demonstrates the community's commitment to work with the SolSmart team and achieve designation.

The local government then work with the TA provider to conduct a baseline assessment of the community's solar processes. This analysis helps determine how close the community is to designation and identifies what technical assistance pathway will achieve designation. After the baseline assessment, with guidance from the SolSmart team, the local government should complete any prerequisite credits needed to achieve designation.

The local government may need to complete additional credits to be ready to submit for designation. In this case, the credits should balance recommendations from the SolSmart team and credits of interest to the local government.

Once the necessary credits are completed, the local government is ready to submit for designation review. The TA provider can assist the local government with the submission process through SolSmart's website. The submission is reviewed by the Designation Program

Designation Criteria

Three designation criteria are available to local governments depending on what processes are within their jurisdiction.

Local governments that control permitting, inspection, planning, and zoning use the **Standard Designation Criteria**.

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

Regional organizations are eligible for SolSmart designation. Multi-jurisdictional organizations such as regional councils or councils of government use the **Regional Organization Designation Criteria**.

Administrator within 10 business days and the local government is notified of their designation by email.

Local governments are encouraged to celebrate and publicize their designations. 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.

SolSmart Definitions to Know

SolSmart - A national designation and technical assistance program. SolSmart recognizes local governments that have taken key steps to address barriers to solar energy and provides no-cost technical assistance to accelerate the development of local solar energy markets.

SolSmart Designation Program Administrators – A team of organizations that maintains the SolSmart Criteria, conducts designation reviews, awards designation.

SolSmart Technical Assistance Providers – A team of organizations that provide assistance to local governments pursuing SolSmart designation.

SolSmart Designation Criteria – A standardized collection of best practices that local governments can implement which aim to accelerate the development of local solar markets. SolSmart provides three Designation Criteria – Standard, Modified/County, and Regional Organization.

SolSmart Credit – A specific action that local governments can implement to encourage solar energy development in their community. SolSmart credits may include policies, processes, or programs that implement solar best practices. Each credit has a corresponding point value ranging from 5 to 20.

SolSmart Credit Overview

The SolSmart Designation Criteria is comprised of 75 credits organized into 5 Categories. Each credit is specific action that local governments can implement to encourage solar energy development in their community. Each credit has a corresponding point value ranging from 5 to 20.

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

Credit Identifier	Credit Points	Permitting and Inspection Credits
PI-1	Req'd	Post an online checklist detailing the required permit(s), submittals, and steps of your community's permitting process for small 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 five 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 five years. (Required for Silver).
PI-4	20	Post an online statement confirming a three-business day turnaround time for small rooftop solar PV. (Required for Gold)
PI-5	5	Distinguish between solar PV systems qualifying for streamlined and standard permit review.
PI-6	5	Require no more than one permit application form for a small rooftop solar PV system.
PI-7	10	Adopt a standard solar PV permit application form aligned with best practices (e.g. Solar ABCs).
PI-8	20	Provide an online process for solar PV permit submission and approval.
PI-9	20	Exempt or waive fees for residential solar PV permit applications.
PI-10	5	Demonstrate that residential permit fees for solar PV are \$500 or less.

PI-11	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-12	10	Post solar PV inspection requirements online, including the inspection process and what details inspectors will review.
PI-13	10	Require no more than two inspections for small rooftop solar PV.
PI-14	10	Offer inspection appointment times in lieu of appointment windows for solar PV.
PI-15	10	Provide an online process for solar PV inspection scheduling.
PI-16	10	Train fire and safety staff on solar PV and/or solar and storage systems. Training must have occurred in the past five years.
PI-17	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).
PI-18	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-19	10	Post an online checklist detailing the required permit(s), submittals, and steps of your community's energy storage system permitting process.
PI-20	10	Post energy storage system inspection requirements online, including the inspection process and what details inspectors will review.

Credit Identifier	Credit Points	Planning and Zoning Credits
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 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	20	Codify in the zoning ordinance that accessory use solar PV is explicitly allowed by-right in all major zones. Zoning ordinance language should not include intentional or unintentional barriers to accessory use solar, such as limits to visibility from public rights-of-way, excessive restrictions to system size, glare studies, subjective design reviews, and neighbor consent requirements. (Required for Gold, PZ-4 is optional)
PZ-6	5	Ensure the zoning ordinance exempts rooftop solar PV from certain restrictions on accessory uses (e.g. height limits, rooftop equipment screening requirements, or other restrictions).
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 requirement or 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	Provide clear guidance for the installation of solar PV on historic properties and in special overlay districts.
PZ-17	5	Post an online fact sheet that provides an overview of what zoning allows for solar PV under what conditions (e.g. types and sizes of solar systems permitted, the processes required, and other relevant information).
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 five years.
PZ-19	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-20	10	Include specific solar PV goals, metrics, and/or strategies in the most current version of relevant local plans (e.g. energy plan, climate plan, comprehensive plan).
PZ-21	10	Develop a solar PV assessment that identifies all feasible sites for large-scale solar PV development within a jurisdiction.
PZ-22	10	Enable solar rights through a local solar access ordinance.
PZ-23	20	Codify in the zoning ordinance that accessory use energy storage systems are explicitly allowed by-right in all major zones.

Credit Identifier	Credit Points	Government Operations Credits
GO-1	20	Demonstrate coordination between local government inspectors and utility staff to reduce Permission to Operate timeline for solar PV.
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. Compile summary and next steps in a memo.
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	10	Conduct feasibility analysis for solar PV on local government facilities and/or local government-controlled land.
GO-5	20	Install solar PV on local government facilities and/or local government-controlled land.
GO-6	20	Install solar PV on local government-controlled brownfields and/or under-utilized properties.
GO-7	20	Install solar PV integrated with other technologies such as combined heat and power or electric vehicle charging on local government facilities and/or local government-controlled land.
GO-8	20	Install solar PV plus storage on local government facilities and/or local government-controlled land.
GO-9	10	Require new local government facilities and/or facility retrofits meeting a specific threshold to be solar ready.
GO-10	20	Procure solar energy for municipal operations through an offsite physical PPA, virtual PPA, green tariff, or similar structure.

Credit Identifier	Points	Community Engagement Credits
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.).
CE-2	5	Post online resources about solar installers and/or solar quote platforms for solar PV.
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 an online dashboard or summary of the solar PV metrics for your community.
CE-8	5	Post an online solar map for your community.
CE-9	5	Support a solar informational session and/or solar tour explaining solar PV opportunities and policies. Session/Tour must have occurred within the last 5 years.
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 within an appropriate committee, commission, taskforce, and/or working group. (e.g. solar is a recurring agenda item during monthly sustainability commission meetings).

Credit Identifier	Credit Points	Market Development Credits
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 5 years.
MD-3	10	Encourage low-to-moderate income (LMI) participation in community-wide group purchase program through program design and/or financing support options.
MD-4	20	Support a community solar program.
MD-5	10	Encourage low-to-moderate income (LMI) participation 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.
MD-9	5	Provide local incentives for solar PV to low-to-moderate income (LMI) households, Disadvantaged Business Enterprises (DBEs), 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).

Credit Identifier	Credit Points	Innovative Action Credit
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 credits above, please share it with us.

How to Use the SolSmart Program Guide

The following section of the SolSmart program guide contains specific actions, called credits, that local governments and community stakeholders can implement to encourage solar energy development in their community. Each credit has a brief description, recommended verification for designation review, community examples, templates, and/or resources. A SolSmart Scorecard is available to help track progress. Please contact your TA provider for more information.

The following provides an overview of the information that is provided for each SolSmart credit.

Credit Identifier	Credit Points	Credit Language	
Credit Obj	Credit Objective and description.		
Recomme			
• Su	ggested a	options to verify the credit.	
Communit	ty Examp	oles:	
• Exc	Examples of how an individual community has completed the credit.		
Templates	:		
• Lir	nks to a te	emplate(s) that can help complete a credit.	
Resources	:		
		ful websites, reports, guidebooks, etc. that have up-to-date information about the topics by the credit	

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 Pre-requisite. The solar statement should be signed by an individual who can speak on behalf 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.

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.

The solar statement should include:

- 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 process or supporting a non-profit led solar initiative)
- 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:

- <u>Fitchburg, WI</u> | SolSmart Bronze
- Pulaski County, VA | SolSmart Gold

Templates:

<u>PR-1 SolSmart Solar Statement Template</u> | SolSmart

Permitting and Inspection

PI-1 F	Req'd Post an online checklist detailing the required permit(s), submittals, and steps of your community's permitting process for small 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 eas	y-to-find local government webpage represents a major step toward overcoming informational
barriers. A	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	l information associated with incomplete permit applications. Such checklists typically detail all the
plans and	forms required for approval and system design requirements.
	ended Verification: rovide a link to the online solar PV permitting checklist.
	ity Examples:
	hapel Hill, NC SolSmart Gold
	<u>hiladelphia, PA</u> SolSmart Gold
Template	
	<u>-1 SolSmart Solar Permitting Checklist Template</u> SolSmart
• <u>C</u>	<u>alifornia Solar Permitting Guidebook (4th Edition)</u> (pg. 22-24)
Resources	
	naring Success: Emerging Approaches to Efficient Rooftop Solar Permitting Interstate Renewable
	nergy Council (IREC)
	mplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained Interstate
	enewable Energy Council (IREC)
• <u>Sc</u>	blar 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 five years. (Required for Silver)
Regular so	blar PV training, at least every few years, is a best practice to ensure permit technicians and plan
	are up-to-date on new procedures, codes, and products within the solar industry. Trainings increase
	vledge of solar energy systems and ensures they know the best procedures for permit application review
	essing to ensure applications and supporting documents are compliant with building and electrical
codes. Inc	reased 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
orovide re	sources designed to help keep staff informed about advances in solar and storage technologies.
Recomme	ended Verification:
• Pr	rovide a memo with details about the permit training including name of training, name of trainer,
	ttendees (name, title, department), date and time, location, agenda, and presentation/slides.
Template	
	- <u>2 SolSmart Solar Permit Training Template Memo </u> SolSmart
Resources	
	o DISmart Workshop: Best Practices for Solar PV Permitting and Inspection (session 1, permitting I)
	blSmart and Bill Brooks, P.E.
	blSmart Workshop: Best Practices for Solar PV Permitting and Inspection (session 2, permitting II)
	blSmart and Bill Brooks, P.E.
	blSmart Workshop: Best Practices for Solar PV Permitting and Inspection (session 3, inspection) []
	blSmart and Bill Brooks, P.E.
	ermitting Training Module 1 IREC Solar PV Structural Plan Review
	ermitting Training Module 2 IREC Solar PV Electrical Plan Review
	ermitting Training Module 3 IREC Solar PV Plan Review Test
• <u>Sc</u>	<u>olar + Storage, A Guide for Local Governments</u> SolSmart Webinar
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 five years. (Required for Silver).

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 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:

• <u>PI-3 SolSmart Solar Inspection Training Template Memo</u> | SolSmart

Resources:

- <u>Solar PV Field Inspection Basics Series</u> | Interstate Renewable Energy Council (IREC)
- <u>SolSmart Workshop: Best Practices for Solar PV Permitting and Inspection (session 1, permitting I)</u> | SolSmart and Bill Brooks, P.E.
- <u>SolSmart Workshop: Best Practices for Solar PV Permitting and Inspection (session 2, permitting II)</u> | SolSmart and Bill Brooks, P.E.
- <u>SolSmart Workshop: Best Practices for Solar PV Permitting and Inspection (session 3, inspection)</u> | SolSmart and Bill Brooks, P.E.
- Inspection Training Module | IREC Solar PV Field Inspection Basics 5 Part Series
- <u>Solar + Storage, A Guide for Local Governments</u> | SolSmart Webinar

PI-420Post an online statement confirming a three-business day turnaround time for small
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:

- <u>Alexandria, VA</u> | SolSmart Gold
- <u>Roseville, MN</u> | SolSmart Gold

Templates:

- PI-1 SolSmart Solar Permitting Checklist Template | SolSmart
- California Solar Permitting Guidebook (4th Edition) (pg. 22-24)

Resources:

- <u>Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting</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

PI-5	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:

- <u>Philadelphia, PA</u> | SolSmart Gold
- Putnam County, GA | SolSmart Silver

Templates:

- <u>PI-1 SolSmart Solar Permitting Checklist Template</u> | SolSmart
- <u>Simplified Solar Permitting Process</u> | SolSmart
- <u>Expedited Permit Process for PV Systems</u> | Solar ABCs

Resources:

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

PI-6 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

Templates:

- <u>Best Management Practices for Solar Installation Policy</u> | Mid America Regional Council (MARC)
- New York State Unified Solar Permit Application | New York State Energy and Research Development Authority (NYSERDA)

Resources:

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

PI-7 10 Adopt a standard solar PV permit application form aligned with best practices (e.g. Solar ABCs).

While requiring a single application form under existing permitting processes represents an improvement over requiring both a building and electrical permit, it may still be more time consuming to complete, review, and approve permits via a process not specifically designed for solar. 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 both 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:

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

Templates:

- PI-7 SolSmart Solar Permit Application Template | SolSmart
- Best Management Practices for Solar Installation Policy | Mid America Regional Council (MARC)

- <u>New York State Unified Solar Permit Application</u> | New York State Energy and Research Development Authority (NYSERDA)
- <u>Simplified Solar Permitting Process</u> | SolSmart

Resources:

- <u>Expedited Permit Process for PV Systems</u> | Solar ABCs
- <u>Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting</u> | Interstate Renewable Energy Council (IREC)
- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- <u>Solar PV Construction: Codes, Permitting, and Inspection</u> | SolSmart's Toolkit for Local Governments

		1	
PI-8	20	Provide an online process for solar PV permit submission and approval.	
reduce into ar saving	the amo online d staff tim	ubmittal, review, and approval can eliminate solar installer trips to the permitting office and bunt of time permitting staff need to spend entering information from paper application forms database. Online systems can also ensure all required information is submitted prior to any revie ne by ensuring only completed applications are reviewed. Online permit platforms can allow for o review materials at the same time and to track progress in the review and approval process.	ew,
Recom •	Provide If an en 1)	HVerification: a link to the online platform for submission and approval. nail-based online process is used: Provide details from building official or staff describing the process. Provide a copy of a sample email with personal and confidential information removed.	
Comm •		amples: <u>n, Wl</u> SolSmart Gold <u>a County, MT</u> SolSmart Silver	
Temple •		software providers have integrated the solar PV permit application process into their online s.	
•	Energy Simplify Renewo Solar Au	<u>Success: Emerging Approaches to Efficient Rooftop Solar Permitting</u> Interstate Renewable Council (IREC) <u>ying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> Intersta able Energy Council (IREC) <u>utomated Permit Processing (SolarAPP+)</u> National Renewable Energy Laboratory (NREL) <u>V Construction: Codes, Permitting, and Inspection</u> SolSmart's Toolkit for Local Governments	ate
PI-9	20	Exempt or waive fees for residential solar PV permit applications.	
In addi jurisdic	ition to st ctions. Ex	tate and federal incentives, local governments can also incentivize solar development within th empting or waiving permit fees for solar energy systems can incentivize community members t lowering the overall cost of the system.	eir
Recom •	Provide	HVerification: a a link to the permit fee schedule or other officially approved document that shows solar PV fees are exempt or waived.	
Comm •		amples: Bables, FL SolSmart Silver or, <u>CO</u> SolSmart Bronze	
Resour • •	ces: Sharing Energy <u>Simplify</u> Renewo	y <u>Success: Emerging Approaches to Efficient Rooftop Solar Permitting</u> Interstate Renewable Council (IREC) <u>ying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> Intersto able Energy Council (IREC) <u>V Construction: Codes, Permitting, and Inspection</u> SolSmart's Toolkit for Local Governments	ate
PI-10	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:

- <u>Naperville, IL</u> | SolSmart Silver
- <u>Sacramento, CA</u> | SolSmart Gold

Templates:

- PI-10 SolSmart Solar Residential Fees Template Memo | SolSmart
- <u>PI-1 SolSmart Solar Permitting Checklist Template</u> | SolSmart

Resources:

- <u>Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting</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

PI-11	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).	
-------	----	--	--

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:

- <u>Naperville, IL</u> | SolSmart Silver
- <u>Sacramento, CA</u> | SolSmart Gold

Templates:

- PI-11 SolSmart Solar Commercial Fees Template Memo | SolSmart
- PI-1 SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

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

PI-12 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.

П

Recommended Verification:

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

Community Examples:

- <u>Camden County, NJ</u> | SolSmart Bronze
- Ramsey County, MN | SolSmart Bronze

Templates:

- PI-12 SolSmart Rooftop Solar Photovoltaic (PV) System Field Inspection Checklist | SolSmart
- <u>Model Inspection Checklist for Residential Rooftop PV |</u> Interstate Renewable Energy Council (IREC)
- <u>Field Inspection Checklist</u> | New York State Energy and Research Development Authority (NYSERDA)

Resources:

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

PI-13 10 Require no more than two inspections 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
- <u>South St. Paul, MN</u> | SolSmart Bronze

Templates:

- <u>PI-1 SolSmart Solar Permitting Checklist Template</u> | SolSmart
- <u>Model Inspection Checklist for Residential Rooftop PV |</u> Interstate Renewable Energy Council (IREC)
- Field Inspection Checklist | New York State Energy and Research Development Authority (NYSERDA)

Resources:

PI-14

- <u>Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting</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

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:

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

Templates:

PI-1 SolSmart Solar Permitting Checklist Template | SolSmart

Resources:

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

 PI-15
 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:

- <u>Prince George's County, MD</u> | Not Designated
- <u>San Leandro, CA</u> | SolSmart Silver

Templates:

• Several software providers have integrated the solar PV inspection request process into their online systems.

Resources:

- <u>Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting</u> | Interstate Renewable Energy Council (IREC)
- <u>Simplifying the Solar Permitting Process: Residential Solar Permitting Best Practices Explained</u> | Interstate Renewable Energy Council (IREC)
- <u>Solar PV Construction: Codes, Permitting, and Inspection</u> | SolSmart's Toolkit for Local Governments
- PI-16 10 Train fire and safety staff on solar PV and/or solar and storage systems. Training must have occurred in the past five 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 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, agenda, and presentation/slides.

Templates:

PI-16 SolSmart Solar Fire Training Template Memo | SolSmart

Resources:

PI-17

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

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).

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 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:

<u>PI-17 SolSmart Solar Large-scale Training Template Memo</u> | SolSmart

Resources:

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

PI-18Share 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:

- <u>Adams County, CO</u> | SolSmart Gold
- <u>Freeport, IL</u> | SolSmart Gold

Resources:

- <u>Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting</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
- Solar PV Safety for Firefighters | Interstate Renewable Energy Council (IREC)

PI-19	10	Post an online checklist detailing the required permit(s), submittals, and steps of your
FI-19	10	community's energy storage system permitting process.

Providing a set of requirements for the local energy storage permitting process (for both residential and commercial solar) on an easy-to-find local government web page represents a major step toward overcoming informational barriers. An online energy storage 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 energy storage 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 energy storage systems.

Community Examples:

- <u>Rocklin, CA</u> | Not Designated
- <u>Sonoma, CA</u> | Not Designated

Templates:

- <u>Battery Energy Storage System Model Permit</u> | New York State Energy and Research Development Authority (NYSERDA)
- <u>National Simplified Residential PV and Energy Storage Permit Guidelines</u> | Brooks Engineering and SolSmart

Resources:

- <u>Solar + Storage, A Guide for Local Governments</u> | SolSmart Webinar
- <u>Storage Permitting Resources</u> | Sustainable CUNY Smart Distributed Generation Hub

PI-20	10	Post energy storage system inspection requirements online, including the inspection process and what details inspectors will review.
energy	storage ed befor	ine list of inspection requirements will reduce informational barriers between inspectors and installers, helping to ensure that all items in the inspection process have been adequately e inspectors arrive on site. These checklists can be used to highlight "common mistakes" made by
Recomi •		Verification: a link to the online document outlining the inspection process and requirements.
Commu	unity Exe Palo Al	a mples: <u>to, CA</u> Not Designated
Templa •	<u>Battery</u>	<u>Energy Storage System Electrical Checklist</u> New York State Energy and Research Development :y (NYSERDA)
Resourc		Storage, A Guide for Local Governments SolSmart Webinar

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:

• <u>Gurnee, IL</u> | SolSmart Bronze

Templates:

SolSmart Zoning Review Template | SolSmart

Resources:

- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | 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:

• <u>Gurnee, IL</u> | SolSmart Bronze

Resources:

- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | 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 in the creation of the draft language.	
Alaaml	~ ~	ant interested in anothing color anoral development should consider including basic color	

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.

Recommended Verification:

• Provide draft language of the proposed zoning ordinance changes that relate to solar energy.

Community Examples:

• <u>Lafayette, CO</u> | SolSmart Gold

Templates:

- <u>Model Zoning for the Regulation of Solar Energy Systems</u> | Massachusetts Department of Energy Resources
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)

Resources:

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

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.)		
ordinan Howeve update	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

Community Examples:

- Egg Harbor, WI | SolSmart Silver
- <u>South Miami, FL</u> | SolSmart Silver

Resources:

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

PZ-5	20	Codify in the zoning ordinance that accessory use solar PV is explicitly allowed by-right in all major zones. Zoning ordinance language should not include intentional or unintentional barriers to accessory use solar, such as limits to visibility from public rights-of-way, excessive restrictions to system size, glare studies, subjective design reviews, and neighbor consent requirements. (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 or land use regulations that codify solar as an accessory use and allowed or by-right use. Please indicate the relevant section(s).

Community Examples:

- Brownsville, TX | SolSmart Silver
- <u>Pinecrest, FL</u> | SolSmart Silver

Templates:

- <u>Best Practice Guidance for Solar and Zoning Accessory Use</u> | SolSmart
- <u>Georgia's Model Solar Ordinance</u> | Georgia Tech Strategic Energy Institute
- <u>Model Solar Energy Local Law (NY)</u> | 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
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)
- <u>Solar Model Ordinance</u> | Grow Solar Toolkit
- <u>Template Solar Energy Development Ordinance for North Carolina</u> | North Carolina Clean Energy Technology Center (NCCETC)

Resources:

- <u>Are You Solar Ready?</u> | National Renewable Energy Laboratory (NREL)
- <u>Best Practices in Zoning for Solar</u> | National Renewable Energy Laboratory (NREL)
- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-6 5

Ensure the zoning ordinance exempts rooftop solar PV from certain restrictions on accessory uses (e.g. height limits, rooftop equipment screening requirements, or other restrictions).

Height restrictions are often imposed on buildings within specific zoning districts to satisfy several planning objectives such as protection of views, controlling neighborhood character, density, and access to sunlight. In many districts, buildings are constructed up to the maximum allowed height. Many local governments exempt antennas, chimneys, flagpoles from height limits to allow for their placement and use. Since solar panels are most efficient when installed at an angle equal to a location latitude, local governments should consider adding solar to the list of height exemptions.

Recommended Verification:

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

Community Examples:

- <u>Brownsville, TX</u> | SolSmart Silver
- Plymouth, IN (pg. 204, 210 D.2.a) | SolSmart Gold

Templates:

- <u>Best Practice Guidance for Solar and Zoning Accessory Use</u> | SolSmart
- <u>Model Zoning for the Regulation of Solar Energy Systems</u> | Massachusetts Department of Energy Resources
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)

Resources:

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

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 districts 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:

5

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

Templates:

- 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
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)

Resources:

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

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 alculations, or other restrictions).

Small ground-mounted solar PV that is considered an accessory use may be subject 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
- <u>Swarthmore, PA</u> | SolSmart Bronze

Templates:

- 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
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)

Resources:

- Planning for Solar Energy | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | 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).	5	5 PV (e.g. through a special use permit or through inclusion among allowed co
------	--	---	---

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:

- <u>Freeport, IL</u> | SolSmart Gold
- <u>La Crosse, WI</u> | SolSmart Gold

Templates:

- <u>Model Zoning for the Regulation of Solar Energy Systems</u> | Massachusetts Department of Energy Resources
- <u>Renewable Energy Ordinance Framework: Solar PV</u> | Delaware Valley Regional Planning Commission (DVRPC)

Resources:

- <u>Are You Solar Ready?</u> | National Renewable Energy Laboratory (NREL)
- Land Use Considerations for Large-scale Solar | SolSmart Issue Brief
- Planning for Solar Energy | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments
- <u>Top Five Large-scale Solar Myths</u> | National Renewable Energy Laboratory (NREL)

PZ-10	10	Ensure the zoning ordinance includes a native perennial vegetation and/or habitat- friendly ground cover requirement or standard for large-scale solar PV.	
energy vegetat	and grov ion unde	ar projects cover many acres that can be used for the dual purpose of providing clean, renewab wing native perennial vegetation or habitat-friendly ground cover. Planting native perennial er solar PV systems can improve soil health and water retention, while providing habitat for native species.	le
Recom •	Provide perenni	Verification: a link to the zoning ordinance or land use regulations that includes language about a native al vegetation and/or habitat-friendly ground cover requirement or standard. Please indicate th t section(s).	е
Comm		<mark>amples:</mark> <u>County, MN</u> (6.54.1 H) SolSmart Silver <u>ph County, IN</u> SolSmart Gold	
Templa •	Minneso	o <u>ta Solar Model Ordinance</u> Great Plains Institute (GPI) <u>Iolar Energy Local Law (NY)</u> New York State Energy Research and Development Authority DA)	
Resource • •	<u>Land Us</u> <u>NREL Be</u> (NREL)	<u>se Considerations for Large-scale Solar</u> SolSmart Issue Brief eneath Solar Panels, the Seeds of Opportunity Sprout National Renewable Energy Laboratory ollinator-friendly Scorecards Fresh Energy	
PZ-11	5	Ensure the zoning ordinance enables co-location of solar PV with an agricultural use such as grazing, apiaries, or crops (agrivoltaics).	
energy	and co-l	ar projects cover many acres that can be used for the dual purpose of providing clean, renewab ocating with forms of agriculture. Co-locating solar PV with crops can enhance yields, soil heal ntion while improving system efficiency by reducing air temperature near the panels.	
Recom	Provide	Verification: a link to the zoning ordinance or land use regulations that includes language enabling the co- of solar with an agricultural use. Please indicate the relevant section(s).	
Comm		amples: ounty, FL SolSmart Gold s Obispo County, CA (D.9) Not Designated	
Templa •	tes:	olar Model Ordinance Great Plains Institute (GPI)	
Resourc	AgriSolo	ar Clearinghouse Information Library National Center for Appropriate Technology (NCAT) ation of Solar and Agriculture Webinar National Renewable Energy Laboratory (NREL) se Considerations for Large-scale Solar SolSmart Issue Brief	

• <u>NREL Beneath Solar Panels, the Seeds of Opportunity Sprout</u> | National Renewable Energy Laboratory (NREL)



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).
A comn	nunity's	zoning ordinance can require a decommissioning plan that clearly outlines the roles,
respons large-sc	ibilities, cale sola	terms, and conditions to ensure the local government will not be responsible for the removal of a r PV system. Decommissioning is the responsibility of the system owner and requiring a plan can ns that a local government will be unnecessarily burden with system removal.
Recom	mended	Verification:
•		a link to the zoning ordinance or land use regulations that includes language about a nissioning plan for large-scale solar PV. Please indicate the relevant section(s).
Commu	unity Exe	amples:
	<u>La Cros</u>	se, WI SolSmart Gold unty, IL SolSmart Gold
Templa	tes:	
•	Model S (NYSER	<u>olar Energy Local Law (NY)</u> New York State Energy Research and Development Authority DA)
•		<u>te Solar Energy Development Ordinance for North Carolina</u> North Carolina Clean Energy ogy Center (NCCETC)
Resourc	ces:	
•	<u>A Surve</u>	y of Federal and State-Level Solar System Decommissioning Policies in the United States
		al Renewable Energy Laboratory (NREL)
•	Decomi (NYSER	<u>missioning Solar Panel Systems</u> New York State Energy Research and Development Authority DA)
•	Land Us	se Considerations for Large-scale Solar SolSmart Issue Brief
PZ-13	5	Ensure the zoning ordinance establishes solar energy zones and/or solar overlays for large-scale solar PV.
strategy	y can en	zoning ordinance and land use regulations could establish a solar energy zone or overlay. This courage solar development on favorable sites and reduce the project development timeline by rmitting and zoning requirements.
	01	Verification:
	Provide	a link to the zoning ordinance or land use regulations that establishes solar energy zones and/or erlays for large-scale solar PV. Please indicate the relevant section(s).
Commu		
•	Framing	g <u>ham, MA</u> (pg. 96) SolSmart Silver <u>ey, MA</u> (pg. 101) SolSmart Silver
Resourc		
•		g for Solar Energy American Planning Association (APA)

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

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.

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:

- <u>El Paso, TX</u> | SolSmart Gold
- <u>Warrenville, IL</u> | SolSmart Gold

Templates:

- <u>Appendix U</u> | International Residential Code (IRC)
- <u>Appendix RB</u> | International Energy Conservation Code (IECC)

Resources:

- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | SolSmart's Toolkit for Local Governments
- <u>Solar Ready Construction Guidelines</u> | 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.	PZ-15
--	-------

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:

- <u>Santa Monica, CA</u> | SolSmart Gold
- <u>South Miami, FL</u> (W *Solar Requirements*) | SolSmart Silver

Resources:

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

PZ-16 10 Provide clear guidance for the installation of solar PV on historic properties and in special overlay districts.

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.

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

Templates:

Best Practice Guidance for Solar and Zoning – Accessory Use | SolSmart

Resources:

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

		Post an online fact sheet that provides an overview of what zoning allows for solar PV	
PZ-17	5	under what conditions (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:

- <u>San Diego County, CA</u> | SolSmart Gold
- <u>Sedona, AZ</u> | SolSmart Bronze

Resources:

- 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 five years.

Regular solar PV training, at least every few years, is a best practice to ensure planning and zoning staff are upto-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 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:

• <u>PZ-18 SolSmart Solar Planning and Zoning Training Template Memo</u> | SolSmart

Resources:

- <u>Best Practices in Solar Planning and Zoning</u> | SolSmart Webinar
- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments

PZ-19	5	Draft new or updated language and provide a timeline for the inclusion of specific solar	
Γ Ζ-17	5	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.

Community Examples:

- <u>Chatham County, NC</u> | SolSmart Gold
- <u>South St. Paul, MN</u> | SolSmart Bronze

Templates:

Solar Resource Development Requirement | Metropolitan Council (Met Council)

Resources:

- Integrating Solar Energy into Local Plans | American Planning Association (APA)
- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | SolSmart's Toolkit for Local Governments

PZ-20 10

Include specific solar PV goals, metrics, and/or strategies in the most current 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
- <u>Philadelphia, PA</u> | SolSmart Gold

Resources:

- Integrating Solar Energy into Local Plans | American Planning Association (APA)
- Local Government Strategies for 100% Clean Energy | SolSmart Webinar
- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | SolSmart's Toolkit for Local Governments

PZ-2110Develop a solar PV assessment that identifies all feasible sites for large-scale solar PV
development within a jurisdiction.

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 large-scale solar PV assessment.

Community Examples:

- <u>Mountain Iron, MN |</u> SolSmart Bronze
- <u>Santa Clara County, CA</u> | Not Designated

Resources:

- <u>Planning for Solar Energy</u> | American Planning Association (APA)
- Planning, Zoning & Development | SolSmart's Toolkit for Local Governments
- <u>Solar Resource Protection Requirement</u> | Metropolitan Council (Met Council)

PZ-22 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:

- <u>Ashland, OR</u> | Not Designated
- <u>Freeport, IL</u> | SolSmart Gold

Templates:

• <u>A Comprehensive Review of Solar Access Law in the United States</u> | Solar America Board for Codes and Standards (Solar ABCs)

Resources:

- <u>A Comprehensive Review of Solar Access Law in the United States</u> | Solar America Board for Codes and Standards (Solar ABCs)
- <u>Best Practices in Zoning for Solar</u> | National Renewable Energy Laboratory (NREL)
- Planning for Solar Energy | American Planning Association (APA)
- <u>Planning, Zoning & Development</u> | SolSmart's Toolkit for Local Governments

PZ-23 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).

Community Examples:

Coming Soon

Templates:

• <u>Battery Energy Storage Model Law</u> | New York State Energy Research and Development Authority (NYSERDA)

Resources:

• <u>NYC Energy Storage Systems Zoning Guide</u> | Sustainable CUNY Smart Distributed Generation Hub

Government Operations

GO-1	20	Demonstrate coordination between local government inspectors and utility staff to reduce Permission to Operate timeline for solar PV.	
which co coording confirm coording	an have ate with ed that ating loo	that has not been granted permission to operate (PTO), is not allowed to produce electricity economic impacts for the system owner. To reduce economic loss, local governments can the electric utility to ensure solar PV systems can begin operation as soon as it has been the systems are properly constructed and connected to the grid. Consolidating and/or cal government inspections and utility interconnection inspections can save time and money for and property owners.	or
•	Provide	Verification: details about the coordination process and explaining how this process reduces the time betwo on and Permission to Operate	een
Commu	-	<mark>amples:</mark> b <u>unty, FL</u> SolSmart Gold	
Resourc	es:	ingagement SolSmart's Toolkit for Local Governments	
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. Compile summary and next steps in a memo.	
develop solar inc	ment of entives,	ents can leverage their relationship with electric utilities to encourage increased support for, an , solar energy. Local governments and utilities can partner to provide community solar prograr , and help improve the solar interconnection process. Utilities can also help local governments or community-wide renewable energy goals by procuring large amount of solar energy.	
•	Provide agenda	Verification: meeting minutes (including a list of follow-up action items), e-mail correspondence, meeting , materials prepared for the meeting (e.g., handouts and slides), or other evidence that at leas eting occurred with your local utility.	st
	Minnea	<mark>amples:</mark> <u>polis, MN</u> SolSmart Gold <u>a, MT</u> SolSmart Silver	
• • •	Engage Making Procure Solar &	<u>ment Guidance</u> American Cities Climate Challenge Renewables Accelerator <u>Solar & Electrification Policies Mutually Beneficial</u> SolSmart Webinar <u>ment Guidance</u> American Cities Climate Challenge Renewables Accelerator <u>Electrification, A Beneficial Partnership</u> SolSmart Issue Brief <u>a City-Utility Partnership Agreements to Achieve Climate and Energy Goals</u> World Resources e (WRI)	
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.	

Local governments can find strength in numerous as they advance ambitious energy transformation goals. Collaborating with other local governments and/or regional organizations 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:

• Provides 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:

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

Resources:

GO-4

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

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. An RFP can then be issued for the most favorable sites.

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:

- <u>Asheville, NC</u> | SolSmart Gold
- Mountain Iron, MN | SolSmart Bronze

Resources:

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

GO-5 20 Install solar PV on local government facilities and/or local government-controlled land.

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.

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, and photos.

Community Examples:

- Johnson County, IA | SolSmart Gold
- <u>New York City, NY</u> | SolSmart Gold

Resources:

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

GO-6	20	Install solar PV on local government-controlled brownfields and/or under-utilized properties.	
location	ns for sol	paces with limited future uses, brownfields, landfills, and other under-utilized lands are favoral ar PV systems. Local governments can lease these lands for solar development to increase loca apacity while generating land lease revenue.	
		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:

- <u>Cary, NC</u> | SolSmart Silver
- <u>Eau Claire, WI</u> | SolSmart Gold

Resources:

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

GO-7	20	Install solar PV integrated with other technologies such as combined heat and power or electric vehicle charging on local government facilities and/or local government-controlled land.	
other te	chnolog	e unique benefits when paired with other distributed energy technologies. Co-locating solar wi ies can improve resilience, provide demand-charge reductions, and charging electric vehicles w irce of energy.	
Recom	mended	Verification: 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:

- <u>Duluth, MN</u> | SolSmart Gold
- Montgomery County, MD | SolSmart Gold
- <u>Boulder, CO</u> | SolSmart Gold

Resources:

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

of a power outage. Local governments have leveraged solar PV and storage to provide lighting for evacuation routes, power to shelters, and extend the fuel supply of diesel generation. Solar plus storage can also be used to provide demand-charge reductions by reducing peak load.

Recommended Verification:

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

Community Examples:

- <u>Fayetteville, AR</u> | SolSmart Gold
- <u>Portland, OR</u> | Not Designated

Resources:

- <u>REopt: Renewable Energy Integration & Optimization</u> | National Renewable Energy Laboratory (NREL)
- <u>Resiliency: Solar + Storage</u> | SolSmart's Toolkit for Local Governments
- <u>Solar + Storage: A Guide for Local Governments</u> | SolSmart Issue Brief
- Solar and Energy Storage for Resiliency (Solar Resilient) | San Francisco Department of the Environment
- Solar and Resiliency: Integrative Financing Strategies for SolSmart Communities | SolSmart Issue Brief
- <u>Solar + Storage / Resiliency</u> | Sustainable CUNY Smart Distributed Generation Hub

GO-820Install solar PV plus storage on local government facilities and/or local government-
controlled land.□Solar can provide resilience benefits and serve as emergency backup power to local government facilities in case

GO-9	10	Require new local government facilities and/or facility retrofits meeting a specific threshold to be solar ready.	
ready. S in the fu	Solar rea uture. Sc	ents can lead by example and require new facilities or those completing a retrofit to be solar dy construction can reduce the installation costs if a solar system will be installed at some poir plar ready buildings are designed and engineered in such a way that allows for the easy future solar system.	nt
	mended Provide	Verification: a link to adopted code(s) or language that require new construction and/or retrofits of local nent facilities to be solar ready.	
Commu	unity Exe <u>Montgo</u>	<mark>amples:</mark> I <u>mery County, MD</u> SolSmart Gold	
Resourc •	<u>Solar-Re</u>	eady Building Design: A Summary of Technical Considerations National Renewable Energy cory (NREL)	
GO- 10	20	Procure solar energy for municipal operations through an offsite physical PPA, virtual PPA, green tariff, or similar structure.	
		e and energy goals, local governments can procure a large amount of solar energy through an acture, depending on the types of contracts allowed by state and utility regulations.	-
Recom	Provide	Verification: a document such as a news article, contract, press release, or similar official document ing the details how the local government is procuring solar energy.	
Comm	unity Exc		
•		<u>ati, OH</u> Not Designated <u>, TX</u> SolSmart Gold	
Resource • •	How Cit How Lo Local G	ties Benefit from Power Purchase Agreements Center for Climate and Energy Solutions (C2ES) cal Governments Can Buy Renewable Energy & Support Market Development SolSmart Webin overnment Strategies for 100% Clean Energy SolSmart Webinar ment Guidance American Cities Climate Challenge Renewables Accelerator	

<u>Municipal Solar Procurement</u> | SolSmart Webinar

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.).	
A solar	landing	page is a way to provide residents, businesses, and solar installers with important information	
		nmunity's solar energy policies, processes, goals, and metrics from one centralized location. It is	
		ducate community members about solar energy topics like financing options and consumer	
	,	practices.	
•		Verification:	
Necom		e a link to the solar landing page.	
•			
Comm		amples:	
•		County, VA SolSmart Gold	
•	<u> </u>	<u>orough, MA</u> SolSmart Gold	
Templo	ites:		
•		o <u>lSmart Solar Landing Page Template</u> SolSmart	
Resour	ces:		
•		wner's Guide to Going Solar (View in Spanish) U.S. Department of Energy (DOE)	
•		ntial Consumer Guide to Solar Power Solar Energy Industries Association (SEIA)	
	Itesider	The consumer ounder to solar rower (solar energy industries / issociation (selvi)	
CE-2	5	Post online resources about solar installers and/or solar quote platforms for solar PV.	
		panies operating in your community means residents and businesses are faced with more choic	
as they	conside	er who to select for their solar project. Providing relevant local information on active solar install	ers
can hel	p comm	nunity members make the best choice given their circumstances.	
Recom	mendec	Verification:	
•	Provide	a link to a webpage that contains information about local solar installers and/or solar quote	
	platfor		
Comm		amples:	
Comm			
•		<u>, CO</u> SolSmart Gold	
•		<u>nburg, IL</u> SolSmart Silver	
Templo			
٠	<u>CE-1 Sc</u>	o <u>lSmart Solar Landing Page Template</u> SolSmart	
Resour	ces:		
•	Board (<u>Certified Professionals Directory</u> North American Board Certified Energy Practitioners (NABCEP)
•		Sage EnergySage	/
•		<u>solar</u> Pick My Solar	
•			
•		uyer's Markets: Unlocking Lower Photovoltaic and Battery Prices on Online Quote Platforms	
	INGLION	al Renewable Energy Laboratory (NREL)	
CE-3	5	Post online resources about residential and commercial solar PV financing options and incentives.	
Many d	ifferent	financing options are available for residential and commercial solar PV. Local governments can	
		ant role in providing access to information about available options.	
. ,		l Verification:	
•		e a link to a webpage that contains information about financing options and incentives.	
Comm	•	amples:	
٠		<u>: Creek, CA</u> SolSmart Gold	
•	Wood (<u>County, WI</u> SolSmart Gold	

Templates:

• <u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

Resources:

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

Recommended Verification:

• Provide a link to a webpage containing consumer protection resources.

Community Examples:

- <u>Alexandria, VA</u> | SolSmart Gold
- James City County, VA | SolSmart Bronze

Templates:

• <u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

Resources:

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

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.

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.

Recommended Verification:

• Provide a link to a webpage with information about state policies relating to solar access and/or rights.

Community Examples:

- <u>Torrance, CA</u> | SolSmart Gold
- <u>Wilmette, IL</u> | SolSmart Silver

Templates:

<u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

Resources:

- <u>A Comprehensive Review of Solar Access Law in the United States</u> | Solar America Board for Codes and Standards (Solar ABCs)
- <u>Database of State Incentives for Renewables and Efficiency (DSIRE)</u> | North Carolina Clean Energy Technology Center (NCCETC)

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.

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 a webpage with information about state policies relating to Homeowner Associations and solar PV.

Community Examples:

• <u>Hallandale Beach, FL</u> | SolSmart Silver

• <u>Torrance, CA</u> | SolSmart Gold

Templates:

<u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

Resources:

• <u>A Beautiful Day in the Neighborhood: Encouraging Solar Development through Community Association</u> <u>Policies and Processes</u> | The Solar Foundation (now the Interstate Renewable Energy Council)

CE-7 5 Post an online dashboard or summary of the solar PV metrics for your community.

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.

Recommended Verification:

• Provide a link to a webpage displaying solar PV metrics.

Community Examples:

- <u>Boulder, CO</u> | SolSmart Gold
- <u>Westminster, CO</u> | SolSmart Gold

Templates:

<u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

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

Solar maps can provide community members with an estimate of the solar potential of their rooftop. Solar maps can also show the location of solar installations within a community.

Recommended Verification:

• Provide a link to the solar map for your community.

Community Examples:

- Los Angeles County, CA | Not Designated
- <u>Westminster, CO</u> | SolSmart Gold

Templates:

• <u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

Resources:

- <u>Data Explorer</u> | Google
- <u>Go Solar Ready</u> | Ohio-Kentucky-Indiana Regional Council of Governments
- <u>NY Solar Map</u> | Sustainable CUNY Smart Distributed Generation Hub
- <u>Project Sunroof</u> | Google

CE-9

Support a solar informational session and/or solar tour explaining solar PV opportunities and policies. Session/Tour must have occurred within the last 5 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 the solar energy and the processes involved with an installation.

Recommended Verification:

• Provide a link(s) to details about the solar informational session or tour such as an agenda, date, time, and location.

Community Examples:

5

- Lower Merion, PA | SolSmart Bronze
- <u>Sarasota County, FL</u> | SolSmart Silver

Resources:

<u>Solar Tour Resources</u> | National Solar Tour

П

CE-10	5	Distribute solar job training and career opportunities in coordination with local colleges and/or workforce development organizations.		
governr	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.			
	 Recommended Verification: Provide posted job descriptions, screenshots from employment websites, evidence of classified ads or advertisement of job trainings. 			
•		a mples: r <u>g, Wl</u> SolSmart Bronze g <u>ton, DC</u> SolSmart Gold		
CE-1 SolSmart Solar Landing Page Template SolSmart				

Resources:

- <u>Solar Ready Vets</u> | Interstate Renewable Energy Council (IREC)
- Solar Workforce Development Pilot | St. Louis, MO
- <u>Workforce Development</u> | 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.

Recommended Verification:

• Provide a link to a document demonstrating encouragement of solar PV projects.

Community Examples:

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

Resources:

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

CE-12	10	Discuss solar PV goals and/or strategies for increasing solar PV development within an appropriate committee, commission, taskforce, and/or working group. (e.g. solar is a recurring agenda item during monthly sustainability commission meetings).	
keep res groups (sidents c can assi es, and _l	cal Advisory Council, Sustainability Committees, or Climate Action Taskforce is a great way to and key stakeholders actively engaged in community energy policy and development. These st in the development of solar energy goals and strategies, lead community-based solar provide communication and outreach support to inform community members about solar lans.	

Recommended Verification:

• Provide meeting minutes (including a list of follow-up action items), meeting agenda, 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:

- <u>Branford, CT</u> | SolSmart Bronze
- <u>Fairfield, CT</u> | SolSmart Gold

Templates:

• <u>CE-1 SolSmart Solar Landing Page Template</u> | SolSmart

Resources:

- <u>Stakeholder Engagement</u> | SolSmart's Toolkit for Local Governments
- Solar and Resiliency: Integrative Financing Strategies for SolSmart Communities | SolSmart Issue Brief

Market Development

MD-1	20	Demonstrate activity in state regulatory and/or legislative proceedings regarding solar PV.
strategi	es, and	ents can provide an important voice into the development of state-level solar energy policy, incentives. Government staff can track policy developments actively and develop appropriate reract with state regulators and legislators.
Recomr	nended Provide	Verification: a link to public comments on solar energy or related energy proceedings, op-eds in local pers, or agenda, minutes, and/or recordings of meetings attended by representatives of the local
	Ann Art	<mark>amples:</mark> <u>oor, MI</u> SolSmart Silver <u>e, NM</u> (Resolution 2018-71) SolSmart Bronze
•	<u>Engage</u> Engage	<u>ment Guidance</u> American Cities Climate Challenge Renewables Accelerator <u>ment Tracker</u> American Cities Climate Challenge Renewables Accelerator <u>eral and State Context: Policies Affecting Solar Energy Development</u> SolSmart's Toolkit for Local ments
MD-2	20	Support a community-wide group purchase program (e.g. Solarize). Program must have occurred within the last 5 years.
can redu	uce the	ents can support or host community group purchase programs for solar energy. Bulk purchasing costs of solar installations for community members. These limited time-offers have had ess in providing discounts of up to 20% of installed costs for residential systems.
•	Provide	Verification: a link to a website where the Solarize campaign has been publicly announced. details about the status of an ongoing solarize campaign or final metrics of a completed solarize gn.
Commu •	inity Exe La Cros	•
Templa ⁺		Your Community New York State Energy and Research Development Authority (NYSERDA)
Resourc •	es: How to Market	<u>Development a Solarize Campaign</u> SolSmart Webinar <u>Development and Finance</u> SolSmart's Toolkit for Local Governments <u>Mass</u> Massachusetts Clean Energy Center
MD-3	10	Encourage low-to-moderate income (LMI) participation in community-wide group purchase program through program design and/or financing support options.
		ents can support or host community group purchase programs for solar energy. Group purchase and corporate incentives for income-qualified participants to promote equitable participation.
Recomr	nended Provide	Verification: details that explains the forms of financing support or program design elements that support LMI is in solar PV group purchase program.
	<u>Durhan</u>	amples: a, NC SolSmart Gold phia, PA SolSmart Gold

Templates:

• <u>Solarize Your Community</u> | New York State Energy and Research Development Authority (NYSERDA)

Resources:

- <u>How to Development a Solarize Campaign</u> | SolSmart Webinar
- <u>Market Development and Finance</u> | SolSmart's Toolkit for Local Governments
- <u>Solarize Mass</u> | Massachusetts Clean Energy Center

MD-4	20	Support a community solar program.
exchan	ige for ec	ar offers residents and businesses an opportunity to own or lease a portion of a solar project in onomic benefits proportional to their share. These economic benefits are commonly delivered in
		tricity bill credits. For renters, and homes or business that are not suitable sites for solar, Ir programs allow consumers to access solar without installing panels on their homes or business.
		ar can be provided by utilities, a third party, or a non-profit.
	,	Verification:
•	Provide	a link to information about the community solar program, including any outreach materials and about program design.
Comm	unity Exe	amples:
٠	<u>Austin,</u>	TX SolSmart Gold
•	Fort Co	<u>lins, CO</u> SolSmart Gold
Resour	ces:	
•		to Community Share Solar: Utility, Private, and Nonprofit Project Development National
		ble Energy Laboratory (NREL)
•		<u>inity Solar</u> SolSmart's Toolkit for Local Governments
•		ng Solar Participation through Community Solar SolSmart Issue Brief
•		ng Solar Participation through Community Solar SolSmart Webinar
•		<u>ment Guidance</u> American Cities Climate Challenge Renewables Accelerator <u>Community Solar Resources</u> Sustainable CUNY Smart Distributed Generation Hub
•		Community Sold Resources Sustainable Contrainable Distributed Ceneration Hub
MD-5	10	Encourage low-to-moderate income (LMI) participation in a community solar program through program design and/or financing support options.
Comm	unity solo	ar provides opportunities to open access to solar to low-to-moderate income households. To fully
		ential, a community program should design programs and financing to support low to moderate
		ation, including savings from day one. It is also important to ensure that appropriate and trusted
	<u> </u>	used and that offerings are designed to be flexible without long-term commitments.
Recom		Verification:
•		details that explains the forms of financing support or program design elements that support LMI is in a community solar program.
Comm	unity Exe	
٠		<u>CO</u> SolSmart Gold
٠		<u>gton, DC</u> SolSmart Gold
Resour		
•		to Community Share Solar: Utility, Private, and Nonprofit Project Development National
		ble Energy Laboratory (NREL)
•		<u>inity Solar</u> SolSmart's Toolkit for Local Governments
•		and Implementation of Community Solar Programs for Low- and Moderate-Income Customers Il Renewable Energy Laboratory (NREL)
•		<u>ment Guidance</u> American Cities Climate Challenge Renewables Accelerator
-		
MD-6	20	Provide residents with Community Choice Aggregation/Energy that includes solar PV as a power generation source.
Local a	jovernme	nts can increase access to solar energy for their operations and their residents through

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:

- <u>San Jose, CA</u> | SolSmart Gold
- <u>Somerville, MA</u> | SolSmart Gold

Templates:

- <u>Community Choice Aggregation Toolkit</u> | New York State Energy and Research Development Authority (NYSERDA)
- <u>Starting a New CCA</u> | California Community Choice Association (CalCCA)

Resources:

- <u>Community Choice Aggregation</u> | SolSmart Issue Brief
- <u>Community Choice Aggregation: Challenges, Opportunities, and Impacts on Renewable Energy Markets</u> | 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:

- <u>Deerfield Beach, FL</u> | SolSmart Silver
- <u>Grand Rapids, MI</u> | SolSmart Silver

Resources:

- <u>Market Development and Finance</u> | SolSmart's Toolkit for Local Governments
- <u>Resources</u> | PACENation

MD-8 20 Provide local incentives or locally-enabled finance (e.g. a revolving loan fund) for solar PV.

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.

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:

- <u>Loudoun County, VA</u> | SolSmart Silver
- <u>St. Louis Park, MN</u> | SolSmart Silver

Resources:

<u>Market Development and Finance</u> | SolSmart's Toolkit for Local Governments

MD-9	5	Provide local incentives for solar PV to low-to-moderate income (LMI) households, Disadvantaged Business Enterprises (DBEs), and/or non-profit organizations that provide community services.	
providir rebates	ng incent	ents can support solar installations by LMI households, DBEs, and non-profit organizations by cives such as low-interest loans, grants, on-bill financing and a variety of tax incentives and lovernments can expand solar programs to disadvantaged residents by implementing any num ms.	ber
Recom •	Provide	Verification: a link to an ordinance creating local incentives or financing options. a link to an application or form that are required for a solar PV system to be eligible for incenti cing.	ives
Comm		amples: , <u>CO</u> SolSmart Gold d, <u>OR</u> Not Designated	
Resourd • • •	<u>Market</u> <u>Projects</u> <u>Resourc</u> <u>Unlocki</u>	<u>Development and Finance</u> SolSmart's Toolkit for Local Governments <u>& Programs in Low-to-Moderate Income Communities</u> SolSmart Webinar <u>es to Support Initiatives for Low-to-Moderate Income Communities</u> SolSmart Webinar <u>ng Solar for Low- and Moderate-Income Residents: A Matrix of Financing Options by Resident,</u> <u>r, and Housing Type</u> 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).	
membe	rs to ins	or grants can improve the financial prospects of a solar project, allowing more community tall solar. Local governments can work with local financial institutions to offer and/or promote hs for solar projects.	1
Recom •	Provide Provide	Verification: link to financing options for solar energy. a memo detailing how the local government partnered with the financial institution to offer a Il incentive for solar energy.	
Comm		amples: te, CO SolSmart Gold <u>kee, WI</u> SolSmart Gold	

• <u>Market Development and Finance</u> | SolSmart's Toolkit for Local Governments

Innovative Action

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 credits above, please share it with us.		
Innovat	ive actio	ns will be reviewed by a team of solar experts and each action may be worth up to 20 points.		
Recom	mended	Verification:		
•		a memo describing the innovative action and include any supporting documentation or links t additional details.	hat	
Comm	unity Exa	mples:		
•	Grayslak	ie, IL SolSmart Bronze		
	I	The Grayslake Sustainable Business Initiative recognizes local businesses that are choosing to b more sustainable. Solar energy is emphasized by awarding a business automatic gold designat f they have installed a solar energy system.		
•	<u>Montgomery County, MD</u> SolSmart Gold			
		Montgomery County's 4 th Solar Co-op offered EV charging as an option through the solar co-c This helps promote EV charging and can reduce costs through group purchasing.	op.	

Acknowledgment

This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Solar Energy Technologies Office Award Numbers DE-EE0007154 & DE-EE007155.

Full Legal Disclaimer

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.