

PLANNING IMPROVEMENTS

WHY? Planning improvements codify and emphasize a jurisdiction’s support of a building owner’s right to use solar. Removing local ordinance barriers, adopting facilitating codes and enabling solar access in new developments fosters a community that supports individual choice.



Step 1

- Zoning code improvements

Step 2

- Enable solar access

Step 3

- Building code improvements

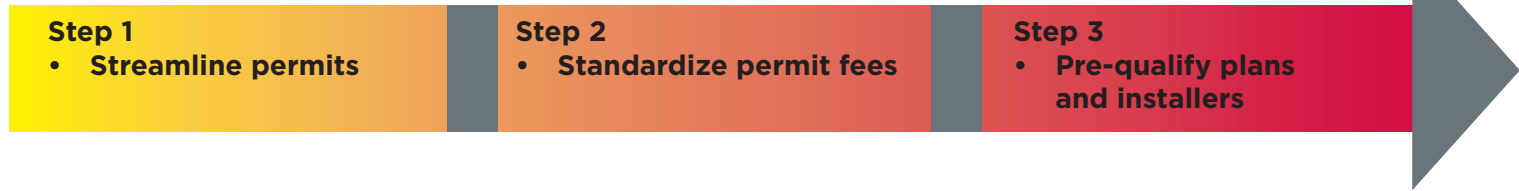


IMPLEMENTATION STEPS

ZONING CODE IMPROVEMENTS					
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 1	PL 1-A Address Solar in the Zoning Code and Adopt a Solar Ordinance	Zoning codes and comprehensive planning documents establish the vision and goals for solar development within a community. Zoning and other ordinance documents can establish rooftop solar “by-right” or “as-of-right” and set forth clear guidance for the development of ground-mounted and larger scale PV systems.	<ul style="list-style-type: none"> • Removes regulatory barriers for solar deployment. • Creates a clear regulatory pathway for solar energy development. • Limits aesthetic objections by setting reasonable design standards. • Addresses solar access issues, in particular, zoning districts. • Encourages solar-ready standards (see Step 3). 	<ul style="list-style-type: none"> • Solar Powering Your Community Guidebook. • American Planning Association Solar Briefing Paper: Integrating Solar Energy into Local Plans. • American Planning Association Solar Briefing Paper: Integrating Solar Energy into Local Development Regulations. 	<ul style="list-style-type: none"> • City of Kansas City, Mo.: Promoting Sustainable Development Practices in Kansas City: Recommended Zoning and Development Code Amendments. • Minnesota — county ordinance. • Minnesota — local ordinance. • Western Pennsylvania Rooftop Solar Challenge Final Solar Zoning Ordinances model language. • American Planning Association model language.
	ENABLE SOLAR ACCESS				
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 2	PL 2-A Adopt a Solar Access Ordinance	Incorporate policies addressing siting and land use along with landscaping considerations in order to facilitate access to solar. State or local ordinances should clearly define any restrictions and the types of structures covered by the ordinance. Conflicting policies should be taken into account.	<ul style="list-style-type: none"> • Demonstrates the importance of solar development in the community. • Makes the pathway to implementing solar clear for both constituents and solar developers. • Reduces potential for legal challenges around solar rights. 	<ul style="list-style-type: none"> • American Planning Association Solar Briefing Paper: Integrating Solar Energy into Local Plans. • Solar ABCs Solar Access Report. • American Planning Association Solar Briefing Paper: Integrating Solar Energy into Local Development Regulations. • Solar Ready KC resource: Solar Access. 	<ul style="list-style-type: none"> • City of Ashland, Ore., 2011. Municipal Code. Title 18, Land Use; Section 18.70, Solar Access. • City of Boulder, Colo., 2011. Boulder Revised Code. Title 9, Land Use Regulation; Chapter 9-9, Development Standards; Section 9-9-17, Solar Access. • Colorado Code Publishing Company: Fort Collins Land Use Code, Article 3, General Development Standards, Division 3.2: Site Planning and Design Standards, 3.2.3 Solar Access, Orientation and Shading. • Western Pennsylvania Rooftop Solar Challenge Final Solar Zoning Ordinances model language. • American Planning Association model language. • Solar Ready KC sample comprehensive plan language. • Solar Ready KC sample ordinance language.
	PL 2-B Engage Homeowners Associations	Educate homeowners and homeowners associations (HOAs) of the role and impact of HOAs and recommend strategies including a solar mission statement and sample language.	<ul style="list-style-type: none"> • Informs homeowners’ HOAs of their role and impact on solar development in the community. • Encourages HOAs to amend policies that prohibit or discourage solar power installations. 	<ul style="list-style-type: none"> • The Solar Foundation’s A Beautiful Day in the Neighborhood. • Solar Ready KC resource: Engage Homeowners Associations. 	<ul style="list-style-type: none"> • Lakewood Cove Homeowners Association, Houston, Texas. • Cherry Creek Springs Homeowners Association, Colorado Springs, Colo. • Hawaii legislation. • Solar Ready KC sample HOA guidelines
BUILDING CODE IMPROVEMENTS					
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 3	PL 3-A Develop Solar Ready Guidelines	Develop a solar-ready buildings checklist and guidelines for new construction and renovations.	<ul style="list-style-type: none"> • Understanding and accounting for solar requirements in advance maximizes efficiency, minimizes costs, and optimizes PV system performance. 	<ul style="list-style-type: none"> • NREL Solar Ready Buildings Planning Guide. • Minnesota Solar Ready Building Design Guide. • American Planning Association Solar Briefing Paper: Integrating Solar Energy into Local Development Regulations. 	<ul style="list-style-type: none"> • City of Boston, Mass.: Department of Neighborhood Development Solar Ready Guidelines. • American Planning Association Model Solar Ready Homes. • Solar Ready KC guide to improve solar readiness. • Solar Ready KC sample solar-ready design guidelines.
	PL 3-B Adopt a Solar Ready Ordinance	Include new building code or ordinance language that promotes solar-ready construction or mandates the inclusion of solar on new construction.	<ul style="list-style-type: none"> • A solar-ready or solar installation mandate can drive the development of solar in your community on new construction. • Solar-ready guides that also promote energy efficiency can make solar systems more cost effective. 	<ul style="list-style-type: none"> • NREL Solar Ready Buildings Planning Guide. • American Planning Association Solar Briefing Paper: Integrating Solar Energy into Local Development Regulations. • Solar Ready KC resource: Improve Solar Readiness. 	<ul style="list-style-type: none"> • Sebastopol, Calif., solar mandate. • Lancaster, Calif., solar mandate. • Town of Oro Valley, Ariz., 2009. Ordinance No. (O)09-11: An Ordinance Requiring Installation of Solar Ready Measures in Residential Construction. Pages 5–10. • American Planning Association Model Solar Ready Homes. • Solar Ready KC sample solar-ready construction ordinance.

PROCESS IMPROVEMENTS

WHY? Process improvements are one of the fastest and most effective means to facilitate solar installations. Streamlining permitting, offering a centralized location for information that clearly explains the process, standardizing permit fees, and pre-qualifying plans and installers will make the process clear and seamless.



IMPLEMENTATION STEPS

STREAMLINE PERMITS					
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 1	PR 1-A Develop criteria for expedited process	Provide a template that fosters the quick permitting of installations that do not require additional permit review.	<ul style="list-style-type: none"> Eliminates unnecessary review by jurisdictions, reducing time invested by installer and permitting staff. 	<ul style="list-style-type: none"> Solar ABCs — expedited permit process. 	<ul style="list-style-type: none"> Small town example: Babylon Village, N.Y. City example: Philadelphia, Pa. Region example: Broward County, Fla.
	PR 1-B Create a permit checklist	Provide a list that documents the steps and necessary items for securing a permit to install solar. The optimal checklist applies to both residential and commercial installation.	<ul style="list-style-type: none"> Clearly defines permitting requirements, reducing learning curve for installer and staff time spent answering questions. 	<ul style="list-style-type: none"> Solar Ready KC example permit checklist. IREC permit checklist guide. 	<ul style="list-style-type: none"> Boulder County, Colo. Miami-Dade County, Fla. State of Oregon
	PR 1-C Provide a central information source	Provide centralized location, preferably web-based, for solar information including permit checklist.	<ul style="list-style-type: none"> Makes important information easily accessible, reducing staff time spent answering questions. 	<ul style="list-style-type: none"> Solar Ready KC sample website language. 	<ul style="list-style-type: none"> Berkeley, Calif. Denver, Colo. Philadelphia, Pa. Boston, Mass.: Renew Boston Solar

STANDARDIZE PERMIT FEES					
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 2	PR 2-A Fixed fees for residential permits	A stated cost recovery-based fee list for PV permits.	<ul style="list-style-type: none"> Fixed cost recovery-based fees eliminate cost surprises and ensure fair fees. 	<ul style="list-style-type: none"> Solar Electric Permit Fees in Northern California (Sierra Club). City of Sacramento Guide to Solar Energy Permits, page 3. 	<ul style="list-style-type: none"> Utah model solar permit fee schedule. Solar Ready KC residential permit calculator.
	PR 2-B Calculator for commercial permits	Excel spreadsheet that quickly calculates commercial PV permit fees based on project parameters and jurisdiction hourly rates.	<ul style="list-style-type: none"> Cost-recovery based formula ensures fair fees. Installers can better budget for permit fee. 	<ul style="list-style-type: none"> Solar Electric Permit Fees in Northern California (Sierra Club). City of Sacramento Guide to Solar Energy Permits, page 3. 	<ul style="list-style-type: none"> Utah model solar permit fee schedule. Solar Ready KC commercial permit calculator.

PRE-QUALIFY PLANS AND INSTALLERS					
	Action	Description	Benefits	Resources	Examples (active links in PDF)
Step 3	PR 3-A Pre-qualify installers	Utilize either the National America Board of Certified Energy Practitioners (NABCEP) or an installer’s successful installation record to pre-qualify an installer and simplify their submittal process.	<ul style="list-style-type: none"> Streamlines process for qualified installer and reduces staff time required on applications from these installers. 	<ul style="list-style-type: none"> City of Honolulu, Hawaii. Pages 27-29. 	N/A
	PR 3-B Pre-qualify electrical plans	Standard electrical permit plans outlining system design and components become pre-qualified for installation. The permitting department immediately issues the electrical permit and the inspector confirms the system conforms to the approved design.	<ul style="list-style-type: none"> Standarding plans eliminates unnecessary work for installers and permitting staff. 	N/A	<ul style="list-style-type: none"> City of Portland, Ore.

FINANCING

WHY? Financing options are key to increasing the amount of installed solar. While in some areas of the country the falling cost of solar has reached “grid parity,” in many places the up-front cost of solar is still a barrier to more widespread adoption. Financing options increase the affordability of solar and can make solar an attractive investment. Evaluating local soft costs, engaging lenders, and launching Solarize campaigns all help to make solar energy more affordable and accessible.



Solar Ready II

Step 1

- Engage local lenders

Step 2

- Enact a Solarize Campaign



IMPLEMENTATION STEPS

ENGAGE LOCAL LENDERS					
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 1	F 1-A Provide resources and host a workshop for lending institutions.	Lending institutions have a significant opportunity to provide competitive financing options for solar PV. While some local and regional banks have in recent years taken advantage of this market, most markets across the country are still largely underserved.	<ul style="list-style-type: none"> • Communities can benefit from the economic development and job creation associated with PV project development. • Utilizing local lending can increase local economic benefits and keep financial benefits within the local economy. 	<ul style="list-style-type: none"> • Solar Outreach Partnership - MCG Guide to Local Lending for Solar. 	<ul style="list-style-type: none"> • Admirals Bank Partnership with Asheville and Massachusetts Communities.

ENACT A SOLARIZE CAMPAIGN					
	Action	Description	Benefits	Resources (active links in PDF)	Examples (active links in PDF)
Step 2	F 2-A Launch a Solarize Campaign	Solarize campaigns create a group purchasing and community outreach program accelerating demand for solar installations. The limited-time offer and tiered pricing structure of the program lowers customer acquisition costs, reduces lead times and thus lowers the cost of PV for local residents. After-effects include sustained growth of the local solar market.	<ul style="list-style-type: none"> • Solarize campaigns help solve three key barriers to solar development, cost, information and customer inertia. 	<ul style="list-style-type: none"> • NREL Solarize Guidebook. • Solarize Massachusetts Pilot Overview. • Solarize Connecticut Report. 	<ul style="list-style-type: none"> • Portland, Ore. • Connecticut. • Massachusetts. • Asheville, N.C.
	F 2-B Partner with local lenders	One of the key barriers to solar development is the lack of financing options.	<ul style="list-style-type: none"> • Solarize programs that partner with local lending institutions can provide additional financing options and work to keep economic benefits of the program within the local economy. 	<ul style="list-style-type: none"> • Solar Outreach Partnership - MCG Guide to Local Lending for Solar. • Massachusetts Local Financial Institutions Outreach Report. 	<ul style="list-style-type: none"> • Admirals Bank Partnership with Asheville and Massachusetts Communities.