

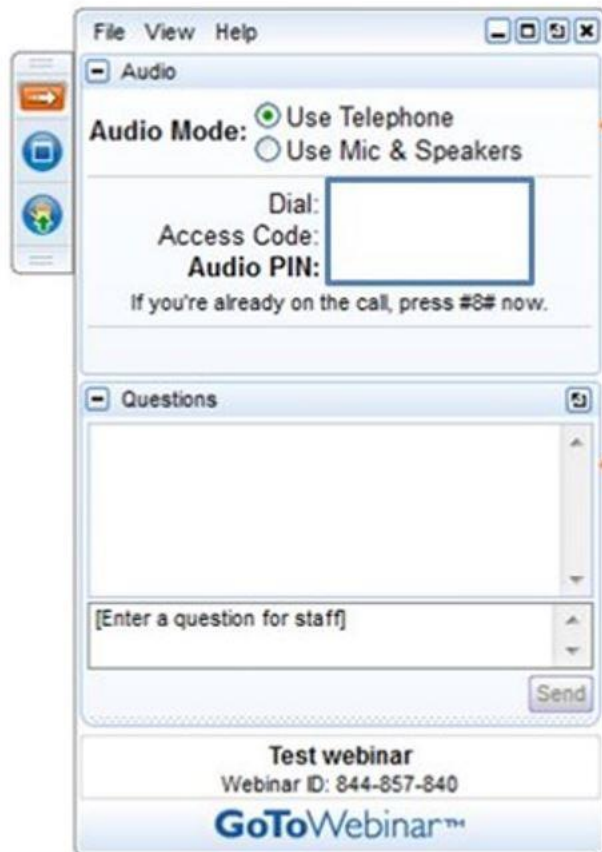
Clean Energy States Alliance Webinar

Streamlining Residential Solar Permitting at the Municipal Level: Lessons from California

Hosted by
Nate Hausman, Project Manager, CESA
February 20, 2015



Housekeeping



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This webinar is being recorded.

You will find a recording of this webinar, as well as all previous CESA webcasts, archived on the CESA website at

www.cesa.org/webinars

About CESA

Clean Energy States Alliance (CESA) is a national nonprofit organization working to implement smart clean energy policies, programs, technology innovation, and financing tools, primarily at the state level. At its core, CESA is a national network of public agencies that are individually and collectively working to advance clean energy.



About Rooftop Solar Challenge II

- The U.S. Department of Energy SunShot Initiative Rooftop Solar Challenge II incentivizes regional teams to make it easier and more affordable for Americans to go solar, reducing soft or “plug-in” costs by streamlining permit processes, updating planning or zoning codes, improving standards for connecting solar power to the electric grid, and increasing access to financing.
- A consortium of five New England states and CESA received a Rooftop Solar Challenge II grant to drive down solar soft costs in the region by increasing coordination among the participating states and implementing best practices.

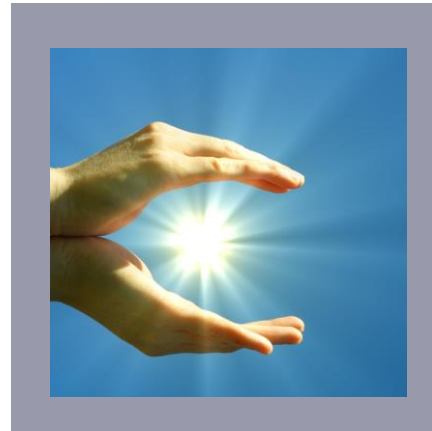


Today's Guest Speakers

Bernadette Del Chiaro, Executive Director, California
Solar Energy Industries Association (CalSEIA)

Tamara Gishri-Perry, Senior Manager, Center for
Sustainable Energy





Reducing Soft Costs Through Streamlined & Standardized Permitting

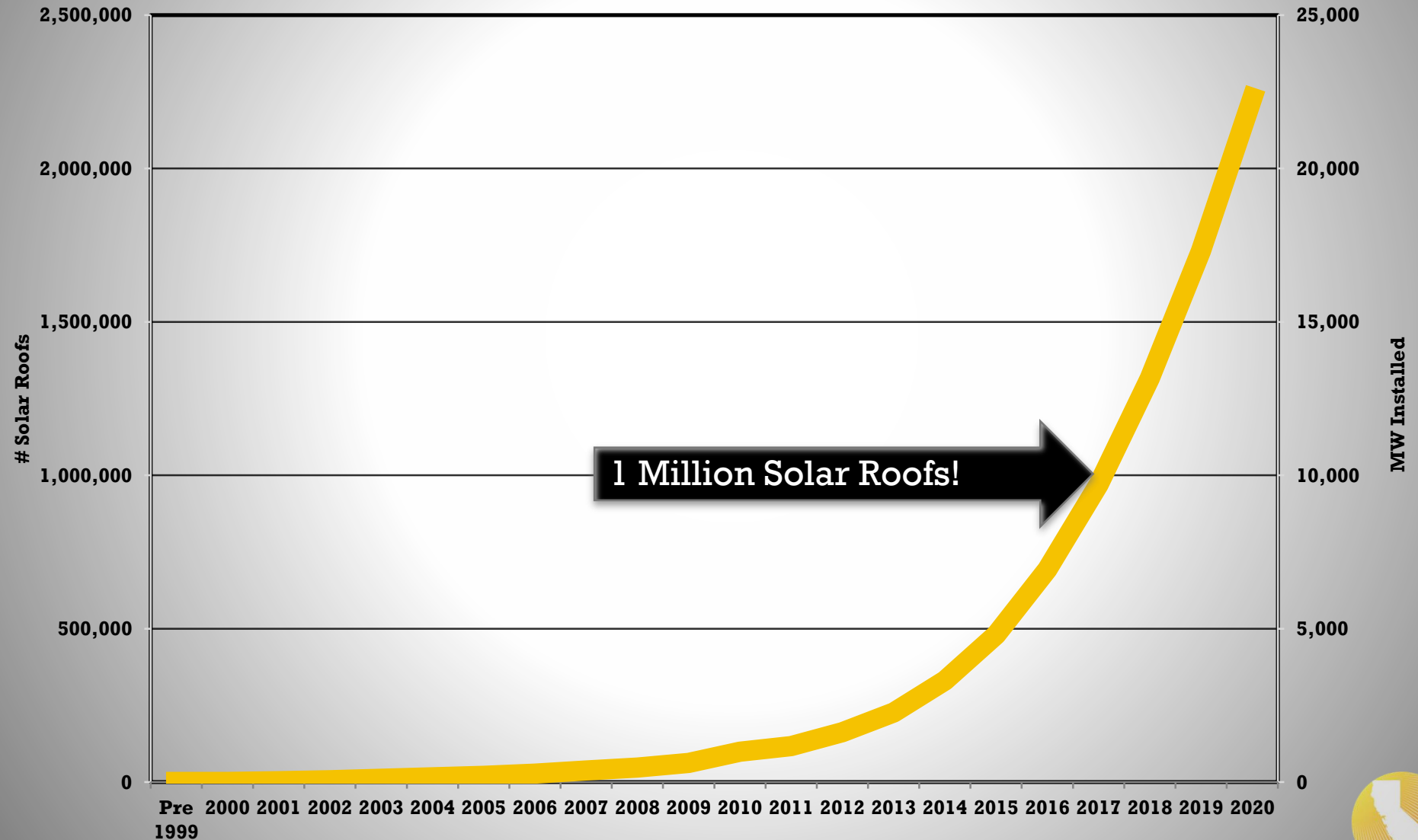
Bernadette Del Chiaro
Executive Director, CALSEIA

California Solar & Climate Goals

- 33% renewables by 2020 (SB 1078)/50% by 2030 (Gov. goal/proposed legislation)
- 3,000 MW rooftop solar by 2017 (SB 1)/12,000 MW by 2020 (Gov. goal)
- 200,000 solar hot water systems by 2018 (AB 1470)
- 1990 GHG levels by 2020 (AB 32)



CA Rooftop Market On Pace to Exceed 1 Million by 2020



There are MORE people employed in the solar industry than in the state's four largest utilities combined

Utility
Workers

Solar
Workers

50,607

54,690



Major Drivers of Solar Success

1. Public Support = Political Action
2. Experienced Industry = Know How
3. Political Leadership = Certainty Upon Which to Build



What's Needed to Keep Growing?

- Net Energy Metering Protections/Solar Access to Grid
- Continued support of SH&C as Carbon Reduction Strategy
- Continued ITC (federal)
- Solar as standard on new construction
- Continued annual price reductions. Bulk of reductions to date (80%) have been from hardware. Soft costs now equal 64% of installed costs.



Reducing Soft Costs: Local Permitting

Permitting, inspection & interconnection accounts for \$1,000-\$3,000 cost of average residential system

PV installation delays as a result of permitting procedures average 8 weeks

Permitting hassles are a market barrier. Many installers avoid operating in, on average, 4 cities because of hurdles



The California Solar Rights Act (Pre 2014)

Government Code 65850.5)

“The implementation of consistent statewide standards to achieve the timely and cost-effective installation of solar energy systems is not a municipal affair...but is instead a matter of statewide concern.”

“It is the intent of the Legislature that local agencies...encourage the installation of solar energy systems by removing obstacles to, and minimizing costs of, permitting for such systems.”



“Standards are the grease of productive commerce.” - SolarTech



Why Statewide Legislation?

California is home to 500+ jurisdictions

Each jurisdiction may have 2-5 different authorities within its boundaries (building, fire, planning)

In these 500+ cities and counties, you can have several different individuals with different opinions and levels of experience/knowledge about solar

Efforts to date to establish streamlined & standardized permitting not working fast enough



Inefficient Permitting

Gather info on what's required by AHJ = 1-3 days

Prepare unique submittal package (1-3 days)

- Drawing sizes, number of copies, etc. vary
- Engineering requirements inconsistent
- Some jurisdictions require multiple reviews (planning, fire, etc.)

In person submittal requirements (1-several days)

Plan Check (1 day to several weeks)

Permit Revisions (1 day to several weeks)

Other departmental review tacks on additional time
(1 day to several weeks)

Inspections – sometimes multiple (1 day to several weeks)



Other headaches that add to equation

In addition to permitting issues:

- HOA hurdles
- Utility interconnection challenges
- Code & Standards role-out issues



**"I think the seller will accept your offer,
but the Homeowners Association will
never approve that shirt."**



Streamlined Permitting Helps AHJ Too

AHJ facing budget cuts just as solar is ramping up

Lack of trained personnel lead to delays.
Only 3 of 30 AHJs had specific solar training (SolarTech)

Inexperience with solar led many jurisdictions to implement unnecessarily complex and inconsistent procedures (Solar ABCs)

Standards would level the playing field for smaller municipalities and help save money (Solar ABCs)

65% of building officials surveyed said they would like or very likely support statewide permitting standards (SolarTech)



Solution: AB 2188

Solar PV and solar water heating technologies

Single-family & Duplexes

10 kW or 30kWth or less

Roof-mounted, not in excess of legal building height

Additional restrictions on HOAs

By Sept 30, 2015 every city & county must adopt ordinance in compliance with AB 2188

**SIMPLE
EASY
FAST**



Solution: AB 2188

By Sept 30th, every city & county must adopt an ordinance that does following:

- Create an expedited, streamlined permitting process for residential solar systems that “substantially conforms” with the recommendations, standard plans, and checklists found in the Solar Permitting Guidebook (“the Guidebook”). Guidebook contains timelines for permit review (1-3 days) and scheduling inspections (1-5 days)
- Electronic submittals required including electronic signatures
- HOA pre-approval no longer legal
- Multiple inspections no longer legal (fire exception)



Unfinished Business

- 1) Single online portal for permitting
- 2) 3rd party inspections to reduce wait times/improve service
- 3) Utility interconnection
- 4) Ongoing inspector training



Challenges & Resources

Heavy Lift

- Challenging politics/local control
- Advocacy community juggling multiple priorities
- Not very compelling public story/"processy"
- Solution questionable by many (can they really improve?)

On our side

- Progressive cities & counties leading the way
- DOE SunShot body of work
- General support for solar
- Believable problem
- Motivated governor
- Minimized opposition



Improvements upon replication

- 1) Have better organizing resources to mobilize supportive cities
- 2) Have outside/non-industry allies willing to speak up
- 3) Policy champs undaunted by local control arguments
- 4) Get fire onboard ahead of time
- 5) Try to find carrot to go along with stick and/or enforcement mechanism (if you do this, then you get that. Or, if you don't do this, then you don't get that)



Elements Easily Replicated

- 1) Focus on residential/small systems
- 2) Ban on multiple inspections/multi-departmental review
- 3) Ban on HOA pre-approval
- 4) Electronic submittal mandate/electronic signature
- 5) Mandate a “checklist” be created by AHJ. Exercise of creating frames whole process positively.



Contact



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Center for Sustainable Energy

Solar Permitting Guidebook Overview

February 20, 2015

Tamara Gishri Perry, Senior Manager

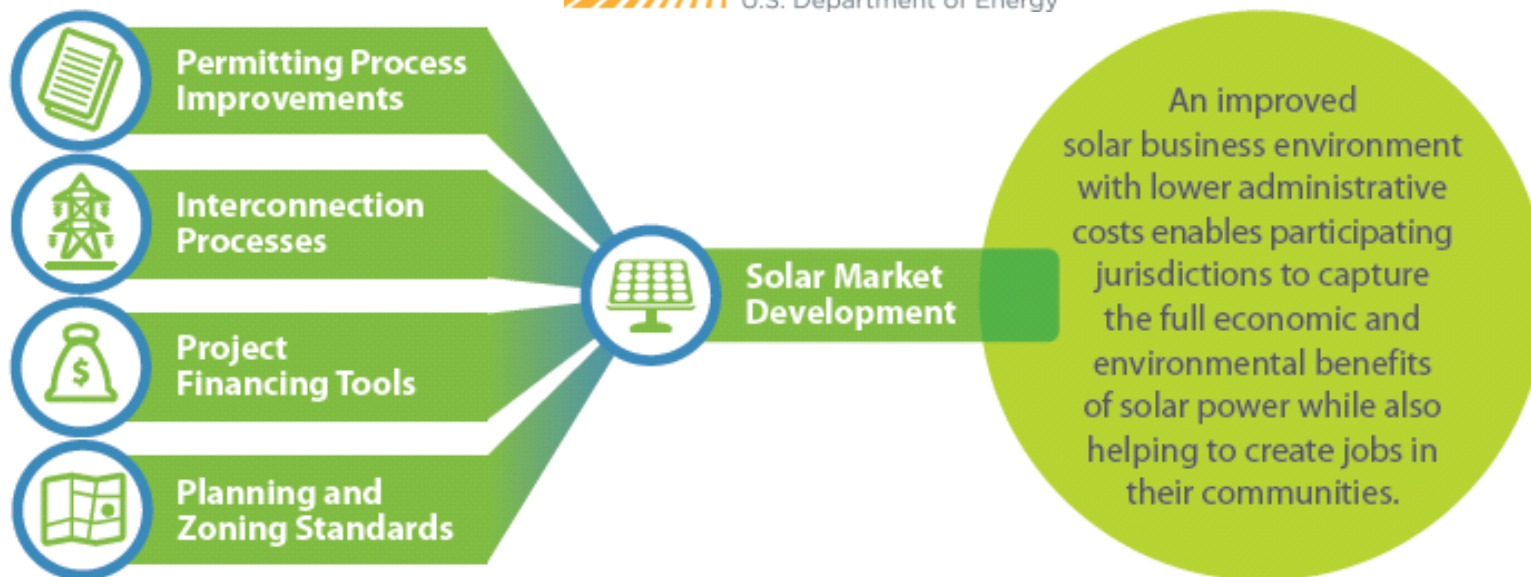


Center for
Sustainable Energy™

Our Mission:

Accelerate the transition
to a sustainable world
powered by clean energy

Rooftop Solar Challenge: Golden State Solar Impact



Streamlined Permitting Reduces Red Tape

- Permitting, inspection, and interconnection accounts for \$1,100-\$1,750 (NREL) to \$2,500 (SunRun)
- PV installation delays as a result of permitting procedures average 3.5 weeks (SunRun) to 8 weeks (CPF)
- Many installers avoid operating in, on average, 3-4 cities each because of hurdles (NREL)

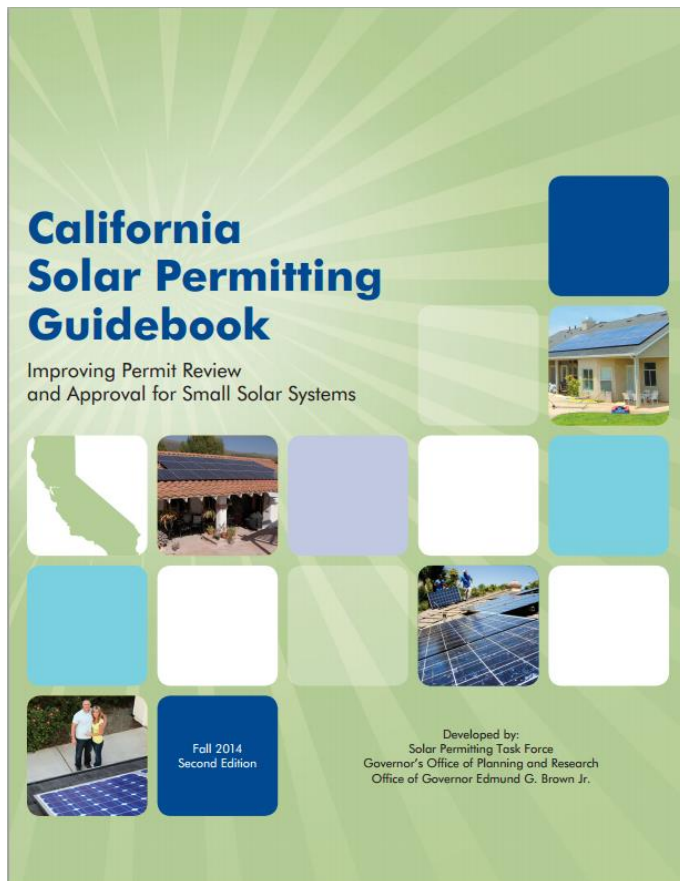


Governor's Solar Permitting Task Force

More than nine months of collaboration from 75 members representing over 60 organizations that include:

- Governor's Office of Planning and Research
- International Code Council
- California Public Utility Commission
- Sungevity
- California Building Officials
- CALSEIA
- California Energy Commission
- City of Chula Vista
- San Jose Fire Department
- Building Standards Commission
- California Building Industry Association
- Sunrun
- City of Fresno
- Division of the State Architect
- City of Walnut Creek
- City of Los Angeles
- Underwriters Laboratories
- Steel Framing Industry Association
- Optony, Inc.
- SolarCity
- City of Bakersfield
- Los Angeles County
- City of Elk Grove
- Brooks Engineering
- Contra Costa County
- City of San Francisco
- CalFire
- Dept. of Housing and Community Development
- State Fire Marshall

California Solar Permitting Guidebook



- Collaboration between the Governor's office, building officials, local governments, state regulatory agencies, and solar companies
- Provides a roadmap for local governments to establish a streamlined permitting processes for small, solar rooftop systems under 10kw
- Guidance on interpretation of codes and standards
- Seven toolkit documents for cities to streamline their permit process

Guidebook Outreach and Marketing

Results to date:

- Guidebook resources accessed by 208 AHJs
- Over 1,700 Press Release views from wire distribution
- Garnered original media coverage in:
 - *Solar Industry Magazine*
 - *PV Solar Report*
 - *Solar Daily*
 - *San Diego Daily Transcript*
- 439 Guidebook downloads
- Over 600 Toolkit Document Downloads

Purpose and Use of the Guidebook

- Designed to help building owners and solar installers navigate permitting as efficiently as possible
- Practices recommended in this Guidebook apply to permitting agencies of all sizes
- Written for permit applicants with all levels of expertise

Overview

Part 1 **CURRENT LAWS, REGULATIONS AND CODES:** This section explains current legal requirements for solar installations in California.

Part 2 **THE PROJECT APPROVAL PROCESS:** This section describes important aspects of permit review and project inspection.

Part 3 **RECOMMENDATIONS FOR EXPEDITED LOCAL SOLAR PERMITTING:** These sections recommend a streamlined local permitting process for small, simple solar PV and solar thermal installations, and provide standard forms that can be used to streamline permitting.

Part 4

Part 5 **RESOURCES AND INFORMATION:** This section provides informational materials that can help local governments clarify current state requirements for all solar installations.

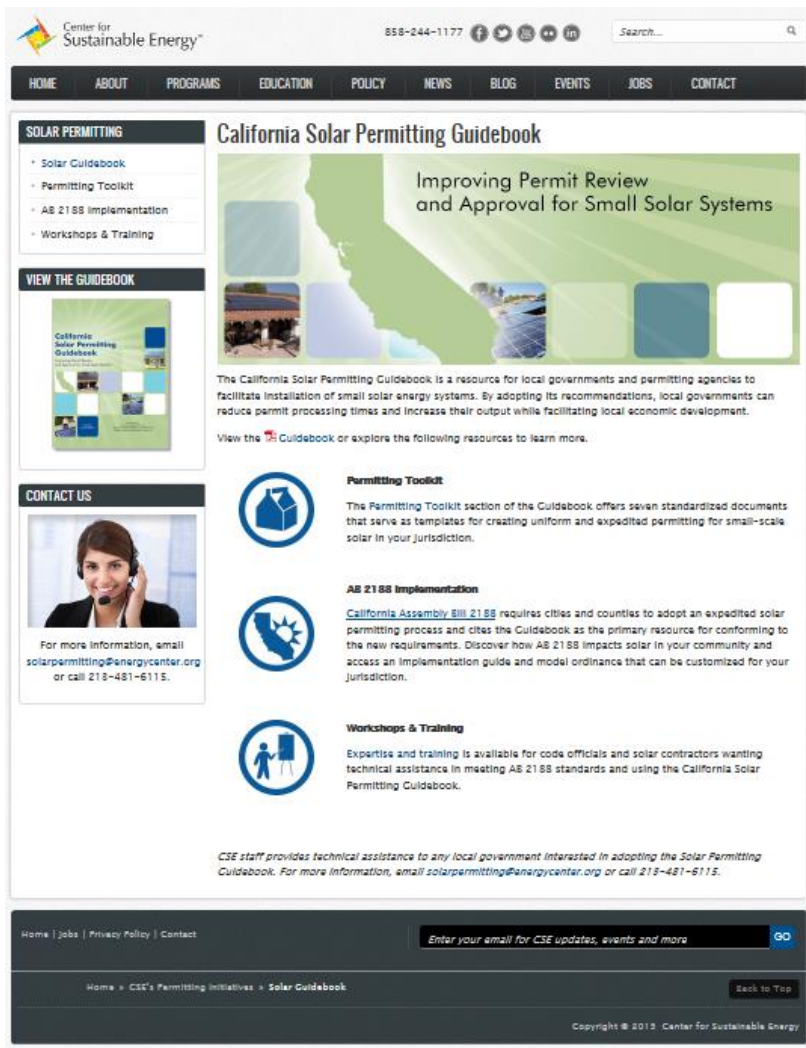
Toolkit Documents in the Guidebook

- Toolkit documents outline a simple permitting process for PV systems 10 kW or less and for solar thermal systems 30 kWth or less (under development).
- An expedited process refers to streamlining the permit process for simple, typical solar installations to issue permits in an “over the counter” or similar manner.
- This Guidebook uses the terms expedited and streamlined synonymously.
 - Thresholds capture approximately 90% of the quantity of solar systems that are currently being installed.
 - Above the size thresholds, systems are more complex.

Permitting Guidebook Toolkit

1. Eligibility checklist for systems <10 kw
2. Simplified applicant submittal requirements
3. Standard electrical plans with fire access requirements (2)
4. Well-defined structural criteria for expedited permitting
5. An inspection reference guide
6. One bulletin with state codes for solar installations
7. Implementation guide and sample ordinance

Guidebook Launch and Tools



- Developed solar permitting resource webpage
- Engaged building departments at events, including CALBO Ed Week
- Developed and launched media outreach plan
- Targeted email communications to building department staff in CA

Guidebook and AB2188 Training

- Working with building official professional associations to create a series of Guidebook trainings for Q1 and Q2 2015
- Curriculum standardized and developed by CSE
- Training participants will be eligible for continuing education units



AB2188 Implementation Guide

- Prepared by Energy Policy Initiatives Center, University of San Diego School of Law
- Provides guidance for implementing AB 2188 in substantial conformance with the Guidebook
- Includes a model ordinance



Free Technical Assistance

- ✓ CSE offers technical assistance to local jurisdictions
- ✓ Currently developing a program to recognize and reward jurisdictions that are taking the lead in streamlining solar permitting processes



CSE Permitting Resources

- 1. Free Technical Assistance to local governments**
- 2. Free Training to Building staff or ICC Chapters**
3. Webinar series on Permitting: AB2188 Compliance, Basics of Guidebook Structural guidelines
4. Addendum on solar hot water installations (Q1 2015)

www.energycenter.org/solarguidebook

Thank You!

www.energycenter.org/solarguidebook

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Thank you for attending our webinar

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