SunShot Initiative:
Rooftop Solar Challenge Kick-Off Webinar

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U.S. Department of Energy

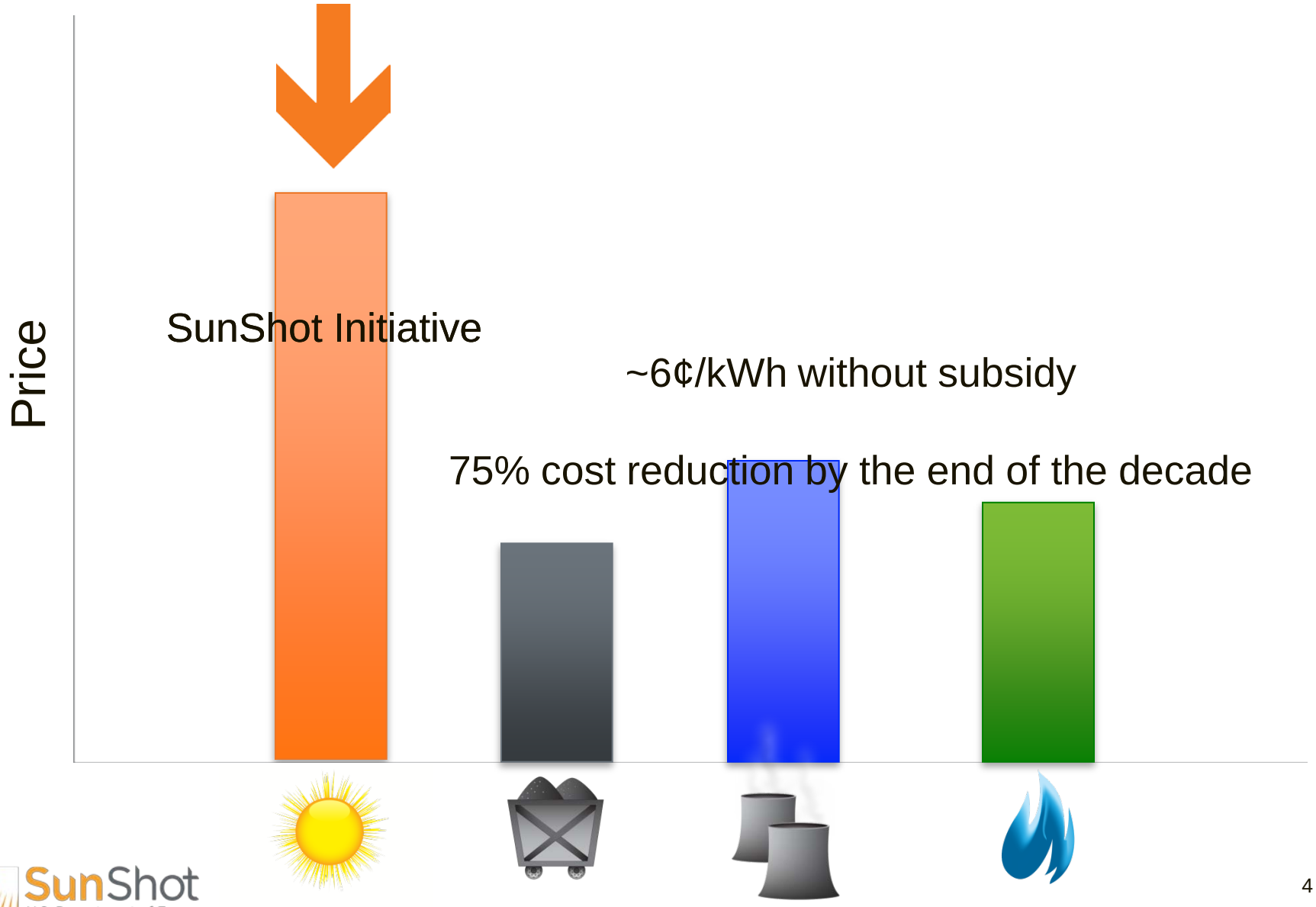
Welcome, Teams!

Let the Challenge begin.

Kick-Off Agenda

- Challenge Overview
- Video Introductions
- Team Activity Overview
- At the Starting Line: Baseline Statistics
- Getting the Word Out
  - Communication Resources
  - Online Engagement
- Solar Energy Resource Center
- Additional Resources & Next Steps
- Questions?

Why we're here: Big Picture



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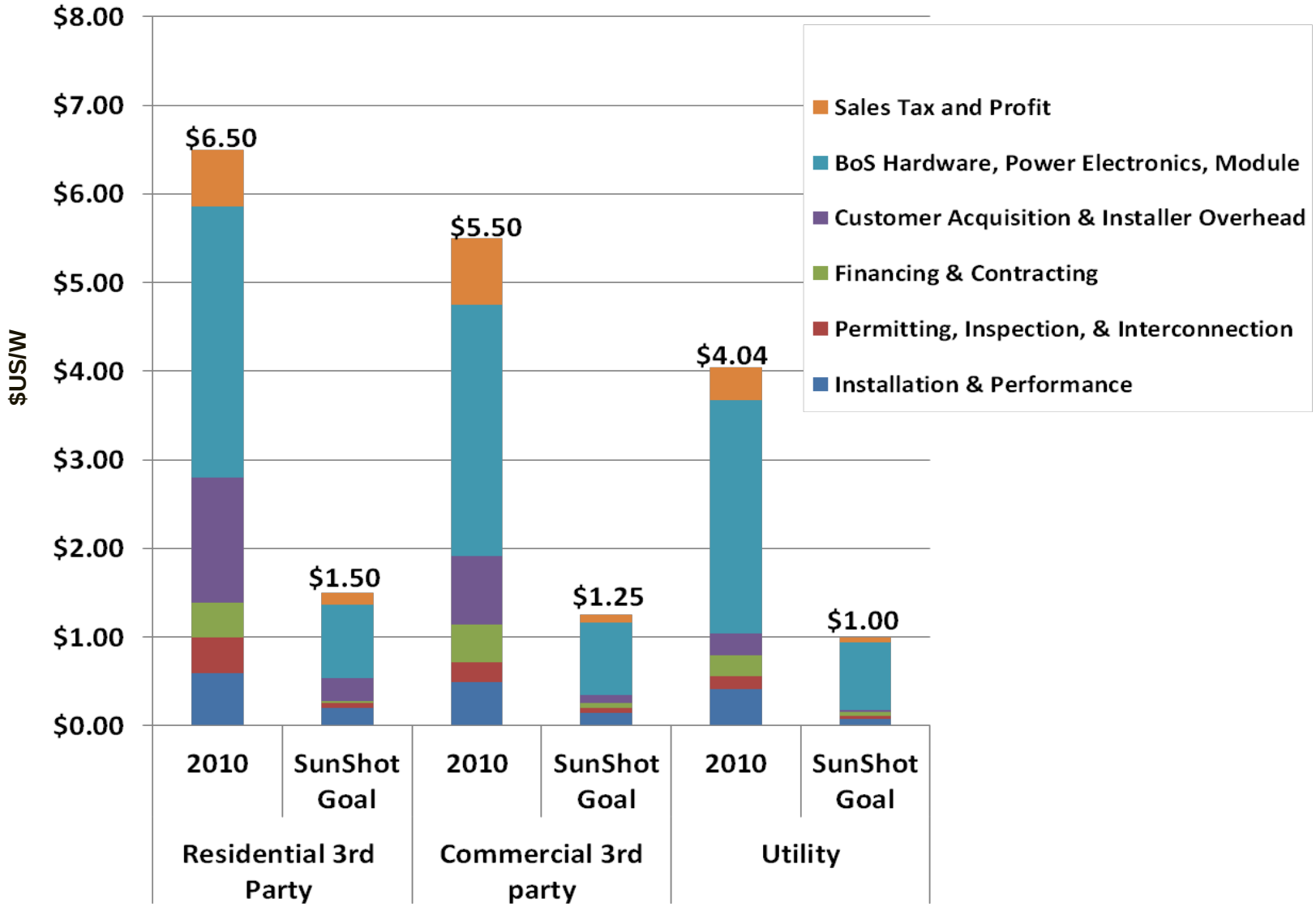
Why we're here:

Non-hardware Balance of System (BoS) Costs, i.e., the "Soft Costs"



Source: NREL, 2011 – Preliminary Estimates -- DO NOT CITE

Where we're going:

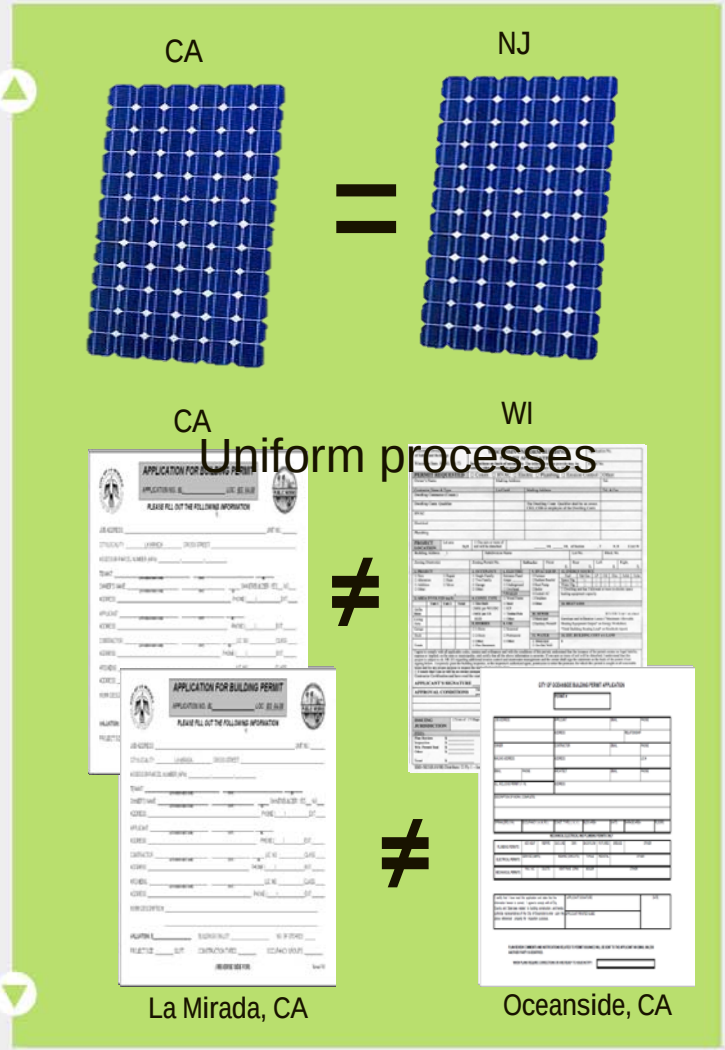
The Problem:

- 18,000+ local jurisdictions with authority over PV permitting requirements, land use codes and zoning ordinances
- 5,000+ utilities implementing interconnection standards and net metering programs
- 50 states developing interconnection standards and net metering rules

The Solution:

The Challenge will seed the development of consistent processes throughout the country in 4 action areas:

- Permitting and Interconnection Process
- Net Metering and Interconnection Standards
- Financing Options
- Planning & Zoning



What we're expecting:

Demonstrate Progress and Track your Results.

By Challenge end, we expect teams to have:

- Made it Faster, Easier, and Cheaper to go solar.
- Achieved a score of at least 800 in the jurisdiction with the lowest benchmark score.
- Worked together and prepared to expand efforts.

ACTION AREA	POINTS
Permitting Process	460
Application	110
Information Access	60
Process Time	110
Fee	30
Model Process	30
Inspection	80
Communication w/ Utility	40
Interconnection Process	110
Application	40
Information Access	20
Process Time	20
Inspection	30
Interconnection Standard	100
Net Metering Standard	100
Financing Options	150
Third Party Ownership (or equivalent)	90
Direct Finance Options	25
Community Solar	15
Other	20
Planning and Zoning	80
Solar Rights and Access	54
Zoning	20
New Construction	6
TOTAL POINTS POSSIBLE	1000

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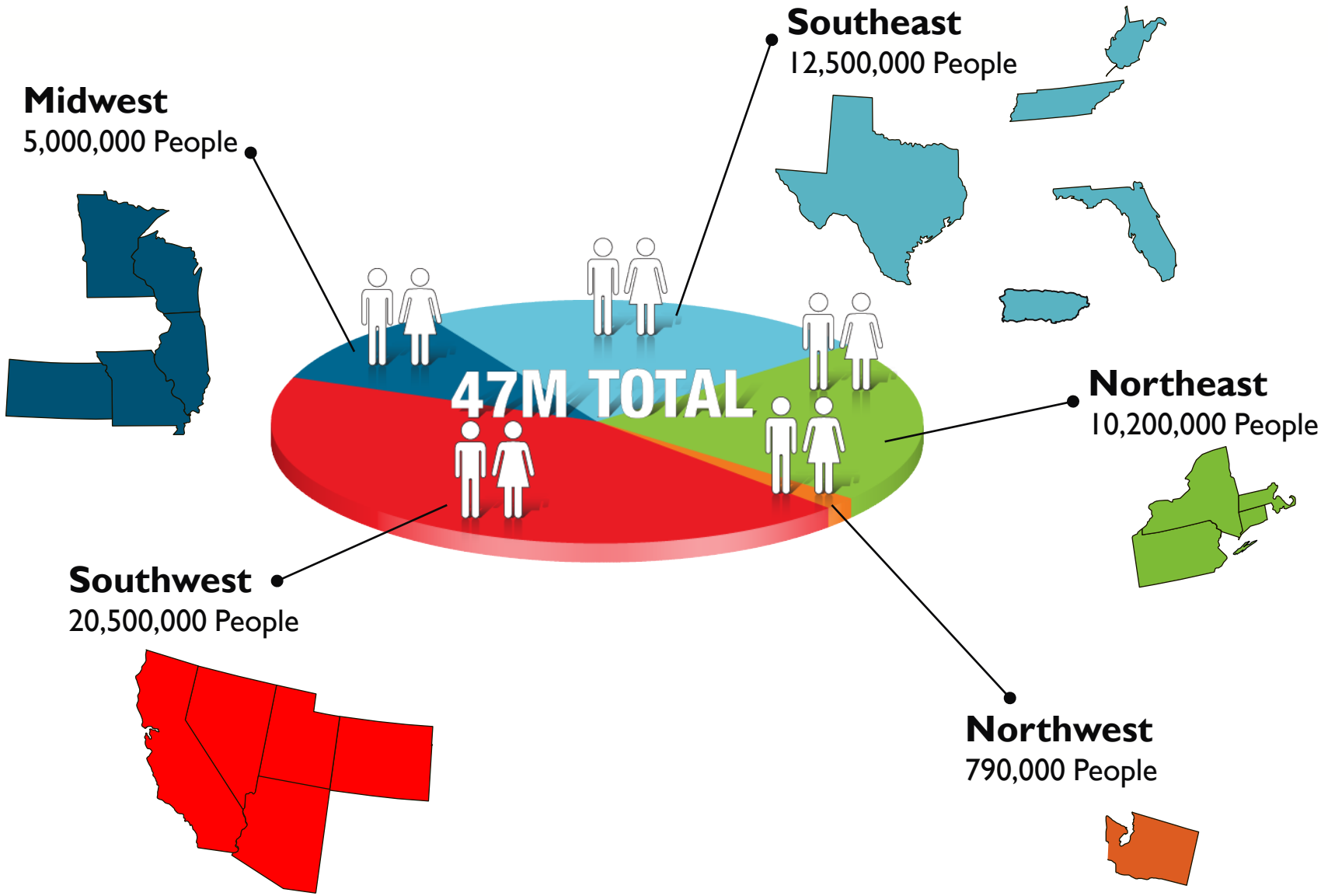
Who's leading the way:



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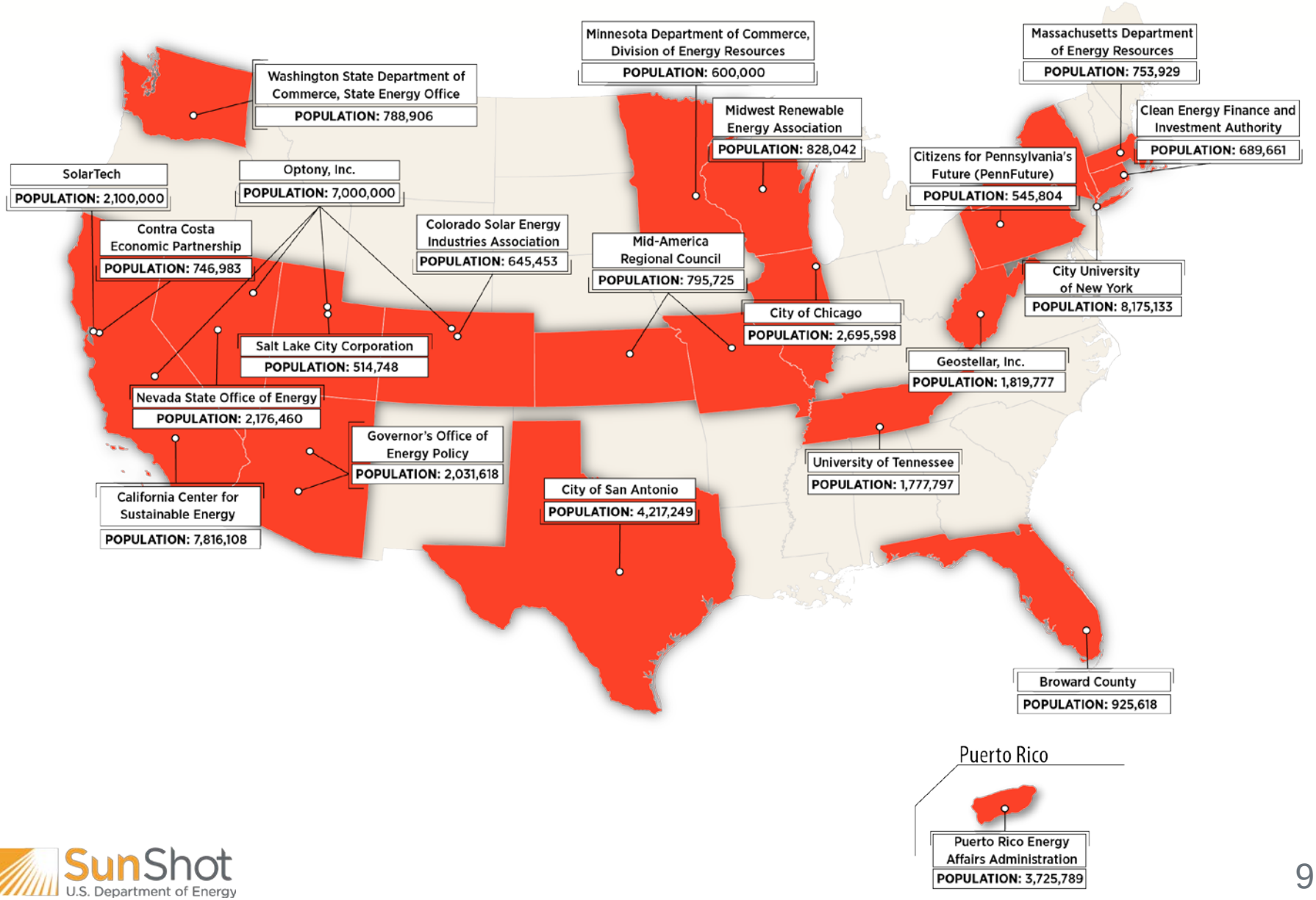
Who's leading the way:



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Who helped get you here:

The DOE Rooftop Challenge Team

- **HQ Staff (Washington, DC)**
  - Josh Huneycutt, Lead
  - Rose Marie Holsing, Project Officer
- **Contracting (Golden, CO)**
  - Diana Bobo, Contracting Officer
  - Lalida Crawford, Contracting Officer
  - Grant Specialists: Todd Wilson, Jeannette Singsen, Clay Pfrangle, Kenneth Outlaw, Uriel Trujillo, Dan Hays, Fania Gordon, Sarah Clemmens
- **Database, Analytics, and Visualization (NREL)**
  - Jason Coughlin
  - Johanna Levene
  - Nick Muerdter
- **Communications & Outreach (NREL)**
  - Tina Eichner
  - Carol Anna
  - Courtney Kendall
  - Alexis Powers
  - Linh Truong

Video Introductions

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Team Activity Overview

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Rooftop Solar Challenge: Focus Areas

GENERAL		
Stakeholder Outreach	15	1
Cost Reduction Emphasis	6	1
Deployment Emphasis	2	1
Media/Consumer Engagement	2	2
Training	9	2

PERMITTING PROCESS		
Application	5	5
Change Structural Requirements	3	1
Information Access	13	3
Online Use	15	2
Point-person / Hotline	1	
Permitting Process Time	4	6
Fee	5	4
Create A Flat Fee	2	
Model Process	13	
Standardization Across Jurisdictions	12	
Inspection	3	3
Communication Protocol with Utility	1	
Survey and Analysis of Current Conditions	10	

Primary Focus Area

Secondary Focus Area

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Rooftop Solar Challenge: Focus Areas

INTERCONNECTION PROCESS		
Application	3	3
Information Access	5	
Online Use	7	
Interconnection Process Time	1	4
Standardization Across/Within Utilities	3	3
Inspection	2	
Survey and Analysis of Current Conditions	8	

FINANCING OPTIONS		
Third-Party Ownership	8	6
Direct Finance Options	2	11
Community Solar	3	8
Investigate Options	11	1
Survey and Analysis of Current Conditions	7	1

PLANNING & ZONING		
Solar Rights & Access	2	4
Zoning	8	2
Updating Building Codes	3	3
New Construction	3	3
Survey and Analysis of Current Conditions	11	2

NET METERING & INTERCONNECTION		
Net Metering Standards	1	
NM Analysis and Develop Recommendations	12	2
Interconnection Standards	2	1
IC Analysis and Develop Recommendations	11	2

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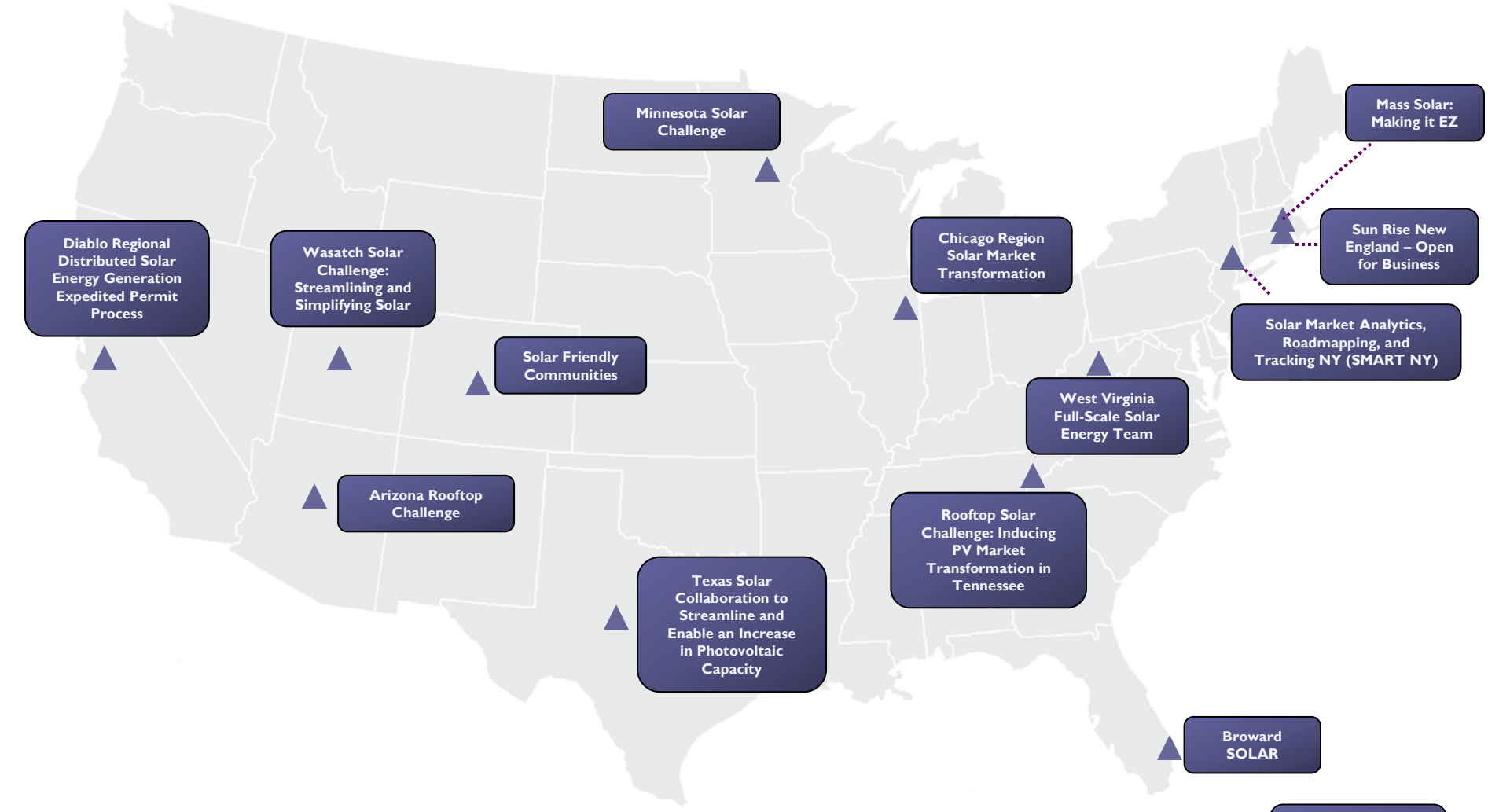
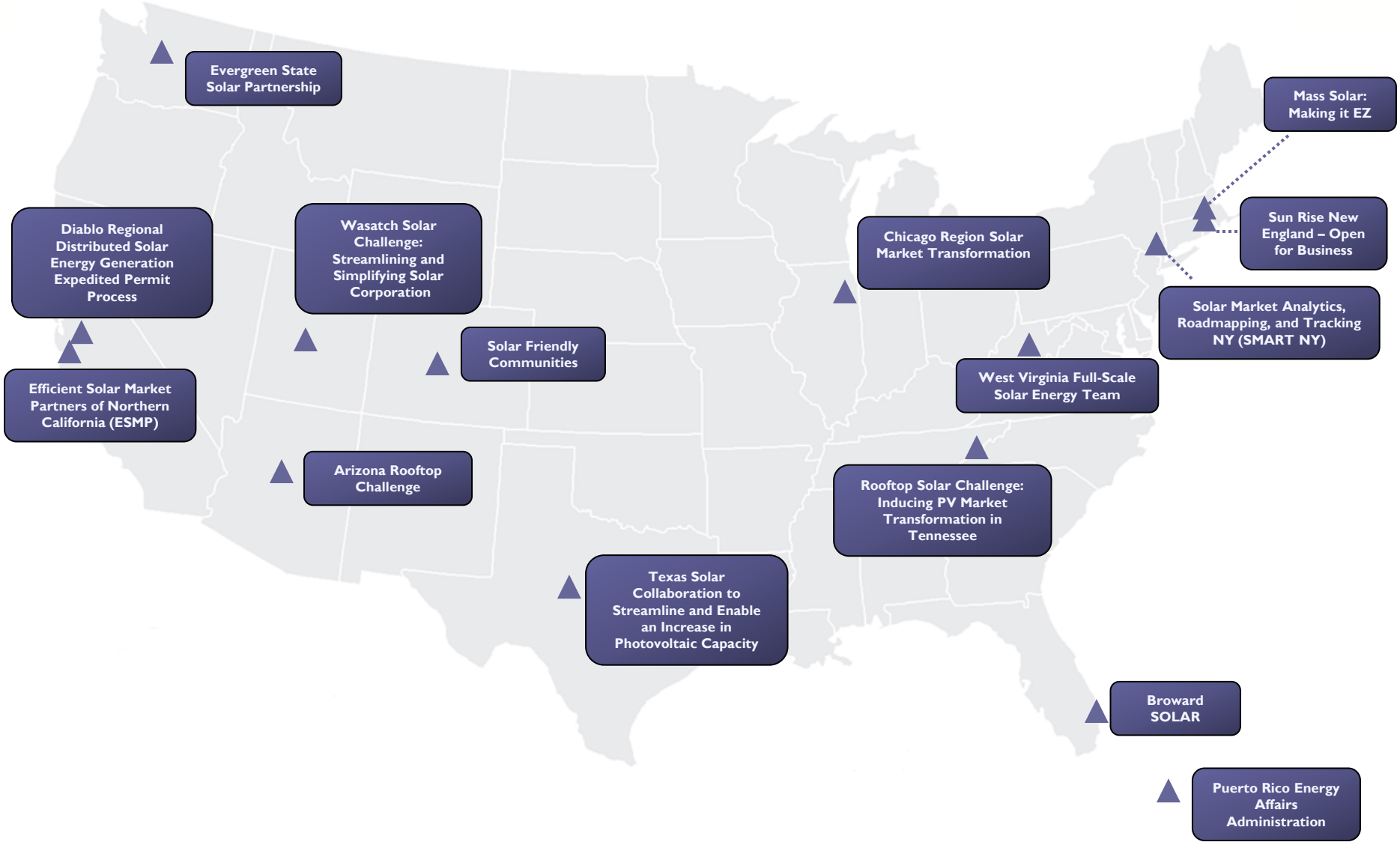
Primary Focus Area Secondary Focus Area

Stakeholder Outreach

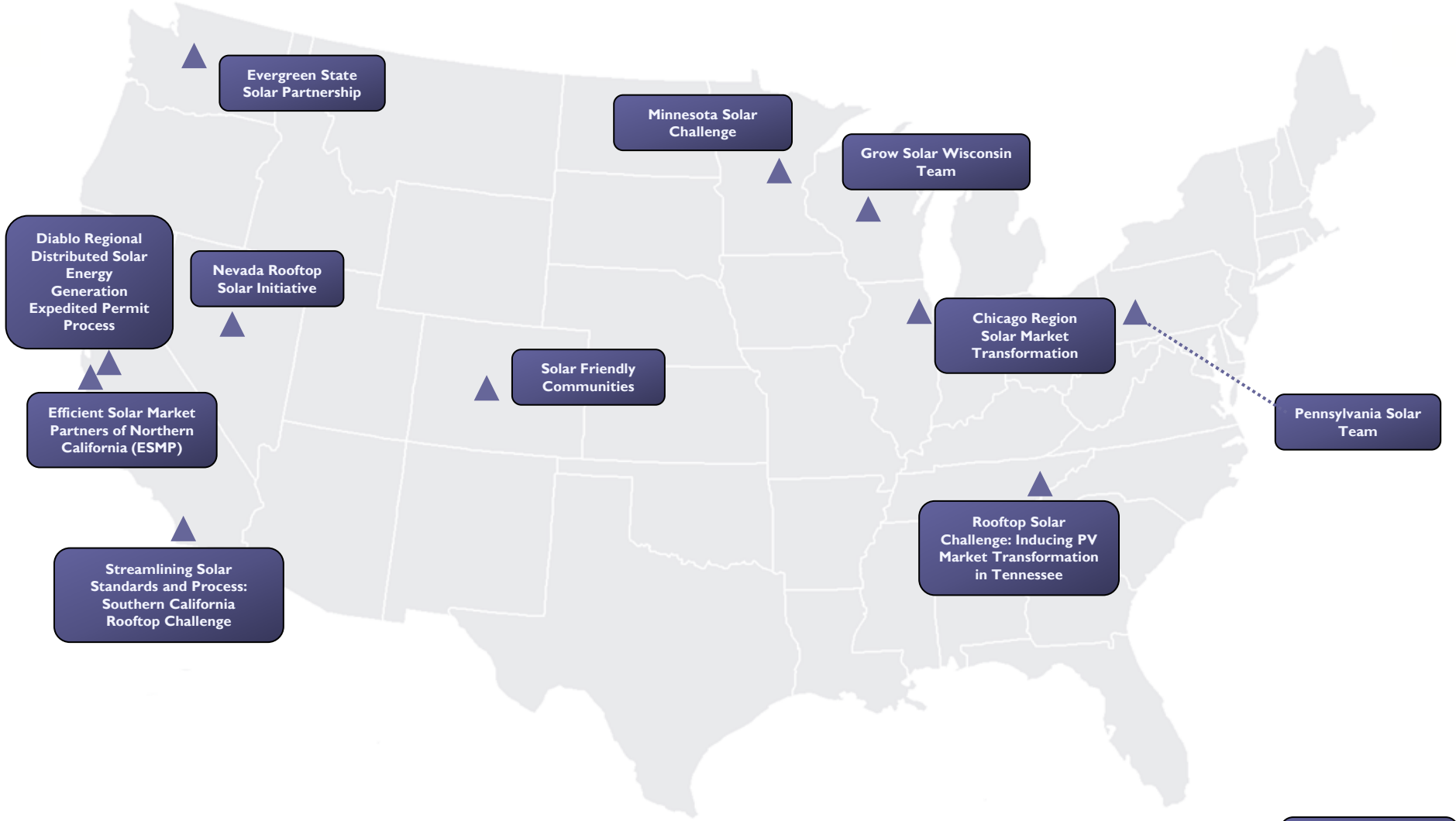
Information Access



Online Permitting



Standardization Across Jurisdictions



Third Party Ownership Issues

Pursue Community Solar Options

Solar-Friendly Zoning

Update Building Codes

Net Metering Analysis

At "The Starting Line": Baseline Statistics

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"The Starting Line"

1B - What is the average number of business days between application submission and decision (issuance or denial) regarding permit? Provide exact answer in terms of hours (e.g., 5 days should be entered as 40 hours)

Residential - 90 Commercial - 179

2B - What is the average number of business days between application submission and utility decision (approval/denial) for installation to proceed? Provide exact answer in terms of hours (e.g., 5 days should be entered as 40 hours)

Residential - 74 Commercial - 122

3B - What is the average number of business days from inspection request to actual inspection? Provide exact answer in terms of hours (e.g., 5 days should be entered as 40 hours)

Residential - 23 Commercial - 24

4B - What is the average number of business days from the inspection request to actual inspection? Provide exact answer in terms of hours (e.g., 5 days should be entered as 40 hours)

Residential - 38 Commercial - 43

"The Starting Line"

5B - What is the average total for the applicable permit fee(s) for typical installations? Provide exact answer in dollars.

Residential - $202 Commercial - NA

6B - What is the typical window of time given to the installer for final onsite inspection? Provide exact answer in terms of hours (e.g., 5 days should be entered as 40 hours).

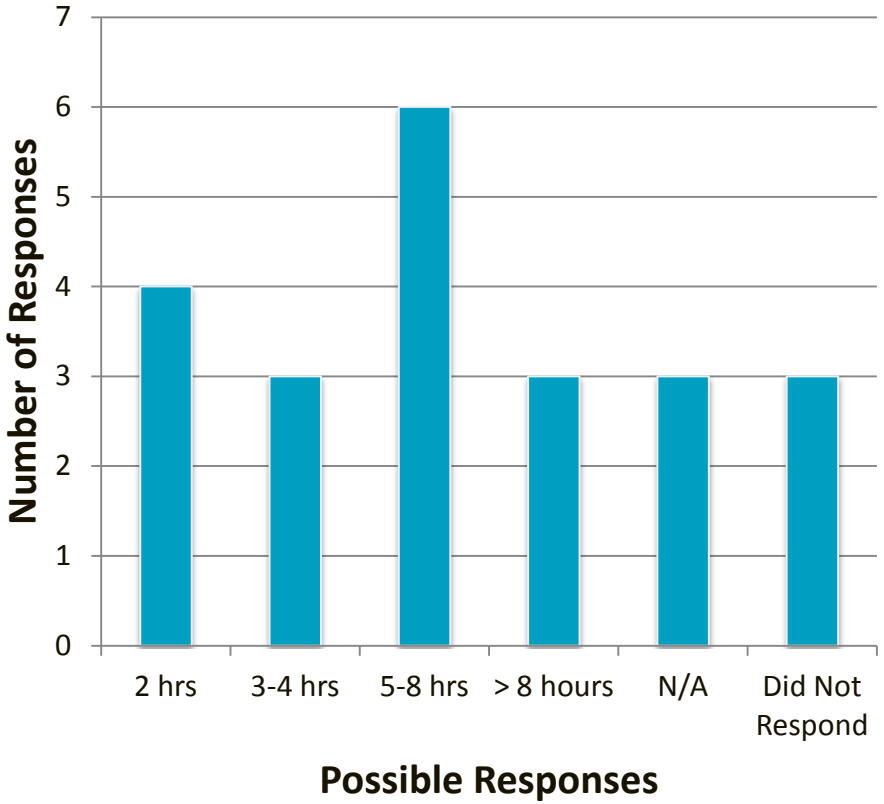
Residential - 6 Commercial - 6

7B - What is the typical window of time given to the installer for final onsite inspection? Provide exact answer in terms of hours (e.g., 5 days should be entered as 40 hours)

Residential – 3.5 Commercial - 6

Question #6B: What is the typical window of time given to the installer for final onsite inspection? Provide exact answer in terms of hours – Permitting Process

Frequency of Responses: Residential

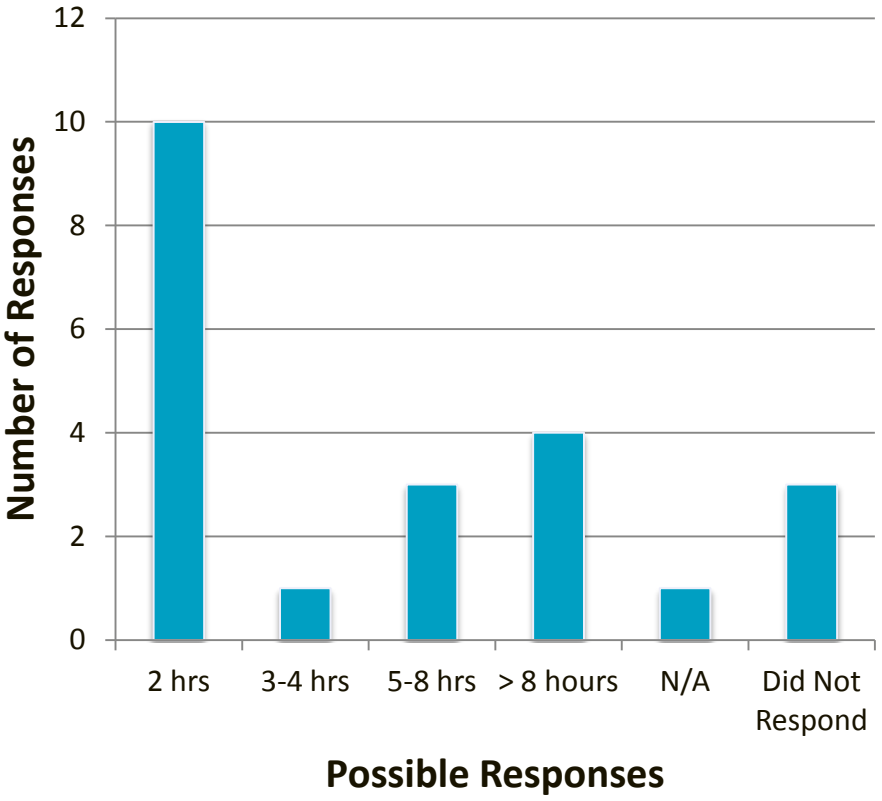


Team Scores: Residential

2 hrs	3-4 hrs	5-8 hrs	> 8 hours	N/A	Did Not Respond
San Antonio	Richmond	Mid-America/KC	Salt Lake City	SolarTech Bay Area	Minnesota
Washington	City University of New York	Chicago	Nevada	West Virginia	New England
Massachusetts	California - CCSE	Arizona	Puerto Rico	Pennsylvania	Optony/ Southwest
Broward County		Colorado			
		Univ of Tennessee			
		Milwaukee			

Question #7B: What is the typical window of time given to the installer for final onsite inspection? Provide exact answer in terms of hours – Interconnection Process

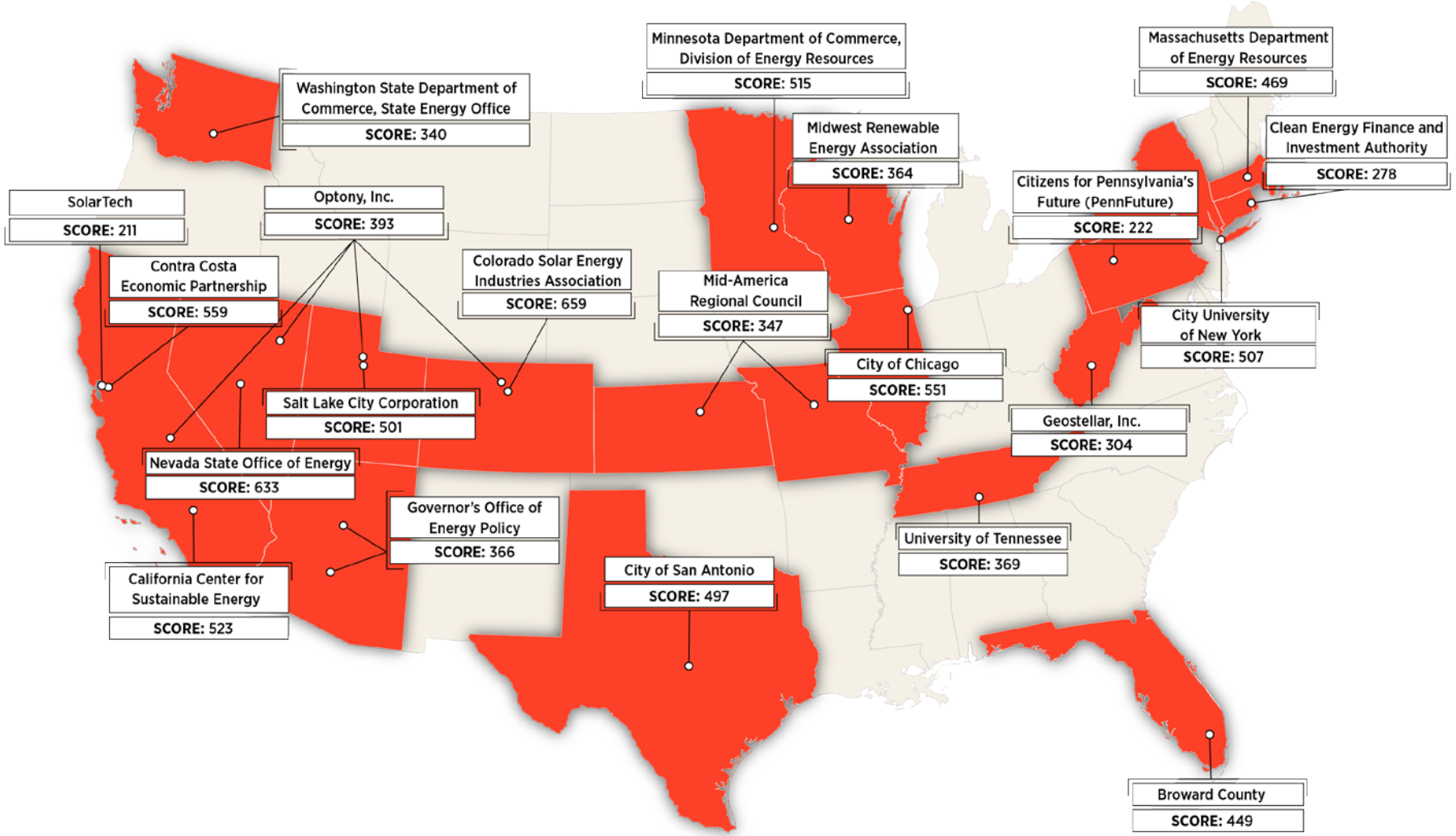
Frequency of Responses: Commercial



Team Scores: Commercial

2 hrs	3-4 hrs	5-8 hrs	> 8 hours	N/A	Did Not Respond
San Antonio	Mid-America/KC	Univ of Tennessee	Pennsylvania	West Virginia	Minnesota
Chicago		Arizona	Richmond		New England
Washington		California - CCSE	Puerto Rico		Optony/South west
City University of New York			SolarTech Bay Area		
Salt Lake City					
Broward County					
Massachusetts					
Colorado					
Milwaukee					
Nevada					

Baseline Market Assessment Scores



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Questions?

Getting the Word Out
Part 1: Communications Resources

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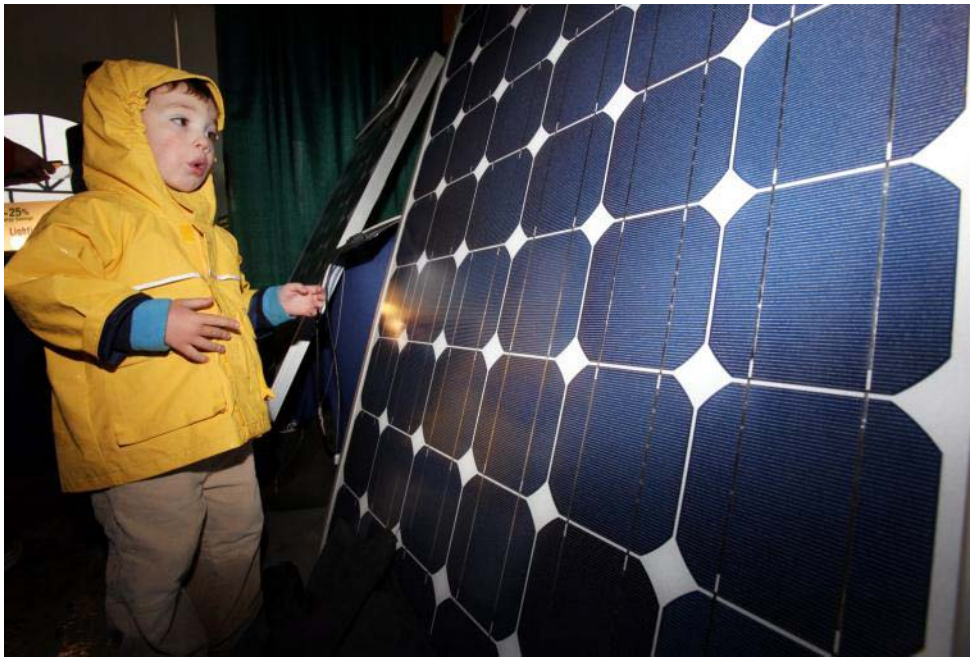
Communications Resources

- Identity Guidelines
- Logos
- Media Release Template
- PowerPoint Template



Identity Guidelines

- Purpose:
  - Help Rooftop Solar Challenge awardees preserve and protect the SunShot Initiative and Rooftop Solar Challenge brand identities
  - Encourage consistency, quality, and accuracy of all communications products
  - Provide the information you need to communicate about your Rooftop Solar Challenge project.
- Include: naming conventions, messaging, logo usage

Not SunShot

- The Rooftop Solar Challenge is
  - NOT the SunShot Initiative
  - Funded through, or "powered by" SunShot
- Correct: Our Rooftop Solar Challenge project
- Incorrect:
  - Our SunShot Project
  - Our SunShot Initiative
  - Our SunShot Team

Logos for Your Use

Media Release Template

- Announce your program's launch to your own stakeholders
  - Template language is approved by DOE
    - Keep Secretary Chu's quote as is – no changes!
  - Add-water-and-stir format makes this easy
    - Fill in your program's details
  - Send to target media in your region
  - Send us a copy, too!
    - Tina Eichner – tina.eichner@nrel.gov

PowerPoint Template

- Use for Rooftop Solar Challenge presentations

Questions?

Thanks to all of you for your time and efforts to get the word out!

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Carol Anna

Communications Support

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Getting the Word Out
Part 2: Online Engagement

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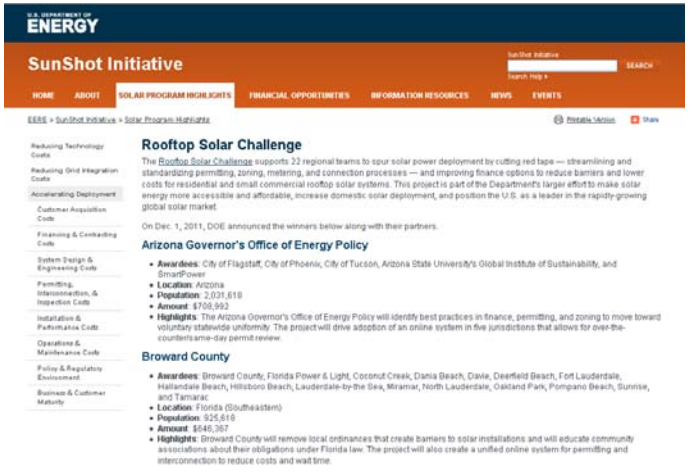
Help me help you

Websites

- SunShot Initiative
  - Program site
  - energy.gov/sunshot
    - Home page features
    - Project page updates
    - Team page details
- Rooftop Solar Challenge
  - Project site
  - eere.energy.gov/solarchallenge/
    - Challenge overview
    - Data summaries
    - Team highlights



Social Media

- Facebook
  - Pages (not Groups)
  - Likes
    - U.S. Department of Energy
    - Other teams
    - Solar Outreach
    - EERE
    - NREL
  - Posts
    - Think interactive

Social Media (cont.)

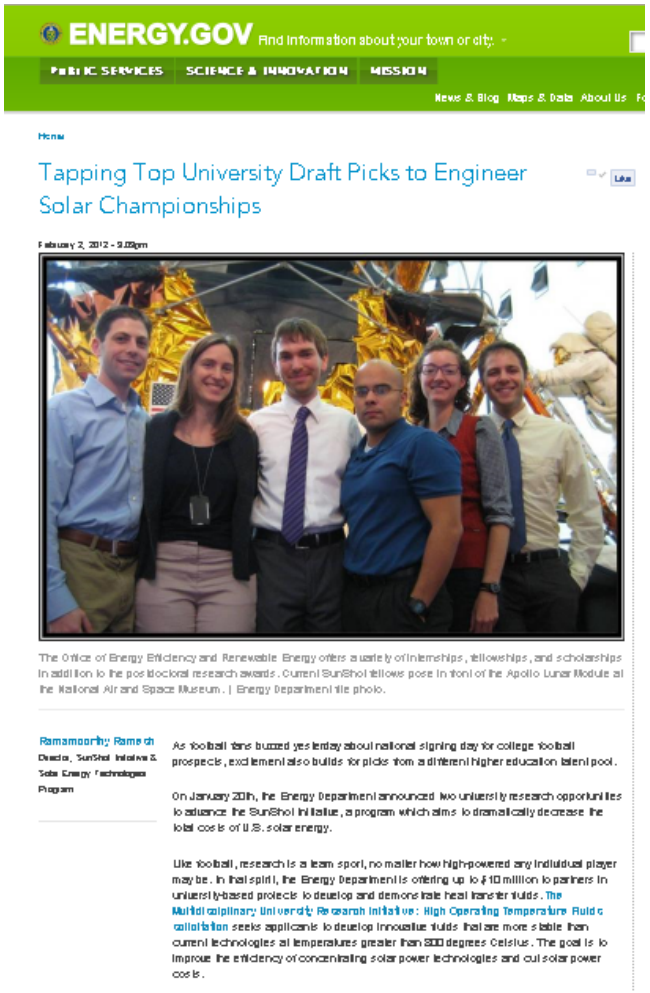
- Twitter
  - Follows
    - @energy
    - @SolarOutreach
    - @LocalManagers
    - @APA_Planning
    - @ICLEI_USA
    - Other teams
  - Hashtags
    - #solarchallenge
  - Best practices
    - Mentions
    - Retweets
    - Direct messages

Podcasts

- Audio Interviews
  - Schedule one call with each team
  - Integrate with Skype
  - Post to website
  - Include in SunShot weekly e-newsletter

Blogs

- Energy.gov
  - Communicate milestones
    - Future meetings
    - Program successes



I am so excited about the beginning of our relationship!

Questions?

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@SunnierSideUp

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SunShot Solar Energy Resource Center Information, Resources, and Tools

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Solar Energy Resource Center

- The Solar Energy Resource Center is a collection of resources on solar technologies and best practices to implement solar, both at the local level and with large-scale deployment.
- Resources include articles, case studies, fact sheets, how-to guides, model rules and ordinances, presentations, sample government documents, technical reports, tools, and webinars.

www4.eere.energy.gov/solar/sunshot/resource_center/

Solar Energy Resource Center

- These resources were developed by industry, local government, university, and national laboratory partners through the DOE Solar Program and SunShot Initiative.

- To access resources, enter keywords in the search box, select a state on the map, or check the faceted categories in the left hand column.

Questions?

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Tina Eichner

SunShot Communications

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Additional Resources For Teams

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Solar Instructor Training Network

Online PV Training for Code Officials

IREC
Interstate Renewable Energy Council

Objective –

To educate code officials in using proper methods for:

- Inspecting residential solar PV installations
- Detecting common installation mistakes
- Applying an expedited permit process

- Training uses DOE's NTER online training platform
- Training to be available in May
- Hands-on companion workshops are being planned by Regional Training Providers and SolarTech's 3.0 initiative

Online PV Training for Code Officials

Modules

1. Roof Mounted Arrays and Wire Management
2. Electrical: Roof and Ground Mounted
3. Ground Mounted Arrays
4. Appropriate Signs
5. Equipment Ratings
6. Expedited Permit Process

This content will be presented via text, drill-down information, and a variety of media including still photos, videos, and selected 3D models.

Capstone

- How to Identify Solar Installation Problems

This will be an immersive, highly interactive lesson using 3D models and game-based interaction techniques.

Innovative Fellowship Program

CODE for AMERICA

Code for America helps governments work better for everyone with the people and the power of the web.

Founded in 2009, Code for America held its inaugural fellowship in 2011 with 19 fellows and three cities. In 2012, Code for America has grown to connecting 26 fellows and eight cities.

Through the Fellowship program Code for America makes it easy and attractive for the web generation to give back by connecting developers and designers with cities to work together to innovate.

In 2012 the fellowship program is partnering with local governments to:

- **Make business permitting as easy as turbo tax**

- **Identify vacant properties and encourage community reuse**

- **Support local government efforts in fighting blight**

- **Develop applications that use open standards and allow better access to government**

- **Support community engagement**

Code for America is accepting applications to the 2013 Fellowship Program. You must apply by March 31st.

For more information go to:

http://codeforamerica.org/cities

And of course, each other.

- DOE will facilitate interaction regionally and nationally among teams
  - Quarterly regional calls
  - Working groups for various topics (e.g., online permitting, community solar)
  - National meeting in Q3 of the project (details TBD)

- Collaboration is key!

Recap & Next Steps

- DOE:
  - Provide webinar slides and related materials
  - Schedule one-month check-in calls for each team
  - Set up new award orientation all-hands call
- Challenge Teams:
  - Complete all database entries by next Friday, 3/9/2012
  - Get the word out
  - Tap into existing resources
  - Contact other Challenge Teams in your region

GO!

Questions?

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THANK YOU!

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