Communities Harnessing the Sun:

NVRC Members Become More Solar-ready through SolSmart

Presented by SolSmart to:

MWCOG – BEEAC Meeting and
Solar Market Workshop Series Kick Off

September 14, 2017

SUNSHOT Funds SolSmart

MISSION

To make solar energy cost-competitive with traditional energy sources before the end of the decade.

GOALS

The SunShot Initiative announced on 9/13/17 that it has met – three years ahead of schedule -- its goal of reducing the total installed cost of solar energy systems (utility scale) to $0.06 per kilowatt-hour (kWh) by 2020. Yesterday SunShot announced its new goal of $0.03 per kWh by 2030.

SOLSMART'S GOAL

To make it faster, easier and more affordable for Americans to choose solar by providing technical assistance to 300+ local governments around the US by October 2018 to demonstrate they are "open for solar business."

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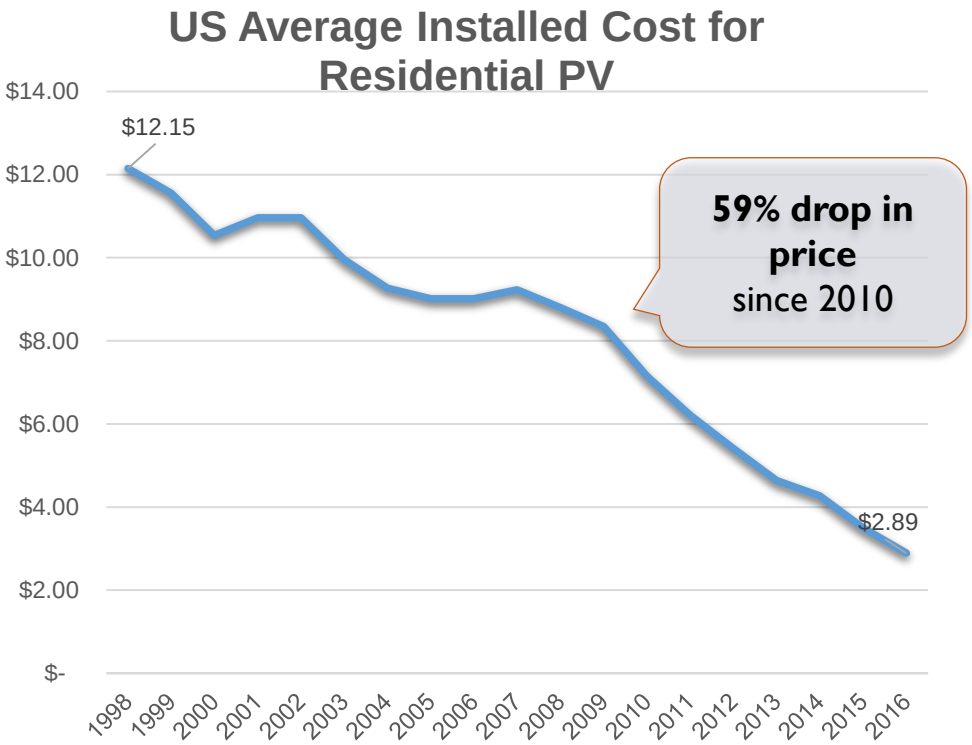
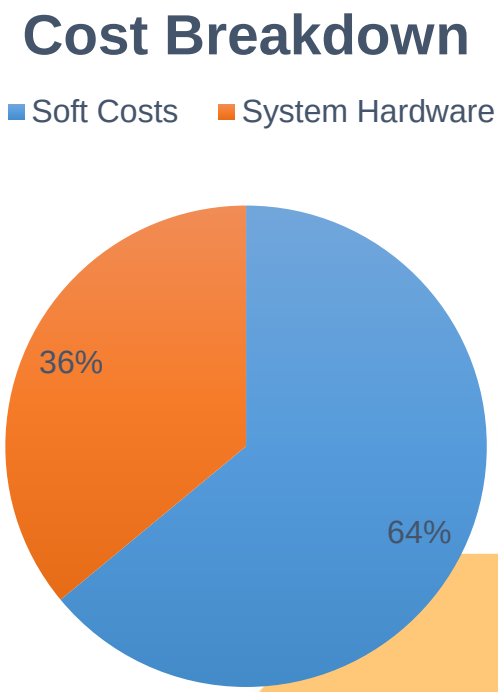
Solar Costs in the U.S





Currently soft costs – administrative processes and associated costs – can account for up to **64 percent** of the total system price.

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Sources: "Tracking the Sun VIII: The Installed Cost of Photovoltaics in the US from 1998-2014" (LBNL); and "2016 Solar Market Insight Year in Review" (SEIA/GTM).

SolSmart's Premise

1. Soft costs are variable costs; if unmanaged they slow solar market growth.
2. Soft costs can artificially shrink the number of places where solar is financially viable, thereby denying communities the economic benefits related to solar.
3. **LOCAL GOVERNMENTS have a key role to play in reducing barriers.**

SolSmart's No-Cost Technical Assistance

- All communities pursuing SolSmart designation are **eligible for no-cost technical assistance** from national solar experts.
- On average, a community can expect **100 hours** of technical assistance.
- Technical assistance is designed to **help a community make tangible changes in policies, standards, processes, and operations so the results are measurable, repeatable and scalable. Designation demonstrates a community's achievements on that pathway.**
- TA also may be available to help designated communities achieve higher levels of designation by continuing to focus on those policy, ordinances, business processes, operational changes, and communications that further **support transparency, standardization, regulatory certainty, and greater solar investment and finance.**

SolSmart Designation Structure

Permitting

Planning, Zoning & Development Regulations

Solar Rights

- ❑ Develop local process to enable solar rights through a solar access ordinance.

Inspection

- ❑ Provide cross-training of inspection and permitting staff on solar PV via in-person or online resources. (Req. for Silver & Gold)

Construction Codes

- ❑ Develop and provide Solar Ready Construction Guidelines for developers to enable lower cost installation of future solar installations.

Community Engagement

- ❑ Support or host a community-group purchase program (e.g., Solarize).

Utility Engagement

- ❑ Discuss community or shared solar programs with the local utility.

Market Development & Finance

- ❑ Install solar capacity on local government facilities.

SolSmart's Work with NVRC

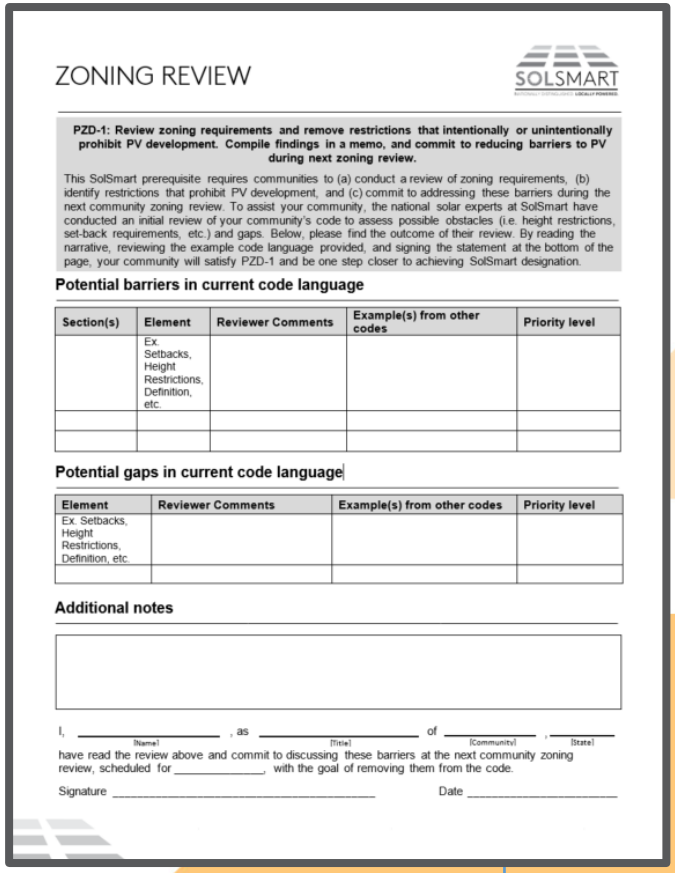
My job is to support the solar conversation and deliver TA within each community so it has more capacity than before to make tangible and durable changes where it wants in policies, processes, and practices. Communities achieve SolSmart designation signifying they are "open for solar business." Examples of TA delivery include:

- Reviewing zoning codes, conducting gap analysis, sharing best practices nationwide, and providing potential language for consideration in future code amendments
- Delivering free-of-charge training to the staff of NVRC local governments on state-of-the art solar permitting and inspection processes and approaches in the US, and customizing those to standardize and streamline within the region
- Engaging permitting staff in evaluating existing permitting business processes, assessing process needs, identifying operational priorities, and engaging IT staff in change management
- Providing research support to benchmark solar permit fees, give visibility to solar equipment and property tax exemptions, and other solar incentives, rebates, and discounts within the region

SolSmart Technical Assistance Delivery

TA provision through a variety of means:

- ❑ Online
  - ❑ Resource catalog
  - ❑ Email
  - ❑ Webinars
- ❑ Over the Phone
  - ❑ Clearinghouse calls
  - ❑ Conference calls
- ❑ In person
  - ❑ Site visits
  - ❑ Technical workshops/seminars
  - ❑ Advisors
- ❑ Peer-to-peer



ZONING REVIEW

SOLSMART

PZD-1: Review zoning requirements and remove restrictions that intentionally or unintentionally prohibit PV development. Compile findings in a memo, and commit to reducing barriers to PV during next zoning review.

This SolSmart prerequisite requires communities to (a) conduct a review of zoning requirements, (b) identify restrictions that prohibit PV development, and (c) commit to addressing these barriers during the next community zoning review. To assist your community, the national solar experts at SolSmart have conducted an initial review of your community's code to assess possible obstacles (i.e. height restrictions, set-back requirements, etc.) and gaps. Below, please find the outcome of their review. By reading the narrative, reviewing the example code language provided, and signing the statement at the bottom of the page, your community will satisfy PZD-1 and be one step closer to achieving SolSmart designation.

Potential barriers in current code language

Section(s)	Element	Reviewer Comments	Example(s) from other codes	Priority level
	Ex. Setbacks, Height Restrictions, Definition, etc.			

Potential gaps in current code language

Element	Reviewer Comments	Example(s) from other codes	Priority level
Ex. Setbacks, Height Restrictions, Definition, etc.			

Additional notes

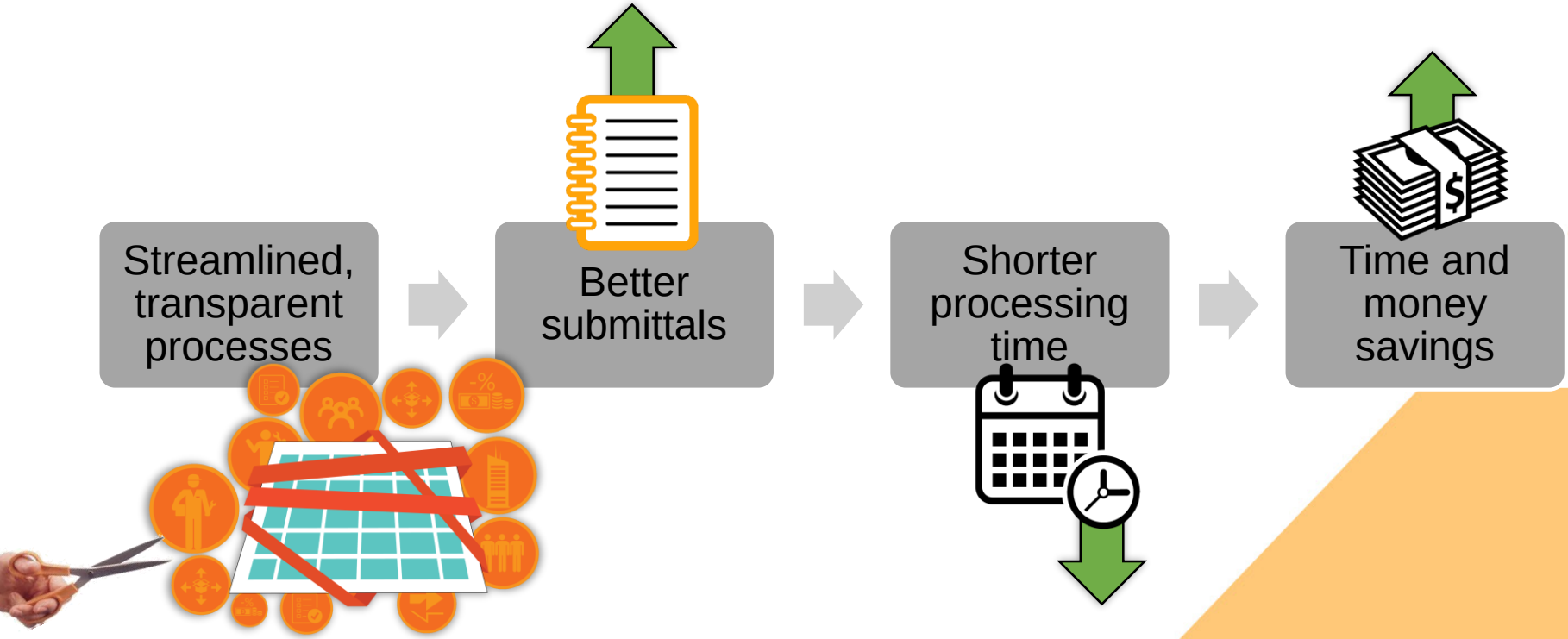
I, _____ [Name], as _____ [Title] of _____ [Community], _____ [State] have read the review above and commit to discussing these barriers at the next community zoning review, scheduled for _____, with the goal of removing them from the code.

Signature _____ Date _____

TA providers are support personnel who do leg work the community has requested to increase its own capacity for more solar.

Local Benefits of Reducing Soft Costs

Streamlining processes at the local level can free up staff time to address other priorities.



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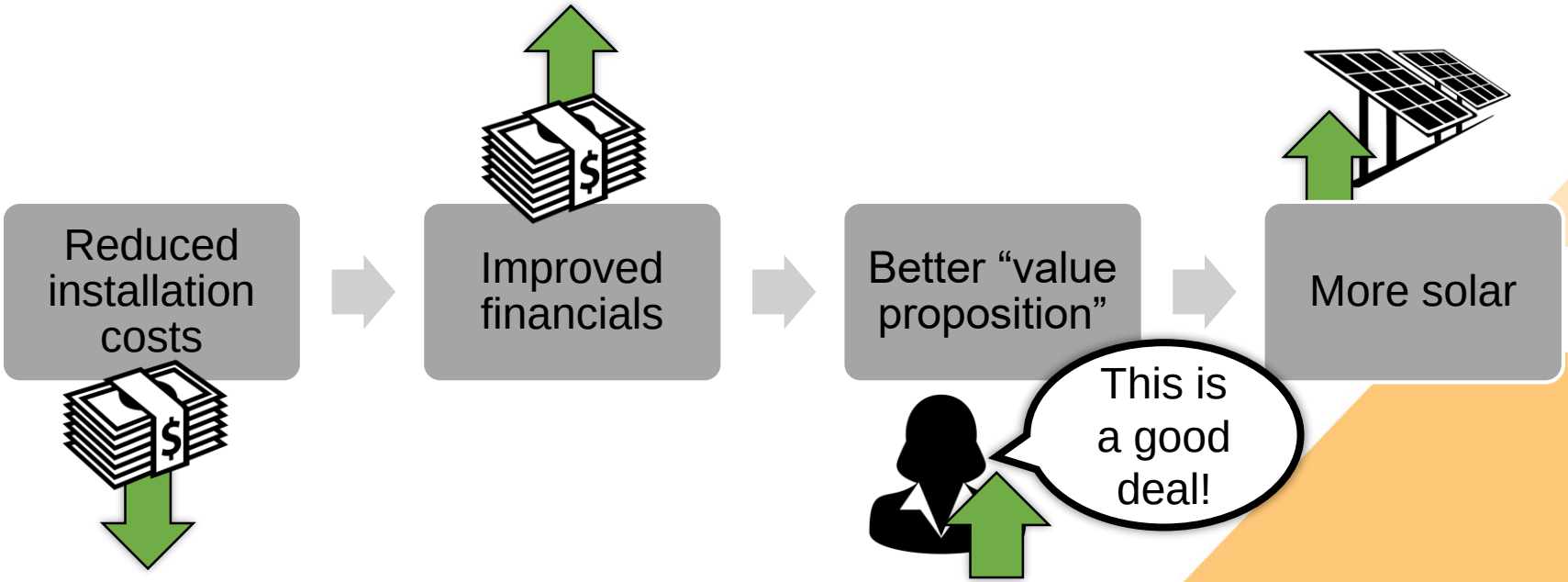
Sources: LBNL, IREC

Market Benefits of Reducing Soft Costs

Streamlining local regulatory processes can reduce the cost of a typical system by **$2,500**. Onerous permitting procedures, for instance, can add **$700** to the installed cost.



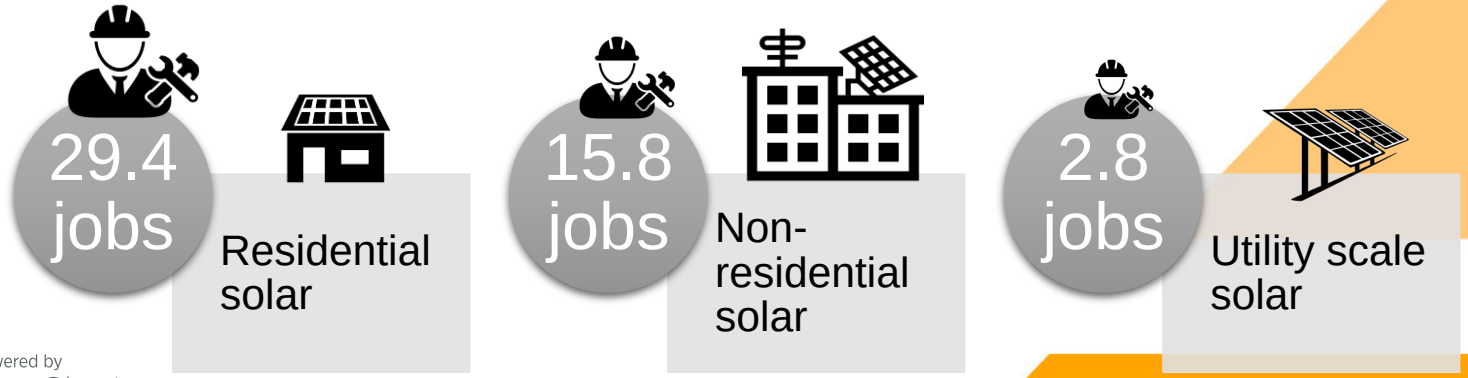
Societal Benefits of Reducing Soft Costs

Support American businesses

- 8,601 U.S. businesses comprise the solar value chain. All but a handful are small businesses.
- Installers avoid multiple jurisdictions in their service areas based on onerous permitting.

Create American jobs

- There are over **260,077 solar workers** in the U.S.
- **One in fifty jobs created** in 2016 was in the solar industry.
- 20% annual growth from 2012 – 2015 and another 25% in 2016.



Sources: Clean Power Finance (Spruce); The Solar Foundation

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Questions?

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