

State & Local Governments: Partners for Reducing Solar Costs

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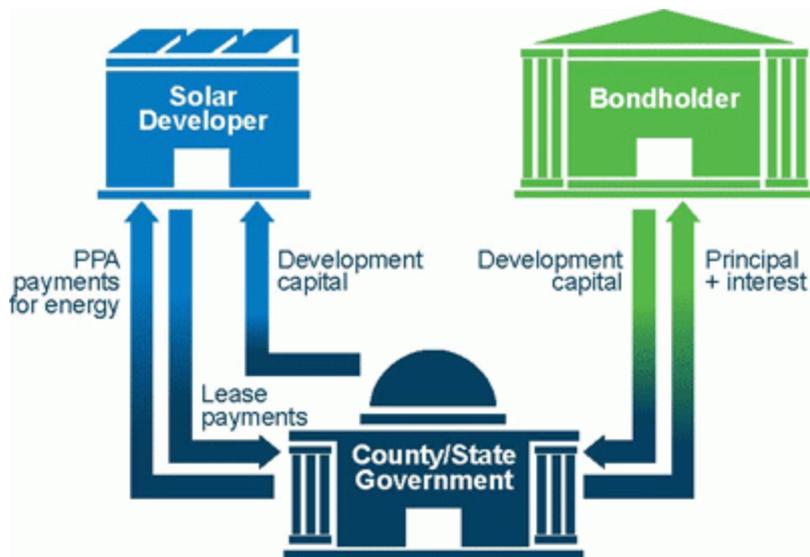




- ▶ A national coalition of state and municipal clean energy funds and agencies
- ▶ Information sharing among the members
- ▶ Work with the federal government, industry, and other stakeholders to promote renewable energy markets and technologies

www.cleaneenergy.org

Bond-PPA Hybrid: An Example of Public/Private Partnership



See “Financing PV at Government Sites with PPAs and Public Debt” by NREL:
<https://financere.nrel.gov/finance/content/financing-solar-pv-government-sites-ppas-and-public-debt>

- ▶ Public entity issues RFP for a solar developer
- ▶ Public entity sells bonds (taxable) to finance project(s)
- ▶ Public entity enters into a lease and a PPA with the developer
- ▶ Advantages: cheaper financing, tax credits
- ▶ Disadvantages: transaction costs
- ▶ “Morris Model”

From Gallup Poll (March 7–10, 2013)

- ▶ Question: “Do you think as a country the US should put more emphasis, less emphasis, or about the same emphasis as it does now on producing domestic energy from each of the following sources?”

Energy Source	United States	East
Solar	76%	79%
Wind	71%	74%
Natural gas	65%	62%
Oil	46%	38%
Nuclear	37%	38%
Coal	31%	25%

The Context

- ▶ Solar energy is highly popular with the public
- ▶ A large number of homeowners and small businesses would like to install solar
- ▶ Solar can be sited on or at a large percentage of homes, businesses, and institutions
- ▶ Solar energy can help governments achieve environmental goals and electricity system goals

Why State and Local Governments Can Be Allies

- ▶ Many governments want to support solar and make installations easier
 - To accomplish their goals
 - To be responsive to constituents
- ▶ It's in governments' interests to reduce solar costs
 - A step towards accomplishing goals and satisfying constituents
 - Reduced need for government incentives

It's Complicated: Challenges to Bringing Down Solar Costs

- ▶ Many factors contribute to soft costs
- ▶ Imperfect knowledge and lack of familiarity
 - Government officials don't always understand all the ways in which government rules and actions impact solar costs
 - Most potential purchasers do not understand the finances of solar
- ▶ Solar's popularity leads to many more inquiries than sales
 - It seems like it should work anywhere
 - Some consumers explore doing a project even when the site is problematic and when they will ultimately find the economics of installing solar unacceptable
- ▶ For municipalities, solar is just one of numerous issues officials deal with

Partnering with Governments

- ▶ Find out what useful information state and local agencies have and how they can help you target your efforts. For example:
 - In CT, the Clean Energy Finance and Investment Authority studied residential permit fees and found them ranging from \$200 to almost \$1500.
 - CA Solar Statistics includes a wealth of useful info
- ▶ Help them understand the situation for solar in their jurisdiction
 - E.g., the number of permits needed and why that can be a problem
 - Why different rules in different jurisdictions is a problem
 - Quantify impacts

Questions to Ask to Recruit State and Local Government Help

- ▶ What tools do they have? (e.g., consumer info to reduce tire-kickers)
- ▶ What programs and outreach efforts are underway or planned?
 - CEFIA promoting online permitting.
 - MA Department of Energy Resources encouraging municipalities to adopt a single total fee per kilowatt
 - Rogue Valley, OR Solarize variant
 - Municipal SunShot projects
- ▶ Where are the most active grassroots groups and can they encourage municipalities to be partners?
- ▶ What can governments do that is both useful and relatively easy?
 - Avoid requests that are hard to act upon
 - It's best when the ask comes from the industry as a whole

What You Can Do for Your Government Allies

- ▶ Provide them with useful information and data—e.g., observed trends
- ▶ Provide feedback and advice
- ▶ Give credit when deserved

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