

# SUSTAINABLE JERSEY SOLAR SITING INITIATIVES

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# Problem (State of the Issue/Market)

- ❖ NJ is a leader in solar energy systems
  - 15,700+ solar development projects with 770MWs of energy capacity
  - Q1 2012 - installed 173.8 MW of solar power; California installed 148.4 MW
- ❖ Solar projects are overwhelming municipalities
- ❖ No coherent, consistent message from the state regarding solar development, especially on farms.
  - State legislation both encourages farmland preservation as well as solar development on farms.
- ❖ No clear guidance or accepted standards available to municipalities for properly siting these projects.
- ❖ Interaction between municipalities and solar developers is ad-hoc; Inconsistent, unpredictable and inefficient process

# Needs

- ❖ Clear up misconceptions surrounding solar (e.g. glare)
- ❖ Clear explanation of solar industry needs:
  - What is the process of construction? What is needed? How can municipalities shape this process? What can they modify? What can't they modify?
- ❖ Master Planning advice
- ❖ Define zoning, site design standards, and building codes that need to be considered and are appropriate for solar development

# Sustainable Jersey's Role

- ❖ Organize and convene a working group of experts on solar
- ❖ Alleviate confusion on state laws
- ❖ Develop guidance material and framework/considerations for ordinance for solar siting
- ❖ Define what zoning and site design standards that need to be considered and are appropriate for solar development
- ❖ Distill and disseminate best practices

# Completed Work

- ❖ Gathered ordinances from around NJ
- ❖ Identified common issue areas
- ❖ Reviewed model ordinances from other states and organizations
- ❖ Partnered with NJLM to create working group
- ❖ Developed background paper for distribution to working group
- ❖ Held forum with all interested parties to identify what municipalities need

# Solar Siting: Common Issue Areas<sup>1</sup>

- ❖ Setback requirements
- ❖ Placement of panels on roofs
- ❖ Height restrictions
- ❖ Minimum lot size for ground mounts
- ❖ Restrictions on portion of lot that can be utilized for solar systems
- ❖ Screening requirements
- ❖ Impervious surface restrictions

<sup>1</sup>Comments of the Solar Alliance on the New Jersey 2011 Draft Energy Master Plan. August 25, 2011

# Siting Standards Considerations

- ❖ Setback requirements
- ❖ Height restrictions
- ❖ Screening
- ❖ Mount type (roof vs. ground)
- ❖ Sound levels
- ❖ Signage
- ❖ Siting on historic sites
- ❖ Decommissioning/  
Abandonment
- ❖ Enforcement and penalties
- ❖ Soil erosion
- ❖ Impervious Coverage

# Local Recommendations

- ❖ Consult planning documents:
  - Master plan revisioning
  - Open space plan
  - Farmland preservation plans
  - Environmental/natural resource inventory
- ❖ Work with utilities to identify locations that may be more appropriate and/or more likely to have solar development interest.
- ❖ Identify areas to:
  - Encourage solar:
    - Brownfields
    - Large rooftops
    - Infill
    - Parking Decks
  - Protect:
    - Woodlands
    - Agricultural areas
    - Natural resources
    - Greenfields
- ❖ Update Master Plan
  - include vision and information on solar energy; will support ordinances
- ❖ Develop and adopt ordinances and site design standards



# Next Steps

- ❖ Create guidance materials from forum input with working group
- ❖ Delaware Valley Regional Planning Commission (DVRPC)
  - Alternative Energy Ordinance Working Group (AEOWG). AEOWG developed a framework that aids municipalities in the development of appropriate zoning and permitting for solar energy systems
- ❖ Vet framework/ordinance through appropriate state agencies
- ❖ Disseminate best practices/guidance materials into a report with input from developers that include case studies and examples

# Other Resources & Initiatives

- ❖ EPA's "Re-Powering America's Land"
  - Tools and “decision trees” to help determine the solar and wind energy potential of contaminated lands and underutilized sites. These decision trees can help identify the most desirable sites for solar or wind installations from both a logistical and economic standpoint. <http://www.epa.gov/renewableenergyland/>  
[http://www.epa.gov/oswercpa/docs/solar\\_decision\\_tree.pdf](http://www.epa.gov/oswercpa/docs/solar_decision_tree.pdf)
- ❖ Philly Solar Guidebook <http://www.phila.gov/green/solarGuidebook.html>
  - Comprehensive guide providing details on the entire solar installation process. Provide an introduction to solar technologies and detail on system design.
- ❖ Interstate Renewable Energy Council
  - *Sharing Success: Emerging Approaches to Efficient Rooftop Solar Permitting* outlines the key procedural steps that commonly make up the local permitting process for rooftop solar. This chapter also identifies reforms taken by jurisdictions across the country to increase the speed, efficiency and clarity of the different components of the permitting process. The examples given will not be applicable in every jurisdiction, but can illustrate the variety of solutions available to improve the process, often in a manner that benefits solar applicants, the local government, and sometimes other non-solar permit applicants, as well. <http://www.irecusa.org/wp-content/uploads/Sharing-Success-final-version.pdf>
- ❖ California County Planning Directors Association (CCPDA) - Model Ordinance
  - ❖ California based – “Model Ordinance IS to be used by local governments as a STARTING POINT to write their own locally appropriate zoning ordinance to implement rules that Streamline the Solar PV Permitting Process AND Protect Farmlands and Environmentally Sensitive Habitats.”  
[http://www.ccpda.org/en/component/docman/doc\\_download/140-appendix-a-ccpda-model-of-permit-streamlining-ordinance](http://www.ccpda.org/en/component/docman/doc_download/140-appendix-a-ccpda-model-of-permit-streamlining-ordinance)

# New Jersey Contacts

## ❖ New Jersey League of Municipalities

- Mike Cerra

## ❖ Solar Energy Industries Association

- Katie Bolcar and Fred Zalczman

## ❖ NJ Board of Public Utilities

- Scott Hunter
- Mike Winka
- Gary Finger

## ❖ NJ Department of Environmental Protection

- Sarah Gentile
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