

# Best Management Practices for Solar Installation Policy in Kansas City and Beyond

# **Planning Improvements**

# **Step 1-3: Educate Homeowners**

# Provide homeowners and HOAs with recommended strategies

### **HOA Strategy 1: Develop design guidelines**

For property owners living in planned communities where a solar photovoltaic (PV) system is subject to the homeowner association's (HOA) ad hoc design review process, and/or where no solar guidelines are in place, it may be appropriate to recommend adoption of design guidelines either prior to or in conjunction with the consideration of a solar installation. Design guidelines could include the following:

- Solar units not mounted on the roof (ground-mounted) should be installed according to the local jurisdiction's zoning setback requirements. Any such structures may need to be concealed from neighbors' views, when reasonably possible.
- Aluminum trim, if used and visible, may be anodized or color treated, if necessary.
- Solar collectors, whenever possible, should be installed on the plane of roof material (flush-mounted).
- Solar units must be firmly secured to the roof in accordance with local building codes.
- A sample or illustrated brochure of the proposed solar unit, which clearly depicts the unit and defines the materials used, should be submitted with the application.
- Construction drawings for the proposed installation should be provided. Drawings should show the location and number of collectors, attachment to roof structure and location of any other exterior system components.
- Calculations should be provided showing the number and area of collectors required.
- Consider inclusion of guidelines outlining a maximum additional cost factor (e.g., the homeowner is not required to invest more than 5 or 10 percent of the total system cost into additional requirements for the HOA); if homeowners do meet the additional cost threshold, and they are eligible for approval of the project.

Create a built-in sunset provision for HOA guidelines, or require the establishment of a mandatory review of HOA guidelines after a specific period of time. The goal of such provisions is to enhance a community's design guidelines while ensuring the requirements are consistent with the community's current priorities and available technologies. New technologies not available when the guidelines were initially adopted could be given special consideration in connection with reviewing requests for approval. Variances should be allowed and granted when new products are in harmony with the intent of the design guidelines.

### **HOA Strategy 2: Adopt a green mission statement**

In lieu of amending existing covenant, conditions and restrictions (CC&Rs), work with the HOA to adopt a green mission statement, supported by the community.

### **HOA Strategy 3: Conduct a sustainability audit**

Conduct a sustainability audit. This would require review of the HOA's existing documents and would evaluate the need for changes to use restrictions, the association's authority to enact changes, the ability to set up programs and committees and ways to add flexibility for adjusting to future change (e.g., technological advancement). This audit would then be used to provide information to the HOA or an

advisory committee in order to allow them to garner support for changes and eventually update guiding documents.

Jurisdictions and regional advocacy organizations could assist developers and existing HOAs by providing template language to enable implementation of these strategies.

### **Homeowner strategy 1: Get involved**

Depending on the HOA's restrictions on solar, it is important to understand the steps that may be necessary for installing a solar system in your community, including:

- Investigate the community's restrictive covenants as well as local zoning ordinances, comprehensive plans and building codes.
- Understand who has the power to review the solar system design and their motivations.
- Work with local jurisdictions and regional solar advocacy organizations, such as Mid-America Regional (MARC), to develop solar educational materials and presentations targeted specifically for HOAs and subordinate HOA committees. Present materials at HOA board meetings in order to familiarize them with solar technologies and benefits.
- Join HOA boards and committees to advocate from within the organizations themselves.
- Specifically for homeowners:
  - » Before signing a contract for a solar PV system, get an opinion from the HOA and ARC (if required) or make the purchase contingent on HOA or committee approval
  - » Present the HOA and ARC with as much information as possible. Have the solar contractor provide you with the costs and projected energy production as well as a few alternatives. Be flexible to some adjustments to the system.

### **Examples**

Creekside, Oregon: HOA Solar Guidelines

These HOA guidelines outline the process for approval by the ARC, the standards by which the proposed solar array will be evaluated, and the requirements for the system.

http://lohrman.com/blogimage/ApprovedGuidelines.pdf

Houston, Texas: Woodlands Community Positive Deed Restrictions for Solar

Solar collectors are expressly permitted on all sides of the house with more restrictive language for collectors on the street side of the house. A covenant administration must approve installation of any solar collector on any aspect of the roof. http://l.usa.gov/QxglWK

Pearland, Texas: Village of Diamond Bay Homeowners Associations, Inc. Solar Energy Devices Guidelines

The homeowners association board adopted guidelines regarding solar energy devices after a review of the rights to adopt and enforce such regulations. http://bit.ly/NybXsy

Houston, Texas: Lakewood Cove Homeowners Association Solar Guidelines

The board of directors of the homeowners association adopted clear and definitive guidance regarding solar energy devices in connection with maintaining the aesthetics and architectural harmony of the community. http://lakewoodcovehoa.org/GuidelinesSolarDevices.pdf

# Sample HOA solar guidelines

The board adopts these guidelines to promote the use of solar energy for heating and cooling and to ensure uniform installation and design of solar energy systems.

- 1. Homeowners should first consider all existing structures and landscaping before selecting a site for any proposed solar system.
- 2. All plans must be preapproved by the Architectural Review Committee (ARC) prior to installation.
- 3. Preferred location of solar panels is either a ground-mounted array (on the side or rear of the house) or a rearfacing, roof-mounted array. Flush-mounted panels (i.e. the plane of the array is parallel to the roof) on a roof facing a street will be allowed if documentation is provided from the solar contractor indicating this is the only feasible location for a solar array. If panels are installed on a side or rear roof, the array may be tilted or raised if a variance is granted.
- 4. All components of the solar system should be integrated into the design of the home. The color of the solar system components should generally conform to the color of the roof shingles to the extent practical. Solar "shingles" that mimic the look of a composite shingle are acceptable but should match the color of the current roof shingles as much as is practical.
- 5. Pursuant to [insert applicable ordinance], the installation of all solar heating and cooling systems shall only be done by a licensed installer or journeyman plumber. Applications submitted to the ARC should include the following:
  - a. A diagram "drawn to scale" by the licensed contractor installing the system showing where the system will be installed:
  - b. Photos of the roof area where the array will be mounted;
  - c. Material to be used and/or manufacturer's description of the system, photos and/or pictures of the system and color of the system.
  - d. Where possible, provide photos of similar existing systems as examples.
- 6. Piping and electrical connections will be located directly under and/or within the perimeter of the panels, when possible, and placed as inconspicuously as possible when viewed from all angles.
- 7. The highest point of a solar panel array will be lower than the ridge of the roof where it is attached.
- 8. All painted surfaces will be kept in good repair.
- 9. Changes to adjacent property should not impede an existing or soon-to-be-installed solar system or interfere with any existing solar energy easement. [insert applicable ordinance]

A variance to certain sections of these guidelines may be granted if compliance with these guidelines would significantly increase the purchase price of the solar system or significantly decrease its performance or efficiency. If a homeowner seeks a variance they must provide a minimum of two bids depicting the cost of installation of the solar systems – one bid in compliance with these guidelines and a second bid depicting the desired alternative location, unless the variance represents the only feasible installation location. The ARC may require bids or estimates from a second contractor in order to make an informed decision.

(Source: Creekside Homeowners' Association Solar Guidelines. Available online: http://lohrman.com/blogimage/ApprovedGuidelines.pdf)

### Sample HOA green mission statement

[HOA name] is dedicated to identifying ways to provide internal and external cost savings, while providing a sustainable benefit to our economy, ecology and community.

OR

[HOA name] will bring the neighbors of our community together to achieve and preserve a vibrant community for living, working, learning and playing.

### Goals: We are committed to strengthening our community by:

- promoting neighborliness, cooperation and goodwill among the members of our community;
- collecting and distributing information that is relevant to the [insert name] community to keep residents informed:
- working with officials, citizens and organizations to maintain the safety and beauty of our community and to ensure the availability of public and private community services;
- encouraging environmental community practices in order to safeguard the health and well-being of the residents in our neighborhood, as well as the environmental health of our community;
- facilitating community conversation and consensus on important topics and providing a community voice where possible;
- encouraging responsible development that includes diversity in housing and consideration for the environment;
- promoting [HOA name] as a vital and prosperous business community. (if applicable)

## Sample covenant language

The [name of community] covenants have been designed to put into place procedures that will carry forward the [name of community] desire to enhance the quality of life and improve the environment. In order to ensure that property owners have the freedom to employ alternative energy solutions if desired, solar collectors may be placed on a dwelling or in the back or side yard of the property, located in such a way as not to obstruct windows of adjacent homes.