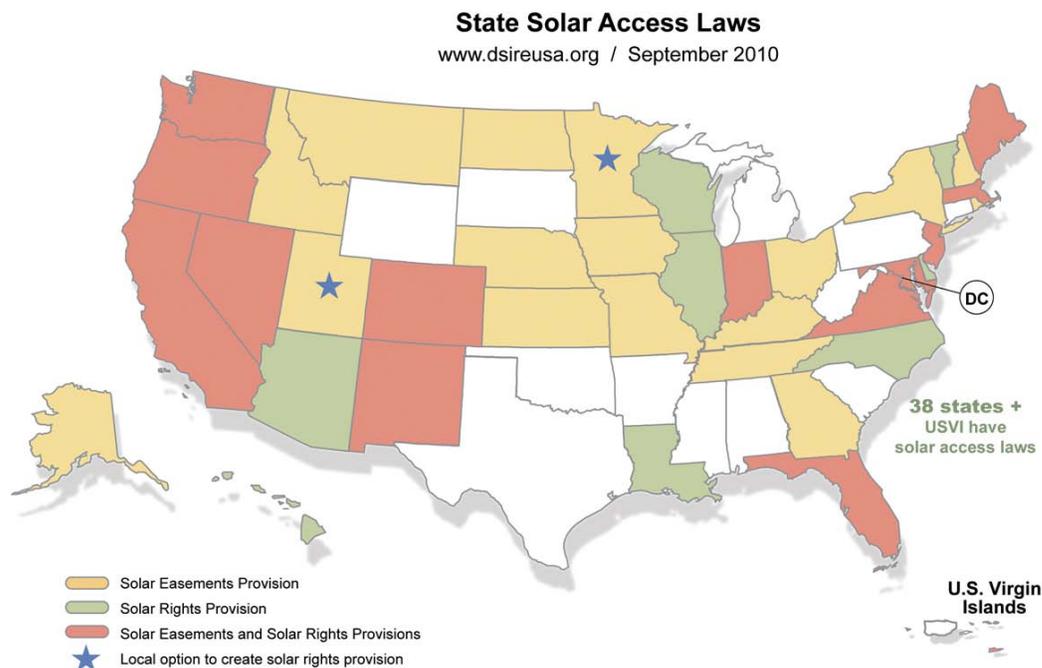


3.1

Solar Access and Solar Rights Laws

To harness the sun's energy, a property owner must have access to sunlight and have the right to install a **solar energy** system that converts that sunlight into usable energy. **Solar access** is most commonly protected through solar easements or ordinances, and solar rights typically must be granted by statute or ordinance. Solar access and solar rights are important issues for local governments to address because—despite the growing support for solar energy at state and local levels—many consumers still encounter local ordinances or homeowners' association rules that prohibit or restrict solar energy system installation. Owners of existing systems can also face challenges when their solar equipment is shaded by growing trees or new structures on neighboring property.



As of September 2010, 38 states and the U.S. Virgin Islands protect solar access or solar rights (see map). Local governments also have the authority to adopt policies that support solar access and **solar rights**. Solar access can be protected through **solar easements**, which are legal agreements that protect access to sunlight on a property. Access to sunlight means that one property can continue receiving sunlight across property lines without obstruction from landscaping or structures on a neighboring property. Easements can be creatively negotiated to

have flexible conditions and terms, including potential compensation requirements if a neighbor interferes with access to sunlight. Solar easements are typically transferred with the property title, and don't terminate unless specified by the easement's conditions. Solar easements are usually voluntary, which limits their effectiveness because system owners have no guarantee of an agreement with a neighbor.

Local governments can create more proactive solar easement processes to help protect solar access, such as a **solar access permit** structure. In this model, a solar easement is automatically created when a property owner receives a permit to install a solar energy system. Local governments can also set forth a degree of solar access protection by specifying certain setbacks in zoning ordinances, so that buildings are constructed far enough apart that they would be unlikely to shade neighboring roofs.

Solar rights laws limit or prohibit restrictions (by neighborhood covenants and bylaws or local government ordinances and building codes) on solar energy system installation. About a dozen states have passed solar rights laws. The laws vary in the types of buildings covered, their applicability to new versus existing construction, and the enforcement of rights. Vague or absent provisions in solar rights laws have led to legal action and installation delays in several of these states.

BENEFITS

Solar access and solar rights laws encourage the adoption of solar energy by increasing the likelihood that properties will receive sunlight suitable for solar energy production, protecting the rights of property owners to install solar systems, and reducing the risk that systems will be shaded and compromised once installed. By logically incorporating solar energy considerations into zoning codes and ordinances, local governments can bring clarity to the responsibilities of various parties, achieve balance between stated government priorities, and avoid costly and time-consuming legal action.

Implementation Tips and Options

- ❑ Revise any local ordinances that pose unintended obstacles. Well-intentioned ordinances such as building-height restrictions or aesthetic requirements can inadvertently restrict solar energy system installation. In many cases, a community can modify these ordinances to serve the original purpose without preventing property owners from installing solar systems.
- ❑ Consider a solar access permit scheme that links solar permits to the creation of solar easements.
- ❑ Set standards for new construction that include east–west street and building orientation, landscaping that doesn't shade solar energy systems, and dedicated solar easements for newly constructed buildings.
- ❑ Establish solar access protections for commercial properties in addition to residential buildings.
- ❑ Require written solar easement agreements that adhere to the same recording and indexing requirements as those for other property interests.

- Conduct outreach and make an information center available to educate residents, businesses, and homeowners' associations about solar access and solar rights.
- Include the following elements when developing solar rights policies and ordinances:
 - Define the type of solar energy equipment protected by the law (e.g., **photovoltaics** [PV], **solar water heating** [SWH], or solar space heating and cooling).
 - Set a clear and quantifiable standard for what constitutes an unreasonable restriction on solar energy systems. A restriction that increases the cost of a system by 10%, for example, could be considered unreasonable.
 - Define the types of structures covered by the law (e.g., commercial buildings, residences including single-family homes and multitenant complexes, garages, and other structures).
 - Award costs and reasonable legal fees to the prevailing party for civil actions with homeowners' associations.
 - Don't restrict solar energy systems because of aesthetics.

Examples

Ashland, Oregon: Protecting Solar Access Through Setbacks and Permits

In 1981, Ashland passed one of the first citywide solar access protection ordinances in the United States. This ordinance contains solar setback provisions designed to ensure that shadows at a northern property line don't exceed a certain height, depending on the zone in which the property is located. The ordinance allows for a 16-foot shadow at the northern property line of commercial properties and a 6-foot shadow along the same property line of residential properties. In addition, property owners can apply for a solar access permit for protection from shading by vegetation.

Madison, Wisconsin: Allowing Solar Energy Systems in Historic Districts

Madison formerly prohibited solar installations in some historic districts on the grounds that "solar apparatus is not compatible with the historic character of the district." In other districts, solar could be denied based solely on aesthetics. These provisions were actually illegal, based on state statutes. The city amended its ordinance to allow solar installations in historic districts and created a permitting process for solar installations in these districts and on landmark properties. The new ordinance allows for an easy staff-level permit as opposed to a more cumbersome committee approval process.

Visit www.solaramericacommunities.energy.gov for more inspiring examples from communities across the United States. 

Additional References and Resources

WEB SITES

Database of State Incentives for Renewables & Efficiency

www.dsireusa.org/solar/incentives/index.cfm?EE=1&RE=1&SPV=1&ST=1&searchtype=Access&solarportal=1&sh=1

This page of the DSIRE Web site includes a full listing of state and local solar access laws in the United States. DSIREusa.org, maintained by the North Carolina State Solar Center in partnership with the Interstate Renewable Energy Council (IREC), is the only comprehensive, regularly updated database of state renewable energy incentives in the United States, and also includes information on many local incentive programs. The U.S. Department of Energy (DOE) funds this ongoing effort.

Rules, Regulations, and Policies: Solar Access Laws

www.statesadvancingsolar.org/policies/policy-and-regulations/solar-access-laws

States Advancing Solar is a Clean Energy Group initiative. The objective is to supply information and assistance to state policy makers and renewable energy programs in developing effective solar programs. The Web site contains a section on solar policies, rules, and regulations, including solar access laws.

PUBLICATIONS

Shadows on the Cathedral: Solar Access Laws in a Different Light

Troy A. Rule, University of Missouri School of Law, 2010

This article applies Calabresi and Melamed's "Cathedral" framework of property rules and liability rules to compare and analyze existing solar access laws and to evaluate a model solar access statute recently drafted under funding from DOE.

Article: <http://ssrn.com/abstract=1466224>

Renewable Energy and the Neighbors

Troy A. Rule, University of Missouri School of Law, 2010

This article analyzes conflicts between states and communities over land use laws that restrict distributed renewable energy. Framing these conflicts as clashes over scarce "entitlements" to regulate, the article explores the possibility of using liability rule-like approaches to more efficiently allocate these entitlements between states and local governments.

Article: <http://ssrn.com/abstract=1649090>

Solar Access: Recommendations for the City and County of Denver (Draft)

Prepared by Hannah Muller for GreenPrint Denver, March 2009

This report gives an overview of solar access and solar rights issues and recommends ordinances and enforcement mechanisms for Denver.

Report: www.solaramericacommunities.energy.gov/PDFs/Solar_Access_Recommendations_City_And_County_Of_Denver.pdf

A Comprehensive Review of Solar Access Law in the United States: Suggested Standards for a Model Statute and Ordinance

Solar America Board for Codes and Standards, October 2008

The Solar America Board for Codes and Standards (Solar ABCs) is a DOE-funded central body created to address solar codes and standards issues. This comprehensive review of solar access law across the United States suggests standards for a model statute and ordinance.

Report: www.solarabcs.org/solaraccess/Solaraccess-full.pdf