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Consumer Protection for Community Solar

A Guide for States

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SUSTAINABLE SOLAR EDUCATION PROJECT





ABOUT THIS GUIDE AND THE SUSTAINABLE SOLAR EDUCATION PROJECT

Consumer Protection for Community Solar: A Guide for States is one of six guides produced by the Clean Energy States Alliance (CESA) as part of its Sustainable Solar Education Project. The project aims to provide information and educational resources to help states and municipalities ensure that distributed solar electricity remains consumer friendly and benefits low- and moderate-income households. In addition to publishing program guides, the Sustainable Solar Education Project is producing webinars, an online course, a monthly newsletter, and in-person training on topics related to strengthening solar accessibility and affordability, improving consumer information, and implementing consumer protection measures regarding solar photovoltaic (PV) systems. More information about the project, including a link to sign up to receive notices about the project's activities, can be found at www.cesa.org/projects/sustainable-solar.



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The U.S. Department of Energy SunShot Initiative is a national effort to drive down the cost of solar electricity and support solar adoption. SunShot aims to make solar energy a low cost electricity source for all Americans through research and development efforts in collaboration with public and private partners. Learn more at www.energy.gov/sunshot.

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SECTION 1

Introduction

Community solar is a rapidly expanding model for increasing solar access and solar deployment in the U.S. It can enable broader participation in the solar economy by allowing renters, as well as homeowners whose roofs are unsuitable for solar, to benefit from solar power. The economies of scale and relative simplicity of construction of community solar projects can help to accelerate the widespread adoption of solar and provide economic, environmental, and energy security benefits to individual participants and the larger community.

Because participation in community solar projects can be a complex and complicated undertaking for residential customers, this paper explores consumer protection issues that may arise, as well as considers the role states can take to ensure appropriate consumer protection measures are provided to the community solar customer.

WHAT IS COMMUNITY SOLAR?

Community solar, also called shared solar, is a purchasing arrangement in which multiple customers share the electricity or the economic benefits of solar power from a single solar array.



Warren Gretz/NREL

An array large enough to serve two to more than 1,000 customers is built in a single location, and individual customers sign up to own or lease parts of the array, or to purchase (or be credited for) some portion of the electricity generated by the array.

Community solar customers have voluntary contracts or subscriptions to participate in the project. Individuals can choose to participate, and other customers of the same utility can choose not to participate. This definition excludes a utility—even a small municipal utility or a rural electric cooperative—that owns or contracts with a solar array, and then includes the electricity from the array in the general mix of electricity that it delivers to its customers.

Within the broad definition, “community solar” can mean very different things in different states, and sometimes even within the same state. This creates challenges for officials trying to understand the risks and benefits of community solar for consumers. It also creates possibilities for misunderstandings between consumers and those selling community solar.

CONSUMER PROTECTION IN THE COMMUNITY SOLAR CONTEXT

As community solar expands rapidly in some parts of the country, state and local officials will need to decide what, if any, specific consumer protections to provide for residential community solar consumers beyond the general consumer protections that already exist.

Community solar consumers’ relationship with their solar systems is relatively abstract, compared to traditional solar consumers who put panels on their own roofs. In community solar, consumers may never see “their” panels, nor know exactly where the panels actually are. It might be easy for consumers to sign up for community solar without understanding its risks and benefits.

In addition to the consumer protection issues that can occasionally arise with traditional rooftop solar installations, community solar raises some new issues. Among these are: unresolved questions about the applicability of securities laws; questions about how much flexibility is or should be built into community solar contracts; and questions about applicability of the solar investment tax credit.

Community solar may be more accessible to low-income consumers than rooftop solar, in part because it can be marketed to consumers who rent, and to homeowners whose roofs are unsuitable for solar or who may not be able to finance or own a rooftop system. It can also sometimes be marketed in small increments of less than 1 kW, which would be impractical for rooftop solar.

Some states are developing community solar programs and projects targeted towards low- to moderate-income participants. For example, they may require community solar developers to reserve a certain percentage of a community solar project’s total capacity for low-income consumers. But this can increase consumer protection concerns. Any investment in solar, whether rooftop solar or community solar, includes some risk that savings won’t materialize, or that costs will be higher than expected.¹ This risk is more important for low-income consumers because they have less of a financial cushion, and so the impacts of a bad deal can be especially devastating to them. For these and other reasons, products that are specifically marketed to low-income consumers may require additional consumer protections.

SECTION 2

Why States Should Consider Consumer Protection for Community Solar

There are a number of reasons why states should consider consumer protection for community solar. Below, several key reasons are explored.

COMMUNITY SOLAR IS GROWING

Community solar capacity nationwide increased from 125 MW at the end of 2015 to 331 MW at the end of 2016.² Additionally, some states, including New York, Massachusetts, and Minnesota, have community solar interconnection queues that dwarf currently installed community solar capacity.³

States may want to reconsider solar consumer protection issues not just because community solar raises some different issues than rooftop solar, but also because growth in community solar can contribute to overall rapid growth in the distributed solar market, which could call for revisiting consumer protection measures that might make sense for rooftop solar as well. A significant number of the early solar adopters were technology enthusiasts who enjoyed



Nate Hausman/CESA

learning about how their systems worked. As solar power continues to expand into the general population, consumers who are less versed in solar technology or products might be well-served by more consumer protections.

CONSUMERS NEED TO UNDERSTAND WHAT THEY ARE SIGNING UP FOR

Consumers who sign up for community solar may not have a clear understanding of exactly what they're buying. The products offered through community solar are abstract, and often tied up in precise legal delineations. Rarely is it as simple as saying, "I'm buying solar panels," or even "I'm buying solar electricity."

Because community solar consumers have a more abstract relationship with their systems than rooftop solar consumers, it may be even more important to emphasize that signing up for community solar can be a major financial decision. Many people are accustomed to signing user agreements for various products without reading all of the terms of the agreements, but community solar agreements deserve careful scrutiny. Solar contracts can be more complicated than other contracts because they often involve more money and longer contract periods, possibly 20 years or more.

SOME STATES HAVE POLICY GOALS TO EXPAND SOLAR

Many states have goals to expand renewable energy, including Renewable Portfolio Standards and Solar Renewable Energy Certificate (SREC) programs. In order to expand the market for solar, as these states hope to do, it may be necessary to ensure that appropriate consumer protections are in place. While a less regulated industry might grow faster in the short run, medium- to long-term growth requires clear and appropriate safeguards to ensure satisfied consumers and a good public image for the industry.

SOME STATES ARE SPECIFICALLY ADVOCATING FOR OR MANDATING THE AVAILABILITY OF COMMUNITY SOLAR

Sixteen states had community solar policies by the end of 2016,⁴ and in many others, utilities are voluntarily offering community solar. To the extent that these states are encouraging community solar, they have a responsibility to help make sure that consumers have a genuine opportunity to benefit and understand exactly what the benefits are.

INFORMATION AND PROTECTIONS MUST BE SPECIFIC TO A STATE

Because community solar programs vary between states, it is not possible to develop generic consumer information that will cover all problems for every state. If a state wants consumers to have the most accurate, useful community solar consumer information, then it needs to develop its own consumer information. The same consumer protection regulations won't work in all states.

SECTION 3

An Overview of Community Solar

THE GOALS FOR COMMUNITY SOLAR

In different locations, and for different stakeholders, community solar can have different goals. Sometimes, it can help meet multiple goals simultaneously. Below are several examples.

Renewable Energy Participation

One goal can be to enable people who can't put solar panels on their own homes to go solar. Many people rent their homes. Others have roofs that are unsuitable for solar, due to roof condition, shading, roof orientation, or other issues. Community solar can be a way for people who are unable to put panels on their homes to experience the benefits, including financial benefits, of solar.

Consumer Flexibility

Another goal for community solar might be to provide solar customers with more flexibility than rooftop solar. The fact that the panels are not physically connected to consumers' homes raises new possibilities. In some cases, a consumer can increase the amount of a solar subscription six months after signing up, decrease the amount of the subscription two years after that, increase it again six years later, and finally cancel the subscription altogether a year later when moving to a new home. It also may be possible for a consumer who is moving away to transfer the subscription to someone else. This flexibility might make community solar appealing even to consumers who would otherwise have installed solar on their own roofs. But this flexibility can also contribute to consumer confusion, as not all community solar programs offer the same levels of flexibility.

Lower Cost Solar

Another goal for community solar might be to lower the cost of solar power through economies of scale, more accessible building sites, and lower customer acquisition costs for those selling the product.

DIFFERENCES BETWEEN COMMUNITY SOLAR MODELS

There is a lot of variation in how community solar operates in different states, and sometimes even within a single state.^{5,6} In some places, community solar is a utility program in which consumers can choose to pay extra for solar power. In other places, participation in community solar is an opportunity for consumers to save money by receiving utility credit for solar power at the retail electric rate. For consumers whose interest in community solar stems primarily from its potential to save them money, it's critical to understand whether a particular community solar program or community solar offering will actually achieve this goal.

Another variation in community solar is the contract term. In some cases, consumers sign twenty-year contracts and can't withdraw without a significant penalty. In other cases, consumers commit to only a year, or a month, at a time.

Some community solar programs are legislatively mandated, while others are undertaken voluntarily by utilities. Legislatively mandated programs may come with their own rules and may include consumer protection measures; and both legislatively mandated and voluntary programs may have consumer protections created by state public utility commissions. Programs at co-ops or municipal utilities may not be subject to any state oversight, but are approved by their elected utility boards.

In essence, community solar is a broad concept that can be applied in countless ways in different places and different situations. The specifics of each program depend on the goals, interests, and creativity of those who design the program.

From a program design standpoint, the flexibility of the community solar concept is an asset. Each state, or each utility, is free to adapt the concept to its own needs and its own priorities. But from a consumer protection standpoint, the numerous differences between programs can make it confusing and hard to design effective consumer protections. While it is important to establish a strong baseline for consumer protection at the beginning of any community solar program, stakeholders must also commit to establishing and updating the rules to reflect evolving community solar business models and programs.

When trying to understand a specific community solar program, some important questions must be answered.

Who owns the array?

In some cases, utilities own community solar arrays. In other cases, private developers own arrays. Community solar arrays may also be owned by nonprofits and other community groups, or by a group of consumers who have joined together specifically for the purpose of building or sharing a solar array. There are also some complicated arrangements in which ownership flips over time from tax investors to consumers. Not all of these options are possible in every state that has community solar.

Who do consumers interact with?

In some places, utilities recruit consumers to participate in community solar. This can happen if the utility owns the arrays or in circumstances where utilities serve as matchmakers between private developers and consumers. In other places, private developers who own the array are responsible for their own customer acquisition.

Billing is also handled differently in different places. In some places, all of a community solar customer's fees and credits are included in the utility bill, and the consumer receives no other bill for community solar. In other cases, consumers pay a monthly fee directly to the community solar developer, while receiving credits on their utility bills for the electricity generated. It is also possible for both the monthly fee and the monthly credits to be contained in a separate bill, and for the actual utility bill to not reflect the community solar arrangement in any way.

How do consumers buy community solar?

Depending on the arrangement, consumers may either pay upfront or pay a monthly fee. Terms to describe how consumers participate in community solar are not used consistently. The term "lease" may be used by a developer, utility, advocacy group, or state agency to describe an upfront payment,⁷ and to differentiate from a "subscription" that involves a monthly payment. In other cases, both of those options are referred to as subscriptions.

In some states, consumers are limited to signing up for only the amount of power that they use in their own homes. In other states, consumers may sign up for more than they use, but for any generation that exceeds consumption at the end of the year they are compensated at only the utility's wholesale rate.

Do consumers benefit financially from community solar?

All community solar participants can receive satisfaction from knowing that they are helping to advance the use of renewable energy. In many cases, they also benefit financially.

In some states, consumers pay a premium in order to participate in community solar and have no expectation of financial gain from their decision to support renewable energy. In other cases in which consumers start off paying a premium, their price may be locked in for as long as 20 years, with the hope that they will ultimately save money on their electric bills as utility retail rates increase. In other states, consumers save money from the start by participating in community solar. Understanding whether a consumer benefits financially in a particular community solar contract requires considering all the costs, including those paid to the utility and those paid to a third party, as well as all of the financial benefits that accrue to the customer.

BOX 1

Rooftop Aggregation

Another model that is closely related to community solar is rooftop aggregation. While community solar involves consumers participating in one particular array, rooftop aggregation involves a solar developer installing arrays on multiple rooftops, and then treating the entire pool of solar panels as one resource. The rooftop aggregation resource can then be marketed just like community solar.

What is the rate of compensation?

Many states have policies that require utilities to compensate rooftop solar consumers through an on-bill crediting mechanism known as net metering. In net metering, solar consumers receive the same rate for the electricity they produce and send to the grid as they pay for the electricity they purchase from the utility. At the end of each month, they pay for their net energy use, or the difference between what they produced and what they used. This is also sometimes known as “retail-rate net metering.”

Some states also use net metering to compensate community solar consumers. Other states use other compensation rates. One option is a “value of solar” rate, which is calculated to include all of the benefits and costs of solar power. Value of solar is calculated

in different ways in different states, and may be more or less than retail rate. Another option is for consumers to be compensated at the utility’s wholesale rate, also known as “avoided cost.” Some states may use still other methods of setting compensation rates. States may also offer additional payments to some community solar projects, based on where the project is located, whether it serves low-income consumers, and other variables.

How easy is it to adjust the amount of the subscription or to cancel?

Community solar may provide opportunities for subscription flexibility that rooftop solar does not. In some cases, participants can alter the amount of their subscriptions or cancel their contract entirely with little or no penalty. In other cases, they can’t.

How does it compare to rooftop solar?

In some states, community solar functions as an extension of rooftop solar, with similar financing options and ownership structures. The compensation mechanisms and customer value proposition are the same as for rooftop solar, and the same net metering rules apply. The primary difference is the location of the panels.

In other states, community solar operates very differently from rooftop solar, and may be more similar to a green power or green pricing program. In a green power or green pricing program, utilities offer customers the option of paying extra to get renewable energy. Similarly, community solar programs may be designed so that consumers pay extra on their utility bills to get solar power from a particular array. (Unlike green power programs, however, this type of community solar program generally involves a price that’s locked in over time, so that consumers may save money in the long run as utility retail rates rise.)

It’s also possible for a state to choose an option somewhere in between. For instance, a state might choose to offer a program in which consumers can own or lease panels in a community solar array, but the compensation rate they receive is different than it is for rooftop solar.

SECTION 4

Community Solar Consumer Protection Issues

Some of the consumer protection issues that arise for community solar also come up in other contexts, including rooftop solar. For example, false advertising or high-pressure sales tactics may be issues that occur regardless of whether the solar product being marketed is located onsite or offsite. These issues can arise for all kinds of consumer products, and there are often existing state laws that attempt to address them.

Other consumer protection issues that crop up in the residential solar market can be particularly pronounced in the community solar context. An example of this is Renewable Energy Certificates (RECs) and who owns the solar array's renewable attributes (see page 16). Community solar customers who aren't informed about RECs may not understand what they're buying.

Other consumer protection issues are unique to community solar. Questions have arisen about whether community solar contracts qualify as “securities,” just like stocks and bonds.



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That's because community solar involves multiple consumers buying into a solar array and in turn being credited for their investment. Community solar interests don't necessarily constitute investment contracts under the law, but if they are classified as such, they qualify as securities and may be regulated under the federal Securities Act or state blue-sky laws designed to protect investors. The issue is complicated, and is addressed at more length on p. 17 (Box 4) and in Appendix C.

Community solar involves multiple consumers buying into and in turn being credited for their investment.

The possibility of increased subscription flexibility, such as the option for consumers to cancel their contracts or change the amount of their subscriptions, also creates consumer protection questions. First, it creates variations between community solar programs, providing options for program designers but possibly creating confusion for consumers and consumer advocates. Second, regulators will need to decide whether subscription

flexibility options are something that consumers are entitled to, or whether they are extras that developers may choose to offer in order to attract customers. And these decisions will likely affect other program design choices. If developers are required to offer consumers the option of cancelling their contracts at any time, that might lead them toward monthly payment options and away from up-front payment options.

Several specific community solar protection issues are discussed below.

Product Confusion

Because community solar involves complex ownership structures that can include multiple parties and the arrays are generally constructed away from the consumer's home, the subscriptions or contracts can be abstract and hard to understand. Furthermore, community solar structures and products differ considerably. This can make it hard for the consumer to understand exactly what's being purchased. When buying into a community solar array, it's not always clear if the benefits are the ownership of a portion of electricity output from an offsite array, the net metering credits stemming from the production of an array, or simply the satisfaction of supporting clean energy production.

Contract Provisions

Community solar contracts can be complex. In some cases, they are structured as an upfront payment, granting ownership (or a lease) over a share of an array or certain panels in an array. In other cases, they are scheduled subscription payments due over time. Sometimes a community solar array will offer consumers two payment options to choose between. It's important for consumers to understand how their agreement is arranged and that different community solar quotes may reflect different products, assumptions, and payment structures.

Box 2 lists some community solar contract provisions that consumers should look for. States can require solar companies to provide specific disclosures on these contract provisions. See Appendix B for examples of community solar disclosure requirements from three states.

BOX 2

What Consumers Need to Know

Before signing a community solar contract, consumers should understand:

- What is the duration or term of their contract?
- What happens to their contract if they move to a different home?
- Do they have a right to terminate the contract without penalty, either within a certain period of time or at any time?
- Is a sign-up fee or deposit required?
 - Is the sign-up fee additional to the monthly payment or upfront payment?
 - Will the sign-up fee be refunded if the project is never built?
- What happens if the community solar array goes down or is taken offline? Must the consumer be notified if the array is offline?
- Does the contract include a production guarantee?
- Does the consumer own part of the array, including panels?
- Will the consumer be able to take advantage of state and federal solar incentives, or will those go to the project owner or developer?
- What is the compensation rate for electricity generated from the project?
- Is the consumer assuming “regulatory risk” that compensation rates may change, based on actions of the Public Utility Commission or other regulatory body?
- If paying upfront:
 - How much is the upfront payment?
 - Does that amount include all fees and other costs?
 - How long will it take for savings to cover the cost of the system (the “payback period”)?
- If paying monthly:
 - Is there an escalator clause that will make payments increase over time? What is the rate of increase? How much will the consumer be paying each month by the end of the contract?
 - Are there late payment penalties?
 - Is it possible to downsize or upsize the subscription after signing up?

Solar Tax Credit

The U.S. tax code includes both a residential solar tax credit and a commercial solar tax credit. In both cases, the owner of a solar system can take a one-time tax credit equivalent to 30 percent of qualified installed costs. When community solar projects are owned by a business, it can claim the commercial solar tax credit and may then choose to pass the value of the credit on to its customers. Where residential consumers actually own parts of a community solar array, they may be eligible to claim the residential tax credit. However, eligibility of community solar customers for the tax credit can be uncertain, and a consumer should

consult a tax professional before assuming eligibility for any tax credits for a community solar project.

In 2015, the Internal Revenue Service (IRS) issued a private letter ruling related to a specific community solar project in Vermont.⁸ The IRS concluded that the owner of solar

Not everyone can use the residential tax credit, even if they qualify for it. The 45 percent of American households that pay no federal income tax can't benefit from the tax credit.

panels in this offsite, community solar array was eligible to take advantage of the residential tax credit. However, it's important to understand that even though the IRS letter said that this particular taxpayer was eligible for the tax credit, that doesn't mean that other taxpayers would necessarily be eligible. By law, the private letter ruling cannot be used or cited as precedent by other taxpayers, although it may be instructive. If a consumer claiming the residential tax credit for the upfront cost of panels in an offsite, community solar array were to undergo IRS audit, ultimately that taxpayer would be responsible for

demonstrating her or his eligibility. Any liabilities associated with the tax credit claim would rest with the individual taxpayer, not with the project developer or promoter.

It's also important for consumers who are buying a share in a community solar project to know whether claiming the tax credit is embedded in the quote, and to understand that not everyone can use the residential tax credit, even if they qualify for it: The 45 percent of American households that pay no federal income tax can't benefit from the tax credit.

BOX 3

Consumer Access and Interconnection

Another kind of community solar consumer protection issue involves ensuring that residential customers have sufficient access to community solar, and have the access that the legislature intended when it passed community solar legislation. Access problems could happen for several reasons: perhaps interconnection procedures in the state are not adequate, creating a large backlog of community solar projects that can't be built; perhaps developers have more incentive to contract with commercial customers than with residential customers; or perhaps a utility is reluctant to actually implement a legislatively mandated program.

Renewable Energy Certificates (RECs)

When a solar project generates electricity, it also creates Renewable Energy Certificates (RECs), a tradable commodity that represents the green attributes associated with renewable energy generation. Whoever purchases the RECs has the right to claim that they're using renewable electricity. RECs can have high value in some states, where utilities need to generate or purchase a certain number of RECs to comply with a state renewable portfolio standard. Community solar project developers often sell the RECs to a third party to help finance the project's development.⁹ If the environmental attributes have been sold to a third party as RECs, the community solar project developer cannot legally claim that the community solar project participants are purchasing renewable electricity, even though they are helping to finance a renewable energy project.

The Federal Trade Commission (FTC), which regulates business practices to prevent unfair competition, has issued guidance on marketing claims related to RECs. The FTC's guidance states, "If a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy." The Vermont Attorney General Office has also issued guidance for third-party solar project owners in the state. Vermont's guidance provides, "In those projects where the RECs are sold, consumers who enter into agreements with the provider are paying money to help generate solar energy, but from a legal perspective, the consumers are not using solar energy from that project. Only the purchaser of those RECs is entitled to make claims about the renewability of the power associated with that project." Community solar developers who sell off the RECs from a project but still make marketing claims that project participants are using solar energy may run afoul of federal or state rules.

RECs can be difficult to understand. Consumers may have misconceptions about what they're buying when they go solar, and whether they're actually getting renewable energy. While this is also a potential problem for rooftop consumers, it may be more acute for community solar because the community solar relationship is already complicated and abstract, and the potential for consumers not to fully grasp the arrangement is higher.¹⁰

The key is transparency and information for the consumer; consumers should understand who owns the RECs and what RECs are. In the Connecticut Green Bank residential solar PV incentive program, consumers are required to sign a document that explains that the Green Bank owns the RECs and to acknowledge that they have received a copy of the Center for Resource Solution's *Guidelines for Renewable Energy Claims*.¹¹

The allocation of RECs is often tied to whether consumers pay a premium or save money with community solar. In some places, community solar consumers retain REC ownership and pay a premium to participate. In other places, consumers save money by signing up for community solar, but the RECs are allocated to the utility or a third party. It also may be possible to both save money and retain ownership of RECs,¹² but that's often not an option. The opportunity to save money with community solar often depends on the sale of RECs.

BOX 4

Securities Regulation

Securities compliance issues can pose a challenge for community solar projects. In most cases, however, securities compliance is less of a direct concern for community solar consumers than it is for project developers. The core issue is whether shares in community solar projects constitute securities. If the Securities and Exchange Commission (SEC) were to find there was a federal securities violation related to the sale or transfer of a community solar share, the project developer or promoter would likely bear the liability for illegally marketing or selling the security. Although it is possible that a community solar consumer could be implicated in an SEC enforcement action related to a community solar project, a consumer protection concern is most likely to surface only if an SEC enforcement action results in the halting of project development after a consumer has signed a contract. Securities regulation is covered in more detail in Appendix C.

SECTION 5

Existing Consumer Protections for Community Solar

A dozen or more federal laws, as well as state and sometimes local laws, may apply to solar marketing, financing, contracting, and installation. While these laws are not community solar-specific (or even solar-specific), they do provide some general protections for consumers. The Federal Trade Commission Act, for example, provides the FTC with authority to regulate unfair and deceptive trade practices. Solar marketing falls within the FTC's regulatory ambit and the FTC has pursued enforcement action in this area.¹³ In 2016, the FTC conducted a full-day workshop on competition and consumer protection issues in solar energy and opened a public comment opportunity on the topic.¹⁴ Every state has its own consumer protection laws prohibiting deceptive trade practices, which are often modeled after the Federal Trade Commission Act. These state laws typically



Terry O'Rourke/NREL

authorize state attorney generals’ offices to enforce deceptive trade practice violations as well. Some states may decide that existing legal protections are sufficient to protect community solar consumers.

A variety of agencies at the federal, state, and local level have regulatory authority over part of the community solar supply chain.

Table 1 lists federal statutes that may apply to community solar along with the subject matter they regulate.

TABLE 1: **Federal Statutes that Apply to Community Solar**

CAN-SPAM Act	Electronic marketing
Consumer Leasing Act	Leasing disclosures
Electronic Funds Transfer Act	Consumer rights in electronic fund transfers
Equal Credit Opportunity Act	Discrimination in credit transactions
Fair Credit Reporting Act	Collection and use of consumer information
Federal Trade Commission Act	Unfair and deceptive trade practices
Magnuson-Moss Warranty Act	Consumer product warranties
Right to Financial Privacy Act	Financial privacy from government intrusion
Truth in Lending Act	Lending disclosures and standardization
Telephone Consumer Protection Act	Telemarketing and automated telephone equipment
Unfair Deceptive Practices Act (UDAAP)	Misleading financial products and services
Uniform Commercial Code	Sales and commercial transactions

Table 2 provides a list of agencies that have oversight over some elements of the solar marketing, financing, contracting, or installation process.

TABLE 2: **Agencies with Solar Oversight**

Contracting & Financing	Construction & Electrical	Technology	Manufacturing
<ul style="list-style-type: none">• Consumer Financial Protection Bureau• Federal Trade Commission• Securities Exchange Commission• State Lenders Licensing Regulators• State Consumer Protection Agencies• State Attorneys General	<ul style="list-style-type: none">• State Contractor Licensing Boards• Local Municipality/ Permitting Agency• State Engineering Licensing Boards• Occupational Safety and Health Administration	<ul style="list-style-type: none">• Federal Trade Commission• Federal Communications Commission• State Attorneys General	<ul style="list-style-type: none">• Federal Trade Commission• National Electric Code• State Attorneys General

Source: Adapted from the Solar Energy Industries Association

On top of the federal laws regulating the solar industry, some states have implemented solar consumer protections. For instance, both Arizona¹⁵ and New Mexico¹⁶ have enacted solar disclosure laws, but they only cover distributed generation systems “used primarily for on-site consumption,” so they likely would not apply to community solar systems. (Neither Arizona nor New Mexico has legislatively mandated community solar in their states.) Solar disclosure

bills in other states have been introduced, but they have not been enacted; and these bills have typically come with similar on-site consumption provisions and therefore would not apply to community solar arrays. Likewise, a solar disclaimer was implemented in Missouri through the rate case process, but it only applies to rooftop solar consumers.

Maryland and Minnesota both have community solar contract disclosure requirements built into their community solar program rules, and Hawaii’s proposed rules include similar provisions.

State Community Solar Contract Disclosure Requirements

Some states have implemented special solar consumer protections for community solar. Maryland and Minnesota both have community solar contract disclosure

requirements built into their community solar program rules, and Hawaii’s proposed rules include similar provisions. Generally, these disclosures require that consumers be provided upfront information about billing and pricing terms; a summary of charges (both nonrecurring and recurring); information about the circumstances under which the charges are subject to change; conditions of services; transfer and termination fees and any other penalties; and a production projection and method for calculating it. Community solar disclosure requirements for Hawaii, Maryland, and Minnesota are detailed in Appendix B. New York is considering the development of a standardized consumer disclosure statement for community distributed generation contracts, including community solar. Connecticut also has consumer protection rules, including disclosures, built into its shared clean energy facilities pilot program.¹⁷

State Community Solar Consumer Education

Another step some states have taken to proactively address consumer protection is to provide consumer-focused information on community solar. The Minnesota Department of Commerce has a webpage dedicated to providing information about community solar in the state. The website includes consumer tips, questions consumers should ask before deciding to participate in a community solar project, and a link to a community solar garden consumer disclosure checklist.¹⁸ The webpage offers answers to the following frequently asked questions:

- What does it mean to be a subscriber and what am I actually buying?
- If I participate in a pay-as-you-go plan, will my payment increase over time?
- What is the duration of my subscription?

- What happens if I move?
- How much solar should I get?
- How does the credit appear on my electricity bill?
- How do I tell if a community solar offer is legitimate?
- Is an upfront payment or deposit required?
- If the project underperforms or the developer goes out of business, will I lose money?
- When will the community solar project be built and operational? Is it in the ground? Is it waiting for approvals from local government officials and/or the utility?

Community Solar Consumer Protection Resources

The Solar Energy Industries Association (SEIA), in partnership with the Coalition for Community Solar Access (CCSA), the community solar industry trade organization, has produced a guide specifically for community solar consumers.¹⁹ The guide explains what community solar is, offers advice for how to be an informed consumer, and explains what to do if community solar contract issues arise.

The Interstate Renewable Energy Council (IREC), a nonprofit focused on supporting the development of sustainable energy in the U.S., has produced several resources, including guiding principles for the development of shared renewable energy programs.²⁰ IREC's five principles for shared renewable energy programs are:

- Expand consumer access
- Offer tangible economic benefits
- Put consumers first
- Promote fair market competition
- Complement existing programs

The Center for Resource Solutions (CRS), a nonprofit organization which facilitates the development of sustainable energy markets, has developed several consumer protection resources focused on RECs and the claims that can be made about renewable power, including guidance for consumers on renewable energy claims²¹ and a guide on best practices for claims about solar systems.²² CRS has also produced a short consumer-oriented video on how RECs are created, transferred, and tracked.²³

A more comprehensive list of solar consumer protection resources, including many that are not specific to community solar, is included in Appendix A.

SECTION 6

State Considerations for Developing Consumer Protections for Community Solar

Community solar consumer protection issues will likely be more pressing in some states than in others. For example, if a state has a community solar market that looks ready to take off, has little experience with other kinds of residential solar, and few existing consumer protections in place that would apply to community solar, it may be especially timely to consider new consumer protections for community solar. Also, if community solar offerings within a state vary widely in their terms and details, or if participants are routinely confused about whether they are saving money and will have a hard time withdrawing from their contracts, then consumer protections may be especially useful.

In deciding how aggressively to address consumer protection, states might want to consider some of the following factors.

How Big is the Community Solar Market and How Quickly is it Growing?

The community solar market varies tremendously from one state to another. In states like Colorado and Massachusetts, community solar has a firm foothold. Other states have not had a single community solar array constructed. Consumer protection may be most pressing in places that are experiencing the greatest community solar development.

What Consumer Protections Already Exist?

All states have existing consumer protection laws that apply to a broad range of products, including both rooftop and community solar. In many cases, rooftop and community solar face the same consumer protection issues. For instance, consumers of either product may be subject to overly aggressive marketing, or may not understand the implications of escalator clauses or RECs. If these concerns have already been addressed for rooftop solar, and if they have been addressed in ways that also apply to community solar, then community solar consumers are less vulnerable, and developing specific consumer protections for community solar may be less urgent. Community solar program designers should check with the attorney general's office in their state to see whether deceptive trade practices related to solar

energy have been reported, to learn whether the attorney general's office has taken solar-related enforcement action, and to evaluate how actively the office is asserting its regulatory authority related to solar energy trade.

How Do Consumers Benefit from Community Solar?

The more consumers benefit from signing up for community solar, the less need there may be for consumer protections. If every community solar consumer in the state gains large and immediate benefits, financially and otherwise, then consumer protections may seem unnecessary. On the other hand, if consumers are likely to receive varying benefits, or if the same benefits are likely to seem worthwhile to some consumers but not to others, then consumer protections might be more pressing.

How Easy is it for Consumers to Withdraw from a Community Solar Subscription?

In some cases, community solar participants must commit to a long-term contract and may face significant penalties if they withdraw early. In other cases, consumers commit to only a year or a month at a time. In places where consumers make long-term commitments to community solar, states may consider it more important to ensure consumers are well-informed before they sign up, and that they're not subject to overly aggressive sales tactics. In places where consumers are free to withdraw from a contract at any time, it may be less important to ensure they don't make a mistake at the start.

In places where consumers make long-term commitments to community solar, states may consider it more important to ensure consumers are well-informed before they sign up, and that they're not subject to overly aggressive sales tactics.

What Are the Goals for Community Solar in Your State?

The importance of consumer protection for community solar may depend on what a state's purposes are in mandating or enabling community solar programs. For instance, if the purpose of community solar is to increase access to solar by low-income consumers, that could affect the urgency and the design of consumer protections. Or, if the legislative purpose of passing a community solar law was to enable consumers to cancel their solar contracts at any time, then provisions requiring that consumers be allowed to cancel their contracts at any time should be included in the contracts or subscriptions.

Many states have aggressive goals for increasing deployment of solar and other renewables. These states might more easily attain their goals if they ensure that the solar industry, including community solar, is working smoothly, including ensuring that appropriate consumer protections are in place.

SECTION 7

Tools to Address Consumer Protection for Community Solar

Consumer protection tools available to states include consumer education, regulations or guidelines, and enforcement mechanisms or grievance procedures. A state can choose different combinations of these tools to reflect its particular needs and priorities. Some consumer protection issues can be effectively addressed through consumer education, while others require more prescriptive approaches, such as regulations.

Consumer Education

Consumer education involves a state agency or other organizations making information available to potential community solar consumers so that they will more thoroughly under-

Consumer education involves a state agency or other organization making information available to potential community solar consumers so that they will more thoroughly understand what they're being offered and will be able to evaluate their options.

stand what they're being offered and will be able to evaluate their options. This is the least intrusive way to provide consumer protection. As an example, the State of Minnesota has created webpages that usefully cover what consumers need to know before signing up for community solar. (See page 33.)

Through the Sustainable Solar Education Project, the Clean Energy States Alliance has produced a guide titled *Solar Information for Consumers: A Guide for States*.²⁴ The guide explains why states should provide consumer information on solar, describes the types of information that can be useful, and points out existing educational efforts by states and other entities that provide models and useful resource information. The guide addresses residential solar in general rather than community solar in particular, but it provides a useful

framework for states considering providing solar information for consumers.

Another way to think about consumer information on community solar is as an explanation of the community solar value proposition. In addition to financial considerations, including cost of subscription, rate of compensation, and discussion of utility rate increases, an explanation of the value proposition in a particular state could include discussion of renewable energy and RECs, local economic development, and other aspects of solar power.

For consumers who are choosing between rooftop solar and community solar, it may be helpful to provide a comparison between the two. Among other things, this could include a comparison of the compensation rates offered. In some states, community solar consumers receive the same net metering rates as rooftop solar consumers, but in others they don't. More fundamentally, it would be helpful to consumers considering their options to know whether rooftop or community solar is likely to be a better deal financially.

As with any informational or educational effort, finding a way to get information in front of consumers is key. This could be even more of a challenge with community solar than with rooftop solar. For example, in a recent California Public Utility Commission docket,²⁵ some commenters suggested that rooftop solar companies be required to provide an information packet to consumers in advance of signing a contract, such as at the first face-to-face meeting. But in community solar there may not ever be a face-to-face meeting. A comparable requirement might require consumers to verify that they had received a (paper or electronic) information packet, and consumers would not be able to sign a community solar contract until, perhaps, a week later. Such a requirement, however, might interfere with the usual way in which people sign up for community solar.

One issue with consumer education as a consumer protection strategy is that even a well-informed consumer may not be in a position to negotiate with a company that's selling subscriptions to a community solar array. A consumer who is considering signing up for 4 kW of a 1 MW array probably can't get the company to change the terms of a contract. The option will probably be to take it or leave it.



Samantha Donald/CESA

Regulations and Guidelines

If providing consumer education is not a sufficient consumer protection strategy, the next step up is implementing guidelines or regulations. Guidelines are voluntary, or are required only of those participating in a particular program. Regulations are mandatory. If a solar program, such as a rebate program, is an essential part of the solar financial proposition in a state, then guidelines for that program can effectively become mandatory.

A guideline or regulation could involve disclosures. A state may require that community solar marketers provide consumers with a disclosure page that summarizes the key provisions of the contract. (See Appendix B for examples implemented in some states.) The intent of disclosure requirements is to ensure that consumers understand their contracts.

Guidelines and regulations can also go beyond disclosures. For instance, a state may require that community solar marketers include specific provisions in the contract, such as a consumer's right to change the amount of their subscription in the first year. Hawaii's proposed community-based renewable energy (CBRE) program framework, for example, states, "There will be no transfer fee if a customer moves within the same utility service territory and no subscription downsizing fee within six (6) months of CBRE program enrollment."²⁶

Enforcement and Consumer Grievance Procedures

The effectiveness of any rule depends on enforcement and grievance procedures. One type of enforcement mechanism commonly used by states to enforce laws on businesses is licensing. In states where a business such as solar installation requires state licensing, violation of the rules can be grounds for revoking a license. States that don't license these activities have fewer enforcement options.

It's a good idea for states to make sure there are clear grievance procedures for consumers who believe they've been treated unfairly by a community solar company. In some cases, the best solution might be to use the same grievance procedures that are used for problems with other types of businesses. This might be through a consumer protection division at the state attorney general's office. In other cases, there might be a solar-specific process housed at the Public Utilities Commission or somewhere else in state government. For example, Maryland's community solar regulations provide a path of recourse for aggrieved consumers. When a violation of the state's community solar regulations is alleged, a consumer "may file a dispute with the [Public Service] Commission's Office of External Relations" to seek a refund for any unwarranted fees or overcharges.²⁷ In all states, courts may provide recourse as well. Regardless, it's useful to have an answer for consumers who want to know where to turn if they have problems.

APPENDIX A

Additional Solar Consumer Protection and Consumer Education Resources

Clean Energy States Alliance (CESA) Resources

- A Homeowner's Guide to Solar Financing—Leases, Loans, and Power Purchase Agreements.²⁸
 - A Spanish-language version of the guide²⁹ is also available
 - State-specific versions of the guide have been produced in [Massachusetts](#)³⁰, [New Mexico](#),³¹ and [New York](#).³²
- CESA has produced an expansive [residential solar guide for consumers in Vermont](#).³³

Center for Resource Solutions (CRS) Resources

- [Guidelines for Renewable Energy Claims: Guidance for Consumers and Electricity Providers](#)³⁴
- A short video titled “What Is a Renewable Energy Certificate?”³⁵
- [Best Practices in Public Claims for Solar Photovoltaic Systems](#)³⁶

Federal Trade Commission (FTC) Resources

- In 2016, the FTC conducted a full-day workshop on competition and consumer protection issues titled “[Something New Under the Sun](#)”³⁷
- The FTC has produced “[Green Guides](#)” that provide guidance on environmental marketing claims including renewable energy claims.³⁸

Interstate Renewable Energy Council (IREC) Resources

IREC has developed and published several clean energy protection tools designed to promote safeguards and protect the solar market, including:

- A [Be Solar Smart Checklist](#), a list of questions and considerations to help consumers get the information they need to make informed decisions about installing solar.³⁹
- A [Clean Energy Consumer Bill of Rights](#), a tool that outlines consumer issues and expectations for solar and other clean energy technologies.⁴⁰
- A [list of solar consumer protection resources](#) produced by various organizations.⁴¹

Solar Energy Industries Association (SEIA) Resources

SEIA's [Solar Consumer Protection Resource webpage](#)⁴² links to various resources focused on improving consumer transparency and reducing transaction costs for solar consumers, including:

- [Consumer Guide to Solar Power](#): A short SEIA guide designed to inform potential solar consumers about solar financing options and contracting terms.⁴³
- [SEIA Solar Business Code](#): Rules of conduct for all SEIA-member companies on advertising, marketing and consumer interactions, and contracts.⁴⁴
- [Complaint Resolution Process](#): Designed to resolve complaints regarding violations of the SEIA Solar Business Code.⁴⁵
- [Information Alert on Telemarketing Rules](#): An overview of rules governing telemarketing and lead-generation activities for solar companies.⁴⁶
- [Solar Leasing](#),⁴⁷ [Purchase](#),⁴⁸ and [Power Purchase Agreement Disclosure Statements](#).⁴⁹ Voluntary forms produced by SEIA for solar third-party ownership providers to make it easier for consumers to understand the terms of an agreement.

Solar Access to Public Capital Resources

The Solar Access to Public Capital working group led by the National Renewable Energy Laboratory has developed resources geared toward solar third-party owners:

- [Sample Leases and Power Purchase Agreements](#)⁵⁰

APPENDIX B

State Community Solar Disclosure Requirements

This appendix provides community solar consumer disclosure requirements from three states. Hawaii, Maryland, and Minnesota have all either adopted or proposed rules for their community solar programs that require certain consumer disclosures in the contracting and enrollment process. In each case, the disclosure requirements are enumerated below a paragraph explaining their context. All three states provide additional community solar consumer protection measures beyond these consumer disclosure requirements.

Hawaii

In 2017, the Public Utilities Commission in Hawaii set forth a proposed framework for the state's Community-Based Renewable Energy (CBRE) program.⁵¹ The program design has not been finalized, but the framework includes a program disclosure checklist and subscriber agreement for each subscriber, "to ensure appropriate consumer protection and that Subscriber Organizations have adequately informed prospective Subscribers on important programmatic considerations." Under the framework, the standardized disclosure checklist will be required to contain at least the following elements:

- i. Future Costs and Benefits of the Subscription
 - (a) Production projections and a description of the methodology used to develop production projections;
 - (b) Bill savings or added cost projections and a description of the methodology used to develop bill projections;
 - (c) All non-recurring (i.e., one-time) charges;
 - (d) All recurring charges;
 - (e) Terms and conditions of service;
 - (f) Whether any charges may increase during the course of service, and if so, how much advance notice is provided to the Subscriber;
 - (g) Whether the Subscriber is required to sign a term contract;

- (h) Terms and conditions for early termination, including a straight line depreciation table of Subscription value;
 - (i) Any penalties that the CBRE Subscriber Organization and/or Operator may charge to the Subscriber and under what circumstances; and
 - (j) The process for unsubscribing or transferring subscription and any associated costs.
- ii. Disclaimers
- (a) An explanation of how the CBRE Subscriber Organization and/or Owner and Administrator will share the Subscribers' data with each other;
 - (b) Data privacy policies of Administrators, Commission, and CBRE Subscriber Organization and/or Owner;
 - (c) Under what circumstance and by what method will notice to Subscribers be issued when the CBRE Project is out of service, including notice of estimated length and loss of production;
 - (d) Assurance that all installations, upgrades, and repairs will be under direct supervision of a qualified professional and that maintenance will be performed according to industry standards, including the recommendations of the manufacturers of solar panels and other operational components;
 - (e) Allocation of unsubscribed output;
 - (f) A statement that the CBRE Subscriber Organization and/or Operator is solely responsible for resolving any disputes with Administrator utility or the Subscriber about the accuracy of the CBRE Facility production;
 - (g) A statement that Administrator is solely responsible for resolving any disputes with the Subscriber about the applicable rate used to determine the amount of the bill credit;
 - (h) Copy of the executed Subscriber Organization's Standard Form Contract with Administrator for the CBRE Program;
 - (i) Copy of the solar panel or wind turbine, inverter, energy storage device, and/or any other core component's warranty;
 - (j) Definition of underperformance and a description of the compensation to be paid by the CBRE Subscriber Organization and/or Owner for any underperformance (i.e., an output guarantee);
 - (k) The type and level of insurance, and what insurance benefits protect Subscribers;
 - (l) Proof and description of a long-term maintenance plan including which services the plan includes (module or inverter failures, etc.); and
 - (m) CBRE Subscriber Organization and/or Owner contact information for questions and complaints and agreement to update and notify the Subscriber if ownership changes hands;

Maryland

Maryland's Public Service Commission (PSC) adopted regulations for a community solar pilot program in 2016⁵² and has begun accepting applications from developers to participate in the community solar pilot program. Certain disclosures for community solar subscription contracts are required.⁵³ Consumer contracts for subscription in Community Solar Energy Generation System (CSEGS) must contain "all material terms and conditions." The following terms and conditions are specified:

- (a) A plain language disclosure of the subscription, including:
 - (i) The terms under which the pricing will be calculated over the life of the contract and a good faith estimate of the subscription price expressed as a flat monthly rate or on a per kilowatt-hour basis; and
 - (ii) Whether any charges may increase during the course of service, and, if so, how much advance notice is provided to the subscriber.
- (b) Contract provisions regulating the disposition or transfer of a subscription to the [community solar energy generating system], as well as the costs or potential costs associated with such a disposition or transfer;
- (c) All nonrecurring (one-time) charges;
- (d) All recurring (monthly, yearly) charges;
- (e) A statement of contract duration, including the initial time period and any rollover provision;
- (f) Terms and conditions for early termination, including:
 - (i) Any penalties that the Subscriber organization may charge to the subscriber; and
 - (ii) The process for unsubscribing and any associated costs.
- (g) If a security deposit is required:
 - (i) The amount of the security deposit;
 - (ii) A description of when and under what circumstances the security deposit will be returned;
 - (iii) A description of how the security deposit may be used; and
 - (iv) A description of how the security deposit will be protected.
- (h) A description of any fee or charge and the circumstances under which a customer may incur a fee or charge;
- (i) A statement that the Subscriber organization may terminate the contract early, including:
 - (i) Circumstances under which early cancellation by the Subscriber organization may occur;

- (ii) Manner in which the Subscriber organization shall notify the customer of the early cancellation of the contract;
- (iii) Duration of the notice period before early cancellation; and
- (iv) Remedies available to the customer if early cancellation occurs;
- (j) A statement that the customer may terminate the contract early, including:
 - (i) Circumstances under which early cancellation by the customer may occur;
 - (ii) Manner in which the customer shall notify the Subscriber organization of the early cancellation of the contract;
 - (iii) Duration of the notice period before early cancellation;
 - (iv) Remedies available to the Subscriber organization if early cancellation occurs; and
 - (v) Amount of any early cancellation fee;
- (k) A statement describing contract renewal procedures, if any;
- (l) A dispute procedure;
- (m) The Commission's toll-free number and Internet address;
- (n) A notice that the contract does not include utility charges;
- (o) A billing procedure description;
- (p) The data privacy policies of the Subscriber organization;
- (q) A description of any compensation to be paid for underperformance;
- (r) Evidence of insurance;
- (s) A long-term maintenance plan;
- (t) Current production projections and a description of the methodology used to develop production projections;
- (u) Contact information for the Subscriber organization for questions and complaints;
- (v) A statement that the Subscriber organization and electric company do not make representations or warranties concerning the tax implications of any bill credits provided to the subscriber;
- (w) The method of providing notice to the subscribers when the CSEGS is out of service for more than three business days, including notice of:
 - (i) The estimated duration of the outage; and
 - (ii) The estimated production that will be lost due to the outage.
- (x) An explanation of how unsubscribed production of the CSEGS will be allocated; and
- (y) Any other terms and conditions of service.

Minnesota

In 2013, the Minnesota Legislature authorized the development of a Minnesota community solar garden program. In 2014, the Minnesota Public Utility Commission approved Xcel Energy's community solar garden program⁵⁴ with certain required subscriber protections.⁵⁵ Minnesota's Clean Energy Resource Teams developed a Community Solar Garden Subscriber Disclosure Checklist, which lists subscriber contract disclosure requirements.⁵⁶ The checklist is available online for consumers to use in reviewing their subscription agreements. Although community solar providers must comply with the requirements outlined in the form, use of the checklist is voluntary. The form lists the following required disclosures:

- All nonrecurring (i.e., one-time) charges
- All recurring charges
- Terms and conditions of service
- Whether any charges may increase during the course of service, and if so, how much advance notice is provided to the Subscriber
- Whether the Subscriber is required to sign a term contract
- Terms and conditions for early termination
- Any penalties that the Community Solar Garden may charge to the Subscriber
- The process for unsubscribing and any associated costs
- An explanation of how the Community Solar Garden Operator and the Utility will share the Subscribers data with each other
- Data privacy policies the Utility of the Community Solar Garden Operator
- Under what circumstance and by what method will notice to Subscribers be issued when the Community Solar Garden is out of service, including notice of estimated length and loss of production
- Assurance that all installations, upgrades and repairs will be under direct supervision of a NABCEP-certified solar professional and that maintenance will be performed according to industry standards, including the recommendations of the manufacturers of solar panels and other operational components
- Allocation of unsubscribed production
- A statement that the Community Solar Garden Operator is solely responsible for resolving any disputes with Xcel Energy or the Subscriber about the accuracy of the Community Solar Garden production
- A statement that Xcel Energy is solely responsible for resolving any disputes with the Subscriber about the applicable rate used to determine the amount of the Bill Credit
- Copy of the contract with Xcel Energy (a.k.a., Northern States Power Company) for the Solar Rewards Community Program

- Copy of the solar panel warranty
- Definition of underperformance and a description of the compensation to be paid by the Community Solar Garden Owner for any underperformance
- The type and level of insurance, and what insurance benefits protect Subscribers
- Proof and description of a long-term maintenance plan including which services the plan includes (module or inverter failures, snow, etc.)
- Production projections and a description of the methodology used to develop production projections
- Community Solar Garden Operator contact information for questions and complaints and agreement to update and notify the Subscriber if ownership changes hands
- Demonstration to the Subscriber by the Community Solar Garden Operator that it has sufficient funds to operate and maintain the Community Solar Garden



Maria Costello/CESA

APPENDIX C

Federal Securities Regulation

The Securities Act of 1933⁵⁷ was enacted to increase disclosure requirements for securities and to prohibit deceit, misrepresentation, and other fraud in securities transactions. Although securities regulations are meant to protect consumers, securities compliance issues can pose a challenge for community solar projects. If a particular community solar interest is classified as a security under the federal Securities Act, the sale or transfer of that community solar interest is strictly regulated by the Securities and Exchange Commission (SEC). A community solar interest that is classified as a security must either be registered under the Securities Act or exempted from regulation. If a community solar interest is not classified as a security, then it falls outside the scope of federal Securities Act regulation. This appendix discusses the tests applied to determine whether an interest in a community solar project will be classified as a security, and discusses exemptions that may apply even when a project is classified as a security.

In most cases, a community solar project developer or promoter, rather than the consumer, will bear the liability associated with securities compliance. Nevertheless, we address securities regulation here because the Securities Act of 1933 is designed to protect consumers and because securities violations could become an issue for a consumer if an SEC enforcement action results in the halting of a community solar project after the consumer has signed a contract.

A security represents a financing or investment instrument that denotes indebtedness by the issuer and an ownership interest or a right to a distribution of property or earnings by the holder. Securities Act jurisprudence usually relies on a test, as set forth in U.S. Supreme Court decision *SEC v. W.J. Howey Co.*, to determine whether an interest is considered an “investment contract” subject to Securities Act regulation. Under *Howey*, a “contract, transaction, or scheme” is considered an investment contract if it satisfies a four-part test: a buyer 1) “invests his money,” 2) “in a common enterprise,” 3) based “solely on the efforts of a promoter or a third party,” and 4) for which the buyer has been “led to expect profits.” Historically, courts have construed interests in a wide variety of objects—from cattle embryos⁵⁸ to vacuum cleaners⁵⁹—to be investment contracts.

A community solar interest generally must satisfy all four prongs of the *Howey* test to be considered an investment contract subject to Securities Act regulation, although some courts have relaxed the third prong to require that profits only accrue “substantially,” not necessarily “solely,” through the efforts of others. A court will typically look at the substance of a transaction as whole to determine if it is an investment contract.

Community solar developers have generally tried to avoid security classification to forgo SEC registration requirements. To avoid security classification, developers have often argued that one or more of the prongs of the *Howey* test isn't satisfied under their project structure.

Many developers have focused on the fourth prong—whether the buyer has been “led to expect profits”—in an effort to avoid classification as an investment contract. Central to this inquiry is the question of whether the goal and function of a program is to provide electricity for personal consumption or whether there is a profit motive at play. How the program is marketed, how program customers receive credit for electricity, and how much excess electricity consumers can be credited for may be important considerations.

Project models structured as cooperative associations of consumers have sometimes argued that the third prong—whether profits accrue based “substantially” or “solely on the efforts of a promoter or a third party”—is not satisfied because no third-party or promoter is involved.

The SEC can provide assurances to companies about whether an interest will be classified as a security through the issuance of a “no-action letter,” which recommends the SEC not take enforcement action against the requester under the particular scenario presented to it. In 2011, CommunitySun, a developer, sought clarification from the SEC about whether the sale of interests in its community solar “SolarCondo” model subjected the company to Securities Act regulation. Under CommunitySun's arrangement, consumers would buy “SolarCondo” interests in an offsite solar facility upfront and receive net metering credit for the electric generation from their interest in the array to reduce their electricity bill. In CommunitySun's request for an SEC no-action letter, the company emphasized the fourth prong of the *Howey* test, arguing that their model was based on offsetting personal electricity consumption, not an expectation of profit. The SEC determined that SolarCondo interests were not securities and that it would not recommend enforcement action based on facts presented. Although the no-action letter issued is based on the specific facts of CommunitySun's arrangement, it suggests that community solar projects can be structured such that they avoid federal Securities Act regulation.

Further, even if an investment is classified as an investment contract subjecting it to the Securities Act, there are exemptions written into the law that community solar developers could use to avoid the security registration requirements. The most obvious exemptions that community solar developers could invoke are Rules 506(b) and (c) of Regulation D (CFR, §230.506), Rule 504 of Regulation D (CFR, §230.504), or Sections 3(a)(4) or 3(a)(11) of the Securities Act.

- Rule 506(b) allows up to 35 non-accredited investors to participate in a securities offering if the non-accredited investors have sufficient financial acumen, are provided certain disclosures, and the company does not use general solicitation or advertising for marketing the offering. A non-accredited investor is someone with a net worth of less than \$1 million and who earned less than \$200,000 annually (\$300,000 with a spouse) in the previous two years.
- Rule 506(c) allows a company offering a security to engage in general solicitation and advertising if the offering is made only to accredited investors and the company takes reasonable steps to verify their accredited status.

- Rule 504 provides an exemption for offerings that comply with state registration requirements and have an aggregate offering price of \$1 million or less within a twelve-month period.
- Section 3(a)(4) provides an exemption for security offerings by nonprofits designated as tax-exempt under Section 501(c)3 of the tax code.
- Section 3(a)(11) of the Securities Act provides an exemption for security offerings made by a company that is organized in the state where the offering occurs, that carries out a significant amount of its business in that state, and that makes security offers and sales only to residents of that state.

These exemptions provide potential paths for community solar developers to avoid security registration where the Securities Act applies, but they may significantly restrict a developer's marketing reach or customer base. A community solar developer relying on an exemption still must comply with securities laws, but does not have to register its offerings. As a technical matter, a community solar developer could still operate without an exemption so long as it complied with security registration requirements; however, the costs associated with registration might be prohibitive.

In addition to federal securities law, states have their own rules called "blue sky laws," which regulate securities transactions. Most states apply the Howey test to determine if an interest is subject to securities regulation under their blue sky laws, but some states may apply a "risk capital test" instead of or in addition to the Howey test. Under the risk capital test, an interest or instrument is treated as a security if it involves 1) "rais[ing] funds for a business venture or enterprise," 2) "an indiscriminate offering to the public at large," 3) "a passive position on the part of the investor," and 4) "the conduct of the enterprise by the issuer with other people's money."⁶⁰

States' regulatory treatment of community solar projects has varied. Oregon, for example, has exempted "renewable energy cooperative corporations" from registering stock or membership certificates with the state subject to certain conditions. In Vermont, the state's Department of Financial Regulation issued an order creating a registration exemption (commonly referred to as the Solar/Utility No-Action Exemption or "SUN Exemption") for intrastate community solar project investments as long as the requirements outlined in the order are satisfied. Under the SUN exemption order, even where a community solar interest constitutes an investment contract, it is deemed to be automatically exempt from security registration if any one of the four exemptions set forth in the order are met.⁶¹ Colorado's Department of Regulatory Agencies issued a letter in response to a request for an interpretative opinion on the application of the states securities law to the state's community solar gardens. The letter noted that the Department was "unable to conclude that a 'security' does not exist with respect to the financial participation of subscribers in [community solar gardens]," but it also highlighted "a number of alternatives to registration of securities" as well as a "number of types of securities that are exempt from the registration requirements of the Securities Act that may apply to [community solar gardens]."^{62,63} Other states, such as Massachusetts and Michigan, have also produced guidance on the application of securities law to community solar projects.⁶⁴

Endnotes

- 1 For instance, many solar consumers take on a regulatory risk that state regulators may change the compensation rate for solar electricity after a consumer has signed a contract, reducing the benefit the consumer gains from solar. Other solar consumers, who sign up for community solar programs in which they agree to pay more now but lock in their prices over the long term, risk that they won't see savings from solar if utility retail rates don't rise as expected.
- 2 Trabish, Herman K., "Subscriptions or sales: Which community solar approach promises the best growth?" *Utility Dive*, January 19, 2017. www.utilitydive.com/news/subscriptions-or-sales-which-community-solar-approach-promises-the-best-gr/434051.
- 3 Tweed, Katherine, "New York Has Nearly 2 Gigawatts of Proposed Community Solar." *Greentech Media*, August 24, 2016. www.greentechmedia.com/articles/read/new-york-has-nearly-2-gigawatts-of-proposed-community-solar.
- 4 Proudlove, Autumn, Brian Lips, David Sarkisian, and Achyut Shrestha, "50 States of Solar Q4 2016 Quarterly Report & Annual Review." NC Clean Energy Technology Center. January 31, 2017. <https://nccleantech.ncsu.edu/the-50-states-of-solar-report-2016-annual-review-and-q4-update>.
- 5 Trabish, Herman K., "Subscriptions or sales: Which community solar approach promises the best growth?" *Utility Dive*, January 19, 2017. www.utilitydive.com/news/subscriptions-or-sales-which-community-solar-approach-promises-the-best-gr/434051.
- 6 For a breakdown of the differences between community solar programs see: "State Shared Renewable Energy Program Catalog." Interstate Renewable Energy Council. Accessed May 23, 2017. www.irecusa.org/regulatory-reform/shared-renewables/state-shared-renewable-energy-program-catalog.
- 7 Shelton Group and Smart Electric Power Alliance, "What the Community Solar Consumer Wants." Accessed May 24, 2017. <https://sepapower.org/resource/what-the-community-solar-customer-wants>.
- 8 Clean Energy States Alliance, "Private Letter Ruling on the Eligibility of an Individual Panel Owner in an Offsite, Net-Metered Community-Shared Solar Project to Claim the Section 25D Tax Credit." September 1, 2015. www.cesa.org/about-us/member-news/newsitem/IRS-Community-Shared-Solar-PLR.
- 9 Dave Gram, "Buyer Beware: Solar Power May Be Missing Key Ingredient," *Portland Press Herald*, January 17, 2016. www.pressherald.com/2016/01/17/buyer-beware-solar-power-may-be-missing-key-ingredient.
- 10 For a user-friendly explanation of RECs, the Center for Resource Solutions has a short, animated video titled "What is a Renewable Energy Certificate?" February 17, 2015. www.youtube.com/watch?v=opJMrzNauFQ.
- 11 Center for Resource Solutions, "Guidelines for Renewable Energy Claims." February 26, 2015. <http://ctgreenbank.com/rec.pdf>.
- 12 Vermont Energy & Climate Action Network, "Boardman Hill Solar Farm Case Study." March 17, 2015. www.vecan.net/wp-content/uploads/BHSF-CASE-STUDY-FINAL-1.compressed.pdf.
- 13 Federal Trade Commission, "FTC and Department of Justice Bring Action against Lead-Generator Using Robocalls to Pitch Energy Savings." March 10, 2016. www.ftc.gov/news-events/press-releases/2016/03/ftc-department-justice-bring-action-against-lead-generator-using.
- 14 Federal Trade Commission, "Something New Under the Sun: Competition & Consumer Protection Issues in Solar Energy." June 21, 2016. www.ftc.gov/news-events/events-calendar/2016/06/something-new-under-sun-competition-consumer-protection-issues.

- 15 SB. 1465, 52nd Legislature. Article 44 Chapter 11 Arizona Revised Statutes §44-1763 (2015).
- 16 SB. 210, 53rd Legislature. Chapter 57 New Mexico Statutes Annotated 1978 §1-5 (2017).
- 17 Connecticut Department of Energy and Environmental Protection, “Request for Proposals from Private Developers for Shared Clean Energy Facilities, Appendix C.” Implementation of the Shared Clean Energy Facilities Pilot Program. March 28, 2017. [www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bfb65ae1f4f487d261852580d7006bd50f\\$FILE/2017.03.28_%20FINAL%20Revised%20Modified%20RFP.pdf](http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bfb65ae1f4f487d261852580d7006bd50f$FILE/2017.03.28_%20FINAL%20Revised%20Modified%20RFP.pdf).
- 18 Minnesota Department of Commerce, “Tips About Community Solar.” December 03, 2016. <https://mn.gov/commerce/consumers/your-home/energy-info/solar/tips-about-community-solar.jsp>.
- 19 Solar Energy Industries Association, “Residential Consumer Guide to Community Solar.” July 2016. www.seia.org/sites/default/files/Residential%20Consumer%20Guide%20to%20Community%20Solar%20-%20FINAL.pdf.
- 20 Interstate Renewable Energy Council, “Five Guiding Principles for Shared Renewable Energy Programs.” February 2017. www.irecusa.org/publications/guiding-principles-for-shared-renewable-energy-programs.
- 21 Center for Resource Solutions, “Guidelines for Renewable Energy Claims.” February 2015. <http://resource-solutions.org/wp-content/uploads/2015/07/Guidelines-for-Renewable-Energy-Claims.pdf>.
- 22 Center for Resource Solutions and Green E, “Best Practices in Public Claims for Solar Photovoltaic Systems.” October 7, 2010. www.green-e.org/docs/energy/Solar%20FAQ%20and%20Claims.pdf.
- 23 Center for Resource Solutions, “What is a Renewable Energy Certificate?” February 17, 2015. www.youtube.com/watch?v=opJMrzNauFQ.
- 24 Leon, Warren, “Solar Information for Consumers: A Guide for States.” Clean Energy States Alliance. November 8, 2016. www.cesa.org/resource-library/resource/solar-information-for-consumers-a-guide-for-states.
- 25 California Public Utility Commission, “Order Instituting Rulemaking to Develop a Successor to Existing Net Energy Metering Tariffs.” July 10, 2014. <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M162/K043/162043082.pdf>.
- 26 Hawaii Public Utilities Commission, “Application for Approval to Establish a Rule to Implement a Community-Based Renewable Energy Program.” October 1, 2015. To access Hawaii’s proposed community-based renewable energy program framework, search <http://puc.hawaii.gov> for docket 2015-0389. Order number 34388 is dated February 10, 2017.
- 27 Maryland General Assembly, “Notice of Proposed Action on Regulations. Public Service Commission.” March 18, 2016. <http://mgaleg.maryland.gov/pubs/committee/aclr/16-039p-regulation.pdf>.
- 28 Hausman, Nate, “A Homeowner’s Guide to Solar Financing Leases, Loans, and PPAs.” Clean Energy States Alliance. February 12, 2015. www.cesa.org/resource-library/resource/a-homeowners-guide-to-solar-financing-leases-loans-and-ppas.
- 29 Hausman, Nate, “Una Guía Práctica de Financiación Solar Para Dueños de Casa.” Clean Energy States Alliance. September 28, 2016. <http://www.cesa.org/resource-library/resource/una-guia-practica-de-financiacion-solar-para-duenos-de-casa>.
- 30 Hausman, Nate, Emma Kruse, and Kaitlin Kelly, “A Massachusetts Homeowner’s Guide to Solar Leases, Loans, and PPAs.” Massachusetts Department of Energy Resources. Mass.Gov. December 2015. www.mass.gov/eeal/docs/doer/ma-homeowners-guide-to-solar-financing-final.pdf.
- 31 Hausman, Nate, Anne Jakie, Mark Gaiser, Ken Hughes, and Jeremy Lewis, “A New Mexico Homeowner’s Guide to Solar Leases, Loans, and Power Purchase Agreements.” New Mexico Energy, Minerals, and Natural Resources Department. July 2015. www.emnrd.state.nm.us/ECMD/RenewableEnergy/documents/NMGuidetoSolarFinancing.pdf.
- 32 Hausman, Nate, Max Joel, Jason Mangione, and Lillie Ghobrial, “New York State Homeowner’s Guide to Solar Leases, Loans, and Power Purchase Agreements.” New York State Energy Research & Development Authority. 2016. www.nysed.gov/-/media/NYSun/files/Homeowners-Guide-Solar-Lease-Loan-Power-Purchase-Agreements.pdf.
- 33 Chace, Diana, and Clay Mitchell, “A Vermonter’s Guide to Residential Solar.” Vermont Public Service Department. Clean Energy States Alliance. September 28, 2016. www.cesa.org/resource-library/resource/a-vermonters-guide-to-residential-solar.
- 34 Center for Resource Solutions, “Guidelines for Renewable Energy Claims.” February 26, 2015. <http://resource-solutions.org/wp-content/uploads/2015/07/Guidelines-for-Renewable-Energy-Claims.pdf>.

- 35 Center for Resource Solutions, “What is a Renewable Energy Certificate?” February 17, 2015. www.youtube.com/watch?v=opJMrzNauFQ.
- 36 Center for Resource Solutions and Green-E, “Best Practices in Public Claims for Solar Photovoltaic Systems.” October 7, 2010. www.green-e.org/docs/energy/Solar%20FAQ%20and%20Claims.pdf.
- 37 Federal Trade Commission, “Something New Under the Sun: Competition & Consumer Protection Issues in Solar Energy.” April 12, 2016. www.ftc.gov/news-events/events-calendar/2016/06/something-new-under-sun-competition-consumer-protection-issues.
- 38 U.S. Federal Trade Commission, “Part 260 - Guides for the Use of Environmental Marketing Claims.” 1-36. www.ftc.gov/sites/default/files/attachments/press-releases/ftc-issues-revised-green-guides/greenguides.pdf.
- 39 Center for Resource Solutions and Green-E, “Best Practices in Public Claims for Solar Photovoltaic Systems.” October 7, 2010. www.green-e.org/docs/energy/Solar%20FAQ%20and%20Claims.pdf.
- 40 Interstate Renewable Energy Council, “Clean Energy Consumer Bill of Rights.” Accessed May 23, 2017. www.irecusa.org/consumer-protection/consumer-bill-of-rights.
- 41 Interstate Renewable Energy Council, “Other Consumer Resources.” Accessed May 23, 2017. www.irecusa.org/consumer-protection/consumer-resources.
- 42 Solar Energy Industries Association, “Solar Consumer Protection Resource webpage.” www.seia.org/consumer-protection-customer-resources. Accessed May 23, 2017.
- 43 Solar Energy Industries Association, “Residential Consumer Guide to Solar Power.” February 2016. www.seia.org/research-resources/residential-consumer-guide-solar-power.
- 44 Solar Energy Industries Association, “SEIA Solar Business Code.” September 2015. www.seia.org/sites/default/files/SEIA%20Solar%20Business%20Code_Sep2015.pdf.
- 45 Solar Energy Industries Association, “Process for Addressing Consumer Protection Complaints Arising Under SEIA Solar Business Code.” January 2016. www.seia.org/sites/default/files/SEIA%20SBC%20Complaint%20Resolution%20Process%20v%201.1%20-%20Jan%202016.pdf.
- 46 Solar Energy Industries Association, “SEIA Consumer Protection Industry Alert: Telemarketing Rules.” January 2016. www.seia.org/sites/default/files/SEIA%20Industry%20Alert%20-%20Telemarketing%20Rules%20-%20Jan%202016.pdf.
- 47 Solar Energy Industries Association, “SEIA Solar Leasing Disclosure Statement.” Accessed May 23, 2017. [www.seia.org/sites/default/files/SEIA%20Solar%20Lease%20Disclosure%20Form%20\(fillable\)%20-%201.13.2016.pdf](http://www.seia.org/sites/default/files/SEIA%20Solar%20Lease%20Disclosure%20Form%20(fillable)%20-%201.13.2016.pdf).
- 48 Solar Energy Industries Association, “SEIA Solar Purchase Disclosure Statement.” Accessed June 6, 2017. <http://www.seia.org/sites/default/files/SEIA%20Solar%20Purchase%20Disclosure%20Form%20-%20204-7-17.pdf>.
- 49 Solar Energy Industries Association, “SEIA Solar PPA Disclosure Statement.” Accessed May 23, 2017. www.seia.org/sites/default/files/SEIA%20Solar%20PPA%20Disclosure%20Form%20-%20206.15.2016%20-%20FINAL%20v2.pdf.
- 50 Solar Energy Industries Association, “Model Leases and PPAs.” Accessed May 23, 2017. www.seia.org/research-resources/model-leases-ppas.
- 51 Hawaii Public Utilities Commission, “Application for Approval to Establish a Rule to Implement a Community-Based Renewable Energy Program.” October 1, 2015. To access Hawaii’s proposed community-based renewable energy program framework, search <http://puc.hawaii.gov> for docket 2015-0389. Order number 34388 is dated February 10, 2017.
- 52 Maryland Public Service Commission, “Maryland PSC Adopts Regulations for Community Solar Pilot Program.” June 15, 2015. www.psc.state.md.us/wp-content/uploads/Maryland-PSC-Adopts-Community-Solar-Regulations_06152016.pdf.
- 53 Maryland Public Service Commission, “Notice of Proposed Actions.” March 18, 2017. <http://mgaleg.maryland.gov/pubs/committee/aclr/16-039p-regulation.pdf>.
- 54 Jones Heydinger, Beverly, David C. Boyd, Nancy Lange, Dan Libschultz, and Betsy Wergin, “Order Approving Solar-Garden Plan with Modifications.” State of Minnesota. September 17, 2014. www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId=%7b10BA0886-4539-4BC2-B896-8E0D8D26E5F4%7d&documentTitle=20149-103114-01.
- 55 Jones Heydinger, Beverly, David C. Boyd, Nancy Lange, Dan Lipschultz, and Betsy Wergin, “Order Rejecting Xcel’s Solar Garden Tariff Filing.” State of Minnesota. April 7, 2014. www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId=%7b30B6A5B5-73CF-46E6-9E5D-B087352EA1AD%7d&documentTitle=20144-98041-01.

- 56 Clean Energy Resource Team, “Community Solar Garden Subscriber Disclosure Checklist.” Accessed May 24, 2017. www.cleanenergyresourceteams.org/sites/default/files/CommunitySolarGarden_DisclosureChecklist_12-11-14_0.pdf.
- 57 15 U.S.C. § 77a *et. seq.* See: www.sec.gov/about/laws/sa33.pdf.
- 58 *Eberhardt v. Waters*, 901 F.2d 1578 (11th Cir. 1990).
- 59 *Bell v. Health-Mor, Inc.*, 549 F.2d 342 (5th Cir. 1977).
- 60 *Silver Hills Country Club vs. Sobieski*, 361 P.2d 906 (Cal. 1961) (citing Dahlquist, Regulation and Civil Liability Under the California Corporate Securities Act, 33 Cal.L.Rev. 343, 360).
- 61 The four exemptions set forth by the Vermont Department of Financial Regulation are 1) the consumer exemption, 2) the financing exemption, 3) the commercial exemption, and 4) the de minimus exemption. For more information on these four exemptions, see Vermont Department of Financial Regulation, “Solar/Utility No Action Securities Exemption.” July 21, 2014. www.dfr.vermont.gov/reg-bulord/solarutility-no-action-securities-exemption.
- 62 Colorado Department of Regulatory Services, “Letter RE: Request for an Interpretative Opinion Regarding Community Solar Gardens.” September 22, 2010. <http://www.solargardens.org/ColorSecuritiesReport.pdf>.
- 63 Massachusetts Department of Energy Resources, “Community Shared Solar: Implementation Guidelines for Massachusetts Communities.” March 2013. www.mass.gov/eea/docs/doer/renewables/solar/community-shared-solar-implementation-guidelines-with-contracts-032913.pdf.
- 64 Great Lakes Renewable Energy Association, “A Guidebook for Community Solar Program in Michigan Communities.” October 2013. www.michigan.gov/documents/mdcd/Michigan_Community_Solar_Guidebook_437888_7.pdf.

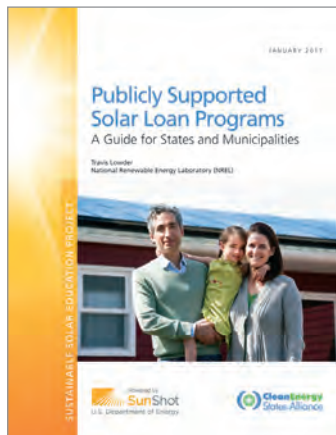
From CESA's Sustainable Solar Education Project

www.cesa.org/projects/sustainable-solar

The Sustainable Solar Education Project provides timely information and educational resources to help states and municipalities ensure distributed solar electricity remains consumer friendly and benefits low- and moderate-income households.

The project is developing program guides, webinars, online course material, and in-person training for government officials on topics related to strengthening solar equitability, improving consumer information, and implementing consumer protection measures.

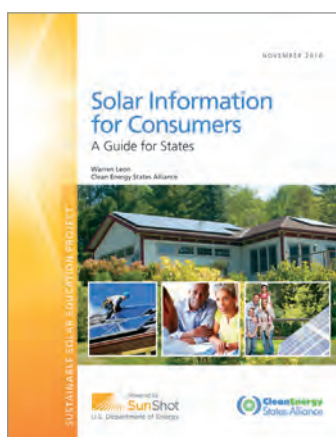
You can sign up to receive the Sustainable Solar Education Project's newsletter, reports, and webinar announcements at www.cesa.org/projects/sustainable-solar/mailling-list.



PUBLICLY SUPPORTED SOLAR LOAN PROGRAMS: A GUIDE FOR STATES AND MUNICIPALITIES

This guide describes general factors state and municipal governments should consider when assessing whether to launch a public solar loan program, explains various loan program design elements, and offers several case studies.

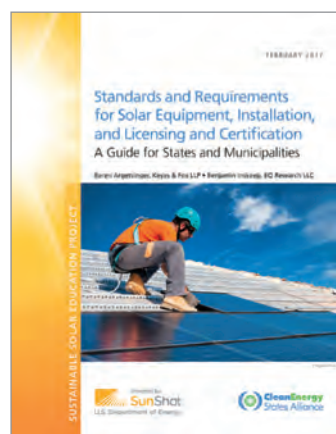
The accompanying webinar recording is available at www.cesa.org/webinars/designing-publicly-supported-solar-loan-programs.



SOLAR INFORMATION FOR CONSUMERS: A GUIDE FOR STATES AND MUNICIPALITIES

This guide explains why states should provide consumer information on solar, describes the types of information that can be useful, and points out existing educational efforts by states and other entities that provide models and useful resource information.

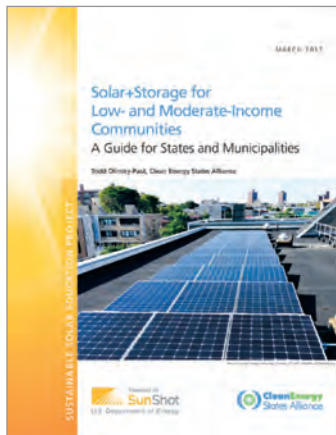
The accompanying webinar recording is available at www.cesa.org/webinars/solar-consumer-protection.



STANDARDS AND REQUIREMENTS FOR SOLAR EQUIPMENT, INSTALLATION, AND LICENSING AND CERTIFICATION: A GUIDE FOR STATES AND MUNICIPALITIES

This guide is intended as a starting point for program managers in states or municipalities who are developing or revising standards and requirements for installation, licensing and certification, equipment, and warranties for solar photovoltaic (PV) equipment and systems.

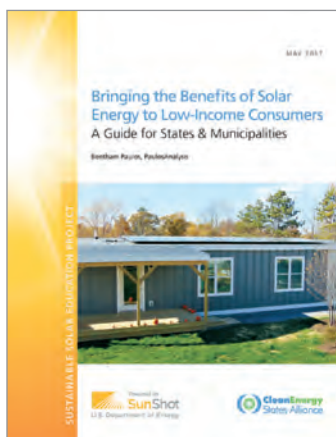
The accompanying webinar recording is available at www.cesa.org/webinars/solar-equipment-installation-and-licensing-and-certification-a-guide-for-states-and-municipalities.



SOLAR+STORAGE FOR LOW- AND MODERATE-INCOME COMMUNITIES: A GUIDE FOR STATES AND MUNICIPALITIES

This guide seeks to provide state and municipal officials with information to develop effective solar and battery storage (solar+storage) policies and programs that benefit low- and moderate-income (LMI) communities. It explores a range of policy approaches that have been successfully employed and provides program examples from states that have made LMI access to these technologies a priority.

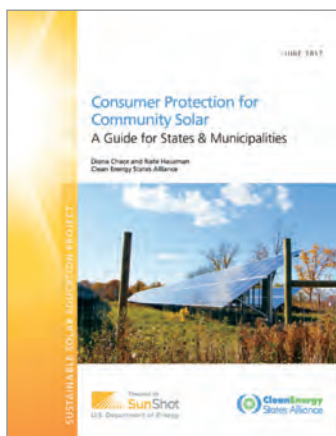
The accompanying webinar recording is available at cesa.org/webinars/solar-storage-for-lmi-communities.



BRINGING THE BENEFITS OF SOLAR ENERGY TO LOW-INCOME CONSUMERS

This guide outlines the obstacles that low-income households face in accessing solar power and provides a detailed overview of strategies that policymakers and government agencies can use to encourage low-income solar adoption.

The accompanying webinar recording can be found at cesa.org/webinars/bringing-the-benefits-of-solar-to-low-income-customers.



CONSUMER PROTECTION FOR COMMUNITY SOLAR: A GUIDE FOR STATES

This guide discusses consumer protection issues that may arise in community solar projects for residential consumers, and the role states play in ensuring appropriate consumer protections.

The accompanying webinar information can be found at <http://cesa.org/webinars/consumer-protections-for-community-solar/?date=2017-06-22>.



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Clean Energy States Alliance (CESA) is a national, nonprofit coalition of public agencies and organizations working together to advance clean energy. CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.

CESA works with state leaders, federal agencies, industry representatives, and other stakeholders to develop and promote clean energy technologies and markets. It supports effective state and local policies, programs, and innovation in the clean energy sector, with an emphasis on renewable energy, power generation, financing strategies, and economic development. CESA facilitates information sharing, provides technical assistance, coordinates multi-state collaborative projects, and communicates the views and achievements of its members.

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