

Community Solar Policy Decision Matrix
Guidance for Designing Community Solar Programs
December 2017





About Us

The Coalition for Community Solar Access (CCSA) is a business-led trade organization that works to expand access to clean, local affordable energy nationwide through community solar. Our mission is to expand consumer choice and increase access to affordable, reliable, clean energy for Americans and American businesses by opening, protecting, and serving markets for community solar across the country. By creating opportunities for everyone to access solar, whether or not they put it on their own roof, CCSA works to make solar available to the vast majority of consumers who do not have that option today.

Acknowledgements

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EnterSolar, Foley Hoag, GRID Alternatives, Keyes & Fox, Lever Energy Finance, M+W Group, Mortenson Construction, Norton Rose, OneEnergy Renewables, OnForce, ProjectEconomics, REC Solar, Regreen, Relay Power, Solstice, Summit Ridge Energy, SunPower, SRP, Trajectory Energy, Vote Solar, Westwood, and Wilson Sonsini Goodrich & Rosati.

About this Policy Matrix

Solar energy continues to grow in popularity across the nation, with individuals, businesses, governments, schools, and other organizations demanding more choice, cleaner energy options, and greater control over their energy bills. Although more than one million solar energy systems have been installed in the U.S.,¹ not everyone has access to the many benefits of solar energy or the ability to install their own system onsite. For example, a property owner may have unsuitable roof space, an old roof needing replacement in the near future, or too much shading, and millions of tenants or renters lack the permission to install a solar system at their home or business.

Community solar provides a key opportunity to expanding access to solar energy to anyone and

¹ Solar Energy Industries Association, see: <http://www.seia.org/million-solar-strong>

everyone wanting solar. By participating in community solar, someone unable to install solar onsite can still take advantage of its benefits. Community solar works by allowing multiple individuals, groups, or businesses to own a portion or subscribe to the output of a single solar facility located off-site.

Sixteen states and Washington, D.C.² have enacted key policies to enable community solar arrangements between community solar subscribing organizations and participating subscribers, and utilities across the country are implementing their own community solar programs. Community solar has grown exponentially in the last six years, going from just a handful of projects installed before 2010 to a gigawatt (GW) by the end of 2018. Community solar installations are on track to grow exponentially in the coming years – the Smart Electric Power Association (SEPA) estimates 2GW installed by 2021. Massachusetts, Minnesota and Colorado are leading the nation in community solar adoption, with New York, Maryland, and Illinois all poised for significant growth over the next several years.

Importantly, no two community solar models are the same. For example, pilot community solar rules in Maryland authorize approximately 250 MW-DC of community solar through 2019 and require electric utilities to provide community solar subscribers with bill credits valued at the retail rate for their share of electricity generated from a community solar facility.³ The rules specifically reserve a portion of the total available capacity for both small community solar projects and projects serving primarily low and moderate-income subscribers. In Minnesota, there is no upper limit on the number of community solar projects, although each facility must be sized under 1 MW, and subscribers are compensated at a “value of solar” rate.

The members of CCSA have experience working in different states under different policy models. This experience has provided the organization with a deep understanding of how different policy options spur the community solar market in different ways and how certain policy provisions may have unintended consequences. Community solar subscriber organizations have adapted to unique state policies by creating a number of



innovative business models to meet diverse customer interests and specific program design requirements.

Based on the experiences of CCSA's members, we have created this policy decision matrix to aid policymakers in designing community solar programs. This matrix is intended to lead policymakers through important questions, grouped into five categories, which should be addressed when designing programs. To answer these questions, we provide a menu of options, focusing on those that will spur market development while providing choices to customize programs to meet a state's needs and goals. The decision matrix provides CCSA's recommendation for what works best, based on our experiences working in different states. It also provides our rationale for that recommendation, example language to aid in drafting policies and other important issues to consider. The five areas addressed in this matrix are:

1. Program Structure
2. Compensation
3. Consumer Participation
4. Project Characteristics
5. Low-to-Moderate Income Considerations

Our recommendations in this document are driven by our Core Principles (listed on p11), which emphasize creation of sustainable markets that will benefit consumers for years to come.

² States include California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New York, Oregon, Rhode Island, Vermont and Washington. See: <http://sharedrenewables.org/shared/community-energy-projects/>

³ Maryland PSC Website. See: <http://www.psc.state.md.us/electricity/community-solar-pilot-program/>

1. Program Structure

Key Questions to Ask	Options to Consider	CCSA Recommendations	Rationale	Example Language	Notes
What types of entities should be permitted to own and/or manage projects?	Community solar providers	Open, competitive markets with as many ownership options as possible.	Competition and innovation are necessary to drive the market forward, ultimately resulting in lower costs and more options for consumers.	A Subscriber Organization shall be any for-profit or not-for-profit entity permitted by [State] law that (A) owns or operates one or more community solar facility(ies) for the benefit of subscribers, or (B) contracts with a third-party entity to build, own or operate one or more community solar facilities.	In a program where utilities are allowed to participate as project owners/managers, protocols should be put in place to ensure a level playing field and safeguard competitive markets. Considerations include equal access to data, financing, interconnection opportunities and other issues.
	Utility				
	Other (e.g. Customer, retail supplier)				
Who should fill the role of program administrator? (i.e. who should determine project/ subscriber organization eligibility and, if a program is capped, determine which projects are allocated space in the program)	State agency (such as the public utilities commission)	A state agency, utility, or contracted third-party administrator may fill this role, but the entity must have adequate systems and staffing in place to ensure a smooth process.	Program administration should be designed to run transparently and efficiently. ⁴	[State agency] shall administer the community solar program.	If a utility oversees program administration and that utility is also participating as a Subscriber Organization in the program, additional oversight will be necessary to ensure conflicts of interest are avoided.
	Utility			An Electric Company shall administer the community solar program based on regulations set forth by [state agency].	
	Third-party administrator				
What entity should administer bill credits?	Utility	Utility (or customer's primary billing entity for electric service), though it may be appropriate to contract with a third-party to provide administrative support.	The primary billing entity should administer bill credits to customers to simplify and enhance the customer experience.	An Electric Company shall apply bill credits to the accounts of participating subscribers on a monthly basis, based on their proportional subscriptions to the community solar facility.	Communication between community solar providers and utilities for the purposes of calculating, assigning, and applying bill credits must be handled via efficient electronic systems that result in timely, accurate bill crediting, with the capability to update subscriber lists at least on a monthly basis. Consistent monthly reporting from utility to subscriber organization is also necessary to ensure accuracy in bill crediting. Utilities should allow community solar providers to opt to offer on bill repayment for community solar subscriptions, which can simplify the transaction for the consumer.
	Other (e.g. retail supplier)				

⁴ Massachusetts' MassACA is an example of a third-party administered application system that is streamlined and transparent. It provides significant value to market participants in the state. The application system is not community solar-specific, but manages applications for projects seeking to reserve net metering capacity more broadly.

1. Program Structure (Continued)

Key Questions to Ask	Options to Consider	CCSA Recommendations	Rationale	Example Language	Notes
Should there be a preset size for the program?	Calibrate initial capacity available under program to meet state policy goals	Either option can be effective; the key is stability, so that market participants can make investment decisions based on accurate predictions of available program capacity. It is important to avoid stop-start program cycles, so if a limit on initial capacity availability is established, there should be a clear mechanism to add capacity based on established triggers in order to ensure market continuity.	Given that the majority of customers cannot host onsite renewable energy, community solar programs should be sized appropriately to accommodate the significant potential market size. At a minimum, policy makers should allocate enough initial capacity to allow community solar to grow to at least the size of the on-site solar market within the initial program period.	The [state regulatory agency] shall establish a cumulative program size of not less than [Percentage] of statewide peak demand based on the most recent full calendar year, to be installed by [date].	Especially for programs without a target size, an effective interconnection queue management process and strict project maturity requirements must also be implemented in parallel to ensure smooth program rollout.
	No predetermined size limit				
How should projects be selected or approved for participation?	Tariff/First-come, first-served	Tariff/First-come, first-served	<p>A tariff-based or other open program is easier to administer, creates a more level playing field for a diversity of projects, and is more efficient from the project development perspective.</p> <p>An RFP process may lead to a situation where some initial projects get delayed, complicating the rollout of later projects. The uncertainty associated with RFP processes can also significantly increase project costs and risks.</p>	<p>Applications will be accepted and processed on a first-come, first-served basis.</p> <p>Massachusetts Department of Public Utilities Order 11-11-A⁵ and Xcel's Electric Rate Book Section 9-64 (Sheet No. 9-67)⁶ in Minnesota both offer approaches for managing the application process under the first-come/first-served approach.</p>	If projects are admitted to the program on a first-come-first-served basis, it is important to set project maturity requirements and require that they meet ongoing development milestones. These requirements must be balanced to ensure that only viable, active projects are counted toward program capacity, without requiring an unreasonable level of at-risk investment by developers. If the program application is integrated with the interconnection process, this may also require a broader interconnection queue management process.
	RFP process of selection by program administrator				

⁵ Massachusetts D.P.U. Order 11-11-A, May 7, 2012.

See: https://www.xcelenergy.com/staticfiles/xn/Regulatory%20&%20Resource%20Planning/Minnesota/Me_Section_9.pdf

⁶ Northern States Power Company (Minnesota) Electric Rate Book. Schedule of Rates, Charges, Rules, and Regulations for Electric Service in the State of Minnesota. Section 9-64, "Solar*Rewards Community Program."

See: https://www.xcelenergy.com/staticfiles/xn/Regulatory%20&%20Resource%20Planning/Minnesota/Me_Section_9.pdf

2. Compensation

Key Questions to Ask	Options to Consider	CCSA Recommendations	Rationale	Example Language	Notes
How should credit compensation be valued?	Resource valuation approach	As long as credits are transparent and predictable over the project life cycle, and provide subscribers with an economic benefit that is equitable, the resource valuation and retail-rate based approaches can both be effective.	Bill credits should provide subscribers with an economic benefit that is equitable based on the long-term, clean, locally-sited energy produced by community solar facilities.	An electric company shall credit a subscriber's electric bill for the amount of electricity generated by a community solar project for the subscriber in a manner that reflects the resource value of solar energy, as determined by the [state regulatory agency].	If the resource valuation approach is chosen, a transparent, data-driven process with broad stakeholder participation must be used to determine the valuation. ⁷ This likely necessitates setting an interim credit rate that can enable the program to launch while the valuation analysis and tariff development is done is done. While credit rates can evolve over time for new projects, once a credit rate approach is set for a particular project it should remain fixed for the 25+ year term of the tariff in order to enable project financing and stability for consumers.
	Retail-rate based approach	Policymakers should choose a compensation approach that can be implemented quickly, in order to give consumers access to solar in the near term. That said, credit rate approaches can evolve within a state over time as distributed generation markets evolve.		An electric company shall credit a subscriber's electric bill for the amount of electricity generated by a community solar project for the subscriber based on the applicable retail rate.	
	Auction approach	The auction approach is not recommended because the inherent uncertainty of this approach leads to unstable project development and subscriptions. It can also lead to underbidding instead of proper, market-based price-setting.			If the retail-rate approach is chosen, special attention should be paid to determining which retail rate to use, as this is a state-specific issue. For example, in restructured states, the credit rate should be based on standard offer service rates as opposed to competitive supplier rates.

⁷ See: Rocky Mountain Institute, [A Review of Solar PV Benefit and Cost Studies](http://www.rmi.org/elab_empower), September 2013, for a review of 15 distributed PV (DPV) benefit/cost studies that assessed what is known and unknown about the categorization, methodological best practices, and gaps around the benefits and costs of DPV. The review also began to establish a clear foundation from which additional work on benefit/cost assessments and pricing structure design could be built. http://www.rmi.org/elab_empower

2. Compensation (Continued)

Key Questions to Ask	Options to Consider	CCSA Recommendations	Rationale	Example Language	Notes
By what mechanism should credits be applied?	Monetary Credit	<p>Either a volumetric (kWh) credit or monetary credit can work, as long as the credit is transparent to subscribers (for example, as a separate and clearly labeled line item on the customer's utility bill).</p> <p>Most major community solar markets use monetary crediting</p>	Flexibility, transparency and long term-certainty are important to encouraging market growth.	<p>A Utility shall provide a Bill Credit to a Subscriber's subsequent monthly electricity bill for the proportional output of a Community Solar Facility attributable to that Subscriber. The value of the Bill Credits for the Subscriber shall be calculated by multiplying the Subscriber's share of the kWh electricity production from the Community Solar Facility by the Applicable Bill Credit Rate for the Subscriber. Bill Credits that exceed a Subscriber's monthly bill shall be carried over and applied to the next month's bill.</p>	If volumetric crediting is used, it is important to ensure that the application of credits to subscribers' bills does not change the underlying calculation of kWh delivered to the subscriber's location (for example, in areas with competitive retail supply). It is important to consider which portions of the bill the credit can offset and whether or not that results in a different value proposition across customer classes.
	kWh Credit				
How should unsubscribed energy or unallocated bill credits be handled?	Utility must purchase	<p>Subscriber Organizations should be allowed to sell unsubscribed energy to the utility at the utility's avoided cost. In addition, Subscriber Organizations could have the option to accumulate unallocated credits as long as they are then allocated to subscribers within a set time period (e.g. one year).</p>	<p>A backstop of purchase at avoided cost is helpful for community solar providers in securing lower cost project financing. The ability to reallocate credits may be able to provide more value and flexibility to subscribers and Subscriber Organizations, which can bring down overall project costs.</p>	Utilities must purchase unsubscribed energy at a rate equivalent to the electric company's avoided cost as determined by the [state regulatory agency].	
	Subscriber organization can distribute unallocated bill credits			<p>Credits that are not allocated during a billing period are held at the host meter. These credits are then available, along with new credits, in the next distribution period. New subscribers may be allocated credits that were accrued prior to their subscription start date. All credits must be allocated within one year.</p>	
How should Renewable Energy Credits (RECs) be addressed?	Subscriber Organizations monetize RECs	<p>The REC provisions should allow Subscriber Organizations to monetize RECs, with the option to pass RECs through to customers at their choosing. When Subscriber Organizations monetize RECs, it provides a positive value proposition for customers. However, some customers, particularly large offtakers with sustainability goals, may want the option to retain and retire the RECs associated with their subscription.</p>	<p>There are 29 states (plus D.C.) with renewable portfolio standards with different standards, rules and REC markets. In states with open REC markets, Subscriber Organizations typically monetize RECs to make the value proposition more attractive to subscribers. Subscriber Organizations are usually better equipped to manage RECs and related transaction costs.</p>	<p>All environmental attributes associated with a Community Solar Facility, including renewable energy certificates, shall be considered property of the Subscriber Organization. At the Subscriber Organization's discretion, those attributes may be distributed to subscribers, sold, accumulated, or retired.</p>	It is extremely important that the community solar program clearly address REC ownership directly.
	Customers allowed the option of retaining RECs				

3. Consumer Participation

Key Questions to Ask	Options to Consider	CCSA Recommendations	Rationale	Example Language	Notes
Should there be a minimum number of subscribers?	More than one	Either can be effective.	A “community” is inherently made up of more than one participant. Requiring an arbitrary minimum number of participants may preclude onsite multi-family and urban installations.	A community solar facility must have a minimum of two subscribers.	It may be useful to define “subscriber” to also include all affiliates and parent companies to avoid a situation in which three branches or locations of the same company take all the available subscriptions from a single project.
	A single subscriber may be limited to receiving a certain percentage of a community solar facility’s generation.			No subscriber’s subscriptions may total more than 40% of the nameplate capacity of an individual community solar project.	
What minimum or maximum should be placed on individual subscription sizes?	Designed to minimize excess bill credits at the end of a year	The limitations on subscription sizes should be considered in conjunction with the credit methodology. In general, subscriptions should be sized so that customers may fully offset their expected usage without accruing significant excess credits at the end of a year. In the event that there are excess credits on the subscriber account, they should roll over to the next month in perpetuity, unless the customer account is closed. A minimum subscription size is not necessary but if desired can be set at 250kwh per year, approximately the output of one solar panel.	To ensure equity and effectively spur the market, subscribers should be able to receive a value proposition similar to those participating in onsite generation.	Subscriptions may be sized to offset up to 100% of the customer’s historical average electric bill over the course of a year. If no historical data is available, an estimate may be used.	For new customers who don’t have historical usage, a proxy estimation based on expected usage will be required. Note that if excess credits are compensated at a lower rate, this will provide a natural disincentive against oversizing subscriptions. Customers with onsite solar should also be able to subscribe to community solar as long as the customer does not exceed any aggregate limits required by the program or otherwise as required by law (e.g. total expected output of the on-site solar and community solar subscription may not exceed 120% of annual onsite load).
	Individual subscribers may offset a certain percentage of their average energy use over the course of a year			Subscriptions may be sized to offset up to 120% of the customer’s historical average annual electricity consumption.	
	No minimum subscription size specified.				
Should there be targets or mechanisms to ensure all customer classes can participate? If so, how should those be determined?	A percentage of each community solar project’s capacity is reserved for residential and small commercial customers.	Either can be effective. To ensure that all community solar projects serve residential and small commercial customers, policymakers can require that each project allocate at least a specified percentage of its capacity to small customers. Alternatively, policymakers can set a MW target for small customer classes that is proportional to their representation (e.g., their % of total electric load or utility accounts), allowing projects with significant small customer participation to receive higher compensation for increased costs associated with managing small subscriptions.	Designating a share of project or program capacity is the only proven way to ensure participation by diverse customer classes. Without an effective mechanism in place to include residential and small commercial customers, community solar providers may be more likely to partner with a handful of commercial customers rather than solicit hundreds of customers that subscribe to small shares of a project.	At least XX percent of the total generating capacity of each community solar project must be made available to customers with subscriptions of 25 kilowatts or less.	This model has been used successfully in multiple states. In Massachusetts, for example, which has one of the most successful programs in the country, no more than two participants can receive credits from more than 25 kW of capacity from a Community Shared Solar Facility and the combined share of those subscriptions cannot exceed 50% of the total capacity.
	A percentage of the overall program target is designated for residential and small commercial customers, accompanied by a higher compensation level for projects with significant small customer participation, and division of available program capacity into multiple buckets, to ensure the target is met.			At least XX percent of the total generating capacity of the community solar program must be made available to customers with subscriptions of 25 kilowatts or less. The [state regulatory agency] shall determine a mechanism to ensure participation by residential and small commercial customers.	

3. Consumer Participation (Continued)

Key Questions to Ask	Options to Consider	CCSA Recommendations	Rationale	Example Language	Notes
What consumer protection and/or disclosure requirements should be followed?	Must comply with existing federal and state consumer protection laws	Consumer protection requirements should be based on existing consumer protections in state law. A standard disclosure checklist could also be implemented to ensure customers can understand key contract terms and compare across providers.	Existing consumer protection laws already apply to community solar projects. It could create confusion and unnecessary administrative burdens and costs to create and apply additional rules.	Subscriber Organizations must comply with all applicable state and federal consumer protection laws.	The SEIA/CCSA Residential Consumer Guide to Community Solar includes specific recommendations for consumers to help them understand the basics of solar energy, where community solar is available, key terms in agreements and the right questions to ask solar professionals. CCSA members have also adopted the SEIA Solar Business Code .
	Develop standard disclosure checklist to include in all customer-facing contracts			The [state regulatory agency] shall develop, in consultation with stakeholders, a standard disclosure checklist to accompany all customer-facing contracts.	
When subscribers move, can they take their subscription with them or transfer it to another utility customer?	Individual subscribers may take their subscription with them if they move within a utility service territory ("contract portability").	Both should apply.	Rules should remain flexible to allow Subscriber Organizations to meet the needs of customers and quickly adjust allocations if subscribers move outside the service area or cancel their subscriptions.	Subscribers may retain their subscriptions if they move within a utility service territory.	Data transfer should be available through an electronic portal or software to avoid unnecessary data entry errors.
	Individual subscribers may be removed and new individual subscribers added to the project as needed.			Electric Companies shall remove subscribers who are canceling participation and add new subscribers to the project within one billing period, as requested by a Subscriber Organization.	
What geographic boundaries should be placed on subscribers' proximity to a community solar facility.	Subscribers must be located in the same utility service territory as the community solar facility.	Subscribers must be located in the same utility service territory as the community solar facility.	This approach seems to be the most administratively feasible, least restrictive option that has been applied to existing community solar programs.	Subscribers must be located in the same utility service territory as the community solar facility.	Geographic boundaries that are smaller than the utility service territory may increase costs and/or limit project availability for subscribers. Also, if the geographic boundary is too small, there may not be enough customers to fully subscribe a project and be assured that departing customers could be replaced.
	Subscribers must be located in the same utility load zone as the community solar facility.			Subscribers must be located in the same utility service territory and load zone as the community solar facility.	
How does participation in a community solar facility affect a participant's electric rate options?	Subscribers remain on their existing rate schedule.	Customers may be given the option to move to a different rate schedule but should not be required to do so, as the community solar project does not directly alter their on-site electricity usage. It is particularly important that subscribers are not subjected to new charges or other changes in rates that are not fully vetted or justifiable per standard ratemaking procedures.	Allowing customers to remain on their current rate schedule reduces complexity for the customer and expedites the rollout of the program.	Subscribers may remain on their previously applicable rate schedule.	To the extent that metering capabilities exist, policymakers may consider a pilot option to pair community solar subscriptions with dynamic pricing, energy storage or other options that may provide additional value to the grid and subscribers. However, these pilot programs should be carefully designed to avoid adding complexity to the customer experience.
	Subscribers may move to a different rate schedule.				

4. Project Characteristics

Key Questions to Ask	Options to Consider	CCSA Recommendation(s)	Rationale	Example policy language	Notes
Should facility size be limited and if so, how should the limit be determined?	5 MW	Either can work. Some economies of scale can be achieved around the 5 MW mark but a number of factors, including the availability of land, interconnection procedures and policy goals should be considered for each state.	The project size limit should be set high enough to allow projects to achieve economies of scale, but low enough to still be considered a distribution-scale project. Some states may easily accommodate 20 MW projects whereas others might see a need to limit projects to a smaller size.	Individual community solar projects shall be connected to the distribution grid and limited to XX MW.	
	Projects should be located on the distribution system and defined according to state characteristics and goals.				
Should multiple systems be able to co-locate on a single or connected parcels of land?	No co-location on the same parcel of land	Co-location of multiple projects on the same parcel of land generally should not be permitted. Community solar facilities should be allowed to be sited on adjacent parcels of land.	Where co-location on a single parcel is allowed (e.g., five projects capped at 1 MW each), this effectively results in a larger project with unnecessary costs (a 5 MW project with five separate interconnections, meters, etc.). If the intention is to allow a larger total project size per parcel, it would be more efficient to simply increase the project size limit rather than permit co-location of multiple smaller projects.	Community solar projects shall be limited to XX MW per parcel of land. A single project may span multiple parcels of land.	If limits are defined per parcel of land, there may need to be a limit on subdivision of parcels for the purpose of community solar program eligibility. ⁸ In addition, there may need to be a process established for considering exceptions on a case-by-case basis.
	Multiple projects permitted on adjacent parcels of land	Community solar projects should be allowed to co-locate with other solar projects (not community solar) on the same parcel.			
What licenses and requirements should be placed on contractors?	The licenses and contractor requirements in place for other solar projects in the state should likewise apply to community solar projects.	The licenses and contractor requirements in place for other solar projects in the state should likewise apply to community solar projects.	Community solar projects should not be subject to any additional contracting and licensing requirements not faced by other solar projects.	The solar contractor licenses and requirements specified in [applicable state code] shall apply to community solar projects.	

⁸ Massachusetts D.P.U. Order 11-11-C, August 24, 2012. <http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=11-11%2f82412dpuord.pdf>

5. Low- to Moderate-Income (LMI) Participation Considerations

Key Questions to Ask	Options to Consider	CCSA Recommendation(s)	Rationale	Example Policy language	Notes
How can LMI customer participation be supported?	Provide differential, higher incentives, structured to enable immediate savings for LMI participants.	Both of these options should be included.	Financing has been by far the most significant barrier to low-income participation in community solar programs. Community solar programs should address both accessibility and affordability. ⁹ Addressing these barriers is crucial to facilitating low-income participation.	The [regulatory agency] shall include a financial incentive for Low-Income Customers or Low-Income Service Organizations to encourage participation by such customers. Incentives should be differentiated for Low-Income Customers, property owners or operators where Low-Income Customers reside, and Low-Income Service Organizations.	LMI programs can encourage innovative partnerships, especially between utilities, developers, state agencies, municipalities, non-profits, affordable housing authorities, green banks and other community-based organizations. Such partnerships can be beneficial to multiple aspects of the program, from siting to outreach to project development.
	Ensure access to alternate financing considerations such as back-up guarantees, credit enhancements, and low-cost financing, among others.			Include financing options for Low-Income Customers and Low-Income Service Organizations such as loan loss reserves or other specialized financing options. The [Public Utilities Commission] and Utilities should collaborate with [appropriate state agencies], financing agencies, or local governments to develop new programs or access existing programs.	

⁹ GRID Alternatives, Vote Solar and the Center for Social Inclusion. Low-Income Solar Policy Guide, 2017, See: <http://www.lowincomesolar.org/guiding-principles/>

CCSA Core Principles

We promote policies, programs, and practices that:

1. Allow all consumers the opportunity to participate in and directly economically benefit from the construction and operation of new clean energy assets.
2. Provide equal access for developers to build and operate community shared renewable energy systems and interconnect those systems to the serving utility's grid.
3. Incorporate a fair bill credit mechanism that provides subscribers with an economic benefit commensurate with the value of the long-term, clean, locally-sited energy produced by community shared renewable energy projects.
4. Support the participation of diverse customer types in renewable energy markets, and encourage customer choice with providers, product features, and attributes to catalyze innovation and best serve customers.
5. Provide assurance of on-going program operations and maintenance to ensure overall quality, that the facility lasts for decades, and that customer participation is protected. Safeguard the continuity of program benefits to protect customers and developers' investment.
6. Ensure full and accurate disclosure of customer benefits and risks in a standard, comparable manner that presents customers with performance and cost transparency.
7. Comply with applicable securities, tax, and consumer protection laws to reduce customer risk and protect the customer.
8. Encourage transparent, non-discriminatory utility rules on siting, and interconnecting projects, and collaboration with utilities to facilitate efficient siting and interconnection.
9. Maintain a 360-degree view of community shared renewable energy market and ensure a beneficial role for all parties in the partnerships forged between subscriber, developer, and utility.

