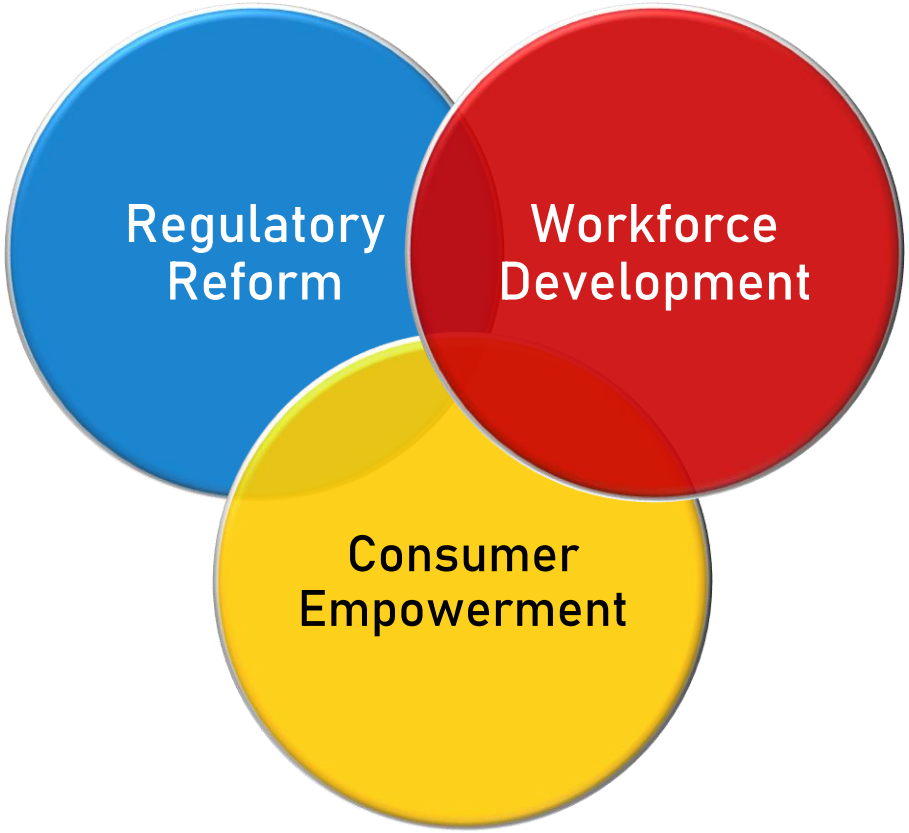
New National Tools for Shared Renewables Program Design & Evaluation

Interstate Renewable Energy Council

VOTE SOLAR

Webinar | November 28, 2018

IREC's MISSION: Increase access to sustainable energy and energy efficiency for more Americans through independent fact-based policy leadership, quality workforce development, and consumer empowerment.

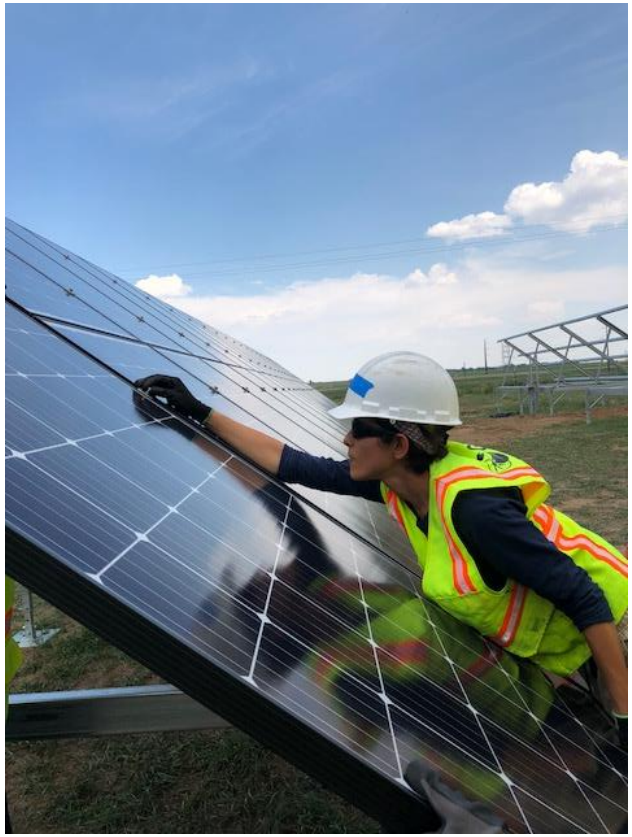


About Vote Solar

Our mission is to re-power the U.S. with clean energy by making solar power more accessible and affordable through effective policy advocacy.

Programs:

- Utility-Scale Solar
- Rooftop Solar
- Access & Equity
- Community Solar
- Grid Modernization



Today's Discussion

- What do we mean by "Shared Renewables"?

- New Tools
  - National Shared Renewables Scorecard (IREC, Oct 2018)
  - IREC's Shared Renewables Policy Catalog (IREC, Q4 2018)
  - A Checklist for Voluntary, Utility-Led Community Solar Programs (IREC & Vote Solar, Nov 2018)

- Q&A

What do we mean by "Shared Renewables"?

Image courtesy of US Department of Energy, SunShot Initiative, http://energy.gov/eere/sunshot/community-and-shared-solar

- We define shared renewables programs as those that enable multiple customers to share the economic benefits of one renewable energy system via their individual utility bills
- Depending on the state policy, the system can either be located on-site (e.g. on a multi-unit building) or, more commonly, offsite (i.e. remotely located from the metered customers being served)

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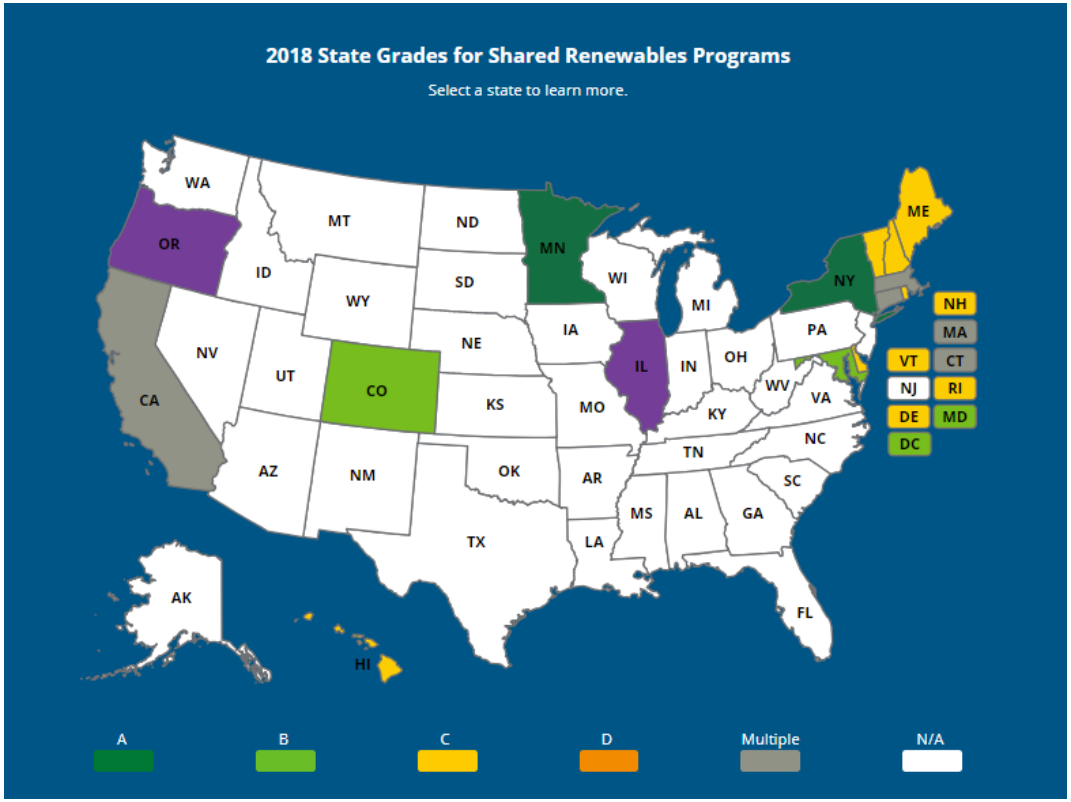
IREC's National Shared Renewables Scorecard

- Evaluates state shared renewable energy programs using criteria based on best practices
- Tool for regulators and other stakeholders to inform decision-making and scale successful program models
- Note: Scorecard only grades statewide mandatory programs (i.e. voluntary utility programs have not been evaluated)



SCORECARD
IREC'S NATIONAL SHARED RENEWABLES SCORECARD

2018 Scorecard Grades

A	MN NY
B	MA-VNM CO DC MD CA-VNM
C	NH VT DE HI ME RI MA CT
D	CA-ECR CT-SCEF

A grade = majority of best practices incorporated
B grade = room for improvement but reflects many best practices
C grade = lacks many key components necessary for market development
D grade = program does not comport with majority of best practices

Note: VNM = Virtual Net Metering; ECR = Enhanced Community Renewables; SCEF = Shared Clean Energy Facility

- 17 active programs implemented in 13 states plus Washington, D.C.
- Did not grade programs still under development (e.g. NJ's Pilot Program) or programs still in process of implementation (e.g. IL and OR)

2018 Grades

➢ Key Scorecard Criteria:

- ✓ **Fairly valued** bill credit – most heavily weighted scoring metric; programs should offer good value proposition for potential subscribers
- ✓ Policies to **promote low- to moderate-income customer participation** (e.g. carve-outs, targets, financial incentives, education and outreach, etc.)
- ✓ **Flexible** subscription terms – subscribers should be able to take their subscriptions with them if they move within the utility's service territory (portability) or transfer their subscription if they move out of the service territory (transferability)
- ✓ Data **tracking & reporting** – utilities should provide publicly available reports on capacity installed and program queue (if applicable) on a regular basis
- ✓ **Project location** flexibility – programs should allow both on- and off-site projects
- ✓ Strong **interconnection procedures** - important to ensure efficient processes are in place to avoid interconnection delays

2018 Grades

➢ New Criteria Added in 2018:

- ✓ **Bill credit** – additional scoring metric that captures the various ways programs are attempting to provide fair and adequate compensation, including credits valued at the utility's retail rate, credits that include generation and other rate components, or targeted renewable energy credits that are supplementing the bill credit value
- ✓ **Program assessment** based on installed capacity – to assess program viability, an extra credit question was added that provides additional points if more than 10 megawatts had been installed under a program
- ✓ **Small customer participation** mechanism – bonus question that provides credit for programs that have included a mechanism to ensure residential and small commercial participation (e.g. incentives or mandates)

Scorecard Grading Sheets – MN Example

- Click "Program Details" button under each state on Scorecard home page to download grade sheets
- Provides subset of criteria, grade and program's strengths and opportunities for improvement

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IREC'S NATIONAL SHARED RENEWABLES SCORECARD

*Minnesota Solar*Rewards Community Program*

>10 MW OF INSTALLED CAPACITY

IREC developed the National Shared Renewables Scorecard to provide policymakers, regulators, and other stakeholders with a tool for evaluating the strengths and weaknesses of state shared renewable energy programs. IREC graded ***Minnesota's Solar*Rewards Community Program*** using the Scorecard's full criteria* and found that the program currently receives an A because it **incorporates the majority of shared renewables best practices**, offering a strong foundation for shared renewable energy development.

KEY	*One star (★) indicates an especially important criterion; Two stars (★★) indicate one of the most critical criteria for program success. The gold star above indicates that the program has at least 10 MWs of capacity installed and received credit for demonstrating a basic level of market viability.*

Category	Criterion	Description	Program Grade
General Program Details	Aggregate Capacity Limit	Does the program have an **unlimited aggregate capacity**?	✓
	Tracking & Reporting Requirements	★ Does the program specifically require the utility or other relevant entity to provide publicly available data regarding installed and queued capacity that is updated on at least an annual basis?	✓
	Low- to Moderate-Income (LMI) Consumer Participation	★ Does the program have specific component(s) **to promote LMI customer participants** (e.g., capacity carve-out or target?)	✓
		Does the program **explicitly address financial barriers** faced by LMI participants (e.g., incentives or on-bill financing)?	✓
		Does the program have specific requirements re LMI customer **marketing, education, and outreach**?	✓
Customers and Subscriptions	Eligibility	Are **all customer classes** eligible for the program?	✓
	Portability	★ Does the program explicitly permit **portability** (i.e., allow participants to move within the utility service territory and take their subscription with them)?	✓
	Transferability	★ Does the program explicitly permit **transferability** (i.e., allow participants to leave the program or service territory and transfer their subscriptions to others?)	✓
Generation Systems	System Capacity Limit	Is the system size limit **at least 5 megawatts** (MW)?	✗
	Siting Requirements	★★ Does the program allow **both on-site and off-site** facilities?	✓
		Can the facility and customers be **located anywhere** within the utility service territory?	✗
		Do the program rules explicitly address whether or not facilities can be **co-located**?	✓
	Ownership & Management	Are **third-party facility ownership** and **management** permitted?	✓
Bill Credits	Valuation	★★ Does the program meet one of the following conditions: 1) Bill credit is valued at the utility's retail rate; 2) Bill credit includes values for generation and at least some portion of the transmission and/or distribution charges; or 3) RECs are used to provide value in addition to bill credit.	✓
		★ Is the valuation methodology **clearly articulated** in the statute, rule, and/or tariff?	✓
	Unsubscribed Generation	Is **unsubscribed generation** clearly treated and valued at least at an avoided cost rate?	✓
Renewable Energy Credits (RECs)	Subscribed RECs	Are **subscribed RECs** clearly treated?	✓
	Unsubscribed RECs	Are **unsubscribed RECs** clearly treated?	✓
		State Program Grade:	***A***

Program Strengths

- ✓ ***Values shared renewable energy generation at the Value of Solar (VOS) rate, which includes values for avoided generation, transmission and distribution costs, among other values.***
- ✓ ***Promotes access to low-income residents of the Railroad Island neighborhood in Saint Paul, Minnesota through its Rehabilitation and Efficiency: Neighborhood Energy Works (RENEWs) three-year pilot program.***
- ✓ ***Allows shared renewable energy facilities to be located either on-site or off-site.***
- ✓ ***Explicitly permits customers to keep their subscriptions if they move within the same utility's service territory.***

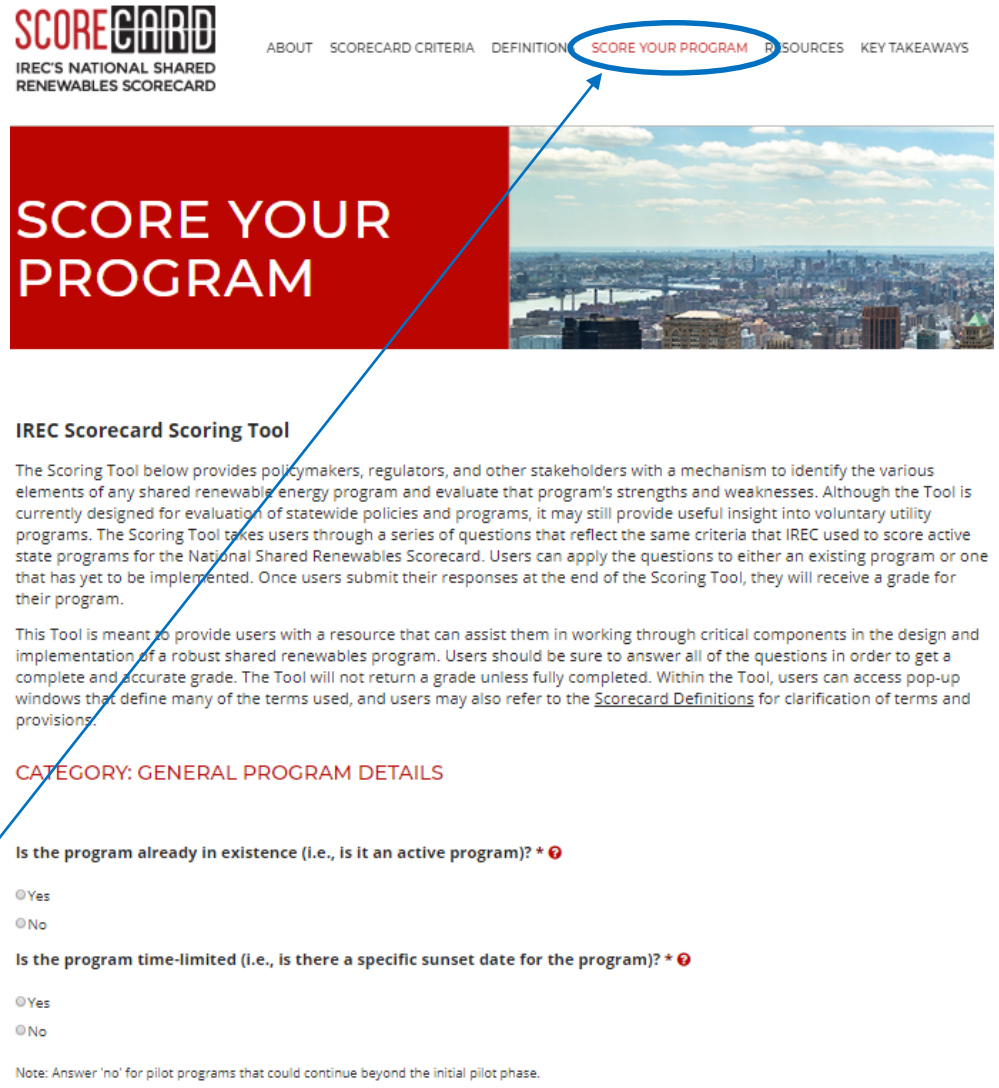
Opportunities for Improvement

- ➢ ***Increase the system size limit to at least 5 megawatts.*** Currently, the system capacity limit is 1 megawatt.
- ➢ ***Allow the facility and customers to be located anywhere within the utility service territory.*** Currently, the facility must be located in the same county or contiguous county as subscribers.

Note: The criteria above are a subset of the full criteria used to arrive at the state grades but reflect the most substantial program design components. For more information about the Scorecard, including the full criteria applied to grade state programs and definitions for many of the terms within the criteria, see https://sharedrenewablesscorecard.org/.* ***October 2018*

Scorecard – Score Your Program Tool

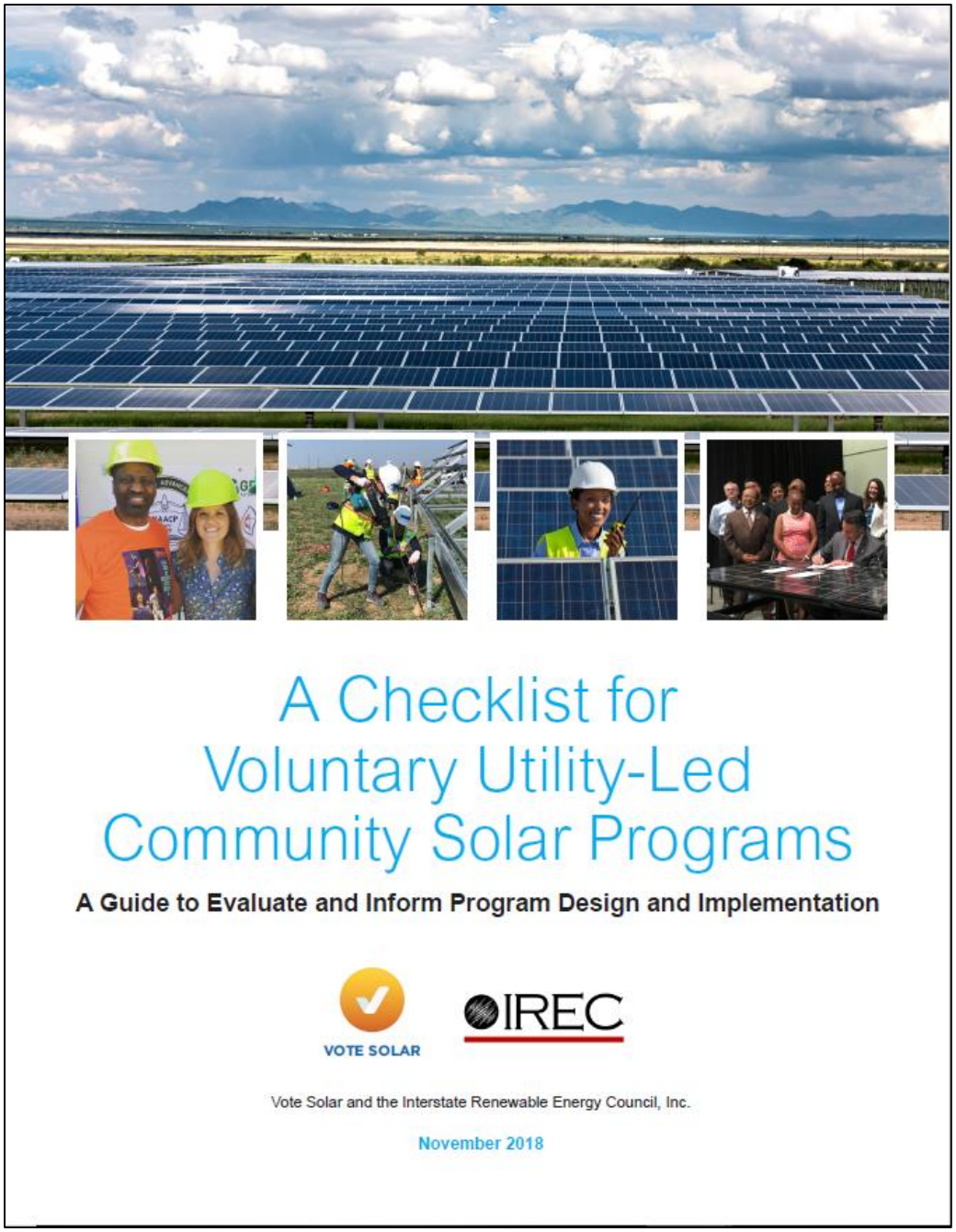
- Online tool to assess programs that have been proposed or are under development
- Based on same set of criteria used for the Scorecard
- Once filled out, the scoring tool will provide a grade based on the answers provided
- To go to scoring tool, click on the “Score Your Program” tab



IREC SHARED RENEWABLES POLICY CATALOG

STATE	POLICY OR PROGRAM NAME	Year Launched	Sunset Date	Applicability
CA	Community Solar - Green Tariff (CS-GT)*	2018	No sunset specified	IOUs
CO	Solar*Rewards Community**	2011	No sunset specified	IOUs
CT	Virtual Net Metering (VNM)	2013	No sunset specified	IOUs
CT	Shared Clean Energy Facility Pilot Program	2015 (bill passed)	2 years from launch	IOUs

- Comprehensive resource that contains in-depth information on existing and proposed state shared renewables programs
- Complementary to the Scorecard, the Catalog provides program details that have been compiled and organized to allow for simple program comparison
- Updated in October 2018

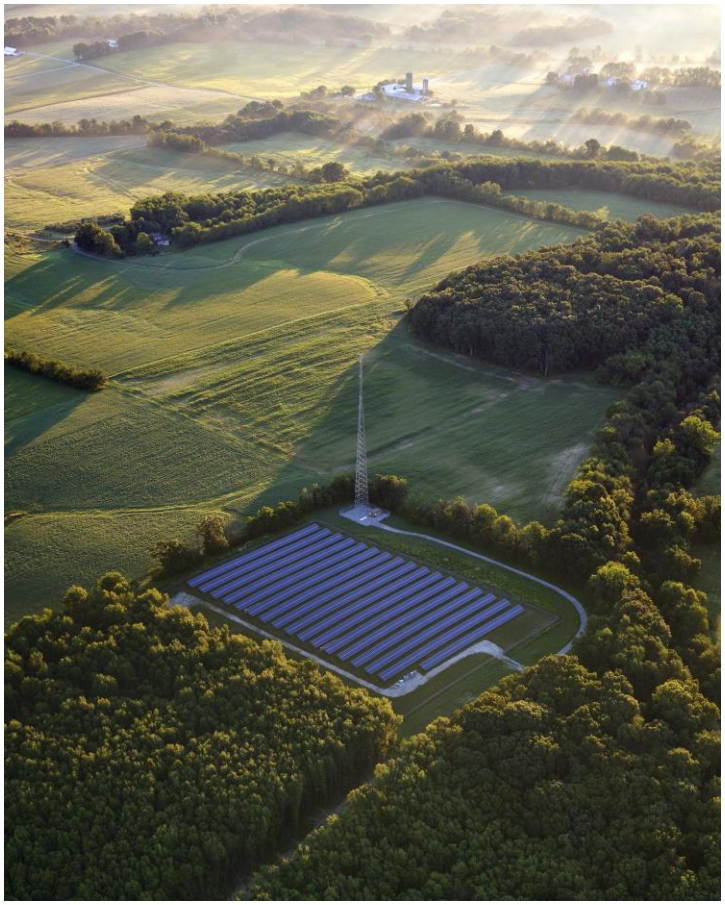


- Based on best practices and successful community solar programs
- Highlights key considerations and principles
- Intended to provide guidance for utility officials and other stakeholders to develop effective community solar programs that benefit consumers and their communities

Checklist Principles

❑ Expand consumer access to clean energy

- ✓ Articulate program goals and identify intended participants
- ✓ Set appropriate program size to meet demand and achieve goals
- ✓ Include participation targets for customers
- ✓ Address financial barriers to participation
- ✓ Create a community outreach and education plan
- ✓ Establish streamlined interconnection processes



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Checklist Principles, cont.

❑ Offer tangible economic benefits for all participating customers

- ✓ Provide near- and long-term benefits for subscribers
- ✓ Eliminate upfront costs
- ✓ Provide immediate bill savings for LMI and other underserved customers
- ✓ Identify provider of last resort for unsubscribed energy

❑ Identify ways to promote project development cost savings

- ✓ Explore opportunities to reduce project costs and maximize economies of scale

Checklist Principles, cont.

❑ Prioritize the customer experience

- ✓ Build transparency and consumer protection into the program
- ✓ Streamline subscriber management, billing and communication processes
- ✓ Provide flexible subscription terms and payment options

❑ Promote competition

- ✓ Encourage third party participation

Checklist Principles, cont.

❑ Optimize community solar to benefit the grid and the community

- ✓ Increase grid benefits through strategic project siting or pairing with other technologies
- ✓ Incorporate community solar into broader grid resiliency strategies or microgrid projects
- ✓ Prioritize local community benefits

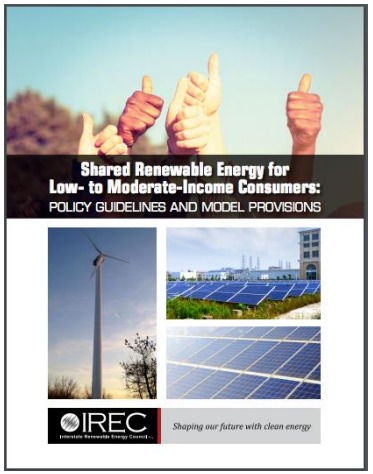
Checklist Principles, cont.

❑ Complement existing programs

- ✓ Make the program additive
- ✓ Encourage customer participation in complementary energy programs
- ✓ Explore partnerships with state programs or community organizations
- ✓ Provide community solar option for customers on energy assistance programs
- ✓ Use existing programs to qualify low-income customers for community solar

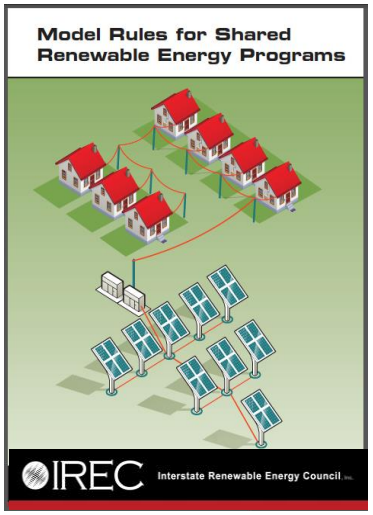
Additional Resources

Low-Income Solar Policy Guide, available at: lowincomesolar.org



IREC's Shared Renewable Energy for Low- to Moderate-Income Consumers

Inclusive Solar Finance Framework, available at: votesolar.org



IREC's Model Rules for Shared Renewable Energy Programs

IREC resources available at:

irecusa.org

Thank you! Q&A

www.irecusa.org

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