



NCSL Task Force on Energy Supply

July 28, 2018

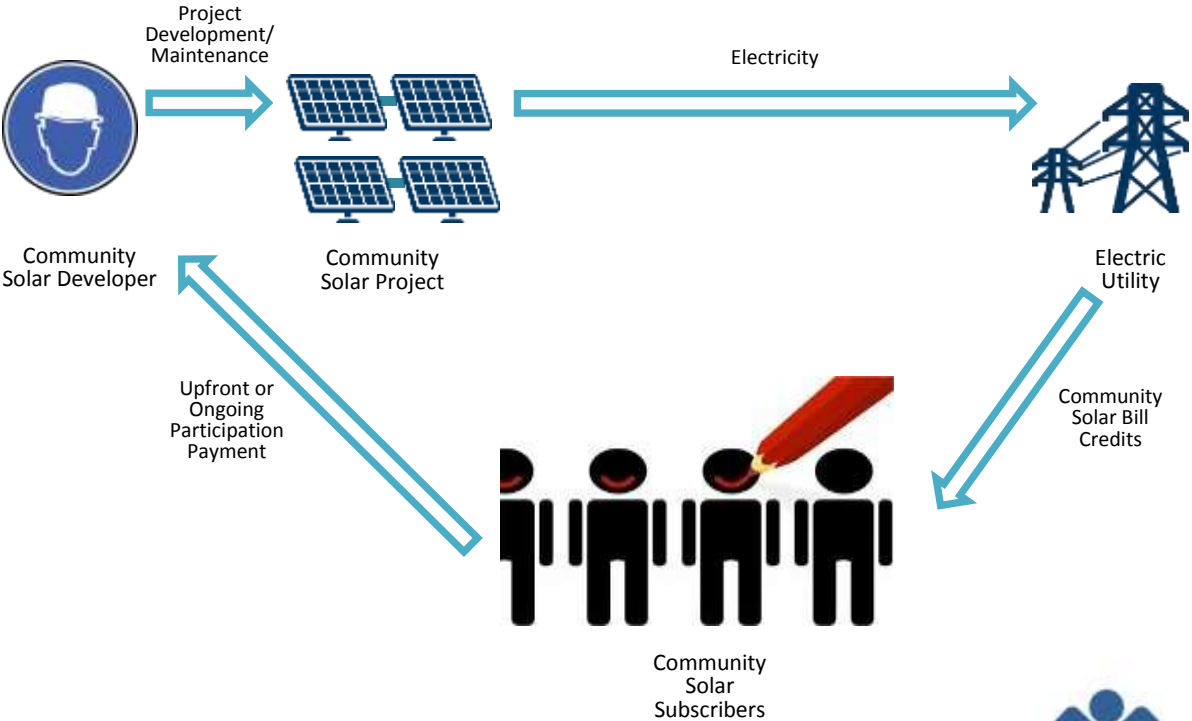




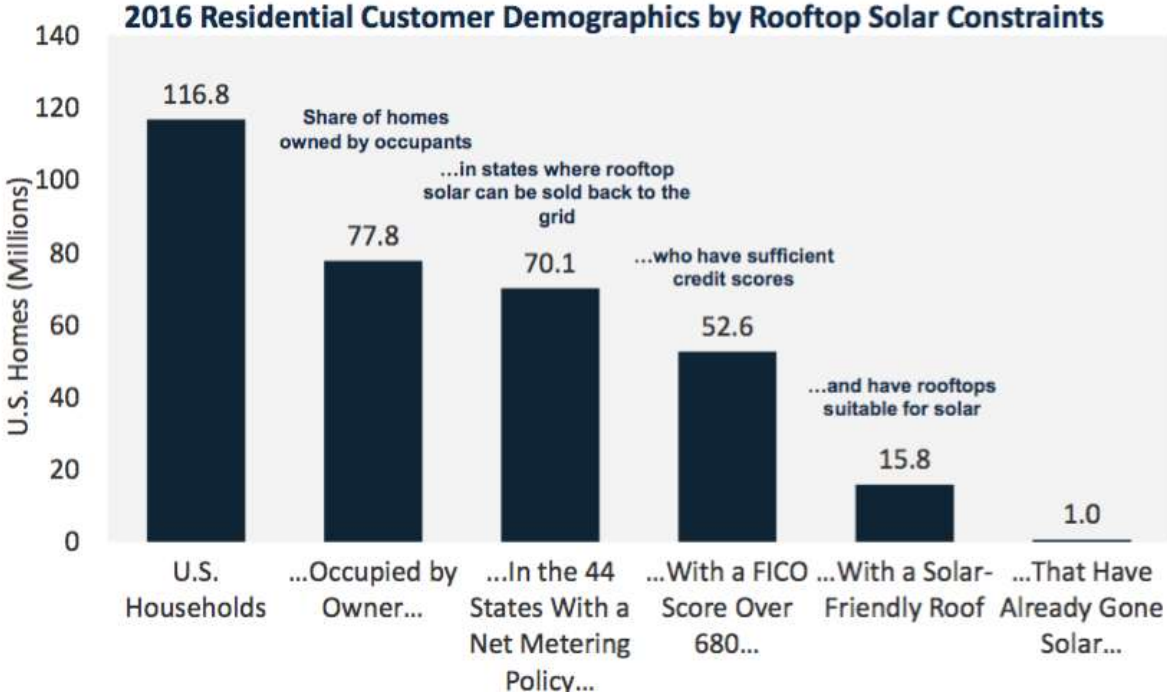
- **About:** National community solar trade association representing 50 providers, customers, and professional service businesses in the community solar sector
- **Mission:** To expand access to clean, local, and affordable clean energy nationwide through community solar – expanding access to solar for all!
- **Learn more:** www.communitysolaraccess.org, www.facebook.com/communitysolaraccess/ and twitter.com/SolarAccess



How does community solar work?

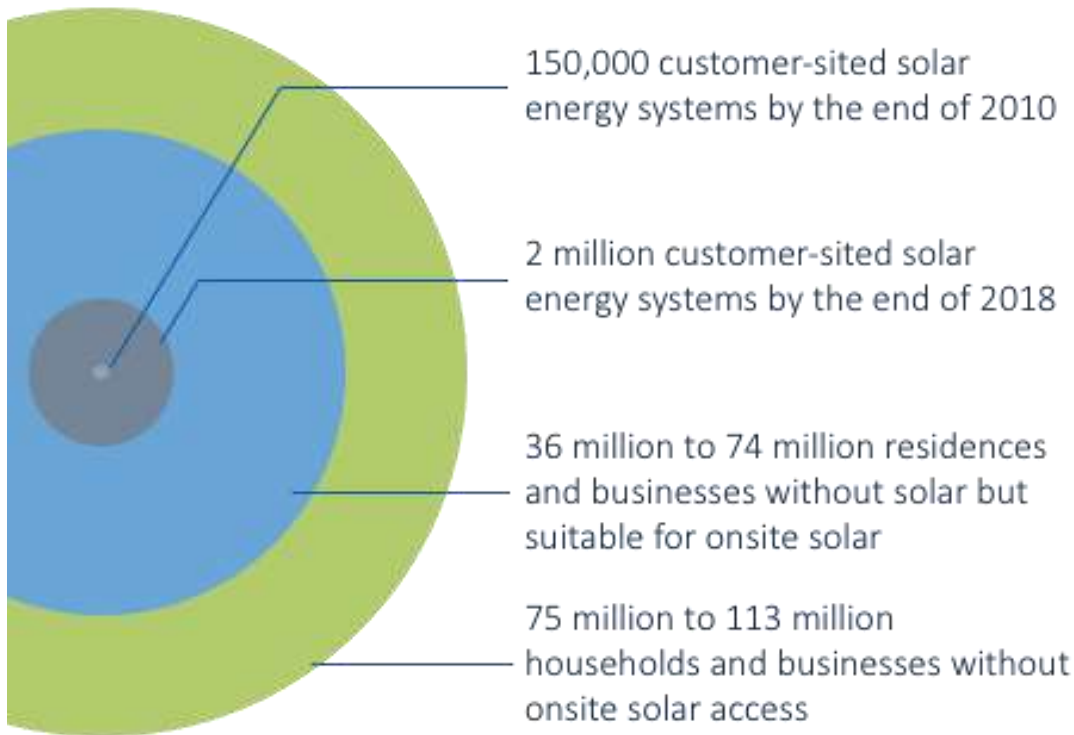


Why community solar?



Why community solar?

Community Solar Can Reach All Potential U.S. Customers



Source: GTM Research Wood Mackenzie, GTM Research/SEIA, NREL, EIA, U.S. Census



What is the potential for community solar?

U.S. Community Solar Market Potential by 2030

Total Community Solar Capacity Operating: 57 GW to 84 GW

Annual Electricity Generated: 72 TWh to 107 TWh

- Share of National Electricity Consumption: 1.6%-2.6%

Subscribers Served: 6.4 million to 8.8 million

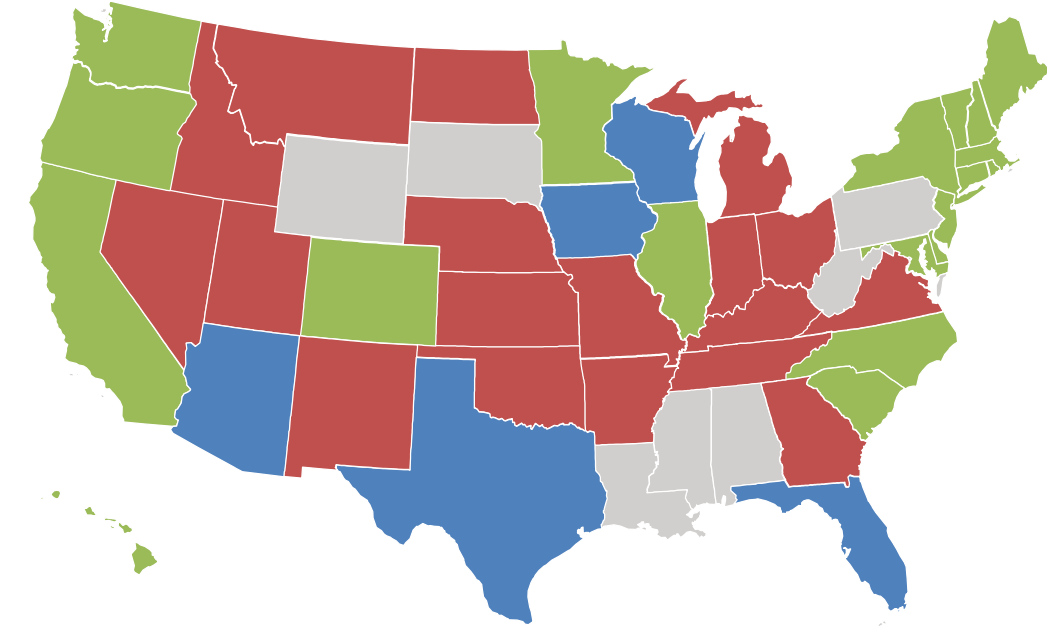
- Low- and Moderate-Income Households Supported: 3.5 million to 4.0 million

Cumulative Capital Invested*: \$81 billion to \$121 billion

*Cumulative capital invested represents total initial costs to build community solar plants, including all installation materials, labor, upfront supply chain, development and financing costs. Does not include ongoing operating costs



Where is community solar today?

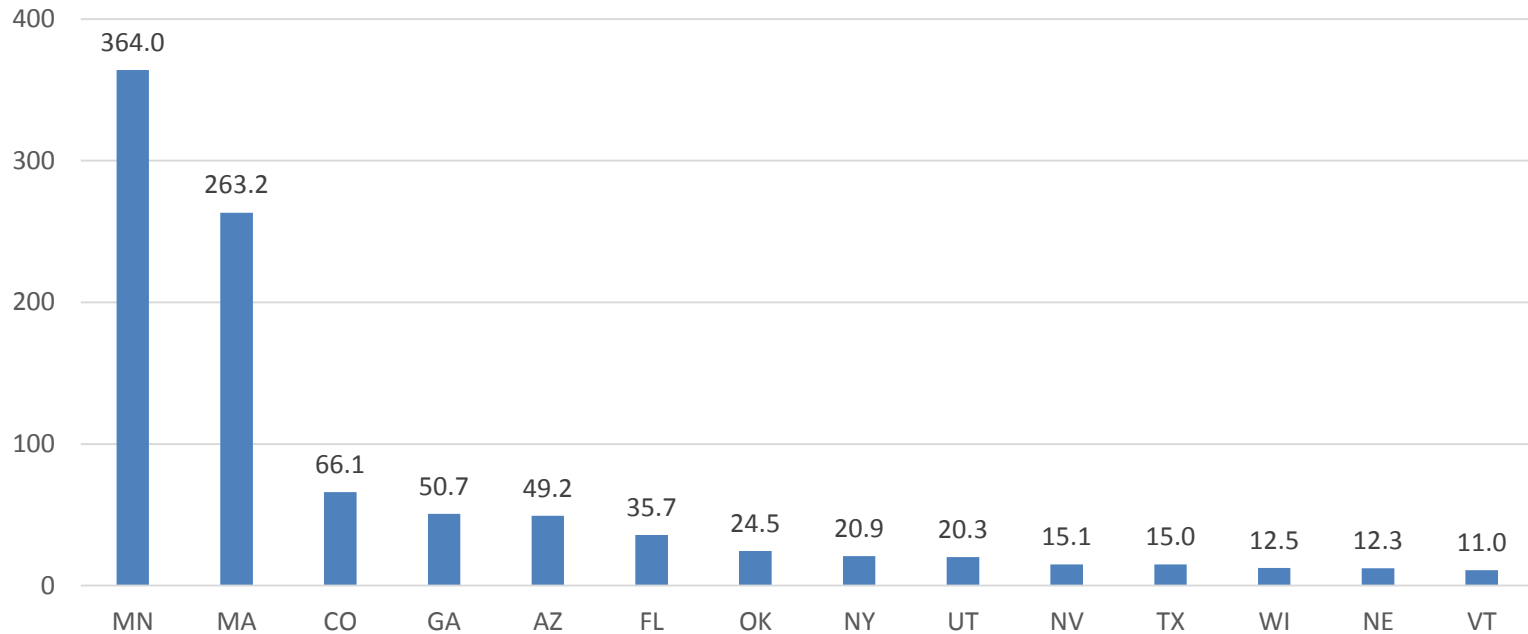


Policy-Enabled Market	One-Off Programs (1-5)	One-Off Programs (5+)
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Where is community solar today?

Community Solar Capacity (MW) by State



Where is community solar today?



What is needed to reach the full potential of community solar?

- **Enabling policy to open viable new market**
 - Bill introduction & passage of *legislation to open the community solar market* in states where it is not yet enabled.
 - *stable, fair rates and market participation structures* that recognize and compensate community solar facilities for the full range of their grid, environmental and societal benefits.
- **Expanding existing programs to support sustainable and scalable markets**
- **Improvements in program design to support meaningful participation** by underserved communities with *the inclusion of low- and moderate-income (LMI) communities* in mind, recognizing the societal benefits and overall market opportunity that full LMI participation represents
- **Product innovation by community solar providers and financiers** around costs, technology and the services offered



Resources: Vision Study

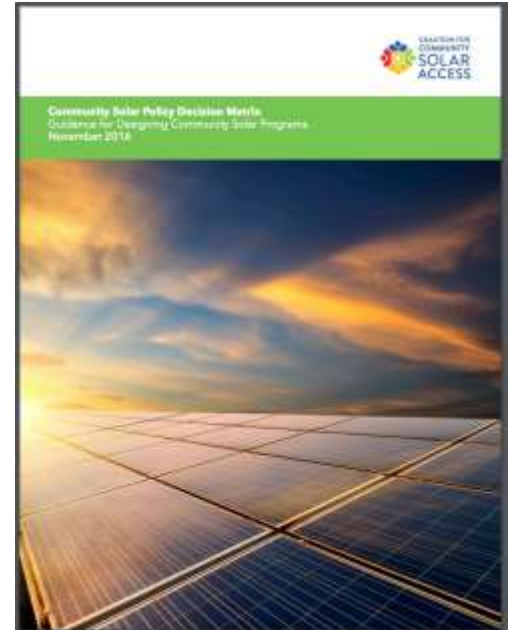


<https://votesolar.org/policy/policy-guides/shared-renewables-policy/csvisionstudy/>



Resources: Community Solar Policy Decision Matrix

- [Community Solar Policy Decision Matrix](#), released November 2016 and updated in December 2017
- Offer policymakers, community leaders, utilities, and stakeholders a a guide to navigate key decision points and offer recommendations on how to best develop successful community solar programs state-by-state
- How to use?
 - ✓ Step 1: Establish policy goals
 - ✓ Step 2: Use the Matrix to engage local stakeholders in process to develop programs that best achieve policy goals
 - ✓ Step 3: Past two years – working with a number states to develop programs with Matrix, and updated the Matrix with input from policymakers, utilities, local stakeholders, etc.



CCSA Matrix components

- **Program Structure**

- ✓ Program size – limits vs. open ended depending on policy goals
- ✓ Project selection and approval – tariff/first come first serve preferred over RFP

- **Compensation**

- ✓ Compensation value – need for predictability, transparency, and consumer benefit
- ✓ Credit mechanism – monetary or volumetric assuming transparency or predictability
- ✓ Unsubscribed energy comp. – utility purchase at avoided cost, holding credits for unsubscribed energy
- ✓ REC treatment

- **Consumer Participation**

- ✓ Minimum subscriber threshold – more than one
- ✓ Subscription sizes – depends on credit methodology
- ✓ Customer class carve outs – yes, but dependent on policy goals and local considerations
- ✓ Standard consumer protections – Yes,

including existing state law coverage and standardized consumer checklist

- ✓ Transferability and geographic limitations – Should be transferable and located within same utility districts
- ✓ Rate schedule changes – no new charges or un-vetted changes through stakeholder process

- **Project Characteristics**

- ✓ Project size – Up to 20 mW
- ✓ Collocation – Yes
- ✓ Licenses – Same for other solar projects

- **Low-to-Moderate Income (LMI) Considerations**

- ✓ Provide differential incentives to ensure participation and cost savings
- ✓ Enhanced financing
- ✓ Leverage existing programs



COALITION FOR
COMMUNITY
**SOLAR
ACCESS**

Resources: model legislation

An Act Relating to the Establishment of a Community Solar Program

For Restructured States

Whereas, solar energy is an abundant, domestic, renewable, and non-polluting energy resource.

Whereas, local solar energy generation can contribute to a more resilient grid, and defer the need for costly new transmission and distribution system build out.

Whereas, community solar can provide access to local, affordable, and clean energy options to all energy customers.

Whereas, community solar provides consumers including homeowners, renters, and businesses access to the benefits of local solar energy generation, unconstrained by the physical attributes of their home or business, like roof space, shading, or ownership status.

Whereas, community solar programs empower consumers with additional energy choices.

Whereas, community solar programs can also expand access to solar energy to low-income households.

Whereas, community solar can foster economic growth as well as opportunities for competition and innovative business models.

Whereas, the deployment of solar energy facilities including community solar can reduce the cost of energy for consumers, while lowering carbon emissions and reducing fossil fuel consumption in [State].

Whereas, it is the intent of [State] to expand the state's energy innovation and provide its residents with access to community solar, therefore,¹

Be it enacted by the [General Assembly of the State], that the Laws of [State] be amended to read:

Section 1. Definitions

The definitions in this section apply throughout this Act.

1. "Applicable Bill Credit Rate" means the dollar-per-kilowatt-hour rate as determined by the [Public Utilities Commission] used to calculate a Subscriber's Bill Credit. The

An Act Relating to the Establishment of a Community Solar Program

For Vertically-Integrated States

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