

How Shared Solar and Community Choice Aggregation Really Work

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Who we are



- Dedicated to transitioning to a locally-based clean energy economy in the Mid-Hudson Region.
- Undertakes research, education, advocacy, and project coordination at local to state levels.
- Supports community engagement in energy decision-making to strengthen local economies, mitigate climate change, and increase resilience.

New Market Structures to Increase Solar Access

- **Community Distributed Generation** **Happening now!**
 - aka Community Solar, or Shared Solar
 - Enables those who can't put solar on their homes to purchase solar (or other) energy
- **Community Choice Aggregation**
 - Pools community buying power to purchase energy
 - Has potential to accelerate local renewable energy, but isn't there yet *Still needs work*

The Context:

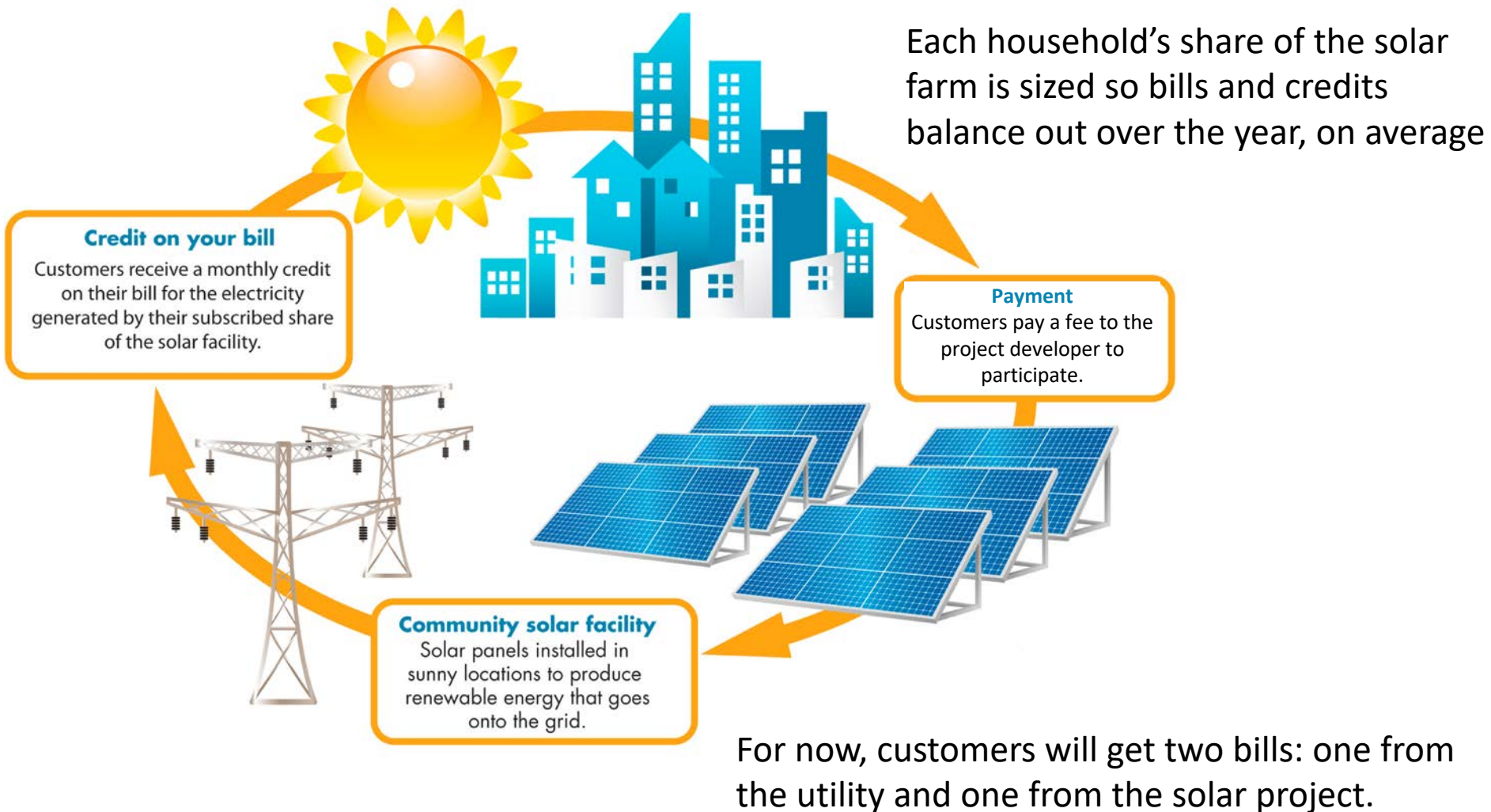
Reforming the Energy Vision (REV)

- Initiated by the NYS Public Service Commission (PSC) to encourage “distributed energy resources” like solar, energy efficiency, and smart appliances
- Very complicated *ongoing* state-level process changing all the rules and markets
- REV enabled community solar and CCA

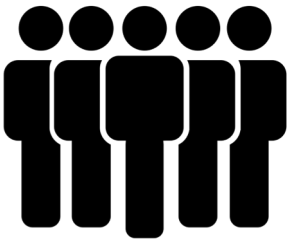
Why Community Solar?

- Most households can't install solar on their homes
 - They don't own the home (or the roof)
 - They don't have enough sun
 - The roof is unsuitable
 - The upfront cost is too high
- Community solar allows them to own or subscribe to a share in a larger, well-situated solar project
- Not just for solar! There's community hydro in our area, too.

How Community Solar Works



CCA in a Nutshell



Municipalities or groups of municipalities can pool the buying power of residents & businesses to:

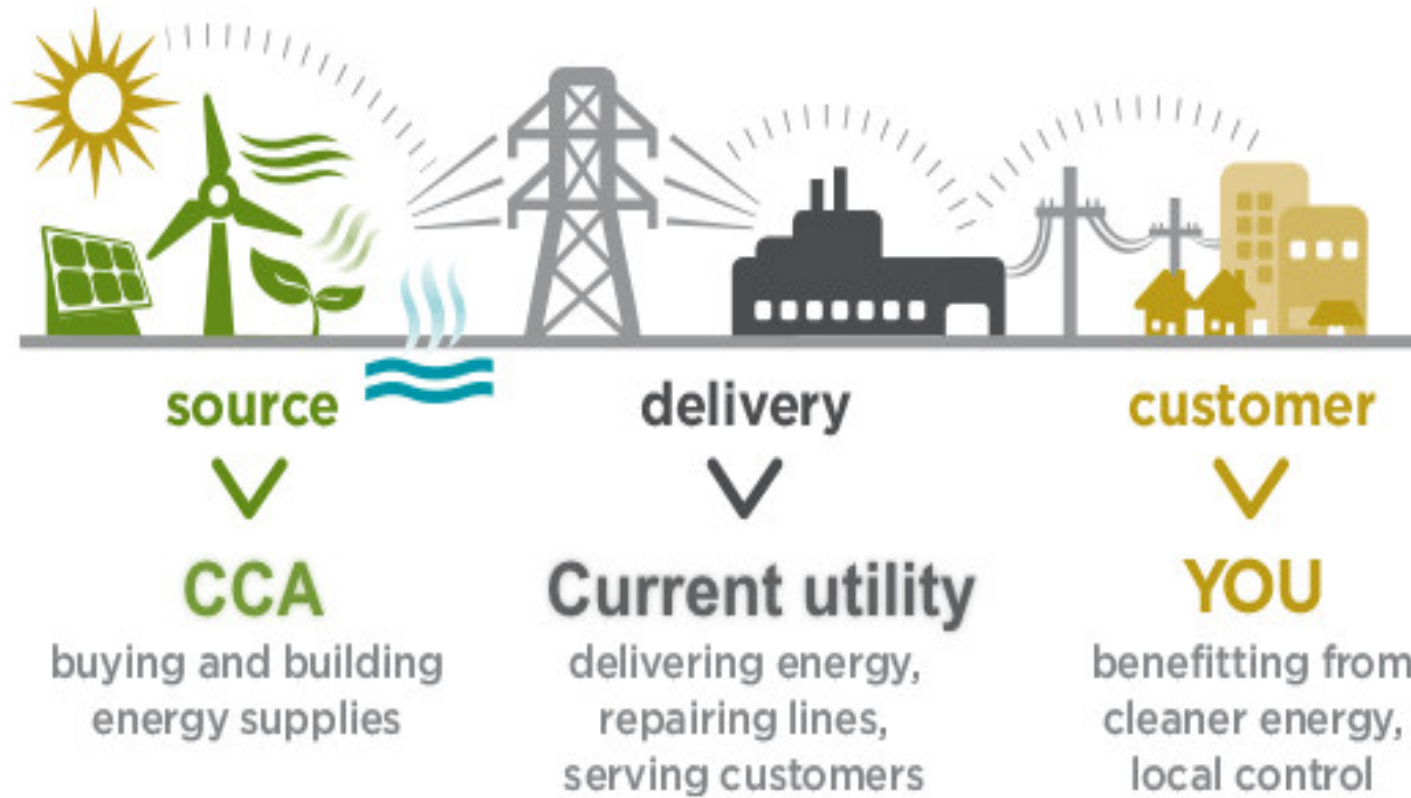
- **Secure alternative energy supply contracts;**
- **Develop energy programs tailored to community needs and goals.**

Replaces the utility as the default **supplier** of electricity.

Utility remains responsible for **delivery** (poles & wires) and billing.

CCA in a Nutshell

How CCA Works



The CCA recovers administrative costs through the rates, not through taxes.

The Evolution of CCA



CCA “1.0”

1990s: bulk purchasing to reduce costs/stabilize rates for fixed terms

2000s: greening supply through purchase of Renewable Energy Certificates (RECs)



CCA “2.0”

2010s: Local clean energy investments to capture economic/jobs benefits and increase resilience

Notable CCAs

- **Cape Light Compact, MA**
 - Runs extensive energy efficiency, energy education, and consumer advocacy programs
- **Marin Clean Energy, and Sonoma Clean Power, CA**
 - Use feed-in tariffs and power purchase agreements to stimulate local renewables
 - Able to beat utility price and aggregate savings to fund efficiency and electric vehicle programs
- **Westchester Power, NY**
 - First CCA in New York, formed as a program of Sustainable Westchester
 - Currently only provides bulk power—offering both “brown” and “green” options

Barriers to CCA 2.0 in NY

- **No pathway to integrate local renewable energy**
 - Unlike CCAs in California, CCAs here cannot directly procure local renewable energy as part of their supply mix
- **No revenue stream to support energy efficiency, energy education, and energy planning**
 - In California and Massachusetts, CCAs have access to Systems Benefit Charge funds collected by the utility to support programs for their communities
- **Much harder to beat the prices of New York utilities**
 - Because of differences in utility market structures, it will be very for NYS CCA programs to generate sufficient revenue from supply to support the kind of robust “2.0” programming characteristic of CCAs in California

How to move CCA forward in New York?

- **Allow CCAs to enroll customers in community solar on an opt-out basis**
- **Enable NYPA to support local renewable procurement by CCAs**
- **Reform utility billing to make bills from CCAs clearer**
- **Direct NYSERDA to support CCAs to administer their own local EE programs**

Conclusions: Accelerating Local Renewables through Shared Buying Power

- **Community distributed generation** is a great way to make solar (and other renewables) available to all households
 - Lots of community solar projects underway now
- **CCA** has great potential, if the necessary rule changes are made