Community Solar 101
Solar United Neighbors
We’re a community of people building a new energy system with rooftop solar at the cornerstone. We help people go solar, join together, and fight for their energy rights.
What makes a good roof for solar?
What makes a bad roof for solar?
What’s the alternative?

What about people who can’t put solar where they are?
What’s the alternative?

Community Solar
Sharing solar

The Smith Family

The Corner Store

The Elementary School

Courtesy of Vote Solar
What is community solar?

• “Community” or “shared solar” or “solar gardens”

• Installed somewhere other than your property

• Proportional, not all or nothing

• Solar energy “virtually” credited to electric bill
What is virtual net metering?

**Categories of Net Metering**

**Single Owner Net Metering**
- Solar on a single property
- One meter on-site
- Example: Home

**Basic Meter Aggregation**
- Solar on same or adjacent property
- Multiple meters on-site
- Example: Farm

**Multiple Owners**

**Tenant Aggregation**
- One owner, many renters
- Savings spread through tenants
- Example: Apartment building

**Virtual/Community Solar**
- Solar offsite, multiple properties
- Savings spread through subscribers
- Example: Community buy-in
Help more Floridians benefit from solar

Community solar empowers individuals and businesses to use solar even if they can’t on their own roof.

Thousands of Florida homeowners and businesses are installing rooftop solar systems to take control of where their electricity comes from and save money with a clean source of electricity. But, there are millions more who are unable to so because their property isn’t suitable for solar or they are renters. Community solar can help them benefit from solar. Community solar is available in 19 states but not yet in Florida.

Community solar lets anyone with an electric bill subscribe to a share of a larger solar array located in their region. Subscribers receive a bill credit on their electric bills just like rooftop solar owners do. Community solar can also make it easier for homeowners who only have small yards to receive the benefits of solar power.
Legislation for Community Solar

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[Map of United States with states in blue and red representing supportive and active states for community solar projects, respectively.]

- Red: Supportive legislation enacted
- Blue: At least one independent project online
Why community solar?

- Cheaper electricity now and/or in the future
- Fair access to solar for everyone
- Wider participation in our clean energy future
- Community-based power
1. Customers subscribe to a share of the electricity output.

2. Subscribers pay the system operator** upfront or monthly for the electricity produced.

3. Subscribers receive credits off their utility bill for the amount of electricity generated by their share.
How it works

How does it work?

Buy solar energy

Solar panel facility
sends electricity to the grid

Make solar energy

Credit solar energy

Utility sells electricity
from solar facility, provides
credit based on share size

Customers subscribe
(individuals & organizations)
to community solar facility

Graphic by Dan Thiede [danthiede.com]
How it works in Maryland

• Direct and third-party ownership permitted

• Full retail credit (just like rooftop solar)

• Subscription up to 200% of annual usage**

• Solar on site + community solar OK

** Excess is not the full retail value but just that of electricity generation costs
How it works in Maryland

Support for:

- Low and moderate income (LMI) access
- Small, non-traditional projects
- Geographic and siting diversity
- Clear consumer protection requirements
Terminology

1. Subscribers
2. Developer(s)
3. Subscriber Organization
4. Land holder
5. Utility Company
6. Public Service Commission
Subscriber Organization’s role?

- Finances and builds
- Claims incentives
- Contracts, subscriptions, billing, etc.
- Communicates w/ utility
- Maintains for 25 years

Community examples

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How it works

We want clean energy

I've got space

I need customers and a location

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1. “Subscribers negotiate together”

2. “Subscriber-owned Energy”
Community-driven examples

#1 “Subscribers negotiate together”

- Subscriber organization builds a multi-user solar project
- Community members (subscribers) buy individual shares of the project, bringing:
  - Interested customers
  - {Possibly land partner}
Community-driven examples

#2 “Subscriber-owned Energy”

- Determine size of project needed
- {Possibly finds land partner}
- Select and contract w/ Developer(s)
- Finance project
- Operate (or contract out) Subscriber Organization management (25 yrs.)
Finding community solar

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Subscription Summary

Project Name: Upper Marlboro 1

- Est. Annual Savings: $57.49
- Transfer: $0
- Upfront Payment: $0.00
- Move Within Territory: $0
- Type: Fixed Percent Savings
- Move Out of Territory: $0
- Subscription Length: 5 Years
- Emergency Exit: $0
- Cost: 5% below utility rate
- Other Exit: $0

The Basics

- Utility service territory where project is located: Pepco
- Who can participate: Residential members that are serviced by Pepco
- Cost: Guaranteed 5% discount below Pepco for length of contract
- Is this cheaper than what I pay now? Yes, it will always be cheaper than Pepco’s standard offer service. The discount rate is tied to the default electricity supply service from your utility. If you have chosen a third party electricity supplier your actual savings per kilowatt-hour may vary.
- How much can I buy? 80% of your annual electricity usage. We will determine this for you automatically based on your historical energy data
- How often will I pay? Monthly (you will pay together with your regular monthly utility cost in

http://cs.solarunitedneighbors.org
Not all are equal...

• Is it a good economic deal for participants?
  • Should lower electric bills/offer a good return on investment.
  • Be able to invest in or own part of the system.

• Is it customer friendly?
  • Should be easy for participants to understand, subscribe and unsubscribe, be transparent and be transferable.

• Does it benefit the community?
  • A key trait of community solar is community-benefit: job creation, providing added grid resilience, and an opportunity for low-income families to benefit from solar energy.
Unfortunately, in many places only utilities or large commercial developers can build community solar projects. Many utilities are trying to use the popularity of community solar projects as a way to rebrand the utility scale projects they own and manage.
Utility Solar Subscriptions

• Also called “Utility-Sponsored Model” (SEIA)

• Utility owns and operates array (solar farm, can be rate based)—may be direct or usually, into general mix

• Almost always a premium price or “subscription”; may result in locked fuel rate

• ROI dependent on rising fuel prices
Other Resources

Solar United Neighbors siting policy for community solar installations

COMMUNITY SOLAR BY STATE
Where is community solar happening today? See the map of states with pending or active shared renewables programs.

Vote Solar’s by state guide: sharedrenewables.org
The Vision for U.S. Community Solar:
A Roadmap to 2030

Florida
Community Solar Capacity: 2.3-3.6 GW
Subscribers Served: 287,000 to 384,000
Low- and Moderate-Income Households Supported: 141,000 to 189,000
Cumulative Capital Invested: $3.3-$4.0 billion

Report by GTM Research on behalf of Vote Solar. With thanks to Coalition for Community Solar Access & GRID Alternatives
Continue the Conversation!
Thank You!

www.solarunitedneighbors.org/learn-the-issues/community-solar/

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