Best Practices for Community-Owned Community Solar Program Design

It is our recommendation that EGLE distribute Solar for All funds directly to community-based cooperatives and LLCs, with guidelines developed jointly with community stakeholders around the state, to plan, and build community-owned community solar projects in Michigan. Unfortunately, utility-owned low-income solar projects have not achieved the promised financial and other benefits to communities in Michigan, therefore we recommend that ownership models should be determined by the community, based on what works best for them. Further recommendations, guidance, and examples below.

Policy Guidelines

Preference should be given to low-income customers, as required under Solar For All. Benefits should be shared equitably with customers in all housing types. Programs should contain strong consumer protection provisions to ensure customers that participate are not harmed by the community solar project. If community-owned community solar projects are installed on residential or commercial rooftops, the program should also include weatherization and efficiency measures to maximize benefits. Additionally, robust and accessible community engagement is a key element of program design. For more guidance and sample language, please visit: https://www.lowincomesolar.org/wp-content/uploads/2018/05/Community-Solar-Policy-Guidelines-and-Sample-Language.pdf.

Model examples

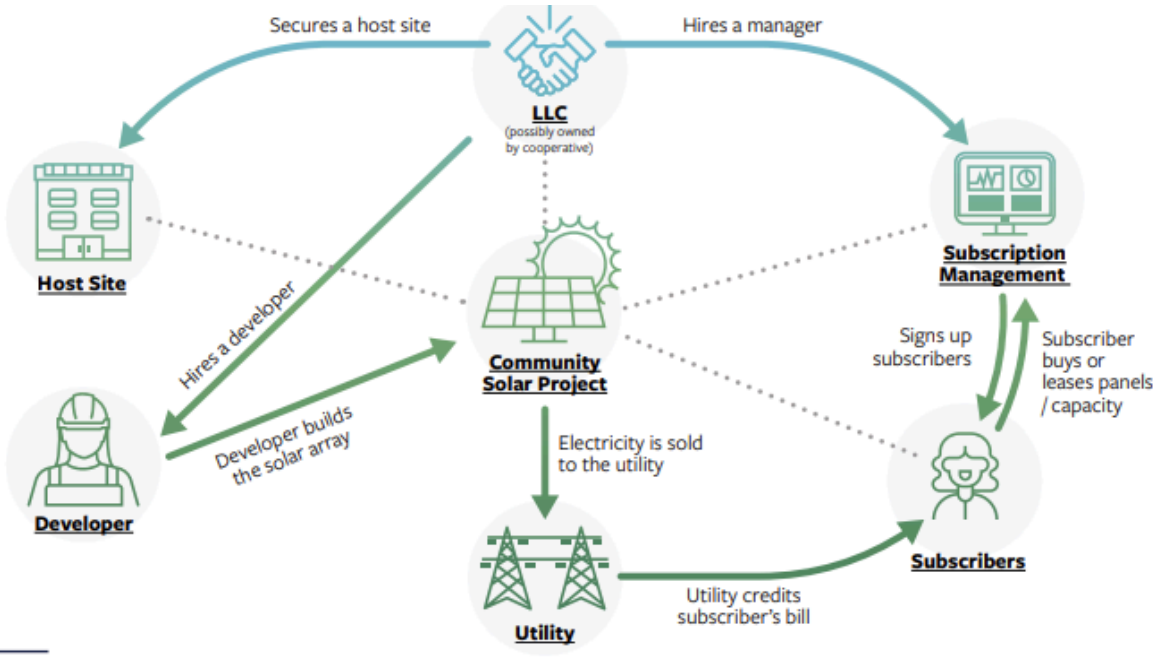
The below table is pulled from the Environmental Law and Policy Center's Community-Owned Community Solar Report and represents real-world examples of community-owned community solar installations.

Project/Organization	Ownership type	Development stage	Key policy drivers	Priority values	Project size
Cooperative Energy Futures project at Shiloh Temple International Ministries (Minneapolis, MN)	Cooperative	Operational	Uncapped community solar program[1]	Renewable energy, community ownership, energy democracy, sited in low-income, predominantly BIPOC part of town	204 kW
University Park Community Solar (University Park, MD)	LLC	Partnership flip completed	None	Showing feasibility and profitability of community-ow	22.7 kW

[1] For more information, see the Institute for Local Self-Reliance's article "Why Minnesota's Community Solar Program is the Best."

		with host institution		ned community solar program	
People Power Solar Cooperative (Oakland, CA)	Cooperative	Operational	2015 California Worker Cooperative Act	Energy democracy and sovereignty	Various (includes 3 different arrays on individual residential homes)
Block Club/Cleveland Owns (Cleveland, OH)[2]	LLC	In Development (note we have reached out to the project developers for an update)	none	Bill savings, community empowerment, equity	~4 MW
Co-Op Power (MA and NY)	Cooperative	Operational	Massachusetts' Mass Solar Loan program	Local ownership, control, and distribution of benefits	4.5 MW as of 2020

How Solar Works, the Special Purpose Entity Model (Courtesy of SolSmart)



Bill crediting:

[2] For more on this project, see the Block Club, Cleveland Owns, and this article.

Community solar models should offer monetary bill-credits for customers' share of electricity generated by the community solar project. **Virtual net metering** offers customers an opportunity to be compensated for their share of electricity generated in offsite solar installations, such as community solar. The outflow credits from these community solar projects should be calculated and disbursed on the monthly utility bill; having everything under one bill would benefit community solar subscribers by helping them avoid tracking multiple accounts and paperwork.

Community ownership:

Community ownership of community solar is key. The International Renewable Energy Agency defines community ownership as:

- "local stakeholders owning most of the project and voting rights and by control resting with a community-based organization"
- "the community owns, manages and takes the benefits of the project, while the main power grid operator and other parties have a secondary role."
- A community model includes at least two of the following characteristics (ownership structure, democratic governance, distribution of profits).
- As you can see below from the Institute for Local Self Reliance report, high degrees of local ownership results in significantly higher economic and job impacts when compared to third party ownership and low degrees of local ownership.

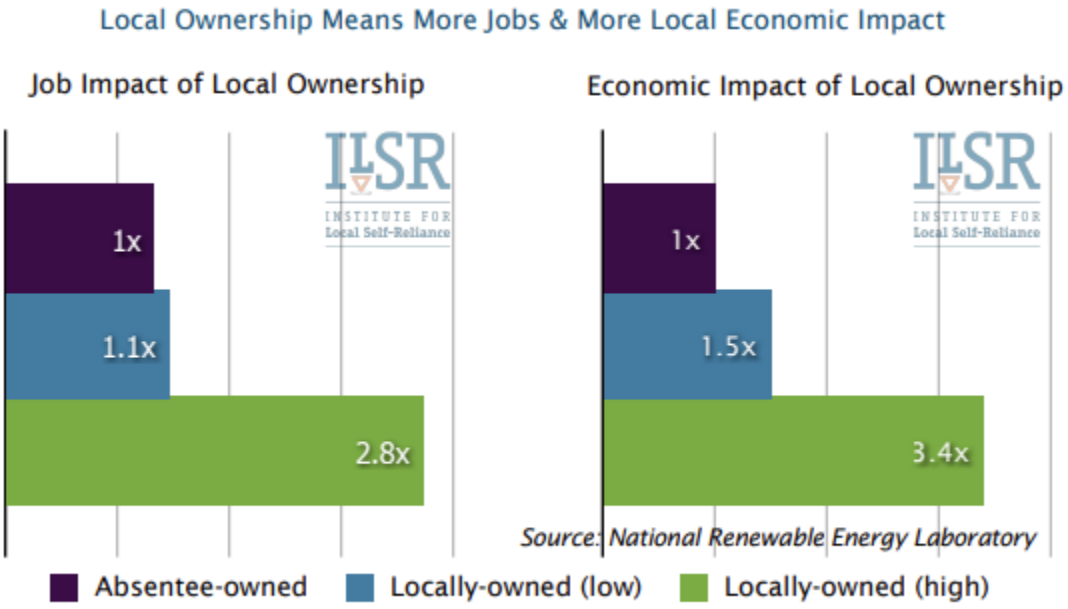


Figure 1 from https://ilsr.org/wp-content/uploads/2018/03/Advantage_Local-FINAL.pdf

Ownership models should be determined by each community and what works best for them:

- Cooperative: a member-owned and controlled business that distributes benefits equitable to those members on the basis of use
    - provides service at cost since the costs are spread across the membership

    - Proportional benefits and obligations: the more a member puts in the cooperative, the more benefits they receive
    - Limited returns on financial equity: providing the service is of higher importance than financial benefits
    - Democratic control- every member has a voice through direct or proportional voting. (Note that Co-Op power community solar program makes decisions by consent rather than voting.)
- Limited Liability Companies: business owned by members that can include individuals, corporations, other LLCs, and foreign entities.
    - Allows community members or groups to own something, like a community solar array, without having personal liability associated with it.
    - Should be structured like a cooperative so members have democratic control, or paired with a cooperative.
- LLCs are simple to form and compatible with tax equity investors, but have a high potential for securities regulation. Cooperatives are good for distributing benefits and mitigate the potential for securities regulation, but may not be compatible with tax equity investors and may be difficult to form based on a state's cooperative laws. Cooperatives that own LLCs maintain LLCs' compatibility with tax equity investors, and also maintain the potential for replication and scaling.

Barriers:

State policies that limit community solar and utility bill crediting (like virtual net metering) are the primary barriers to adoption and this landscape is unlikely to change without new legislation. Important pending community solar bills in the Michigan state legislature aim to address some of these barriers. Securities regulation may also hinder community owned community solar and thus it is recommended that programs offer bill crediting or are structured as cooperatives. However, all projects should be aware of securities laws and regulations.

Financial barriers are often major obstacles to community-owned community solar projects. Funding from federal programs like Solar For All can allow low-income communities to plan and build community-owned community solar projects without having to secure external upfront funding or loans. Additionally, it may be possible for solar developers to take advantage of Investment Tax Credits, and Low-income and energy community bonus tax credits from the Inflation Reduction Act.

Additionally, it's important to consider that certain established ways of identifying target customers or determining eligibility criteria is not inclusive to certain low-income groups, like (undocumented) immigrants.