Engaging the Public in a Just and Equitable Energy Transition

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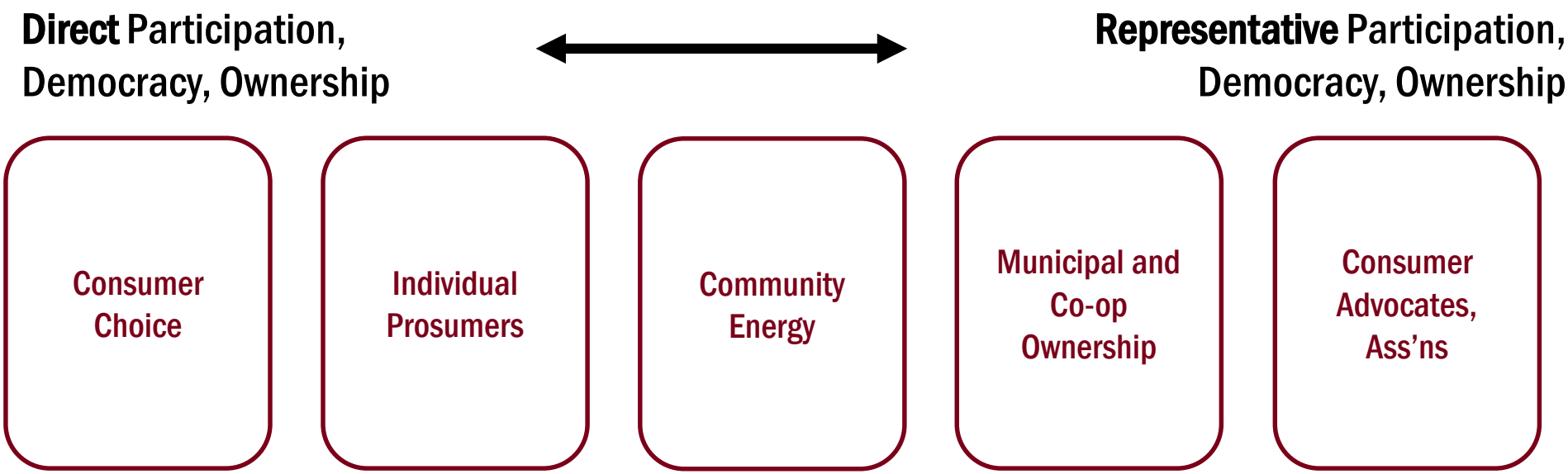
Why Public Engagement for an Equitable Energy Transition?

Public engagement can…

- lead to more equitable **outcomes**
- build **legitimacy** and **procedural justice**
- facilitate the **political economy** of broader transition efforts
- meet **statutory requirements** to consult or otherwise engage the public

What are the forms of public engagement and participation?

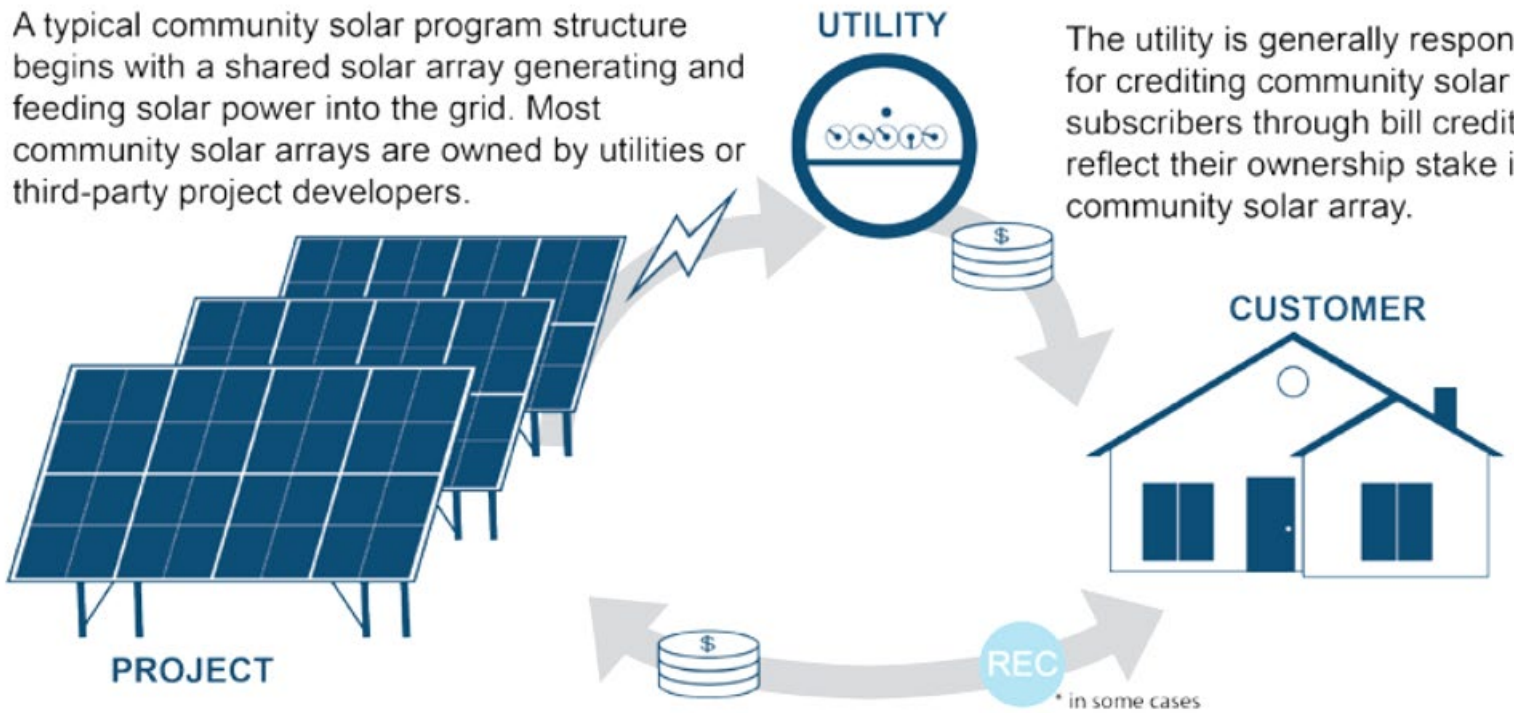


DERs enable more direct participation, democracy, and ownership in the energy system. But DERs simultaneously create **opportunities for innovation** in how participation, democracy, and ownership of diverse groups can occur.

Adapted from Wahlund & Palm (2022)

What is Community Shared Solar?

A typical community solar program structure begins with a shared solar array generating and feeding solar power into the grid. Most community solar arrays are owned by utilities or third-party project developers.



The utility is generally responsible for crediting community solar subscribers through bill credits that reflect their ownership stake in the community solar array.

Community solar subscribers generally pay for their subscription through up-front purchases of capacity (kW) or output (kWh). In return, the subscribers receive bill credits. This figure represents a community solar green power program where RECs are conveyed to the subscriber. However subscribers do not commonly receive the RECs, in which case their subscription is not a green power purchase.

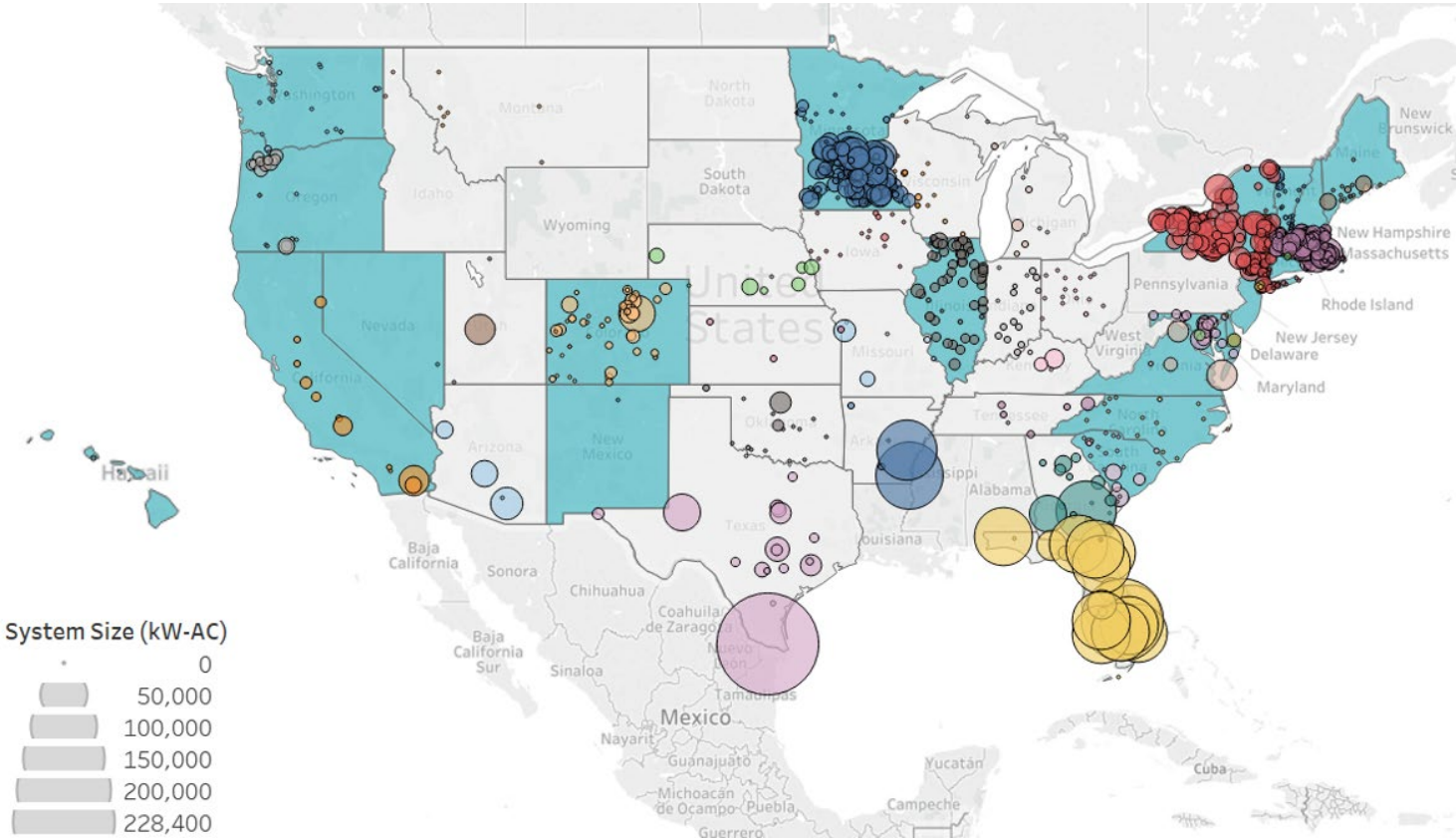
NREL, 2018

Community Shared Solar Market Status (2021)

5.2 GW of community solar projects have been installed, as of Dec. 2021

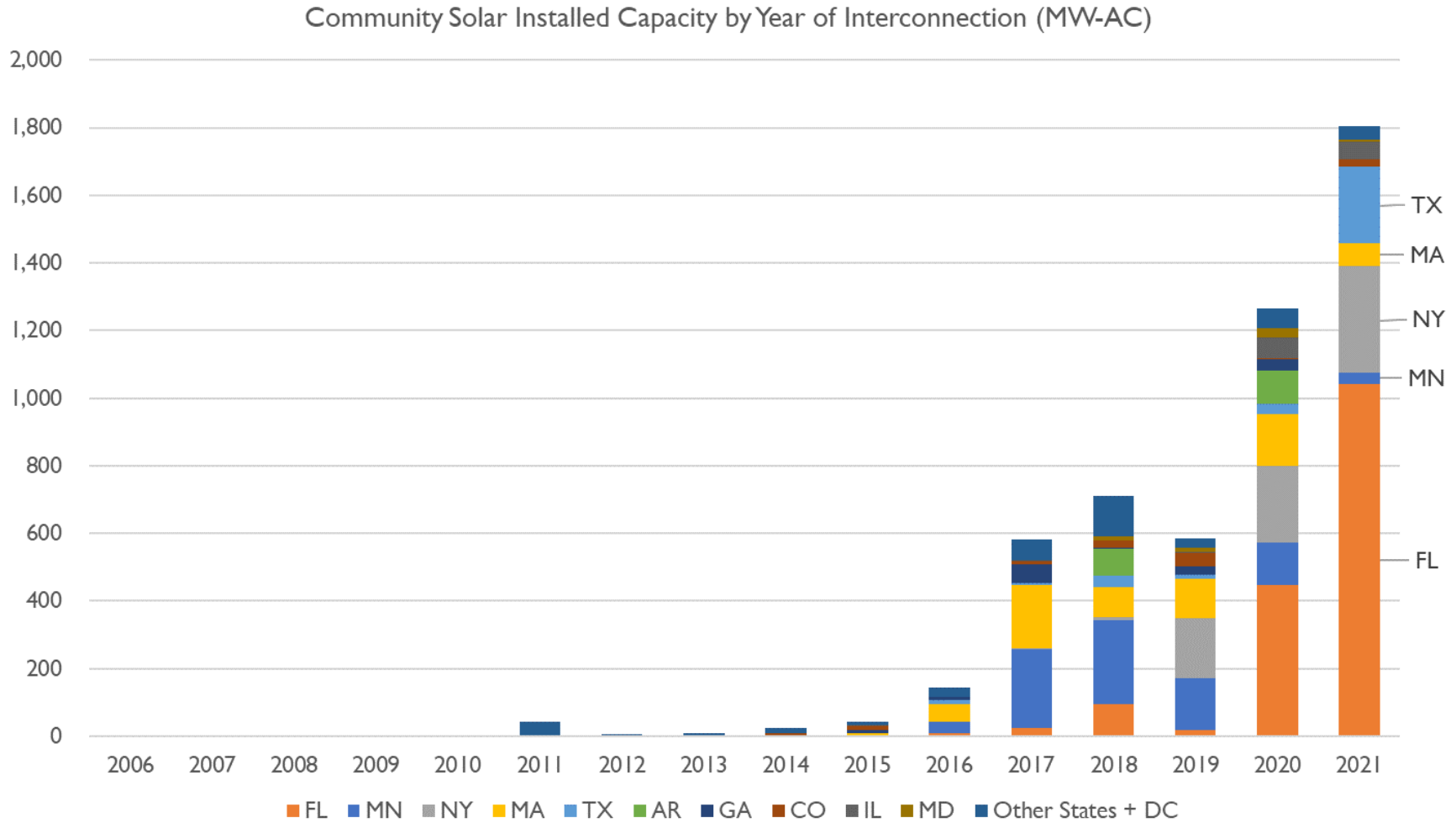
There are more than 2,000 CSS projects across the United States

22 states and D.C. have enabling policies or mandates for community solar



NREL(2022)

Community Shared Solar Market Status (2021)



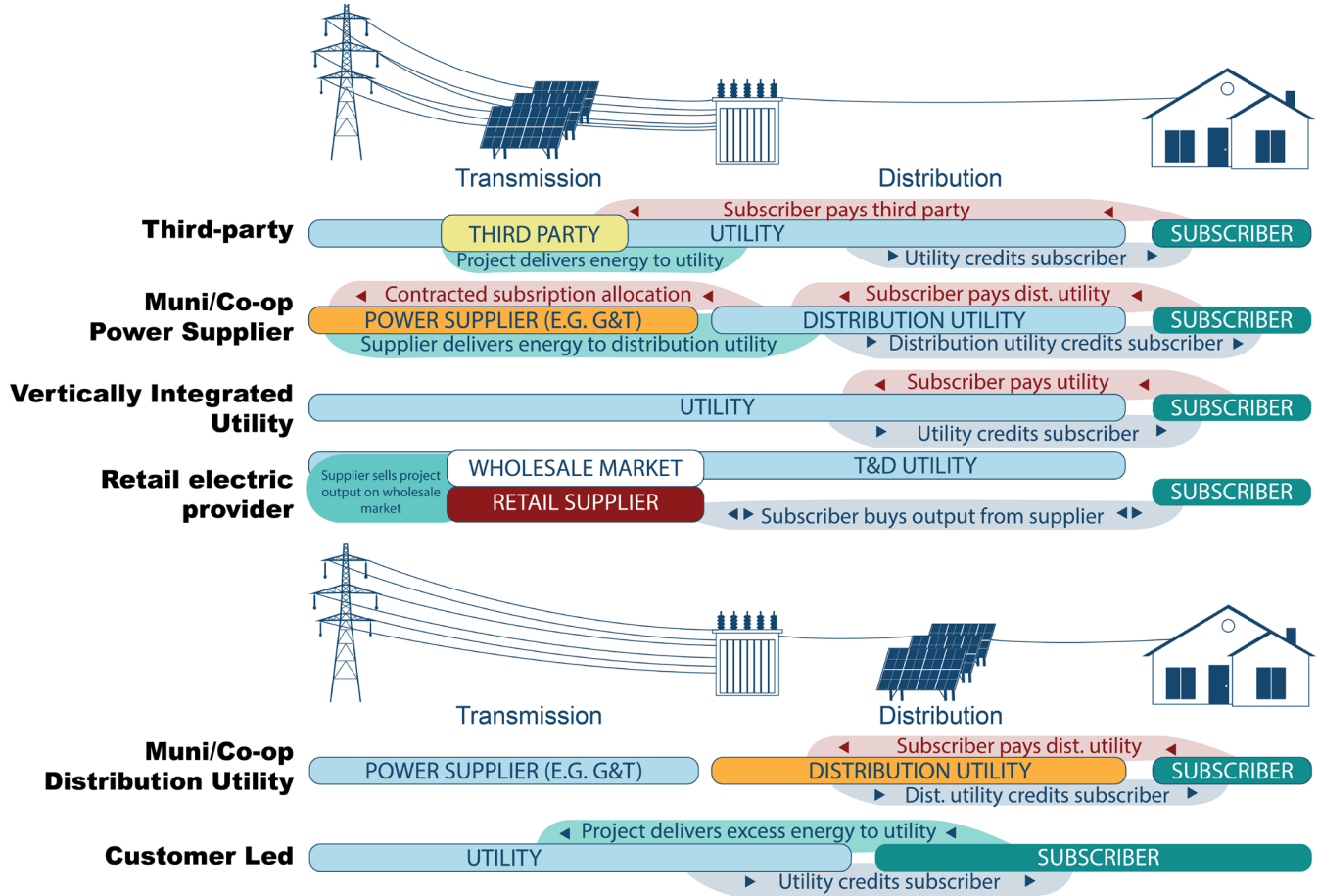
Chan, et al. (2022)

Alternative Forms of Financial Flows for CSS

Most community solar contracts offer guaranteed savings to subscribers

There are different models of ownership of community solar

Most capacity has been owned by third parties and output purchased by utilities and credited to subscribers

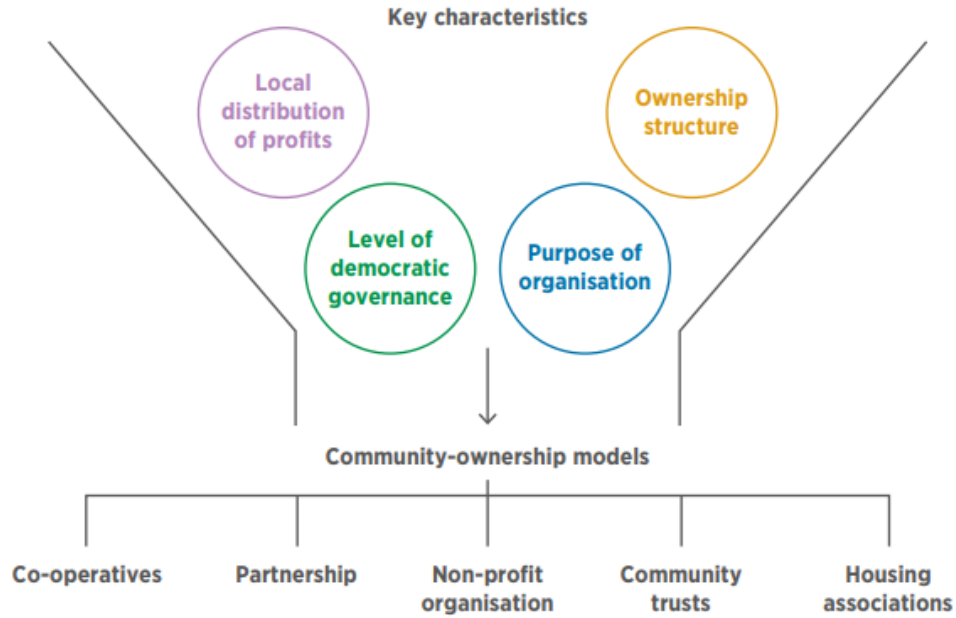


Chan, et al. (forthcoming)

Community-Level Ownership Models

Ownership as a "bundle of rights"

- **Alienation**: e.g., equity owner
- **Management**: e.g., project and program decision-makers
- **Monitoring**: e.g., project operator
- **Indirect Use**: e.g., landowners, neighbors, stakeholders
- **Direct Use**: e.g., offtakers, subscribers



IRENA (2020)

Adapted from Sikor, et al. (2017) and Grimley (forthcoming)

Alternative Forms of Ownership for Shared Solar

Consumer-Owned Cooperatives (e.g., Cooperative Energy Futures in MN)

Producer-Owned Cooperatives (e.g., People Power Solar Co-op in CA)

Housing Cooperatives (e.g., Solar Uptown Now in NY)

Consumer-Owned Utilities (e.g., nearly 500 electric co-ops with solar projects)

Nonprofit Ownership (e.g., Block Club Community Development Corp. in OH)

Tribal Ownership (e.g., Leech Lake Band of Ojibwe in MN)

Public Ownership (e.g., municipal utilities)

Crowdfunding (e.g., Red Lake Nation crowdfunded 2 solar arrays in MN)

Worker-Owned Business (e.g., ReVision in the Northeast)

Community Land Trust (e.g., Guadalupe Neighborhood Dev. Corp in TX)

Grimley (forthcoming)

Understanding and Evaluating Community Ownership

Different ownership models create tradeoffs between **high individual benefits** and **more beneficiaries** (see, e.g., University of Michigan, 2020)

Distributed energy resources create new opportunities for **diverse ownership and participation models** that blend:

- individual action and collective (representative) action through intermediaries and community-based organizations
- different regimes of multiple ownership rights
- multiple functions of—and opportunities for—community action (Grimley, et al. 2022)

Policy innovation should reflect how different ownership and participation models can achieve the goals of a just energy systems transition together with (and not separate from) the goals of energy democracy itself (Szulecki and Overland, 2020; Wahlund and Palm, 2022)

Thank You

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