



Community Solar

National Renewable Energy Laboratory

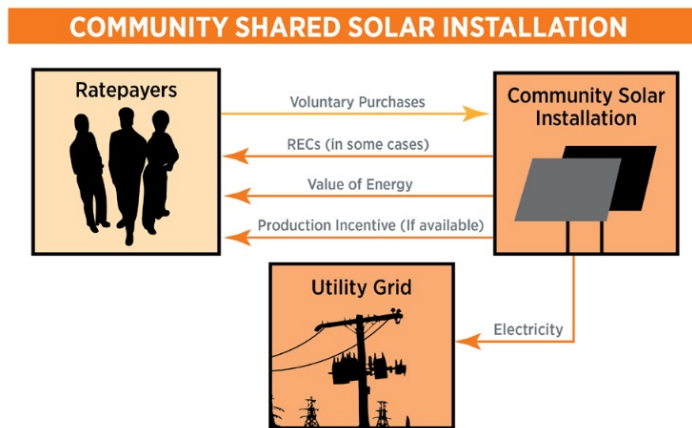
Presenter: Liz Weber
October 14, 2021

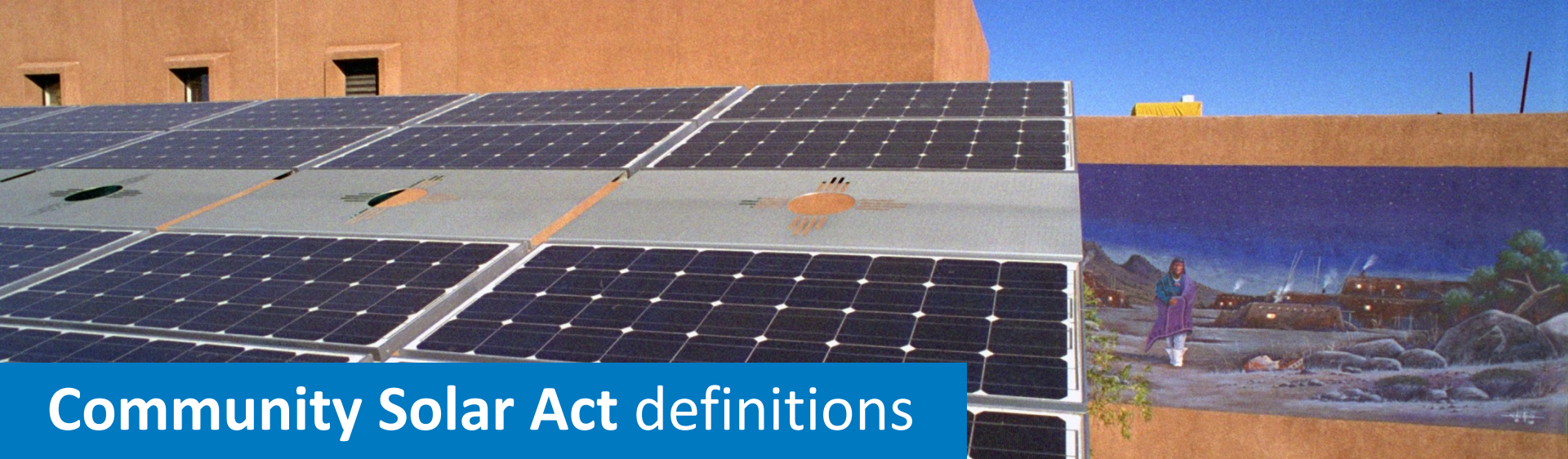
What is community solar?

Community solar, also known as *shared solar* or *solar gardens*, is a distributed solar energy deployment model that allows customers to buy or lease part of a larger, offsite shared solar photovoltaic (PV) system and receive benefits of their participation.

Other definitions include:

- A **solar power plant whose electricity is shared** by more than one property
- **Community-owned** projects as well as **third party-owned** plants whose electricity is shared by a community.





Community Solar Act definitions



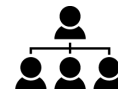
Community solar program



Community solar facility

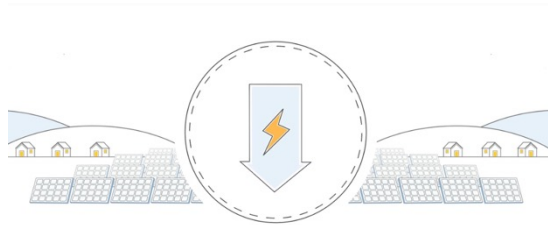


Subscribers



Subscribing organization

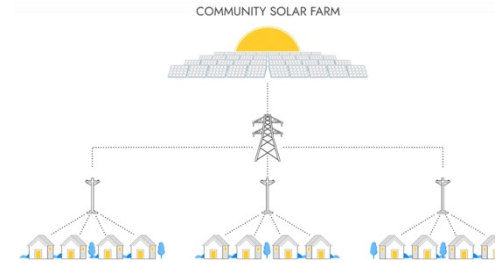
What is community solar for **Tribes and Pueblos?**



Resilience



Sustainability



Benefit to all

Criteria of Community Solar



Financial benefit: Community solar convey some part of financial gains of electricity generation to subscribers.



Exclusive: Community solar serve some exclusive set of subscribers within a utility or community



Chosen: Participation in community solar is always discretionary, subscribers opt in



What are the benefits to the Tribe/Pueblo?

Who will use the energy?

How will electricity be delivered?

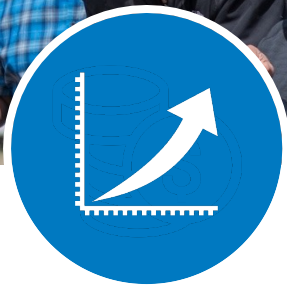
How much will it cost/how much profit?

Benefits to Tribes and Pueblos



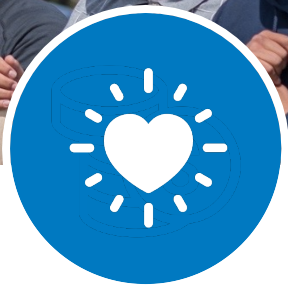
Offset electrical costs

Electricity rate stability and potential bill savings



Economic development

Tribal land for cost recovery, ownership of projects



Energy sovereignty

Independence and reliability, grid resiliency



Opportunity for community members

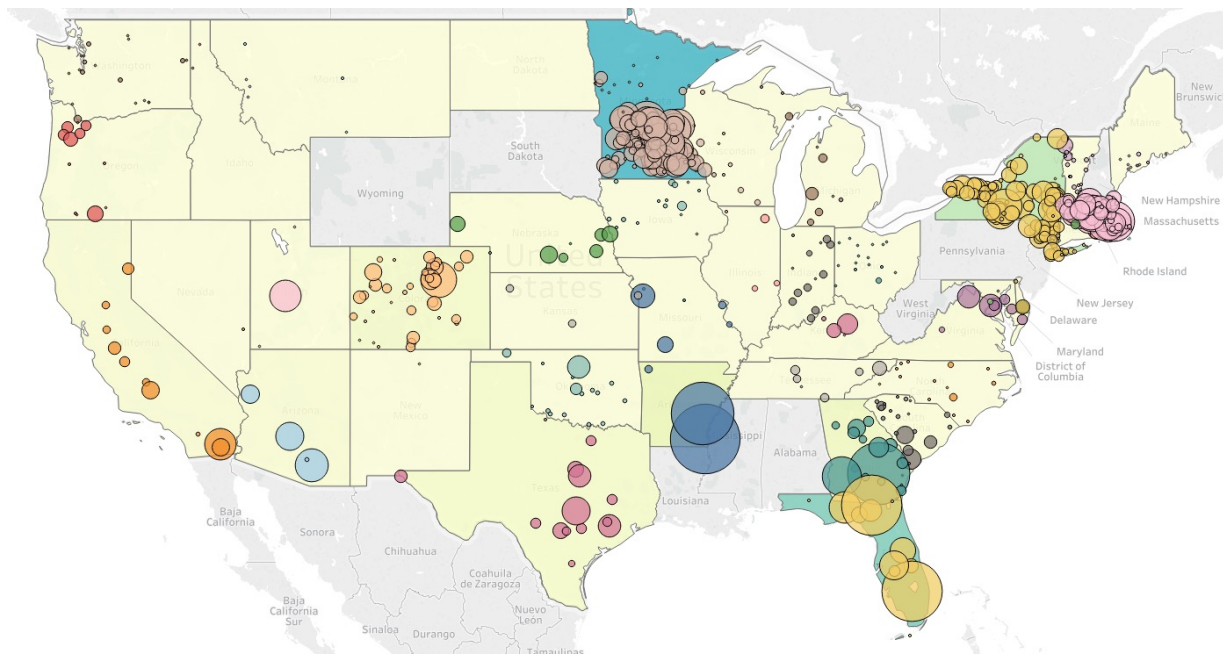
New job opportunities for Tribal community members, provide new job skill set



Reduce and mitigate CC risks and promote EJ

Preserve Tribal lands and cultural practices, reduce CO₂ emissions, supports climate justice, gain a cleaner, healthier environment

Community Solar Capacity by State



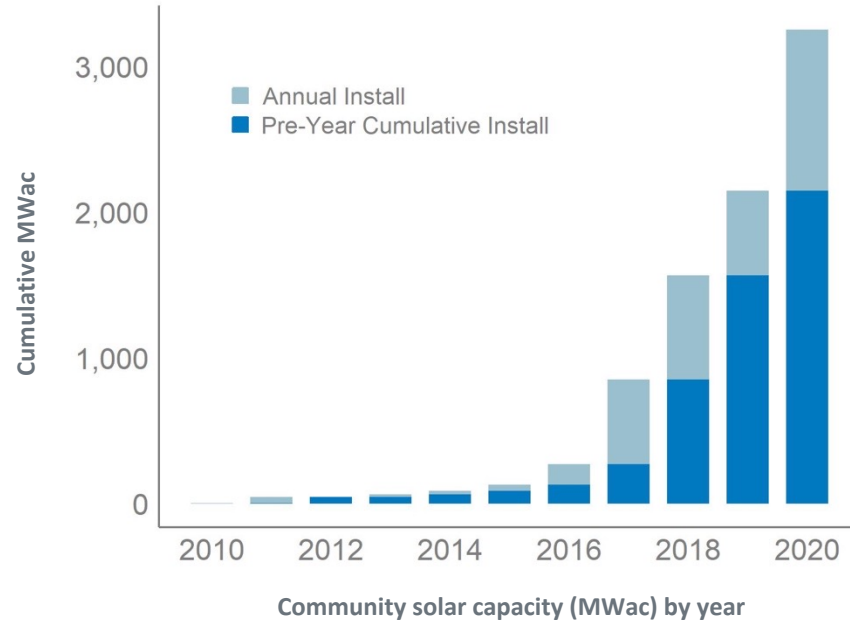
By the end of 2020, we estimated that there were at least **3,253 MW-AC of community solar capacity** distributed across ~1,600 projects in 39 states and Washington, D.C.

Community solar projects in the contiguous United States

Data Source: *Sharing the Sun Project List 2020*

The Rapid Growth of Community Solar

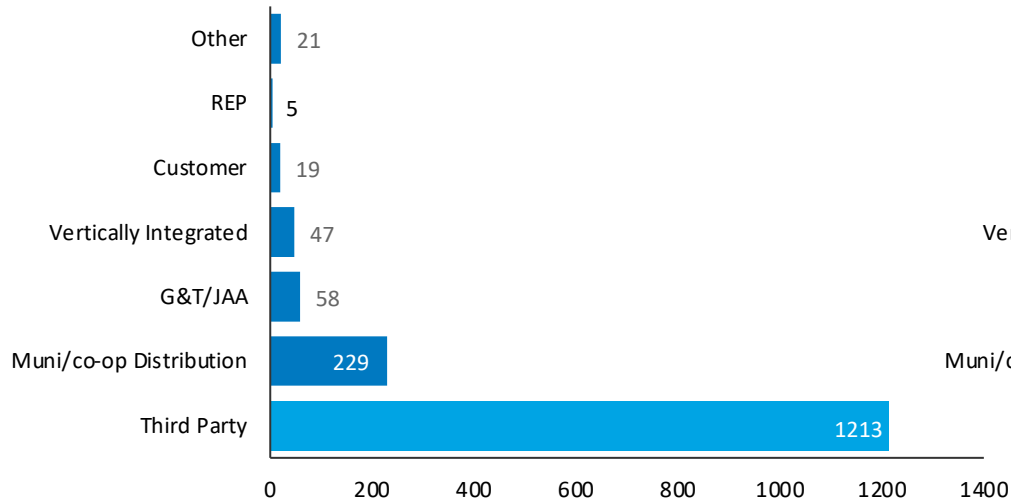
Cumulative community solar capacity has **more than doubled** on average year over year.



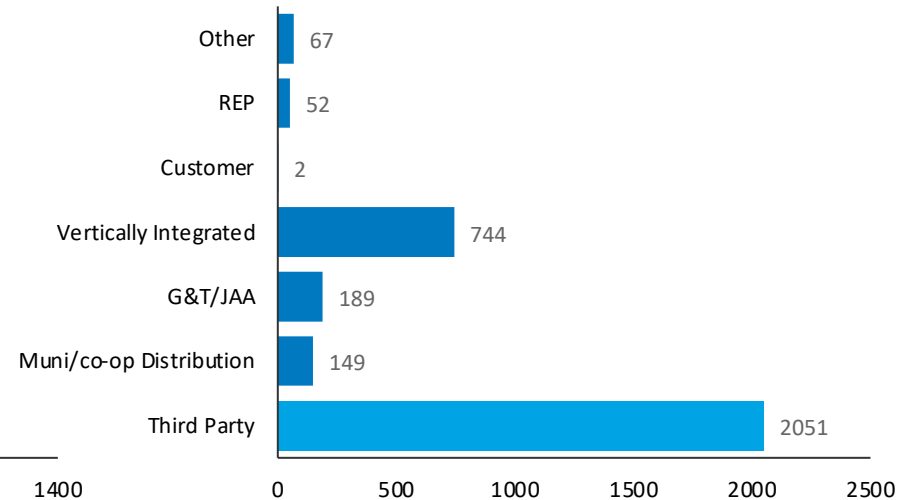
Archetypes of Community Solar Ownership

Most **capacity (64%)** and **projects (76%)** are developed and operated by third parties

Project Number by Archetype



Total Capacity MWac by Archetype



An aerial photograph of a rural landscape. In the foreground, a dirt road curves through a field of green pine trees. A white tent is set up in a cleared area, with several vehicles parked nearby. The middle ground shows a small village with scattered houses and blue-roofed buildings, surrounded by green fields. In the background, rolling hills and mountains are visible under a clear sky.

Impact of Policy

Policy is shaping community solar deployment.

The Why

Through developing, owning, operating, and maintaining solar facilities, Tribes and Pueblos can **increase their capacity for self-determination, reduce reliance on fossil fuels, and potentially achieve net-zero emissions.**





Thank you

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Publication Number: NREL/PR-6A50-81224

