How State Legislation Impacts Community Solar

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Overview

Over the last 20 years, solar power installation substantially increased in the U.S. According to a report from industry experts, solar accounted for 43% of new electricity generation in Q3 2020. And while costs are declining, barriers such as unsuitable roofing, rental and homeowner association contracts, and shaded property leave 90 million American households without access to residential rooftop solar. Likewise, utility-scale projects are not always suitable due to their size and infrastructure requirements. Due to these limitations, the push for community, or "shared", solar is taking place at the federal, state, and local level.

So, what does community solar entail? A utility or group of stakeholders will invest in a small-scale solar farm, typically developed on a brownfield site or location in proximity to the interested parties. While the business model for community solar varies, subscribers are credited on their electricity bills for the additional value generated from the solar farm. There is also the consideration of land accessibility, cost, and power capacity. But due to the flexibility offered by community solar, utilities can strategically develop projects and form partnerships with stakeholders. As a result, customers can lower their monthly bills, consume clean energy, and be free from the responsibility of maintenance.

The growth of community solar is in large part due to state mandated programs. According to a report from the Delaware Public Service Commission, 71% of community solar operating capacity in the U.S. stems from legislative initiatives. For example, community solar projects are located in thirty-nine states, with at least twenty states (including D.C) supporting policies for their implementation. In 2011, Delaware launched its "Community Net Metering Program" with the enactment of S.B. 267 (145th General Assembly). And while there was growth in the industry in Delaware, the Interstate Renewable Energy Council ("IREC") conducted an analysis and determined it lacked key components for successful market development.

Delaware's Energy and Environmental Forum is leading discussions with the public, energy utilities, and non-profit organizations to improve the outlook of community solar. This issue brief focuses on the policy areas Delaware could improve in, based on the IREC analysis and legislation from other states.

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Prioritizing Low-Income Accessibility

- Low-to-Moderate Income (LMI) participation is a crucial component of community solar policy. Legislation with required "carve-outs", LMI-only projects, and incentives may provide greater access for disadvantaged stakeholders.
- An additional example is project siting. For instance, Virginia HB 573 (2020) mandates a utility company to locate a portion of its solar farms within a low-income census tract.
- IREC's scorecard indicated that Delaware could increase LMI participation with marketing and outreach, provide on-bill financing, and develop required LMI carveouts for projects.

Challenges of Community Solar

- Low awareness about community solar in the public and policymakers. A report published in Renewable Energy Focus found the technical complexity of these projects are a barrier to policy development.
- Project Development. There are a variety of technical and economic aspects to consider, such as the valuation of renewable energy credits, facility size, local regulations, and ownership. Cooperation with utilities, energy experts, and the public is required for community solar to work well.

Recent State Legislation Expanding Community Solar

- Maryland passed HB 0683 in 2019. The bill expanded the existing pilot program, allowing for increased subscribers and allowable generating capacity per project.
- New Jersey passed a pilot program in 2018 with A3723. Its first project recently finished

- and brought 7MW of clean energy to low-income communities.
- New Mexico's legislative committee favorably reported SB 84 with bipartisan support in 2021. The bill creates rulemaking authority for the Public Regulation Commission to build community solar programs.
- Colorado Community Solar Gardens
 Modernization Act. With the passage of
 HB19 (2019), the previous capacity of 2MW
 was increased to 5MW. Allowing for more
 subscribers can spread and reduce a project's
 overall cost.

Considerations for Delaware Legislators

 Community solar is most effective when the parties involved are prepared and in agreement with the technical aspects of solar projects. For more information on development models, see a detailed guide from the National Renewable Energy Lab.

Additional Resources

- An Overview of Solar Energy Terms. The Solar Energy Industries Association breaks down the basics of solar generation, cost, and state by state outlooks.
- Federal Partnership. The National Community Solar Partnership leverages peer networks to expand solar farms. Services range from technical assistance, barrier removal, and networking.
- Community Power Map. The Institute of Local Self Reliance provides a scoring of states with solar-friendly policies. Delaware was ranked in the middle of the range.

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