50States Of SOLAR



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The NC Clean Energy Technology Center is a UNC System-chartered Public Service Center administered by the College of Engineering at North Carolina State University. Its mission is to advance a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies, practices, and policies. The Center provides service to the businesses and citizens of North Carolina and beyond relating to the development and adoption of clean energy technologies. Through its programs and activities, the Center envisions and seeks to promote the development and use of clean energy in ways that stimulate a sustainable economy while reducing dependence on foreign sources of energy and mitigating the environmental impacts of fossil fuel use.

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PREVIOUS EDITIONS AND OTHER 50 STATES REPORTS

Full editions of and annual subscriptions to the 50 States of Solar may be purchased here.

The 50 States of Solar is a quarterly publication. Previous executive summaries and older full editions of *The 50 States of Solar* are available here.

The NC Clean Energy Technology Center also publishes the *50 States of Grid Modernization* and the *50 States of Electric Vehicles* on a quarterly basis. Executive summaries of these reports may be found here. Please contact us for older issues of the *50 States* of Solar.



ABOUT THE REPORT

PURPOSE

The purpose of this report is to provide state lawmakers and regulators, electric utilities, the solar industry, and other stakeholders with timely, accurate, and unbiased updates on state actions to study, adopt, implement, amend, or discontinue policies associated with distributed solar photovoltaics (PV). This report catalogues proposed and enacted legislative, regulatory policy, and rate design changes affecting the value proposition of distributed solar PV during the most recent quarter, with an emphasis on the residential sector.

The 50 States of Solar series provides regular quarterly updates of solar policy developments, keeping stakeholders informed and up to date.

APPROACH

The authors identified relevant policy changes through state utility commission docket searches, legislative bill searches, popular press, and direct communication with stakeholders and regulators in the industry.

Questions Addressed

This report addresses several questions about the changing U.S. solar policy landscape:

- How are state legislatures, regulatory authorities, and electric utilities addressing fastgrowing markets for distributed solar PV?
- What changes to traditional rate design features and net metering policies are being proposed, approved, and implemented?
- Where are distributed solar markets potentially affected by policy or regulatory decisions on community solar, third-party solar ownership, and utility-led residential rooftop solar programs?

Actions Included

This report series focuses on cataloging and describing important proposed and adopted policy changes affecting solar customer-generators of investor-owned utilities (IOUs) and large publicly-owned or nonprofit utilities (i.e., those serving at least 100,000 customers). Specifically, actions tracked in these reports include:



- Significant changes to state or utility net metering laws and rules, including program caps, system size limits, meter aggregation rules, and compensation rates for net excess generation
- Changes to statewide community solar or virtual net metering laws and rules, and individual utility-sponsored community solar programs arising from statewide legislation
- Legislative or regulatory-led efforts to study the value of solar, net metering, or distributed solar generation policy, e.g., through a regulatory docket or a cost-benefit analysis
- Utility-initiated rate requests for charges applicable only to customers with solar PV
 or other types of distributed generation, such as added monthly fixed charges, demand
 charges, stand-by charges, or interconnection fees
- Utility-initiated rate requests that propose a 10% or larger increase in either fixed charges or minimum bills for all residential customers
- Changes to the legality of third-party solar ownership, including solar leasing and solar third-party solar power purchase agreements (PPAs), and proposed utility-led rooftop solar programs

In general, this report considers an "action" to be a relevant (1) legislative bill that has been passed by at least one chamber or (2) a regulatory docket, utility rate case, or rulemaking proceeding. Introduced legislation related to third-party sales is included irrespective of whether it has passed at least one chamber, as only a small number of bills related to this policy have been introduced. Introduced legislation pertaining to a regulatory proceeding covered in this report is also included irrespective of whether it has passed at least one chamber.

Actions Excluded

In addition to excluding most legislation that has been introduced but not advanced, this report excludes a review of state actions pertaining to solar incentives, as well as more general utility cost recovery and rate design changes, such as decoupling or time-of-use tariffs. General changes in state implementation of the Public Utility Regulatory Policies Act of 1978 and subsequent amendments, including changes to the terms of standard contracts for Qualifying Facilities or avoided cost rate calculations, are also excluded unless they are related specifically to the policies described above. The report also does not cover changes to a number of other policies that affect distributed solar, including solar access laws, interconnection rules, and renewable portfolio standards. Details and updates on these and other federal, state, and local government policies and incentives are available in the NC Clean Energy Technology Center's Database of State Incentives for Renewables and Efficiency, at www.dsireusa.org.



EXECUTIVE SUMMARY

OVERVIEW OF Q3 2022 POLICY ACTION

In the third quarter of 2022, 40 states plus DC took a total of 174 actions related to distributed solar policy and rate design (Figure 1). Table 1 provides a summary of state actions related to DG compensation, rate design, and solar ownership during Q3 2022. Of the 174 actions cataloged, the most common were related to DG compensation rules (58), followed by community solar (46), and residential fixed charge and minimum bill increases (28).

Table 1. Q3 2022 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	58	33%	26
Community solar	46	26%	22 + DC
Residential fixed charge or minimum bill increase	28	16%	18
Residential demand or solar charge	19	11%	10
DG valuation or net metering study	12	7%	10
Third-party ownership of solar	8	5%	4
Utility-led rooftop PV programs	3	2%	3
Total	174	100%	40 States + DC

Note: The "# of States/ Districts" total is not the sum of the rows, as some states have multiple actions. Percentages are rounded and may not add up to 100%.

TOP FIVE SOLAR POLICY DEVELOPMENTS OF Q3 2022

Five of the quarter's top policy developments are highlighted below.

Mississippi Regulators Adopt Revised DG Compensation Rules

The Mississippi Public Service Commission approved revised DG compensation rules in July 2022, with further amendments made in an October 2022 order. The revised rules expand eligibility for the low-to-moderate (LMI) income benefits adder from 200% to 225% of the federal poverty level, create new upfront incentive programs for LMI customers and residential battery storage, and establish a solar for schools program, among other changes.

California Lawmakers Enact Legislation to Expand Community Solar

The California State Legislature enacted A.B. 2316 in September 2022, which directs the California Public Utilities Commission to evaluate customer renewable energy subscription



programs and determine by March 31, 2024 whether it would be beneficial to ratepayers to establish a Community Renewable Energy Program. The legislation requires that 51% of program subscribers be low-income customers or low-income service organizations.

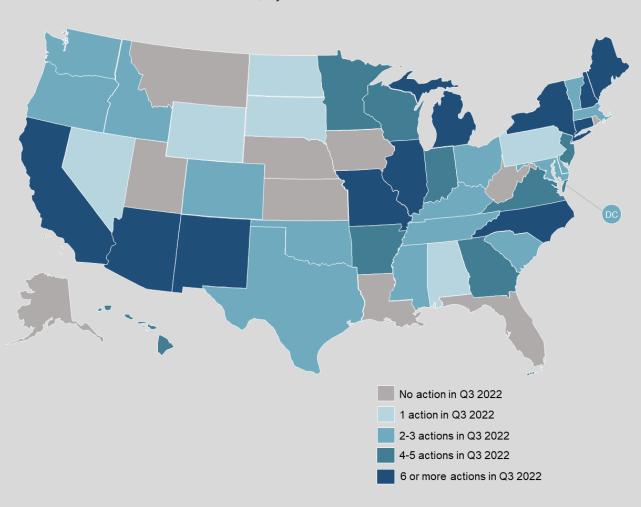


Figure 1. Q3 2022 Action on DG Compensation, Rate Design, & Solar Ownership Policies, by Number of Actions

Virginia Corporation Commission Establishes Minimum Bill for Community Solar Participants

In July 2022, the Virginia Corporation Commission approved a monthly minimum bill of \$55.10 for participants in the state's new shared solar program. Notably, the Commission exempted low-income customers from the minimum bill. Regulators granted a motion for reconsideration that urged the Commission to approve a different option that would set the minimum bill at \$10.95, but the Commission later upheld the higher charge.



North Carolina Regulators Authorize Third-Party PPA for Military Facility

The North Carolina Utilities Commission issued a declaratory ruling in August 2022, allowing a power purchase agreement (PPA) between Sunstone Energy and Fort Bragg to move forward under the proposed third-party ownership structure. The Commission found that since Fort Bragg is on federal land, federal law applies and the Commission may not regulate Sunstone Energy as a public utility.

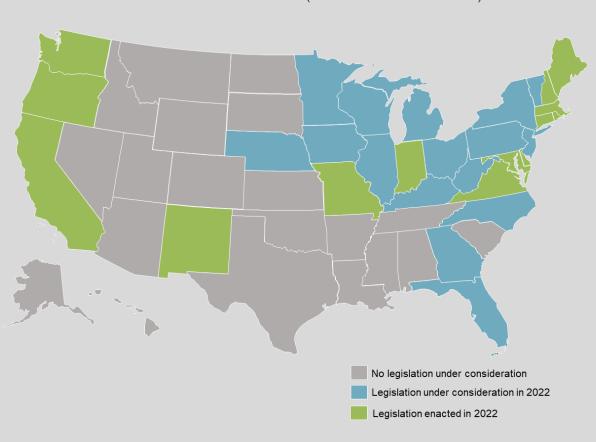


Figure 2. DG Compensation, Rate Design, and Solar Ownership Legislation Under Consideration in 2022 (as of mid-October 2022)

Illinois Commerce Commission Approves Long-Term Renewable Resources Procurement Plan

Illinois regulators approved the state's 2022 Long-Term Renewable Resources Procurement Plan in July 2022. The plan provides guidelines for the state's renewable energy incentive programs, including those for community solar. The plan implements changes enacted in the Climate and Equitable Jobs Act of 2021, including requirements related to equity. The plan includes new funding categories specific to public schools, community-driven projects, and "equitable eligible contractors".



THE BIG PICTURE: INSIGHTS FROM Q3 2022

States Tying Labor Requirements to Solar Programs

As states continue to evaluate their distributed solar programs, policymakers in some states are tying new labor requirements to these programs. At the federal level, the recently enacted Inflation Reduction Act requires that laborers are paid prevailing wages for new projects to receive the full 30% business investment tax credit. In California, legislation enacted in September 2022 requires that net metering systems over 15 kW installed after December 31, 2023 meet the labor standards for public works projects, including prevailing wage requirements. New Mexico's new community solar program includes bid preferences for projects employing local labor and including workforce training opportunities, while Illinois' Adjustable Block Program requires that most project proposals comply with Illinois Prevailing Wage Act rules.

Policymakers and Regulators Examining Improvements for Next Iterations of Community Solar Programs

In several states, policymakers and regulators are examining potential improvements to community solar programs to be implemented in future iterations of these programs. California lawmakers enacted legislation in September 2022 that is intended to address policy barriers that have inhibited the growth of community solar in the state. In Maryland, the Public Service Commission submitted a report to the state legislature with recommendations regarding the future of the state's community solar pilot program, and the New Jersey Board of Public Utilities has been working to develop a straw proposal for a permanent community solar program to succeed its pilot. Meanwhile, stakeholders in Maine have been meeting to discuss potential changes to the state's distributed generation programs, including community solar, while Connecticut regulators evaluate potential changes for Year 4 of the shared clean energy facilities program.

States and Utilities Considering the Resilience Value of Distributed Solar

A number of states and utilities are considering the potential resilience value that distributed solar can offer as a part of customer programs. The Georgia Public Service Commission approved Georgia Power's proposed Resilience Asset Service Tariff in July 2022, which will allow the utility to deploy distributed energy resources, including solar and battery storage, at commercial and industrial customer locations in exchange for a monthly resiliency service charge. In New Hampshire, resilience services is one of the avoided cost components analyzed by the state's forthcoming value of distributed energy resources study. Additionally, Connecticut regulators have considered the potential for bid preferences in the shared clean energy facilities program for projects delivering measurable resilience benefits.



FULL REPORT DETAILS & PRICING

FULL REPORT DETAILS

Content Included in the Full Quarterly Report:

- Detailed policy tables describing each pending and recently decided state and utility action regarding:
 - Net Metering
 - Distributed Solar or DG Valuation
 - Community Solar
 - Residential Fixed Charge and Minimum Bill Increases
 - Residential Solar Charges (Demand Charges, Standby Charges, & Grid Access Charges)
 - Third-Party Ownership
 - Utility-Led Rooftop Solar
- Links to original legislation, dockets, and commission orders for each policy action
- Summary maps of action for each policy category above
- Excel spreadsheet file of all actions taken during the quarter and separate
 Powerpoint file of all summary maps available upon request
- Qualitative analysis and descriptive summaries of solar policy action and trends
- Outlook of action for the next guarter

WHO SHOULD PURCHASE THIS REPORT

The 50 States of Solar allows those involved in the solar and electric utility industry to easily stay on top of legislative and regulatory changes. The report provides a comprehensive quarterly review of actions, an undertaking that would take any one business or organization weeks of time and thousands of dollars in staff time. At a cost of \$500 per issue (or \$1,500 annually), the 50 States of Solar offers an invaluable time and financial savings. With direct links to original sources for all actions, customers may stay on top of legislative and regulatory developments between quarterly reports.

Solar Installation and Manufacturing Companies

- Identify new market opportunities, as well as changing and risky markets
- Stay on top of state policy developments relevant to your business
- Give your own team a head start in tracking legislative and regulatory proceedings



Investor-Owned and Public Power Utilities

- Learn about the approaches being taken by other utilities facing similar challenges
- Stay on top of relevant state policy developments
- Utilize an objective source of information in legislative and regulatory proceedings

Investors and Financial Analysts

- Identify new investment opportunities and emerging areas of growth, as well as risky investments
- Access rate data that is often buried in regulatory filings

Advocacy Organizations

- Learn about the diverse solar policy and rate proposals in other states
- > Learn about the outcomes of other state's policy and rate decisions
- Utilize an objective source of information in legislative and regulatory proceedings

Researchers and Consultants

- Access valuable data requiring an immense amount of time to collect first-hand
- Identify research needs to inform solar policy and rate design proceedings
- Cite an objective source in your own research and analysis

PRICING

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Subscription Type	Annual Subscription	Single Report
50 States of Solar Report	\$1,500	\$500
Single-Tech Subscription (Solar) (Includes 50 States of Solar report, plus comprehensive biweekly legislative & regulatory solar tracking, policy data sheets, & curated monthly policy updates)	\$4,500	N/A
All-Tech Subscription (Includes 50 States of Solar report, 50 States of Grid Modernization report, & 50 States of Electric Vehicles report; plus comprehensive biweekly legislative & regulatory tracking; policy data sheets, & curated monthly policy updates)	\$10,500	N/A



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