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STATES OF SOLAR

Q2 2024 Quarterly Report
Executive Summary



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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*, the *50 States of Electric Vehicles*, and the *50 States of Power Decarbonization* 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 fast-growing 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 Q2 2024 POLICY ACTION

In the second quarter of 2024, 44 states plus DC and Puerto Rico took a total of 182 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 Q2 2024. Of the 182 actions cataloged, the most common were related to DG compensation rules (64), followed by residential fixed charge and minimum bill increases (48), and community solar (42).

Table 1. Q2 2024 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	64	35%	27 + DC, PR
Residential fixed charge or minimum bill increase	48	26%	29 + DC
Community solar	42	23%	23 + DC
DG valuation or net metering study	16	9%	13 + DC, PR
Third-party ownership of solar	6	3%	4
Residential demand or solar charge	5	3%	4
Utility-led rooftop PV programs	1	1%	1
Total	182	100%	44 States + DC, PR

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 Q2 2024

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

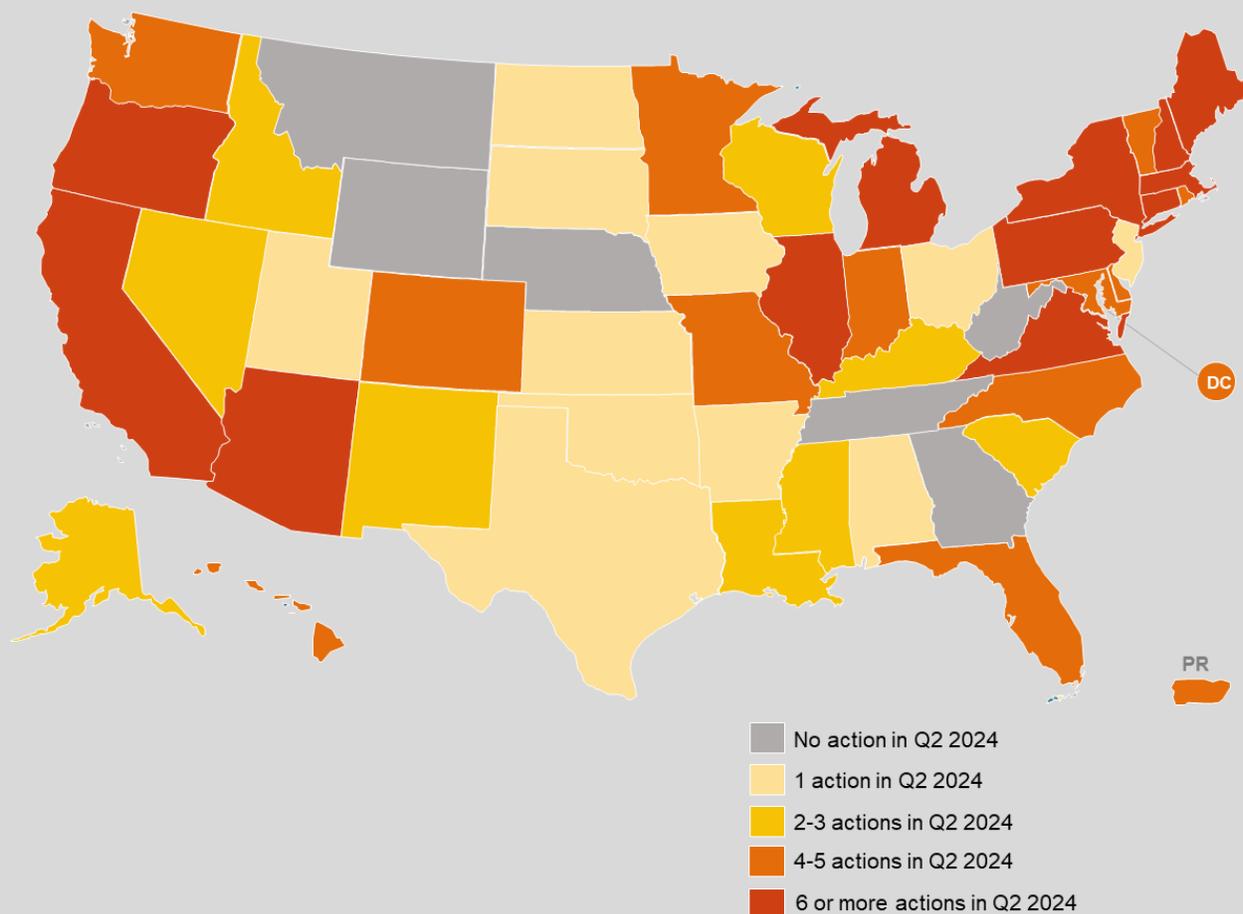
California Regulators Issue Decisions on Community Solar and Income-Based Fixed Charges

The California Public Utilities Commission (CPUC) issued two major decisions on community solar and income-based fixed charges during Q2 2024. The CPUC approved income-tiered residential fixed charges for the state's investor-owned utilities, which range from \$6.00 to \$24.15. The CPUC also approved a new Community Renewable Energy Program and modifications to existing Green Tariff programs. The new community energy program will use existing procurement mechanisms like the Renewable Energy Market Adjustment Tariff and PURPA Standard Offer Contract as the foundation of the program.

Alaska Lawmakers Pass Community Solar Legislation

Alaska lawmakers passed legislation requiring Commission-regulated utilities to offer community energy programs. The Regulatory Commission of Alaska is to develop several program specifications, including bill credit rates that consider the full economic value provided by community energy facilities. The Commission is also authorized to adopt a separate rate for capacity provided by energy storage as part of a community energy facility.

Figure 1. Q2 2024 Action on DG Compensation, Rate Design, & Solar Ownership Policies, by Number of Actions



Colorado Legislators Approves Changes to Community Solar Garden Program

The Colorado General Assembly enacted legislation in May 2024 that adopts changes to the state's community solar garden program. The revised program will begin in 2026 and focus on inclusive community solar development. The new program requires that at least 51% of a facility's subscriptions be reserved for income-qualified customers and allows for the donation of excess credits to income-qualified customers.

THE BIG PICTURE: INSIGHTS FROM Q2 2024

States Examining Interplay of Inflation Reduction Act Funding and Solar Programs

With Inflation Reduction Act (IRA) funding flowing to state agencies and clean energy projects, a number of states are considering how this funding interacts with solar programs in their states and how it can be potentially leveraged to enhance the impact of these programs. In California, the Public Utilities Commission specified that U.S. Environmental Protection Agency Solar for All funding is to be used as part of the new Community Renewable Energy Program to make the program more attractive to participants. In Colorado, lawmakers specified as part of community solar garden program revisions that the limit on subscription charges will vary based on whether and how the community solar facility is using IRA funding. For income-qualified customers, the subscription charge is limited to 75% of the value of the bill credits, while this decreases to 70% if the project is receiving IRA funding for energy communities and 50% if IRA funding is being used to provide bill savings. Meanwhile, in Mississippi, the Public Service Commission has suspended multiple solar and storage incentives/programs in the state due to Solar for All funding.

States Utilizing Formal Studies to Inform Net Metering Successor Efforts

While there has been somewhat of a lull in states and utilities undertaking studies of net metering or the value of solar, a number of states have recently taken steps to conduct studies that will inform future program changes. In Washington, lawmakers passed a bill initiating a study of the value of distributed solar and storage in the state, which will be used to create recommendations and options for methodologies that can be utilized once the state's aggregate cap on net metering is reached. Connecticut legislators also enacted legislation that requires a study of the state's Renewable Energy Solutions Program and potential successor options, and Delaware lawmakers passed a bill earlier this year initiating a study of net metering in the state. In Massachusetts, the Clean Energy Center released a solicitation for a consultant to create a statewide compensation mechanism for distributed energy resources providing service to the state's grid.

States Modifying Existing Community Solar Programs

Legislators and regulators in a number of states recently approved modifications to community solar programs, with many of these focused heavily on making programs more accessible to low-income customers. Colorado legislators passed a bill this quarter revising the state's community solar garden program, and California regulators issued a decision making changes to community solar in the state. Connecticut lawmakers enacted legislation requiring the Public Utilities Regulatory Authority to conduct a study of the state's Shared Clean Energy Facilities Program and potential successor programs. In Maryland, regulators are considering proposed regulations for the next iteration of the state's community solar program, while Minnesota regulators are implementing community solar changes passed by legislators last year.

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 quarter

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
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All-Tech Subscription <i>(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)</i>	\$10,500	N/A

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We offer complimentary copies of the 50 States of Solar to **policymakers and regulators only** (limited to federal and state legislators and staffers, utility commissioners, utility commission staff, state consumer advocate office staff, and state energy office staff). [Contact us](#) to receive a complimentary copy of the most recent report.

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