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STATES OF SOLAR

Q2 2023 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 2023 POLICY ACTION

In the second quarter of 2023, 40 states plus DC and Puerto Rico took a total of 176 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 2023. Of the 176 actions cataloged, the most common were related to DG compensation rules (57), followed by community solar (48), and residential fixed charge and minimum bill increases (44).

Table 1. Q2 2023 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	57	32%	22 + DC, PR
Community solar	48	27%	20 + DC
Residential fixed charge or minimum bill increase	44	25%	27 + DC
DG valuation or net metering study	10	6%	9 + PR
Third-party ownership of solar	8	5%	4
Residential demand or solar charge	7	4%	5
Utility-led rooftop PV programs	2	1%	2
Total	176	100%	40 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 2023

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

Maryland Lawmakers Pass Permanent Community Solar Program Legislation

In April 2023, Maryland lawmakers enacted legislation establishing a permanent community solar program in the state to succeed its pilot program. The new program lifts the aggregate cap on community solar capacity, sets a 40% requirement for low- and moderate-income (LMI) customer participation, and includes consolidated billing provisions. The bill also prohibits LMI subscribers from being charged a fee that is more than 90% of the bill credit value.

California Utilities Propose Income-Graduated Residential Fixed Charges

Following the passage of A.B. 205 in 2022 authorizing income-graduated fixed charges for residential customers, California's three major investor-owned utilities proposed such charges

THE BIG PICTURE: INSIGHTS FROM Q2 2023

Addressing Equity Issues Through Distributed Solar Program and Rate Design

A growing theme in distributed solar program and rate design has been that of addressing equity issues. In California, the state's major investor-owned utilities recently proposed residential fixed charges that are graduated by income level. While the charges would be applicable to both customers with and without solar, higher fixed charges can reduce the potential savings offered by solar. Another more common approach has been designing community solar programs in a way that focuses on participation and savings for low- and moderate-income (LMI) customers. Legislation enacted in Maryland and Minnesota during the quarter increased LMI customer participation requirements for community solar projects, while requiring a certain level of savings or a higher bill credit for these customers. In New York, regulators opened the door to allowing different community solar credit rates for different customers, such as a higher credit rate for LMI subscribers.

States Developing New Iterations of Community Solar Programs

A number of states are developing new, revised community solar programs to follow pilot programs or first iterations. Lawmakers in Maryland and Minnesota enacted legislation during the quarter revamping community solar programs in their states. Legislators in Rhode Island also passed a bill including significant modifications to the community solar net metering program. Meanwhile, New Jersey regulators have released a straw proposal for the state's permanent community solar program to follow its pilot, and California regulators are developing a new community solar program pursuant to legislation enacted last year. In developing the next iterations of their community solar programs, states are placing increased emphasis on low- and moderate-income (LMI) customers through various measures, such as setting higher LMI customer participation targets.

Modifying Treatment of Monthly Net Excess Generation from Customer-Generators

Several states recently took action to modify treatment of monthly net excess generation from customer-generators. In Delaware, regulators approved changes to the net metering provisions in the state's administrative code that allow customers to change the end of their annualized billing period and request payment based on supply service charges at the end of this period. Maryland lawmakers passed legislation that allows investor-owned utility customers to elect to indefinitely accrue net metering credits instead of receiving an annual reconciliation payment. Legislation enacted in Maine allows the Public Utilities Commission to use the value of unused and expired credits for low-income assistance. In Rhode Island, RI Energy filed an application earlier this year to modify its provisions regarding annual reconciliation and cash-out of net excess generation credits.

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
50 States of Solar Report	\$1,500	\$500
Single-Tech Subscription (Solar) <i>(Includes 50 States of Solar report, plus comprehensive biweekly legislative & regulatory solar tracking, policy data sheets, & curated monthly policy updates)</i>	\$4,500	N/A
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Customers purchasing an annual subscription, receive complimentary access to all past editions of the report. Previous editions of the 50 States of Solar are offered at a discounted rate upon request. Contact us to learn more.

NON-PROFIT / GOVERNMENT DISCOUNT

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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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