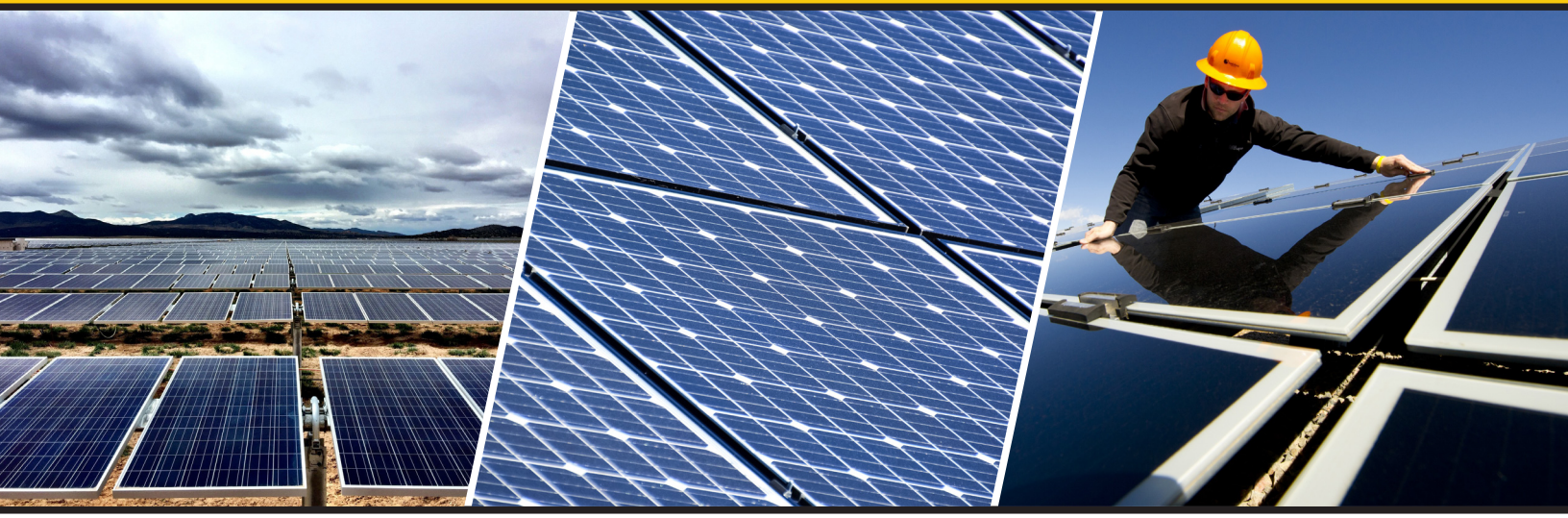
50 STATES OF SOLAR

Q2 2025 Quarterly Report

Executive Summary



NC CLEAN ENERGY TECHNOLOGY CENTER | DSIRE insight

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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
- Changes to state or utility **interconnection rules** for distributed generation systems, exempting rules governing transmission- or wholesale-level interconnection
- 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 existing **state or utility solar incentive programs**, or new solar incentive programs, including tax incentives, rebate and grant programs, and performance-based incentives
- Changes to the legality of **third-party solar ownership**, including solar leasing and solar third-party solar power purchase agreements (PPAs)

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 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 excluded unless they are related specifically to the policies described above. Interconnection rules governing transmission- or wholesale-level interconnections are also excluded. The report also does not cover changes to a number of other policies that affect distributed solar, including solar access laws 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 2025 POLICY ACTION

In the second quarter of 2025, 48 states plus DC and Puerto Rico took a total of 252 actions related to distributed solar policy and rate design (Figure 1). Table 1 provides a summary of state actions related to distributed solar policy and rate design during Q2 2025. Of the 252 actions cataloged, the most common were related to DG compensation rules (68), followed by community solar (48), and residential fixed charge and minimum bill increases (39).

Table 1. Q2 2025 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	68	27%	32 + PR
Community solar	48	19%	24 + DC
Residential fixed charge or minimum bill increase	39	15%	24
Financial incentives	29	12%	17
Interconnection rules	27	11%	14 + DC
DG valuation or net metering study	17	7%	15
Third-party ownership of solar	16	6%	11 + PR
Residential demand or solar charge	8	3%	6
Total	**252**	**100%**	**48 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 2025

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

Dominion Energy Virginia Proposes Net Metering Successor Tariff

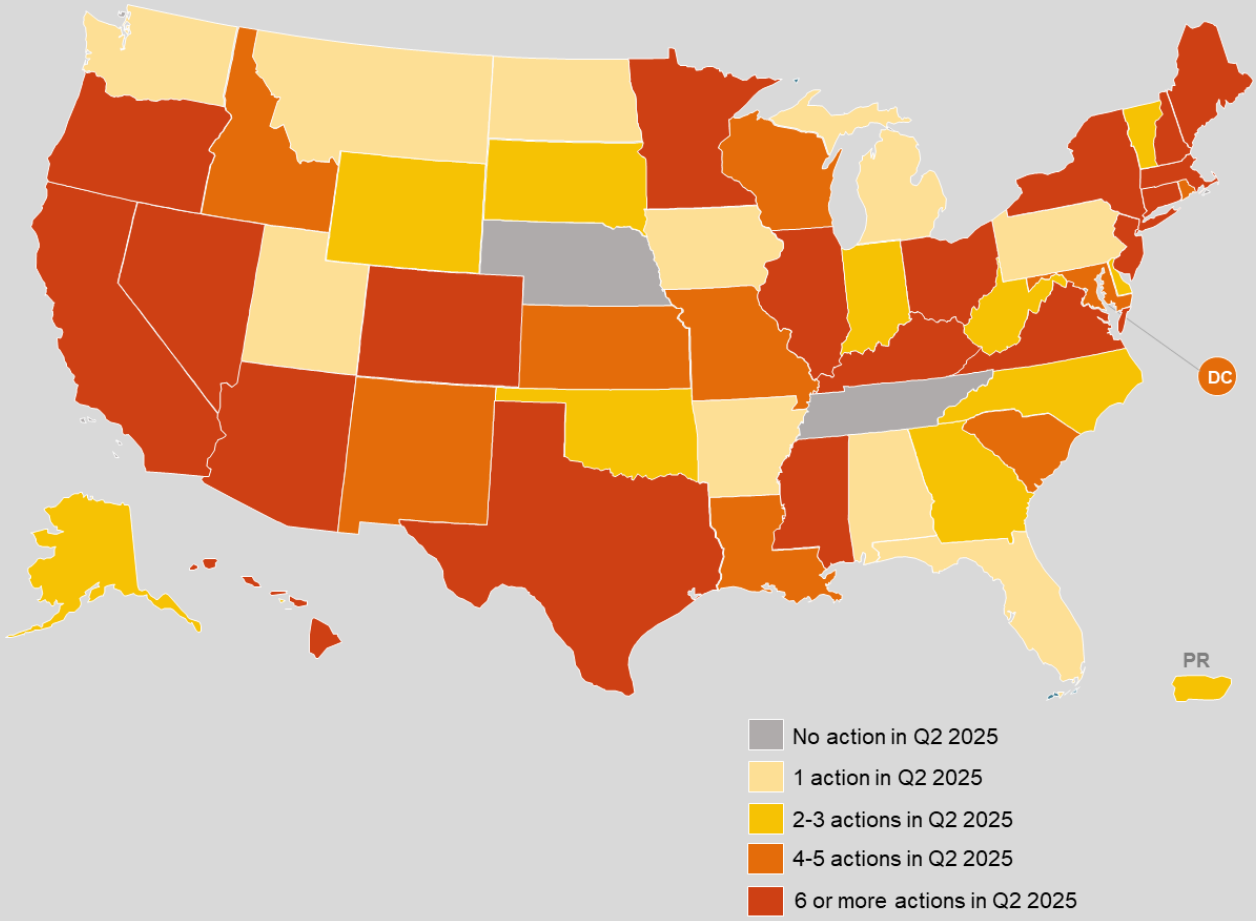
Dominion Energy Virginia filed its proposed net metering successor program NEM 2.0 in May 2025, which utilizes net billing with 30-minute intervals and compensates excess generation based on bid prices for distributed solar PPAs executed under Dominion's most recent RFP. Since the bid prices include the price of RECs, RECs would be automatically sold to the utility. Appalachian Power filed its net metering successor proposal in August 2024.

Montana Legislature Passes, Governor Vetoes Community Solar Bill

The Montana Legislature passed the Montana Solar Shares Act, which establishes rules for community solar in the state. While the bill creates requirements like maximum size, system

location, subscriber minimums, and ownership structures, it leaves many details up to the Public Service Commission, including the bill credit rate and participation pathways for different customer classes. The Governor vetoed the bill in June 2025, and the bill is undergoing an override vote at the legislature.

Figure 1. Q2 2025 Action on DG Compensation, Rate Design, & Solar Ownership Policies, by Number of Actions



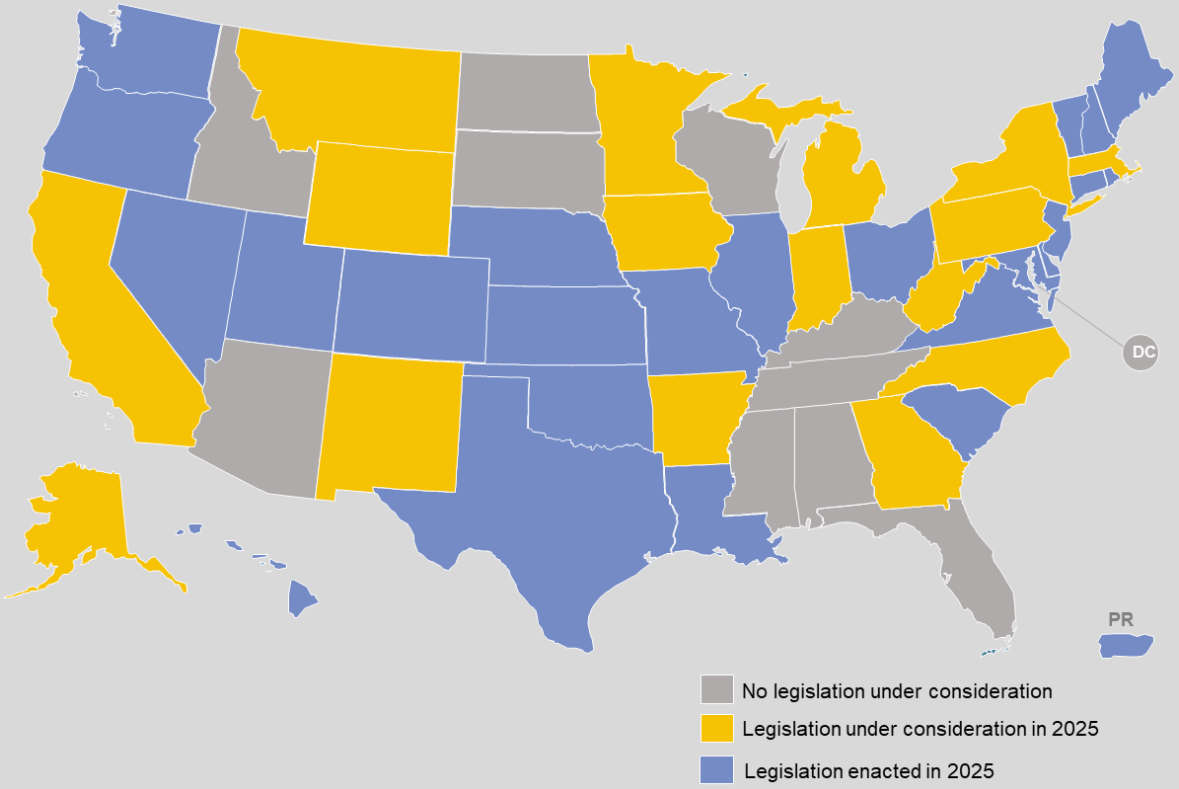
Delaware Sustainable Energy Utility Releases Value of Solar Study

The Delaware Sustainable Energy Utility released its statutorily-mandated value of solar study, finding that behind-the-meter net-metered solar provides both direct and societal benefits to all ratepayers. The report notes that the existing traditional net metering structure provides greater benefits than switching to a successor tariff or a time-of-use structure, as these complexities could diminish customer understanding, interest, and ultimate participation.

Massachusetts Department of Energy Resources Files 3.0 Update to SMART Program

The Massachusetts Department of Energy Resources filed emergency regulations for the Solar Massachusetts Renewable Target (SMART) 3.0 Program, which provides per-kWh incentives to solar systems. The 3.0 program implements annual capacity targets for each project type, and it introduces new incentives and adders for different project types. It also revises the incentive tiers, changing the eligible system sizes for each tier. The 3.0 program will go into effect in 2027.

Figure 2. Distributed Solar Policy Legislation Under Consideration in 2025 (as of mid-July 2025)



Maine Policymakers Enact Changes to Net Energy Billing Program

The Governor of Maine signed L.D. 1777 into law in June 2025, which makes various changes to the state's net metering programs. The bill implements a tiered credit system, with larger systems receiving a lower credit rate than smaller systems, and creates a new credit rate methodology with values increasing annually. It also imposes a new monthly kW capacity charge on shared financial interest systems participating in the program. The bill also orders the Governor's Energy Office to develop a successor DER program that credits exported energy based on real-time and locational value, tiered by system size.

THE BIG PICTURE: INSIGHTS FROM Q2 2025

States Initiate Studies into Valuation of Distributed Energy

State policymakers and other stakeholders recently initiated various studies into the value of distributed energy and solar across the country. As states aim to refine distributed generation compensation programs to accurately reflect the value of the exported energy, these types of studies provide insight into this value. Avista Utilities, as part of its general rate case, agreed to meet with Idaho Public Utilities Commission Staff to discuss a study quantifying the costs and benefits of on-site generation for its export credit rate. The Illinois Commerce Commission began a proceeding to establish an annual process and formula for the compensation of distributed generation. The Maryland United Benefit Cost Analysis Work Group began Phase II of its investigation, while the Washington State Academy of Sciences outlined the upcoming Phase 2 of its research into the value of distributed solar. Meanwhile, Missouri lawmakers appropriated $500,000 for the Department of Natural Resources to perform a distributed generation study, including a value of solar study.

States Encourage Consumer Protection for Third-Party Systems

State policymakers enacted multiple bills supporting consumer protection for customers with third-party owned solar systems. The Puerto Rico Senate will begin investigating how a solar financier's bankruptcy will affect the island's consumers; the company finances around 70% of solar panel owners on the island, most of whom are residential customers. Connecticut lawmakers extended the deadline for an ongoing task force on consumer protection for solar power purchase agreements (PPAs), while their Louisiana counterparts established a task force to investigate, among other things, alternatives for merchant generators serving single or multiple industrial customers. Legislatures in Colorado and Nevada adopted various customer protection requirements – including disclosures, licensing, and warranties – for companies offering solar leases and PPAs.

States Adjust and Expand Property Tax Incentives for Solar Energy

States adjusted and expanded property tax incentives for solar energy systems, by both creating new exemptions and revising how property valuations are calculated. The California Senate passed a bill repealing the sunset date for the state's property tax exemption for solar equipment, but also limiting it to customer-sited systems used for on-site generation. Connecticut lawmakers created a new municipal uniform solar capacity tax for new systems over 1 MW, but exempted systems located on rooftops, brownfields/landfills, canopies, critical facilities, or state-owned land. Maryland will now allow local governments to grant property tax exemptions for non-residential installations on brownfields, floating/retention bonds, or industrial quarries. Missouri and Rhode Island lawmakers revised property valuation rules, with Missouri valuing solar systems at 5% of their true value and Rhode Island putting dollar-per-kWh caps on local tangible and real property taxes for solar systems.

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
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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.

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COMPLIMENTARY COPIES FOR POLICYMAKERS

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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