

50

STATES OF SOLAR

Q1 2025 Quarterly Report

Executive Summary



AUTHORS

Emily Apadula
Rebekah de la Mora
Justin Lindemann
Brian Lips
Vincent Potter
Autumn Proudlove
David Sarkisian

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.

CONTACT

Autumn Proudlove (afproudl@ncsu.edu)
Rebekah de la Mora (rmdelamo@ncsu.edu)

PREFERRED CITATION

North Carolina Clean Energy Technology Center, *The 50 States of Solar: Q1 2025 Quarterly Report*, April 2025.

COVER DESIGN CREDIT

Cover design by Amira Ferjani and Justin Lindemann

COVER PHOTO CREDIT

Photo by U.S. Department of Energy. "Moen_000119_160166_501596_4578." August 2, 2017. U.S. Government Works. Retrieved from <https://www.flickr.com/photos/departmentofenergy/36293687776/>

Photo by U.S. Department of Energy. "Solar Testing Facility." June 4, 2012. U.S. Government Works. Retrieved from <https://www.flickr.com/photos/departmentofenergy/7336025204/>

DISCLAIMER

While the authors strive to provide the best information possible, neither the NC Clean Energy Technology Center nor NC State University make any representations or warranties, either express or implied, concerning the accuracy, completeness, reliability or suitability of the information. The NC Clean Energy Technology Center and NC State University disclaim all liability of any kind arising out of use or misuse of the information contained or referenced within this report. Readers are invited to contact the authors with proposed corrections or additions.

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
- 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), 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 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 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 Q1 2025 POLICY ACTION

In the first quarter of 2025, 47 states plus DC and Puerto Rico took a total of 193 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 Q1 2025. Of the 193 actions cataloged, the most common were related to DG compensation rules (55), followed by community solar (35), and residential fixed charge and minimum bill increases (34).

Table 1. Q1 2025 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
DG compensation rules	55	29%	30 + PR
Community solar	35	18%	19 + DC
Residential fixed charge or minimum bill increase	34	18%	34
Interconnection rules	23	12%	13 + DC
Financial incentives	18	9%	11
DG valuation or net metering study	15	8%	12 + DC
Third-party ownership of solar	8	4%	6
Residential demand or solar charge	5	2%	4
Total	193	100%	47 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 Q1 2025

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

Nevada Utilities File Net Metering Successor Tariff Plans

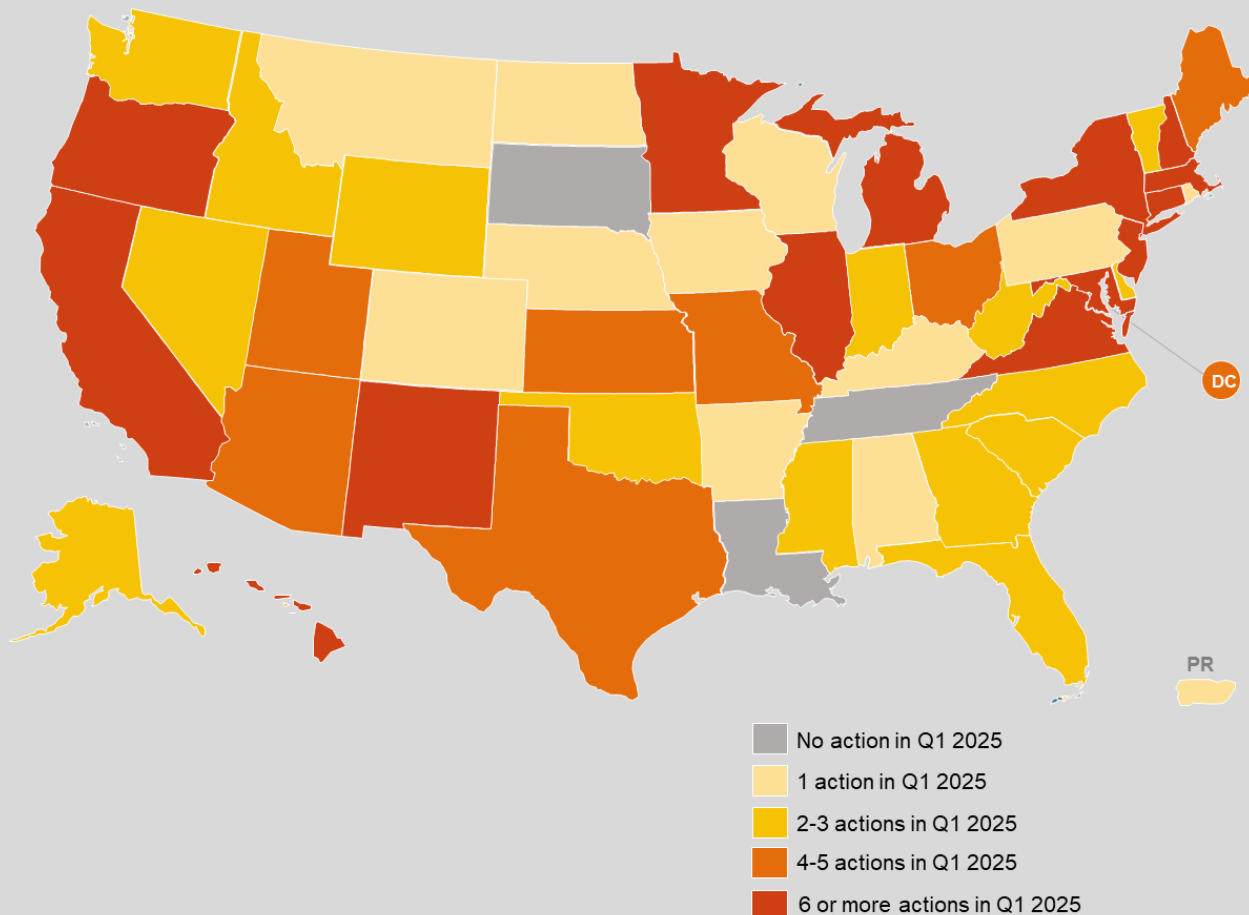
Nevada Power and Sierra Pacific Power filed amendments to their net metering tariffs during the quarter, proposing new 15-minute netting intervals for DG systems of 25 kW or less; the existing netting intervals are monthly. The credit rate for excess generation – 75% of the retail rate – would not change, but would now be applied to excess generation calculated on a 15-minute basis, rather than a monthly basis.

Idaho’s Rocky Mountain Power Requests Approval for New Export Credit Rate

Following an investigation into distributed generation (DG) compensation values, Rocky Mountain Power filed its new export credit rate proposal with Idaho regulators in February

2025. The DG tariff will use instantaneous netting and include export credit rates based on multiple types of avoided costs. The proposed annual average export credit rate is \$42.30/MWh, varying by season and time of day. The filing also increases the DG system size limit for non-residential customers from 100 kW to 2 GW.

Figure 1. Q1 2025 Action on DG Compensation, Rate Design, & Solar Ownership Policies, by Number of Actions



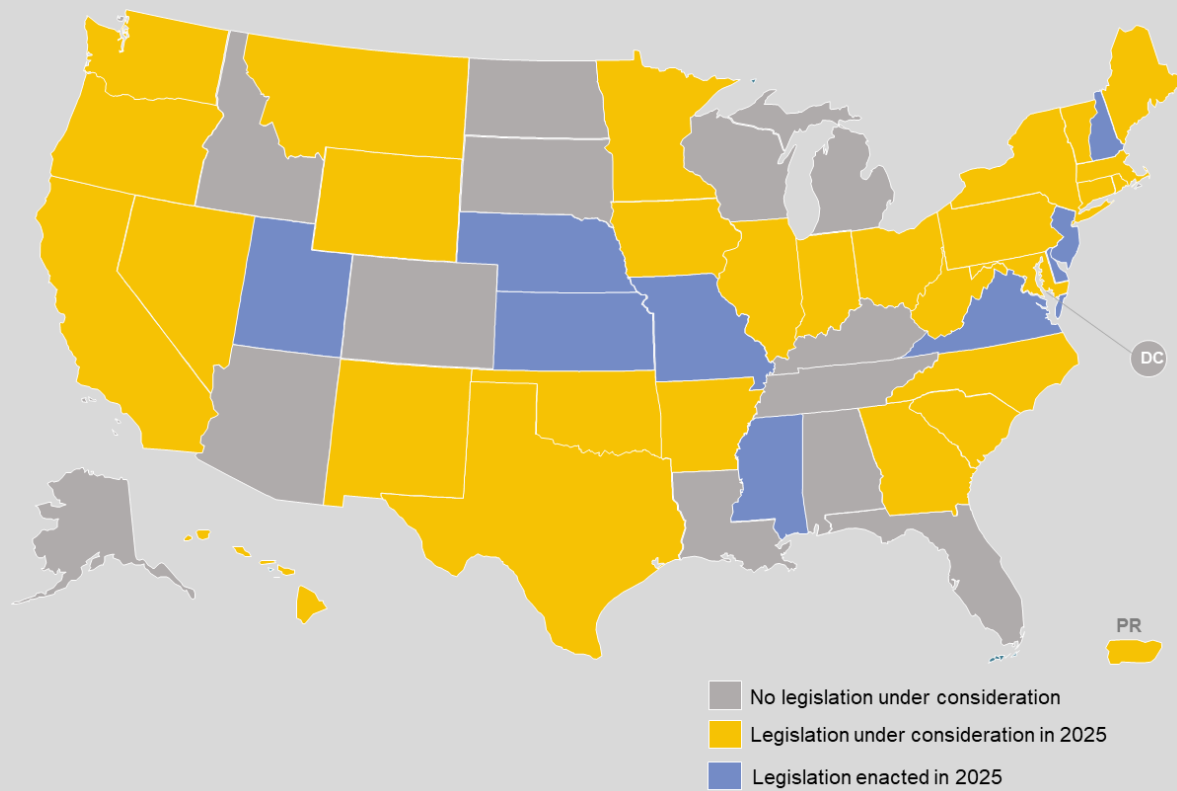
Maryland Regulators Approve New Community Solar Program

The Maryland Public Service Commission approved rules for a permanent community solar program, as a successor to its pilot program, in February 2025. The new program retains the pilot’s 5 MW system size limit and 3 GW aggregate cap (shared with net metering). The program will now allow co-located projects on the same or adjacent land with a total capacity over 5 MW under certain circumstances, with 10 MW of co-location capacity for agrivoltaic projects that primarily serve low-income customers.

El Paso Electric Proposes Shift from Minimum Bill to Demand Charge for DG Customers

In Texas, El Paso Electric is seeking approval to shift residential DG customers from a rate including a minimum bill to a rate with DG customer-specific demand and energy charges. The demand charge would be 10% higher than the standard demand charge applied to residential demand time-of-use customers, with energy charges lowered to compensate for these costs.

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



Illinois Regulators Release Value of Distributed Energy Resources Report

In January 2025, a consultant for the Illinois Commerce Commission released its final report on the value of and compensation for distributed energy resources (DERs) in Illinois. The report recommended DER compensation based on two common benefit-cost tests. Major takeaways included that DER value depends on timing and should be based on performance.

THE BIG PICTURE: INSIGHTS FROM Q1 2025

States Consider Iterative Revisions to Net Metering Policies

Many states have already adopted successor tariffs or other major revisions to their net metering programs, and some of these states are now considering significantly modifying their programs yet again. The Arizona Corporation Commission is reviewing its limit on annual changes to the avoided cost proxy credit rate, with Commission Staff recommending continuing the 10% annual limit. California regulators are considering revisions to the virtual net metering program for government and institutional customers, as well as net metering programs at smaller investor-owned utilities. Connecticut regulators began a legislatively-mandated review into the Renewable Energy Solutions Program, the state's successor net metering program that began in 2022. Two utilities in Nevada filed tariffs to move from monthly netting to 15-minute netting for systems under 25 kW, after various revisions over the past several years.

States Overhaul Community Solar Programs

With community solar-enabling policies now established in 25 states, allowing for extensive information on program success and efficacy, policymakers have begun revamping their programs. The Colorado Public Utilities Commission began regulatory proceedings to implement the state's new inclusive community solar program, established by a 2024 bill to replace the existing community solar gardens program. Maryland regulators approved rules for its permanent community solar program, to succeed its community solar pilot. The New Jersey Board of Public Utilities published updated rules for the state's community solar program, allowing community solar projects to co-locate with net metered facilities participating in a state incentive program, as long as the facilities serve separate customers and have an aggregate capacity under 5 MW. Connecticut regulators began reviewing the Shared Clean Energy Facilities Program to consider successor program design.

States Expand System Size Limits for Non-Residential Net Metered Systems

Seeking to increase non-residential participation in net metering programs, regulators and utilities are increasing the system size limits for these customers. The Delaware Public Service Commission approved various changes to net metering regulations, including increasing the system size limit for farm customer-generators from 100 kW to 150 kW. In Idaho, Rocky Mountain Power filed revised net metering tariffs after reviewing the value of distributed generation; as part of the filing, the utility is requesting approval to increase the maximum system size for non-residential customers from 100 kW to 2 GW. Minnesota regulators opened a rulemaking to amend the definition of "capacity" in regards to system size. The New Hampshire Senate passed a bill establishing a new customer class of "industrial hosts" for large customer-generators with systems between 1 MW and 5 MW.

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

Visit <https://www.dsireinsight.com/subscriptions/> to purchase the full 50 States of Solar Q1 2025 Report or learn more about our additional subscription offerings.

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
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

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

A 20% discount is available for non-profits and government entities. Please [contact us](#) for more information.

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.

CUSTOMIZED SOLUTIONS

The NC Clean Energy Technology Center also offers customized policy research and analysis services. Contact us to learn more.