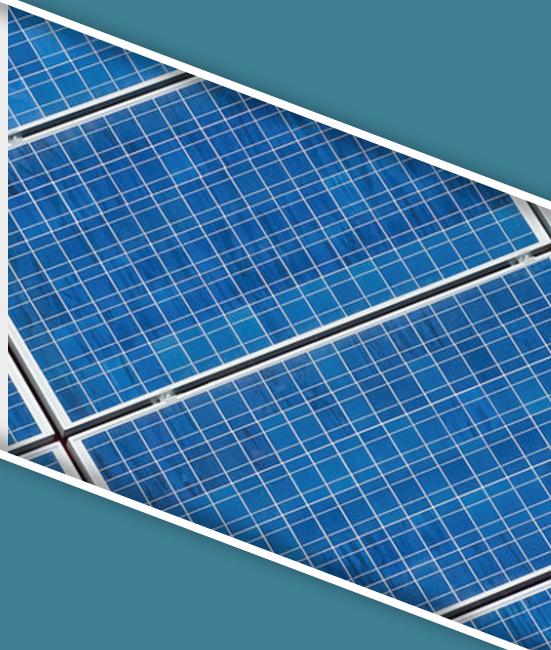


50 States of SOLAR

Q2 2016 Quarterly Report
Executive Summary



AUTHORS

Autumn Proudlove
Kate Daniel
Brian Lips
David Sarkisian
Achyut Shrestha

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)

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COVER PHOTO CREDIT

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PREVIOUS EDITIONS

The 50 States of Solar is a quarterly publication. Previous editions of *The 50 States of Solar* are available for complimentary download at www.nccleantech.ncsu.edu or by clicking here:

- [Q1 2016](#)
- [Q4 2015 and 2015 Policy Review](#)
- [Q3 2015](#)
- [Q2 2015](#)
- [Q1 2015](#)
- [Q4 2014](#)

ABOUT THE REPORT

PURPOSE

The purpose of this report is to provide state lawmakers and regulators, electric utilities, the solar industry, and other energy stakeholders with timely, accurate, and unbiased updates on how states are choosing 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 provides regular quarterly updates of solar policy developments, keeping stakeholders informed and up to date on a timely basis.

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 (1) state regulatory bodies and legislatures and (2) 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 focuses on cataloguing 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 this issue include:

- Significant changes to state or utility **net metering** laws and rules, including aggregate caps, system size limits, aggregate net metering rules, and compensation rates for net excess generation
- Changes to statewide **community solar** 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 residential 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 specifically related 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 policies and incentives are available at www.dsireusa.org.

EXECUTIVE SUMMARY

OVERVIEW OF Q2 2016 POLICY CHANGES

In the second quarter of 2016, 42 states plus DC took a total of 121 actions related to distributed solar policy and rate design (Figure 1). These actions span 84 unique regulatory dockets and over 15 bills that have passed at least one legislative chamber.

Table 1 provides a summary of state actions related to net metering, rate design, and solar ownership during Q2 2016. Of the 121 actions catalogued, the most common were related to residential fixed charge increases (42), followed by net metering (37), and solar valuation or net metering studies (16).

Table 1. Summary of Policy Actions (Q2 2016)

Policy Type	# of Actions	% by Type	# of States
Residential fixed charge increase	42	35%	25 + DC
Net metering	37	31%	24
Solar valuation or net metering study	16	13%	15 + DC
Community solar	12	10%	11
Residential solar charge	8	7%	6
Third-party ownership of solar	3	2%	3
Utility-led rooftop PV programs	3	2%	3
Total	121	100%	42 States + DC

Note: The "# of States/ Districts" total is not the sum of the rows, as some states have multiple actions.

TOP FIVE SOLAR POLICY DEVELOPMENTS OF Q2 2016

Five of the quarter's top policy developments are highlighted below. From Arizona to New Hampshire, Q2 2016 held a number of major solar policy decisions and new proposals.

Arizona Public Service Rate Case: Changes to Fixed Charges, Demand Charges, Time-of-Use Rates, and Net Metering

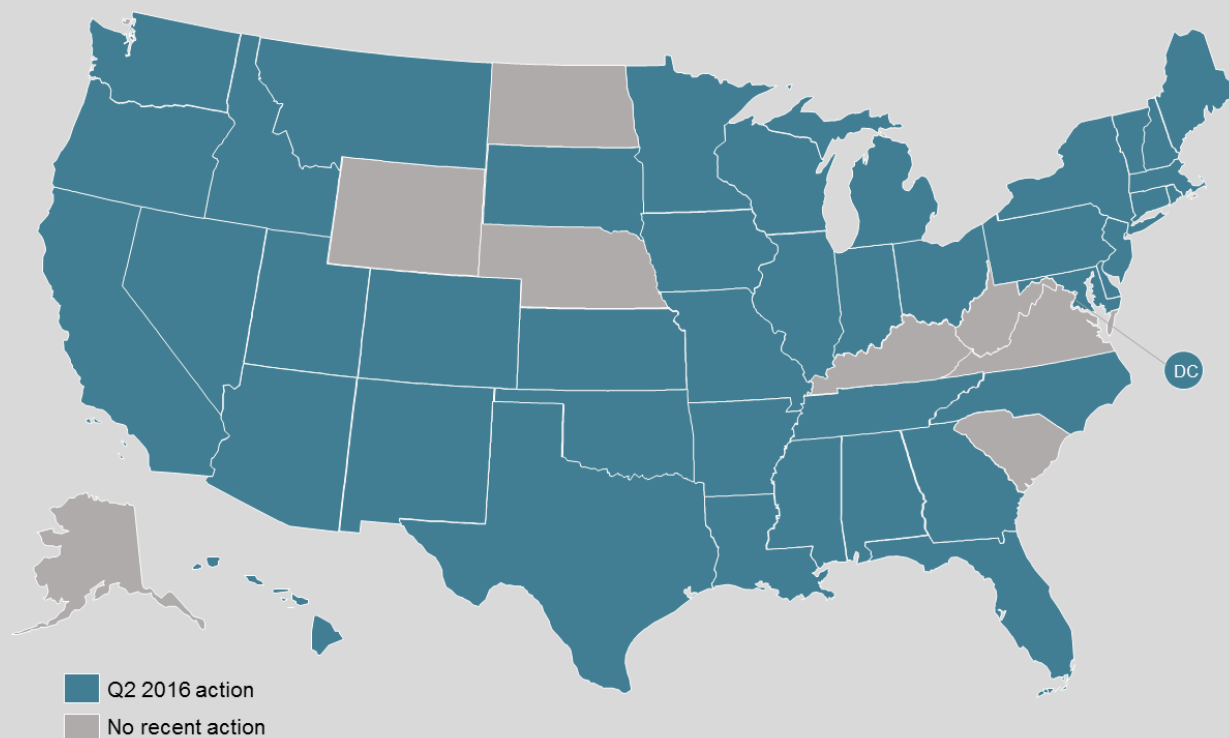
In June 2016, Arizona Public Service (APS) filed a general rate case including a number of major rate design changes for both distributed solar owners and general residential customers. APS proposed three residential rate options, each with mandatory time-of-use rates and demand charges. Each rate option also includes an increase from the current residential fixed

charge. APS is also proposing reducing the credit rate for real-time excess generation under its net metering tariff, moving to a “net billing” policy.

Net Metering Compromise Reached in Massachusetts

After months of standstill on contrasting net metering bills in the Massachusetts House and Senate, the two chambers reached a compromise that was enacted in April 2016. The compromise legislation increases both the public and private net metering caps by 3%, reduces the net excess generation credit rate for systems subject to the private cap, authorizes the Department of Public Utilities to approve minimum bill requests, and directs the Department of Energy Resources to develop a new solar incentive program to succeed the SREC II program.

Figure 1. Action on Net Metering, Rate Design, & Solar Ownership Policies (Q2 2016)



Rhode Island Solar Bill Passes, Addressing Net Metering, Community Solar, and Third-Party Ownership

In June 2016, Rhode Island enacted H.B. 8354, which included a number of changes to the state’s solar policies. The bill increased the system size limit for net metering, established community net metering, and enabled third-party ownership options for all customer types in the state.

New Hampshire Becomes Next State to Develop Net Metering Successor Tariffs

In May 2016, the New Hampshire General Court passed a bill both doubling the state's net metering aggregate cap and directing the Public Utilities Commission to develop alternative net metering tariffs by March 2017. Customers signing up for net metering before the aggregate cap is reached will be grandfathered into the existing policy.

Nevada Net Metering Successor Saga Continues

In Q4 2015, Nevada eliminated net metering for both existing and future distributed solar customers. The decision not to grandfather existing customers into the former net metering policy has been highly contested, and the Governor's New Energy Industry Task Force recommended that the legislature grandfather existing net metering customers. Solar advocates and industry members have also developed a ballot measure to contest the Public Utilities Commission's net metering decision.

FULL REPORT DETAILS & PRICING

Included in the Full Report:

- Detailed policy tables describing each 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, & Flat Fees)
 - 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, including a separate Powerpoint file of all summary maps
- Qualitative analysis and descriptive summaries of solar policy action and trends
- Outlook of action for the next quarter

Visit <https://commerce.cashnet.com/NCSU-NCETC> to purchase the full Q2 2016 50 States of Solar Report.

	Single Report	Annual Subscription
Business or Individual	\$500	\$1,600
Non-Profit, Government, or Education	\$400	\$1,300

*Policymakers (including federal and state legislators, utility commissioners, utility commission public staff, and state energy office staff) and Students: [Contact us](#) to receive a complimentary copy of the most recent report.

The NC Clean Energy Technology Center also offers customized policy research and analysis services. Visit <http://www.dsireusa.org/services/> to learn more.