Net Metering Reforms Across the U.S.

Florida Bar CLE: Net Metering in the Sunshine State
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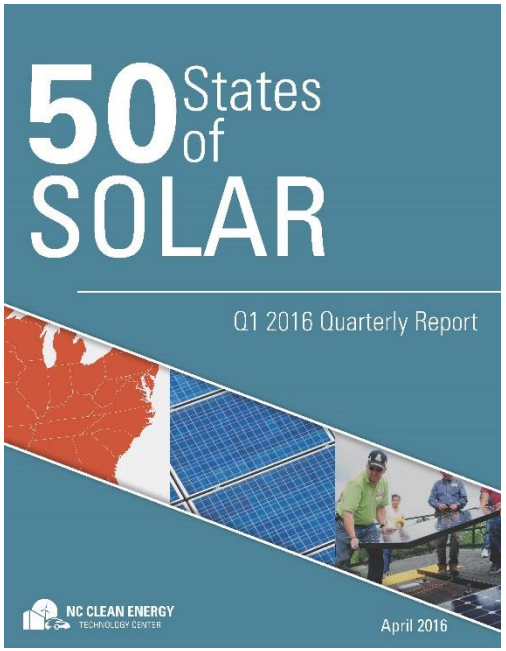
NC CLEAN ENERGY TECHNOLOGY CENTER

About the NC Clean Energy Technology Center

- UNC System-chartered Public Service Center administered by the College of Engineering at North Carolina State University
- Mission is to advance a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies practices, and policies.
- Objective research, analysis, & technical assistance – no advocacy
- Manage the Database of State Incentives for Renewables and Efficiency (DSIRE – www.dsireusa.org)

About the 50 States of Solar

- Quarterly publication detailing state and utility distributed solar policy & rate design changes
  - Net Metering
  - DG Valuation/NEM Cost-Benefit Studies
  - Residential Fixed Charges & Minimum Bills
  - Residential Demand Charges & Solar Charges
  - Community Solar
  - Third-Party Ownership
  - Utility-Led Rooftop Solar
- Regulatory actions, bills passing at least one chamber
- States, IOUs, public power utilities with >100,000 customers



https://www.dsireinsight.com/publications

What is Net Metering?

- Allows for the flow of electricity both to and from the customer
  - Typically one-to-one offsetting of electricity production and consumption
  - Monthly excess generation treated differently
- States began adopting net metering policies in the 1980's

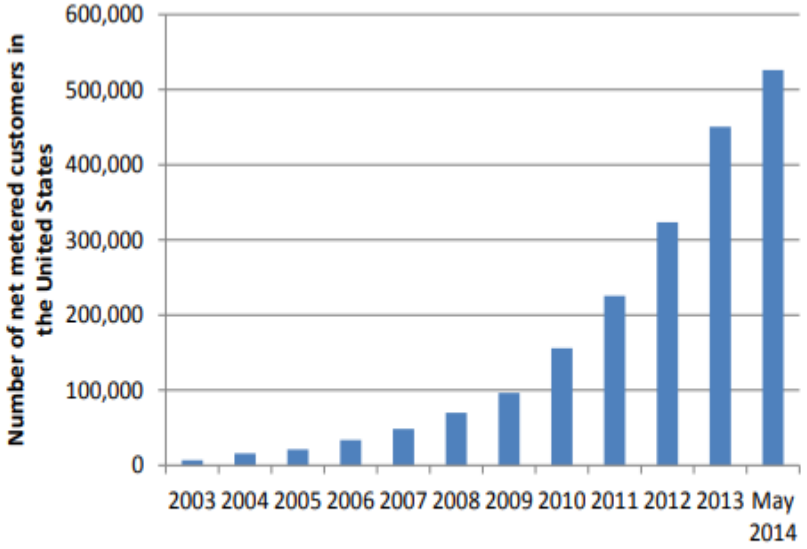
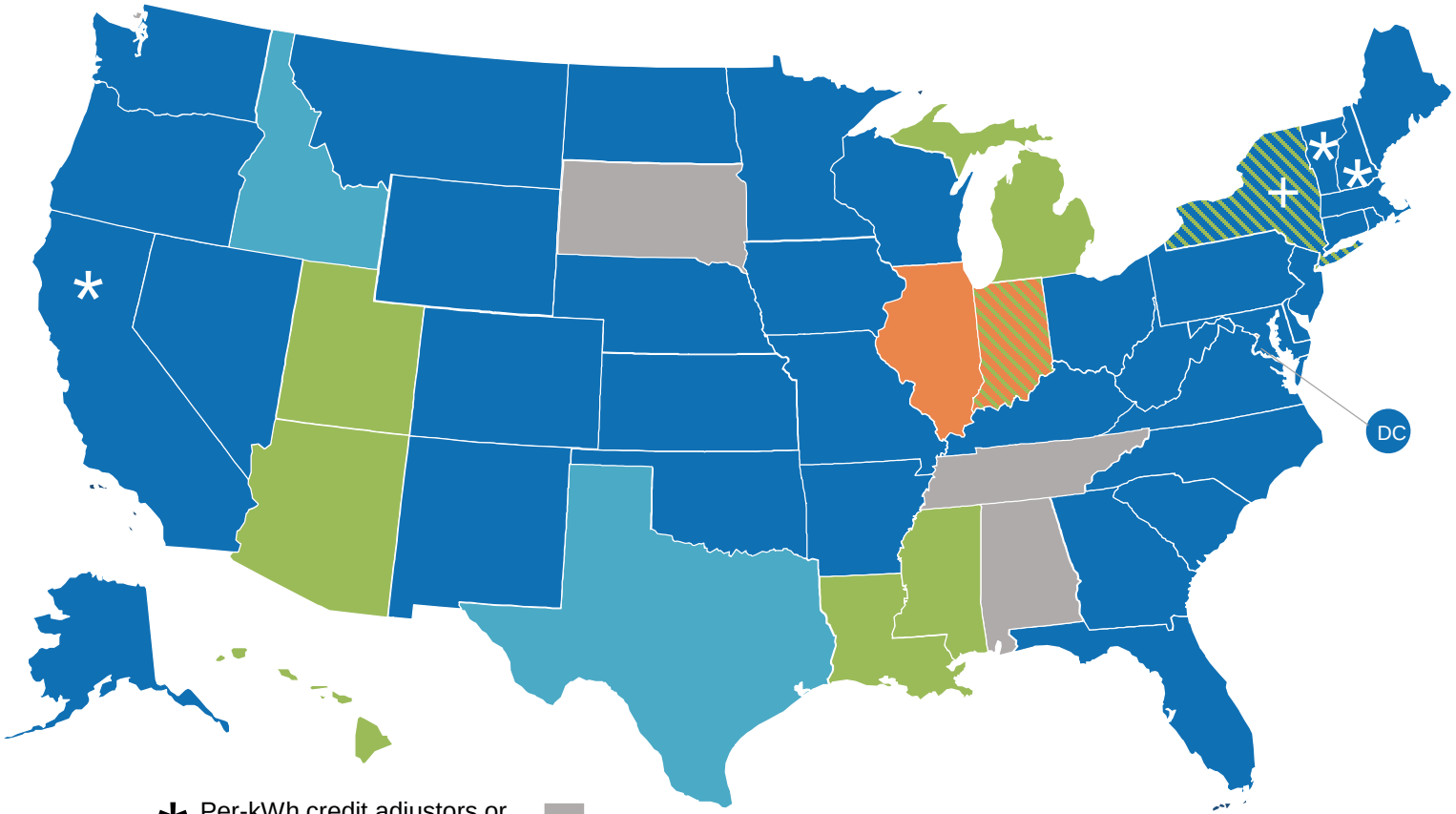


Figure 1. Number of net metered customers in the United States

Source: EIA (2014)

Net Metering and Distributed Generation Compensation Policies

www.dsireusa.org / June 2021



* Per-kWh credit adjustors or non-bypassable charges

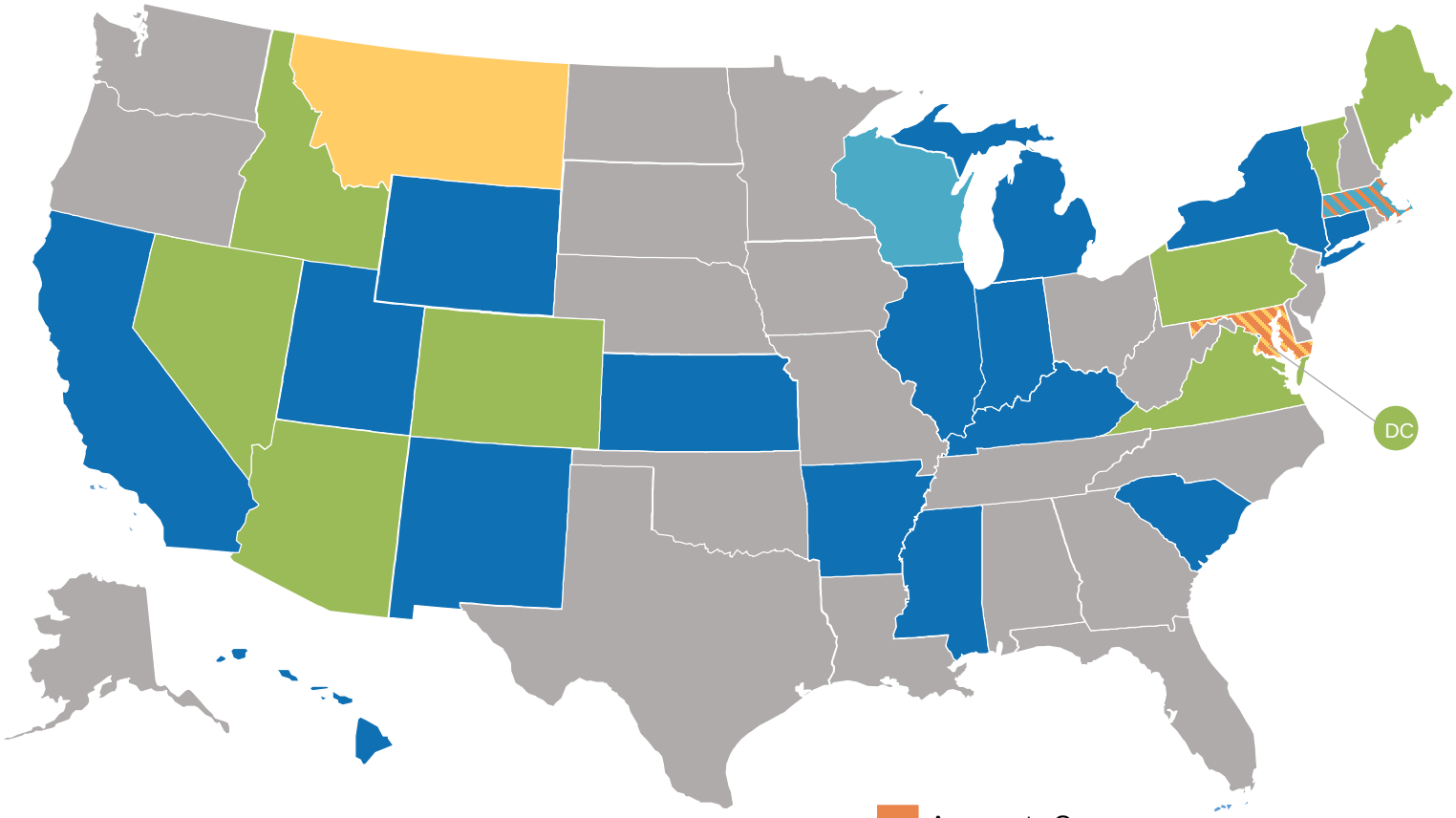
\+ Other DG compensation rules are for large customer-generators

- No statewide DG compensation rules
- Statewide DG compensation rules other than net metering
- In transition from net metering to other statewide DG compensation rules
- No statewide mandatory net metering rules, but some utilities offer net metering
- State-developed mandatory net metering rules for certain utilities

Why are NEM Reforms Being Considered?

- ***Concerns about cost-shifting***
  - Majority of fixed & demand-based costs for residential customers generally recovered through variable rates; bill reduced through NEM
  - Others suggest benefits of DG negate or reverse cost shift
- ***Increasing solar capacity on the grid***
  - Increases the impact of any potential cost shift
  - Potential system impacts
- ***Efforts to become more granular in solar valuation and compensation***
  - NEM is easy to understand, but a rough mechanism
- ***Utilities reaching net metering aggregate caps***
  - Sometimes an impetus for considering changes

Q1 2021 Proposed or Enacted Changes to Net Metering Policies by Type



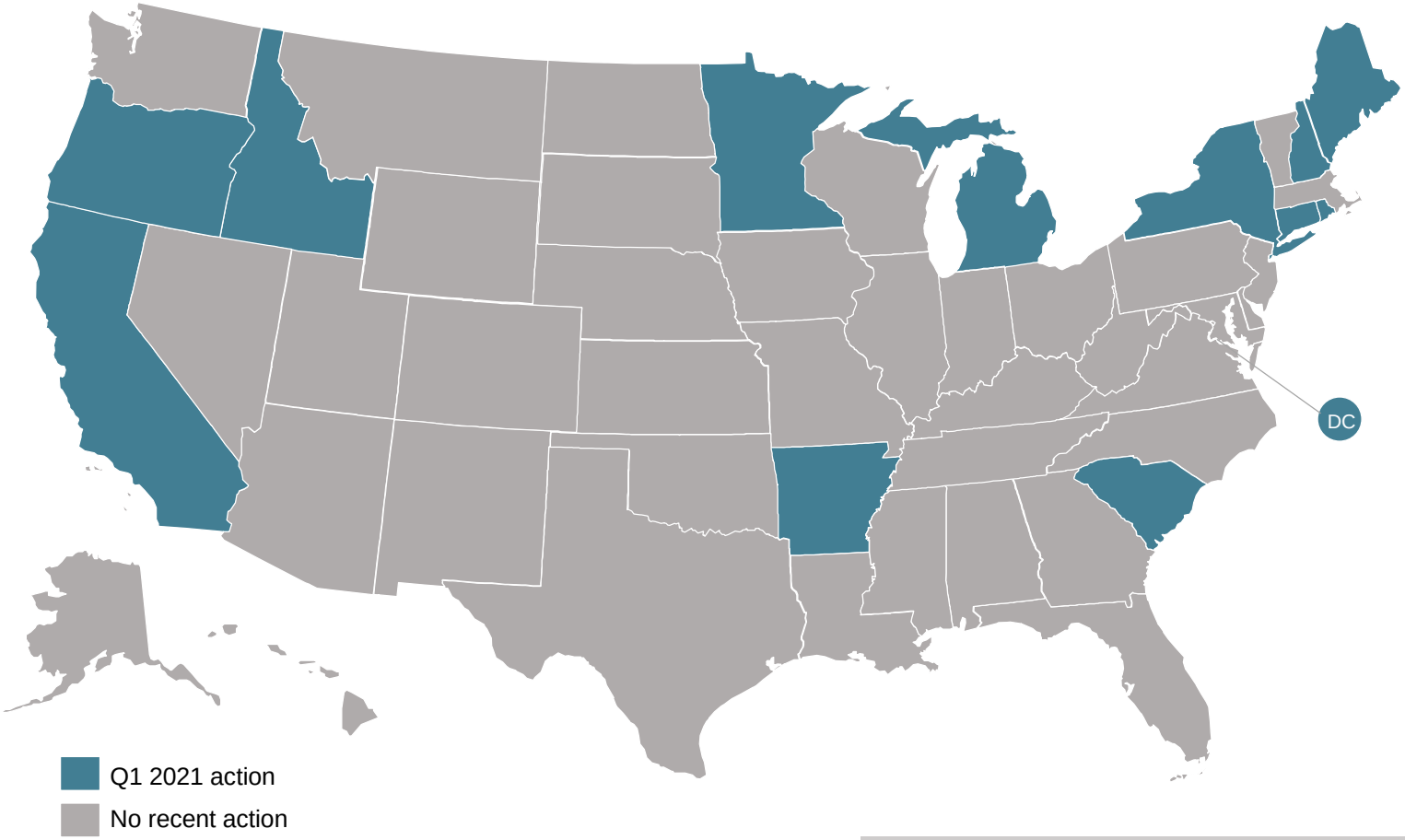
Net Metering Policy Trends

- States considering changes to **export credit rates** & **netting period**
  - Many different variations possible
  - Credit rates: retail rate, TOU rates, value of solar or DER, avoided cost, adders, locational rates, etc.
  - Netting intervals: monthly, instantaneous, 15 / 30 / 60 minute intervals, time-of-day netting, etc.
  - Almost all successor tariffs allow self-consumption
- States establishing **timelines to transition** to net metering successor tariffs

Net Metering Policy Trends

- Examples of Credit Rate/Netting Period Changes:
  - **Arizona** – Phasing down to avoided cost
  - **California** – TOU rates
  - **Indiana** – 1.25 times avoided cost rate
  - **Louisiana** – Avoided cost rate
  - **New York** – Value of DER rate (larger customers)
  - **Utah** – Rate includes value for avoided energy, generation capacity, T&D capacity, line losses, integration costs
  - **Vermont** – Credit rate adjustors
- Some states have elected to continue retail rate net metering

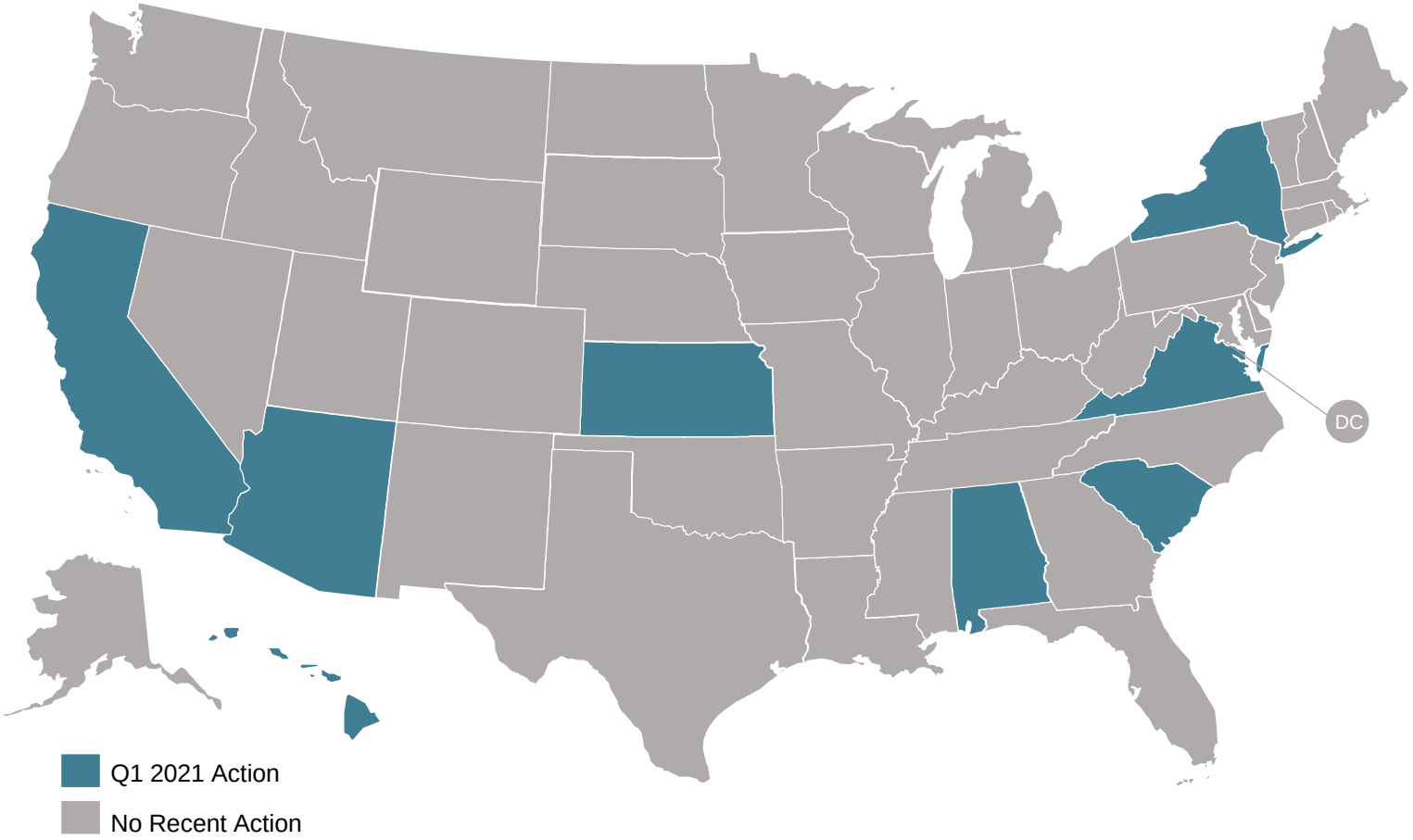
Q1 2021 Action on Distributed Solar Valuation and Net Metering Studies



12 States + DC took action on distributed solar valuation during Q1 2021

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Q1 2021 Action on Residential Demand or Solar Customer Charges



16 Actions in 8 States related to demand or solar charges were under consideration during Q1 2021

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Net Metering Policy Trends

- **States are taking very different approaches!**
  - Credit rates
  - Netting interval
  - Grandfathering
  - Storage treatment
  - REC ownership
  - Credit rate changes or lock-in
  - Cost recovery
  - Additional fees or minimum charges
  - Carryover
  - System size
  - Aggregate cap
  - Incentives
  - Customer type
  - Metering

Thank You!

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