

50

STATES OF ELECTRIC VEHICLES

Q3 2023 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)

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PREVIOUS EDITIONS AND OTHER 50 STATES REPORTS

The full version of this report may be purchased [here](#). Previous executive summaries of *The 50 States of Electric Vehicles* are available for download [here](#).

In addition to *The 50 States of Grid Modernization*, the NC Clean Energy Technology Center publishes additional quarterly reports called *The 50 States of Solar*, *The 50 States of Grid Modernization*, and *The 50 States of Power Decarbonization*. These reports may be purchased [here](#). Executive summaries and older editions of these reports are available for download [here](#).

ABOUT THE REPORT

PURPOSE

The purpose of this report is to provide state and local lawmakers and regulators, electric utilities, the electric power industry, the transportation industry, and other energy stakeholders with timely, accurate, and unbiased updates about how states are choosing to study, adopt, implement, amend, or discontinue policies associated with electric vehicles. This report catalogues proposed and approved legislative, regulatory, and utility rate design changes affecting electric vehicles during the most recent quarter, as well as state and investor-owned utility proposals to deploy electric vehicles and charging infrastructure.

APPROACH

The authors identified relevant policy changes and deployment proposals through state utility commission docket searches, legislative bill searches, popular press, and direct communications with stakeholders and regulators in the industry.

Questions Addressed

This report addresses several questions about the U.S. electric vehicle landscape, including:

- How are states addressing barriers to electric vehicle and charging infrastructure deployment?
- What policy actions are states taking to support markets for electric vehicles and related infrastructure?
- How are utility companies designing rates and electric vehicle supply equipment companies designing charging equipment and controls to influence charging behavior of electric vehicle owners?
- Where and how are states and utilities proposing to deploy or pay for electric vehicles and electric vehicle charging infrastructure?

Actions Included

This report focuses on cataloguing and describing important proposed and adopted policy changes related to electric vehicles. For the purpose of this report, the definition of electric vehicle includes all-electric vehicles (EVs), hybrid electric vehicles (HEVs), and plug-in electric vehicles (PHEVs). In order to explore all policy actions related to electric vehicles, this report catalogs and describes actions related to the deployment of electric vehicle charging equipment, which is often referred to as electric vehicle supply equipment (EVSE). Additionally, the electric grid is impacted

by electric vehicle charging, so legislative and regulatory actions related to electric utilities are included in this report.

In general, this report considers an “action” to be a relevant (1) legislative bill that has been introduced, (2) executive order, or (3) regulatory docket, utility rate case, or rulemaking proceeding. Only statewide actions and those related to investor-owned utilities are included in this report. Specifically, actions tracked in this issue include:

Studies and Investigations

Legislative or regulatory-led efforts to study electric vehicles specifically, or electric vehicles as part of a broader grid modernization study or investigation.

Regulation

Changes to state rules related to electric vehicles, including registration fees, homeowner association limitations, and electricity resale regulations affecting vehicle charging.

Utility Rate Design

Proposed or approved changes to investor-owned utility rate design for electric vehicles, including new electric vehicle tariffs and significant changes to existing electric vehicle tariffs.

Market Development

New state policy proposals or changes to existing policies aimed at growing the electric vehicle market.

Financial Incentives

New state or investor-owned utility incentive programs or changes to existing incentive programs for electric vehicles and charging infrastructure.

State and Utility Deployment

Utility-initiated requests, as well as proposed legislation, to deploy electric vehicles or charging infrastructure.

Actions Excluded

While actions taken by municipal utilities and electric cooperatives are not comprehensively tracked in this report, particularly noteworthy or high-impact actions are included. The report also excludes actions related to grid modernization without an explicit electric vehicle component, as well as actions related to general time-varying rates not specific to vehicle charging; these types of actions are tracked in the 50 States of Grid Modernization report series.

EXECUTIVE SUMMARY

Q3 2023 ELECTRIC VEHICLE ACTION

In Q3 2023, 39 states plus DC and Puerto Rico took a total of 430 actions related to electric vehicles. Table 1 provides a summary of state and utility actions occurring during Q3 2023. Of the actions cataloged, the most common were related to Financial Incentives (112), followed by Regulation (104), and Market Development (100). All 50 states, plus DC and Puerto Rico, took actions planning for National Electric Vehicle Infrastructure (NEVI) program funding distribution.

Table 1. Q3 2023 Summary of Electric Vehicle Actions

Type of Action	# of Actions	% by Type	# of States
Financial Incentives	112	26%	27 + DC, PR
Regulation	104	24%	23 + DC, PR
Market Development	100	23%	21 + DC, PR
Rate Design	52	12%	27 + PR
Studies and Investigations	37	9%	23
Deployment	25	6%	17 + DC
Total	430	100%	39 States + DC, PR

Note: The “# of States/ Districts” total is not the sum of the rows because some states have multiple actions. Percentages are rounded and may not add up to 100%.

TOP ELECTRIC VEHICLE ACTIONS OF Q3 2023

Five of the quarter’s most notable electric vehicle actions are noted below.

Delaware Lawmakers Pass Multiple Transportation Electrification Bills

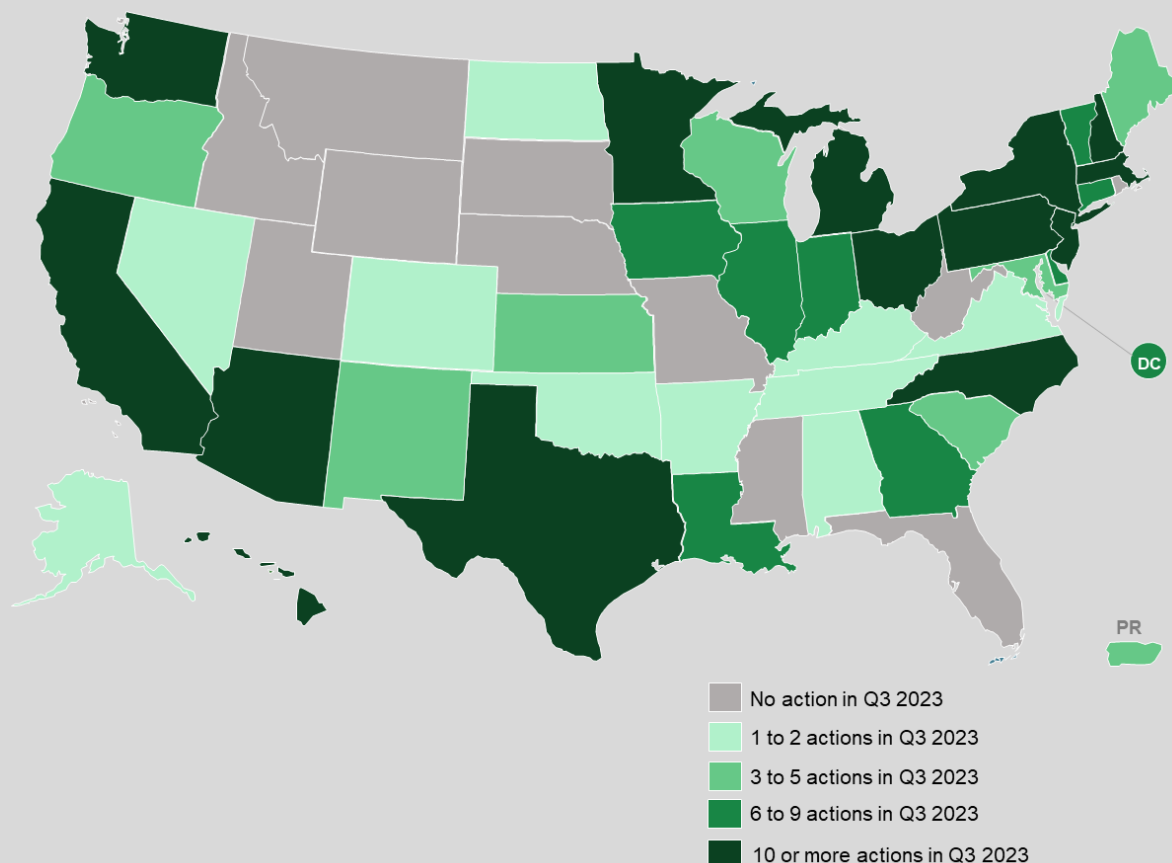
Delaware lawmakers passed three transportation electrification bills during Q3 2023, setting new targets and creating new incentives. One bill establishes a school bus electrification target of 30% by 2030, while another bill sets targets for electric vehicle-capable parking spaces at new single-family and multifamily dwellings. Another bill enacted during the quarter creates a new rebate program for electric vehicle purchases.

New York Launches Charge Ready NY 2.0 Program

NYSERDA launched the Charge Ready NY 2.0 program in July 2023, which offers incentives to public, private and non-profit organizations installing Level 2 electric vehicle charging stations at workplaces, multi-unit dwellings, or public facilities owned and operated by

municipal or state government entities. Incentives are offered on a first-come, first-served basis until December 31, 2025, or until funding is fully subscribed.

Figure 1. Q3 2023 State and Utility Action on Electric Vehicles



North Carolina Regulators Approve Duke Energy’s Charging-As-A-Service Program

In August 2023, the North Carolina Utilities Commission approved Duke Energy’s proposed charging-as-a-service program, which will involve deployment of utility-owned charging stations on customer premises with participants paying a monthly fee. The Commission also specified that participating customers will be a separate rate class and that no costs of the program are to be allocated to non-participants.

Hawaii Legislators Adopt Transportation Emissions Reduction Target

Hawaii lawmakers enacted legislation in July 2023 that establishes a goal to reduce greenhouse gas emissions and achieve zero emissions across all transportation modes in the state. The bill also creates a Clean Ground Transportation Working Group and an Interisland

Clean Transportation Working Group, and sets planning requirements to ensure electric charging capacity is sufficient to support growing use of electric vehicles.

Connecticut Regulators Open Emissions Standard and Electrification Target Rulemakings

In July 2023, Connecticut’s Department of Energy and Environmental Protection opened rulemaking proceedings to establish emissions standards and electrification targets for light- and medium-duty passenger vehicles, as well as medium- and heavy-duty vehicles. The proposed rules would apply to model year 2027 and later vehicles, requiring them to meet California vehicle emission standards. School buses, transit agency buses, and authorized emergency vehicles would be exempt from the regulations.

Figure 2. Top Electric Vehicle Actions of Q3 2023

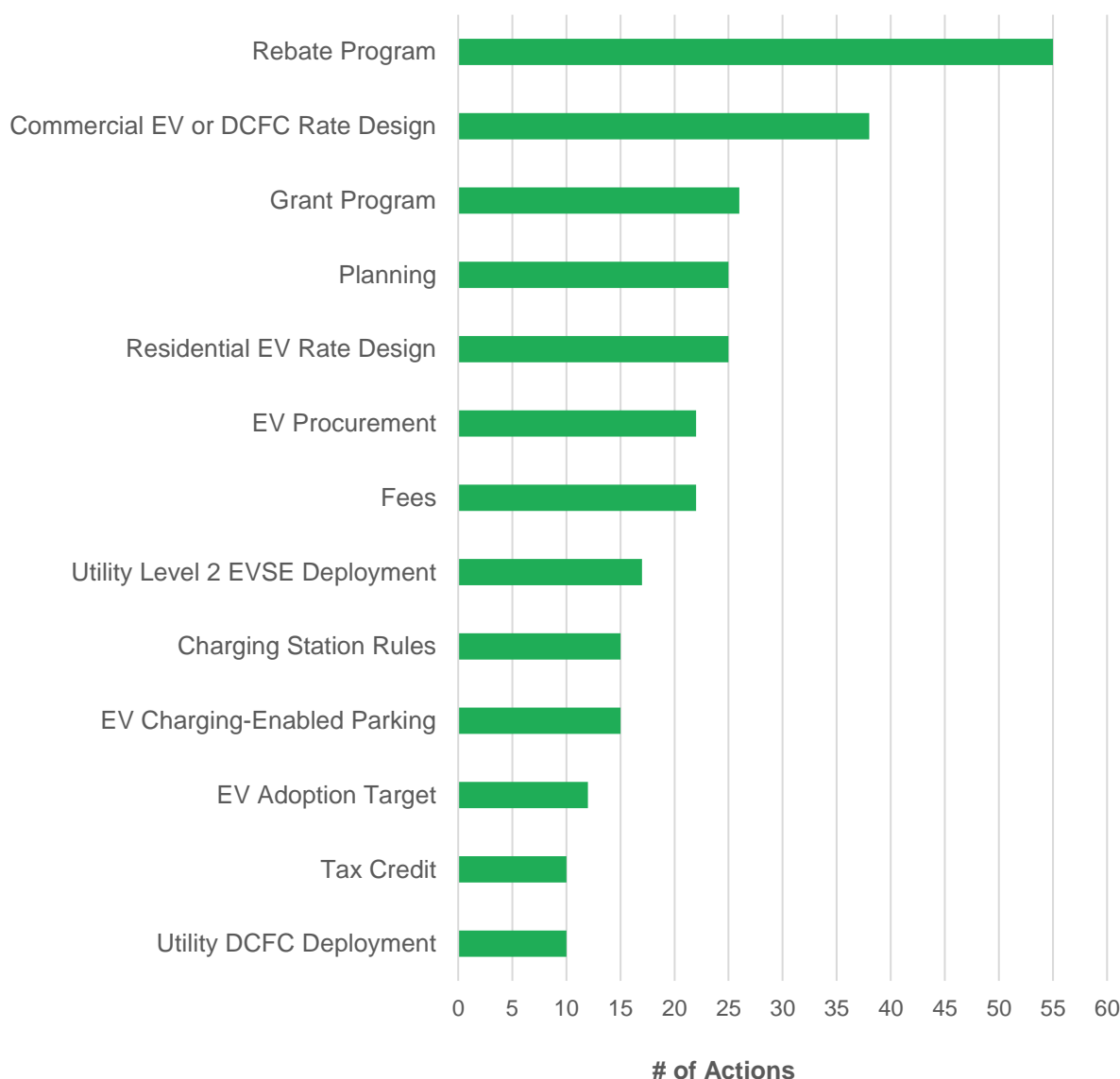
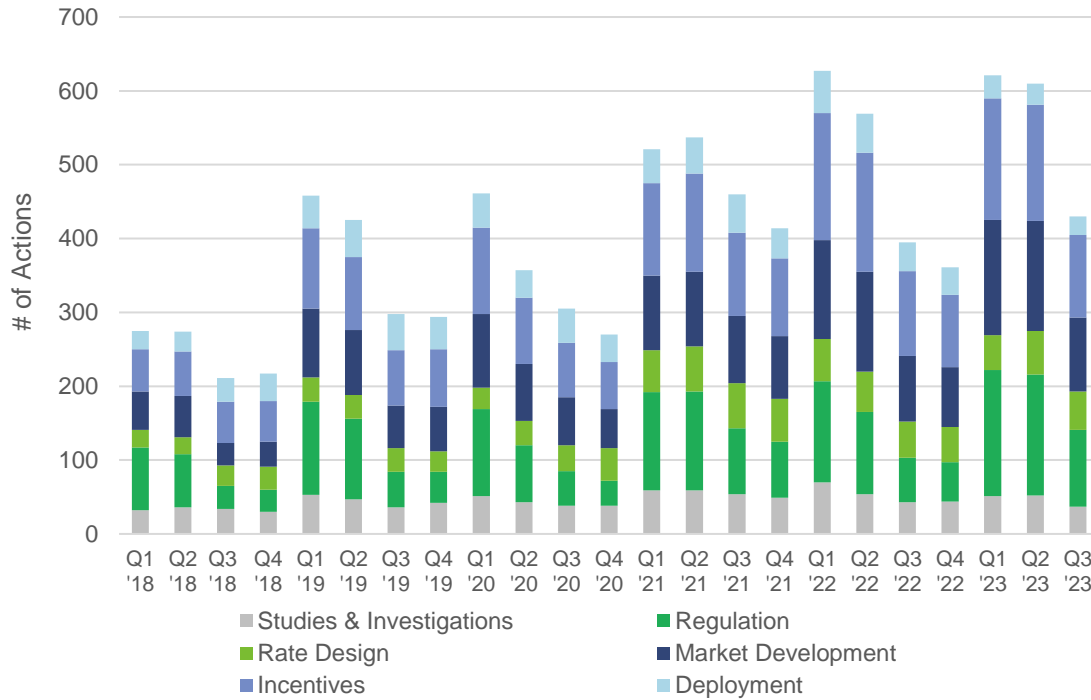


Figure 3. Electric Vehicle Action by Quarter, Q1 2018 to Q3 2023



TOP ELECTRIC VEHICLE POLICY TRENDS OF Q3 2023

Lawmakers Considering Bills Restricting Transportation Electrification Policies

In a number of states, lawmakers are considering bills that would limit the ability of state agencies and others to adopt certain transportation electrification policies. In North Carolina, the General Assembly passed a budget bill during Q3 2023, which included provisions prohibiting any state agency from adopting and enforcing standards related to the control of emissions from new motor vehicles or new vehicle engines. In Minnesota, proposed legislation would prohibit state agencies from restricting vehicle purchase selections based on fuel types or mandating vehicle inventories based on fuel types. Pending legislation in Ohio prohibits state agencies from adopting any vehicle emissions standards established by California. The bill also restricts state agencies and local governments from restricting vehicle usage and sales based on fuel source.

Regulators Addressing Utility Ownership of Charging Infrastructure

Regulators in several states have been addressing the role of utilities in owning electric vehicle charging infrastructure. To date, states have taken different approaches to this issue, with some allowing utilities to own charging stations, some allowing utilities to own charging stations only in limited circumstances, some allowing utilities to own make-ready infrastructure only, and some not allowing utilities to own any charging or make-ready infrastructure. In Texas,

regulators are currently considering if Entergy Texas should be permitted to own charging facilities, while the DC Public Service Commission issued an order clarifying that Pepco should not own any make-ready infrastructure. In North Carolina, the Utilities Commission’s order on Duke Energy’s charging-as-a-service program spoke generally about the role of regulated utilities in the electric vehicle charging marketplace. Meanwhile, Phase 2 of the Louisiana Public Service Commission’s electric vehicle proceeding will address the circumstances under which a regulated utility may own, lease, operate, or control charging stations.

Utilities Integrating Electric Vehicle Charging Programs Into Broader Demand-Side Management Portfolios

A growing number of utilities are including electric vehicle charging programs within their broader demand-side management plans, with these programs typically focused on managed charging. In Virginia, regulators approved Dominion Energy’s demand-side management plan in August 2023, which includes a new residential electric vehicle telematics pilot that will utilize telematics to provide demand response during curtailment events. Kentucky regulators are currently reviewing Louisville Gas & Electric’s and Kentucky Utilities’ demand-side management plan, which includes a new optimized charging program. Meanwhile, the Arizona Commerce Commission is considering Arizona Public Service’s 2023 demand-side management plan, which would modify the utility’s managed charging programs.

Figure 4. 2023 Proposed Legislation on Electric Vehicles (as of late October 2023)

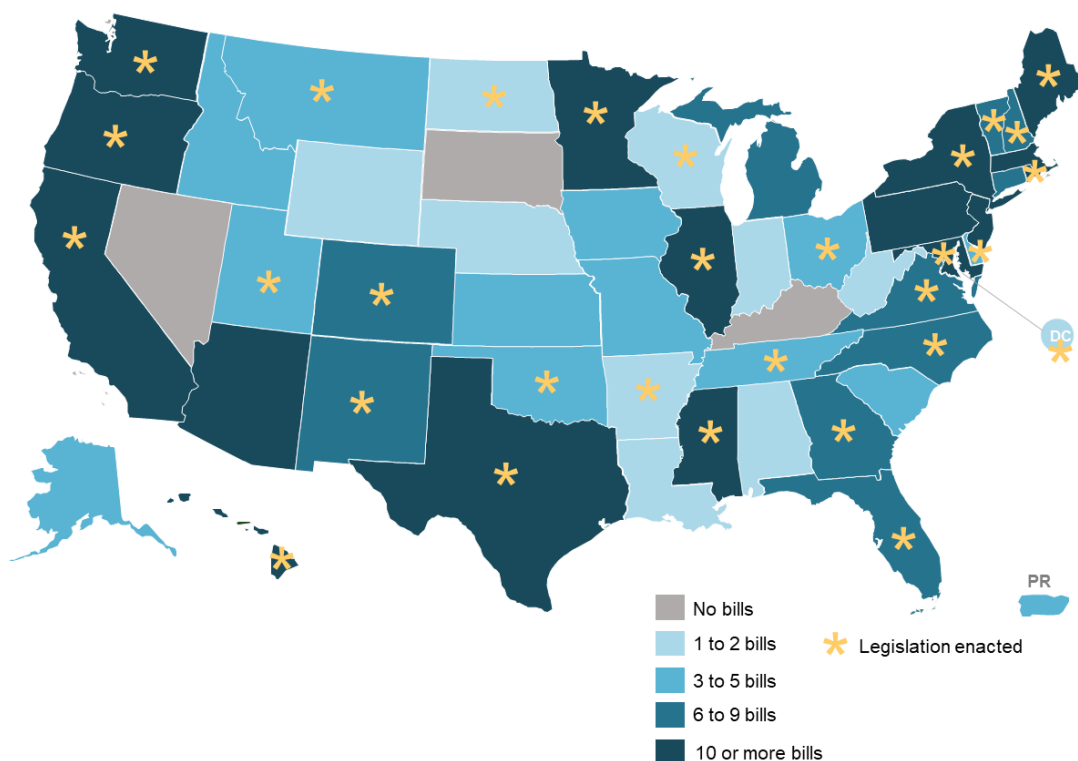
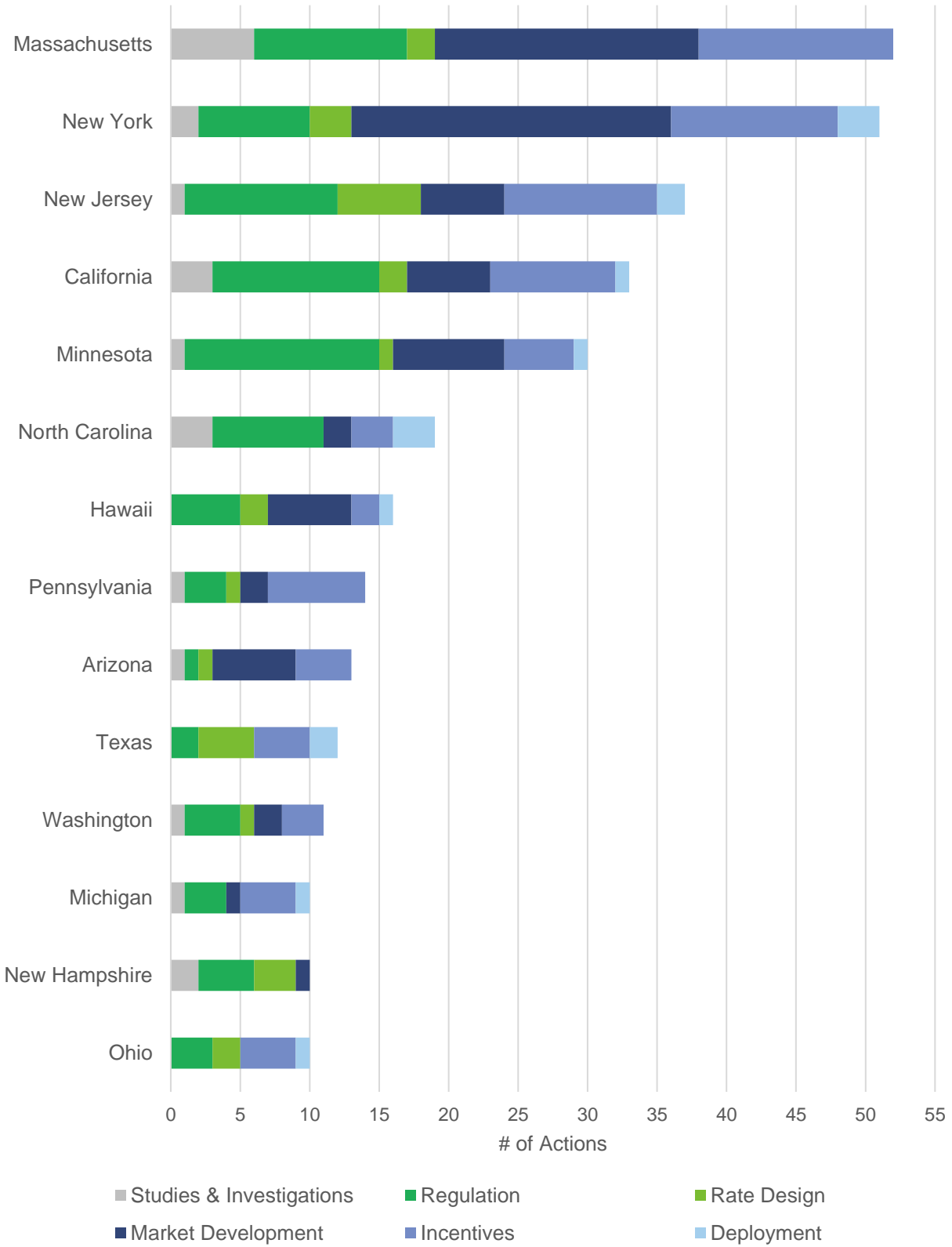


Figure 5. Most Active States of Q3 2023



FULL REPORT DETAILS & PRICING

FULL REPORT DETAILS

Content Included in the Full Quarterly Report:

- Detailed tables describing each pending and recently decided state and investor-owned utility action related to electric vehicles and charging infrastructure. Actions are broken out into the following categories:
 - Studies and Investigations
 - Regulation
 - Rate Design
 - Market Development
 - Financial Incentives
 - State and Utility Deployment
- Links to original legislation, dockets, and commission orders for each legislative and regulatory action
- 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 electric vehicle policy action and trends
- Outlook of action for the next quarter

WHO SHOULD PURCHASE THIS REPORT

The 50 States of Electric Vehicles allows those involved in the electric and transportation industries to easily stay on top of legislative and regulatory changes. The report provides a comprehensive quarterly review of actions. At a cost of \$500 per issue (or \$1,500 annually), the 50 States of Electric Vehicles offers a significant 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.

Electric Vehicle and Charging Infrastructure 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

Electric Utilities

- Learn about the approaches being taken by other utilities facing similar opportunities and 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
- Identify active utility investment proceedings

Advocacy Organizations

- Learn about the electric vehicle actions under consideration across the country
- Learn about the outcomes of other states' policy discussions
- Utilize an objective source of information in legislative and regulatory proceedings

Researchers and Consultants

- Access valuable data requiring a vast amount of time to collect first-hand
- Identify research needs to inform electric vehicle proceedings
- Cite an objective source in your own research and analysis

PRICING

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Subscription Type	Annual Subscription	Single Report
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