

50

STATES OF ELECTRIC VEHICLES

Q2 2024 Quarterly Report

Executive Summary



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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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PREFERRED CITATION

North Carolina Clean Energy Technology Center, *The 50 States of Electric Vehicles: Q2 2024 Quarterly Report*, August 2024.

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Cover design by Amira Ferjani and Justin Lindemann

COVER PHOTO CREDIT

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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

Q2 2024 ELECTRIC VEHICLE ACTION

In Q2 2024, 41 states plus DC and Puerto Rico took a total of 561 actions related to electric vehicles. Table 1 provides a summary of state and utility actions occurring during Q2 2024. Of the actions cataloged, the most common were related to Market Development (151), followed by Regulation (149), and Financial Incentives (134). All 50 states, plus DC and Puerto Rico, took actions planning for National Electric Vehicle Infrastructure (NEVI) program funding distribution.

Table 1. Q2 2024 Summary of Electric Vehicle Actions

Type of Action	# of Actions	% by Type	# of States
Market Development	151	27%	27 + DC, PR
Regulation	149	27%	30 + DC, PR
Financial Incentives	134	24%	29 + DC
Rate Design	61	11%	27 + PR
Studies and Investigations	40	7%	18
Deployment	26	5%	15 + DC
Total	561	100%	41 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 Q2 2024

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

Virginia Governor Exits Participation in Advanced Clean Cars Standards

The Governor of Virginia announced in June 2024 that the state will not follow California’s Advanced Clean Cars II standards. Legislation enacted in 2021 directed the state to follow the original Advanced Clean Cars standards, but after a ruling from the State Attorney General that this legislation does not require following Advanced Clean Cars II, the Governor announced that the state would not require adherence to these rules.

Xcel Energy Submits Transportation Electrification Plan in New Mexico, Receives Decision in Colorado

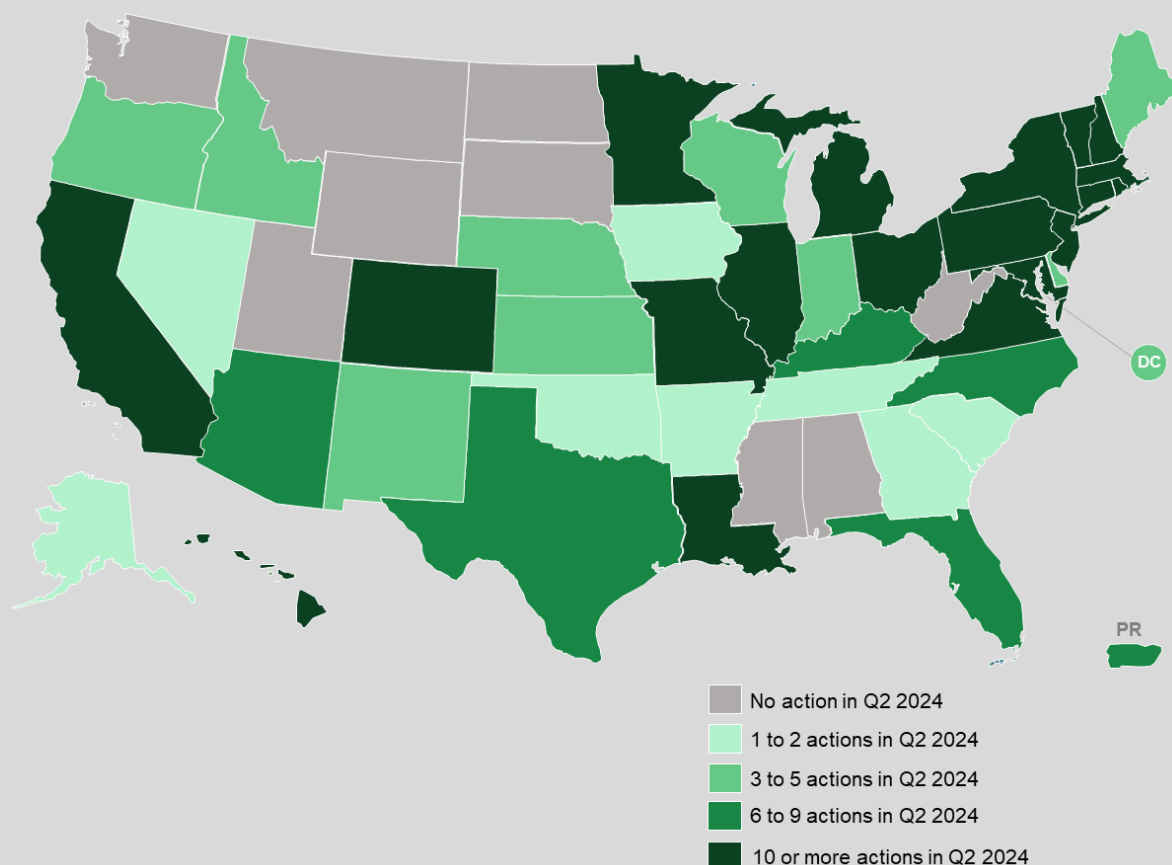
Xcel Energy filed its 2025-2027 Transportation Electrification Plan in New Mexico in early April 2024, which contains a variety of managed charging and rebate programs, as well as a utility-

owned electric vehicle supply infrastructure offering for commercial customers. Regulators also issued a decision on Xcel's latest Colorado Transportation Electrification Plan, which includes a number of programs similar to those planned in New Mexico.

NV Energy Files Transportation Electrification Plan with Nevada Regulators

NV Energy filed its 2024 Transportation Electrification Plan in May 2024, which proposes a portfolio of managed charging programs for both residential and non-residential customers. The utility is also proposing three pilots, including a residential submetering pilot, a V2X pilot, and continuation of a vehicle telematics managed charging pilot. The plan also includes an extension of the school bus vehicle-to-grid pilot to the end of 2027.

Figure 1. Q2 2024 State and Utility Action on Electric Vehicles



Vermont Lawmakers Enact Broad Transportation Program Bill

Vermont lawmakers enacted a large transportation program bill in June 2024, which includes adjustments to state electric vehicle incentives, development of a plan for funding and maintaining charging infrastructure, a study examining options for achieving transportation

sector emission reductions, and a directive for the state to institute an additional registration fee for electric and plug-in hybrid vehicles.

South Carolina Public Service Commission Releases Transportation Electrification Report

In April 2024, the South Carolina Public Service Commission published its report on regulatory challenges and opportunities associated with transportation electrification. The study addresses eight issues centered around grid integration, data management, rate design, load management, and grid investment, evaluating participant opinions and identifying a series of opportunities and challenges the state faces for each issue.

Figure 2. Top Electric Vehicle Actions of Q2 2024

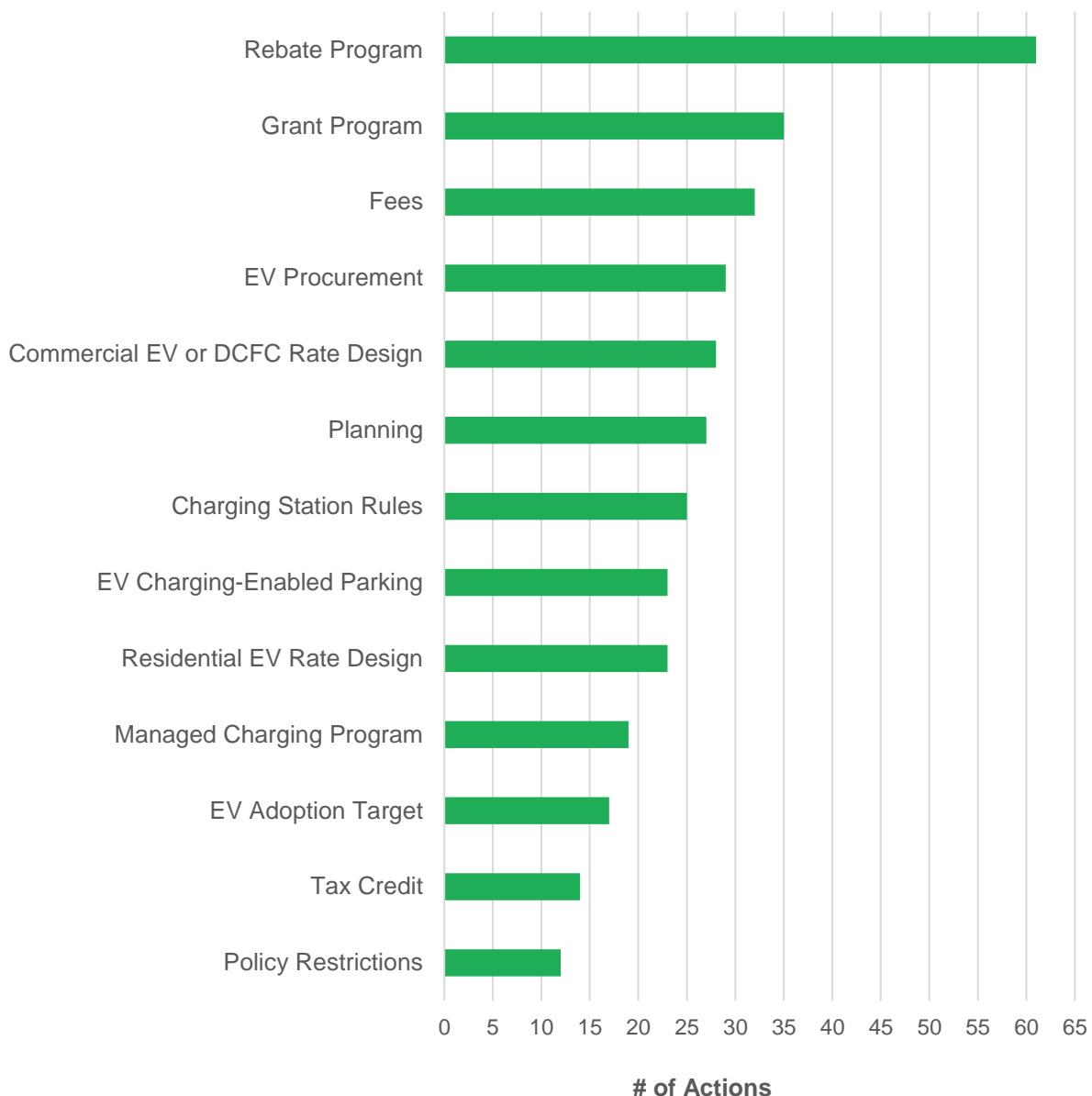
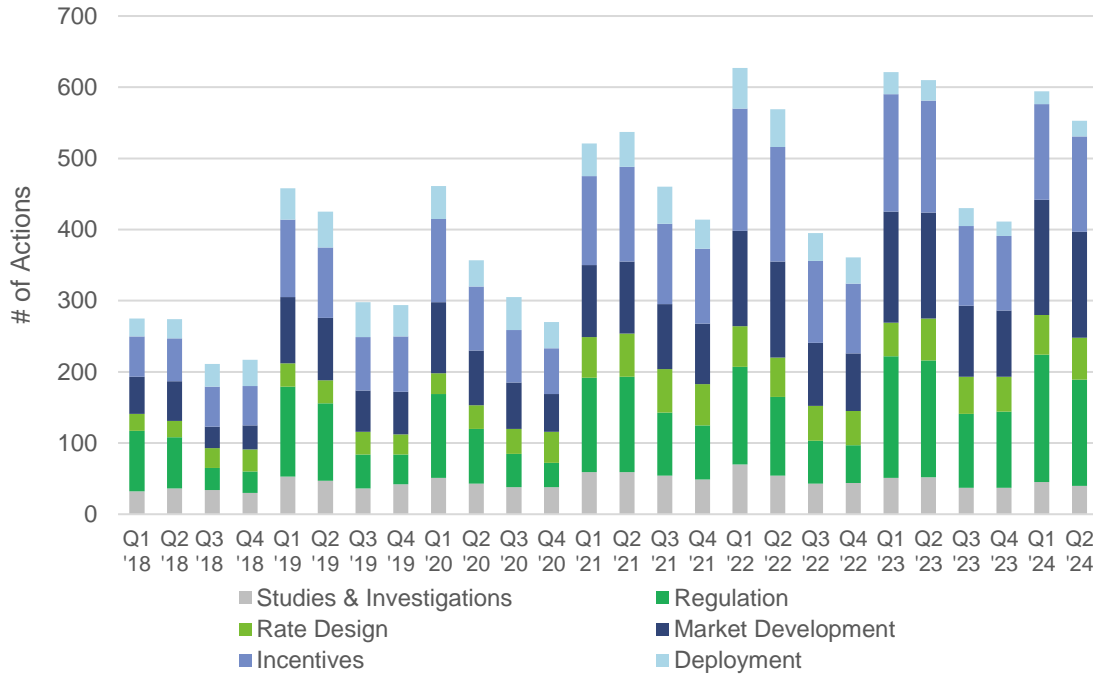


Figure 3. Electric Vehicle Action by Quarter, Q1 2018 to Q2 2024



TOP ELECTRIC VEHICLE POLICY TRENDS OF Q2 2024

New States Adopting Electric Vehicle Registration Fees, While Per-kWh Charging Fees Gain Popularity

Recently, new states have been instituting additional registration fees for electric vehicle owners, with most U.S. states now having such fees in effect. Lawmakers in Maryland, New Jersey, Pennsylvania, and Vermont all approved legislation adopting new electric vehicle registration fees this year. Legislation under consideration in Massachusetts and New York would also adopt additional registration fees, but these bills have not yet advanced. Meanwhile, a growing number of states are opting to adopt per-kWh fees for electric vehicle charging. Nebraska lawmakers enacted legislation establishing a three cent per kWh excise tax on electricity used at commercial charging stations, and Wisconsin legislators adopted a similar fee last quarter. These states join several others, including Georgia, Iowa, and Kentucky, that have instituted per-kWh charging fees in the last couple of years.

Utilities Focus on Development of Active Managed Charging Programs

While rate designs for electric vehicle drivers continue to be a common offering, utilities across the country are increasingly focusing on active managed charging programs to shape and control electric vehicle charging load. NV Energy proposed a portfolio of managed charging programs as part of its latest transportation electrification plan, while Xcel Energy requested approval for a new active managed charging program in New Mexico that would allow the utility

to remotely optimize the customer's charger to align the customer's needs, off-peak periods, and renewable energy curtailment. DTE Electric recently proposed new managed charging programs, while Indiana Michigan Power's electric transportation plan filed in late June includes a credit for enabling managed charging. Arizona Public Service has proposed an active managed charging program providing a monthly bill credit to customers that allow the utility to optimize their charging schedules during off-peak hours.

Growing Number of Utilities Filing Comprehensive Transportation Electrification Plans

A growing number of utilities are filing expansive transportation electrification plans on a routine schedule, with several states now requiring this. Xcel Energy filed its latest transportation electrification plan in New Mexico, while Colorado regulators issued a decision on its Colorado-focused plan. NV Energy filed a new transportation electrification plan in Nevada this quarter, as did Indiana Michigan Power in Indiana. In Michigan, the Public Service Commission Staff filed a proposed transportation electrification plan filing process, which would require utilities to file a transportation electrification plan every three years beginning July 1, 2025. DTE Electric and Consumers Energy both already filed transportation electrification plans in Michigan this year. In Arizona, Arizona Public Service has filed a transportation electrification implementation plan as part of its demand-side management plan.

Figure 4. 2024 Proposed Legislation on Electric Vehicles (as of late July 2024)

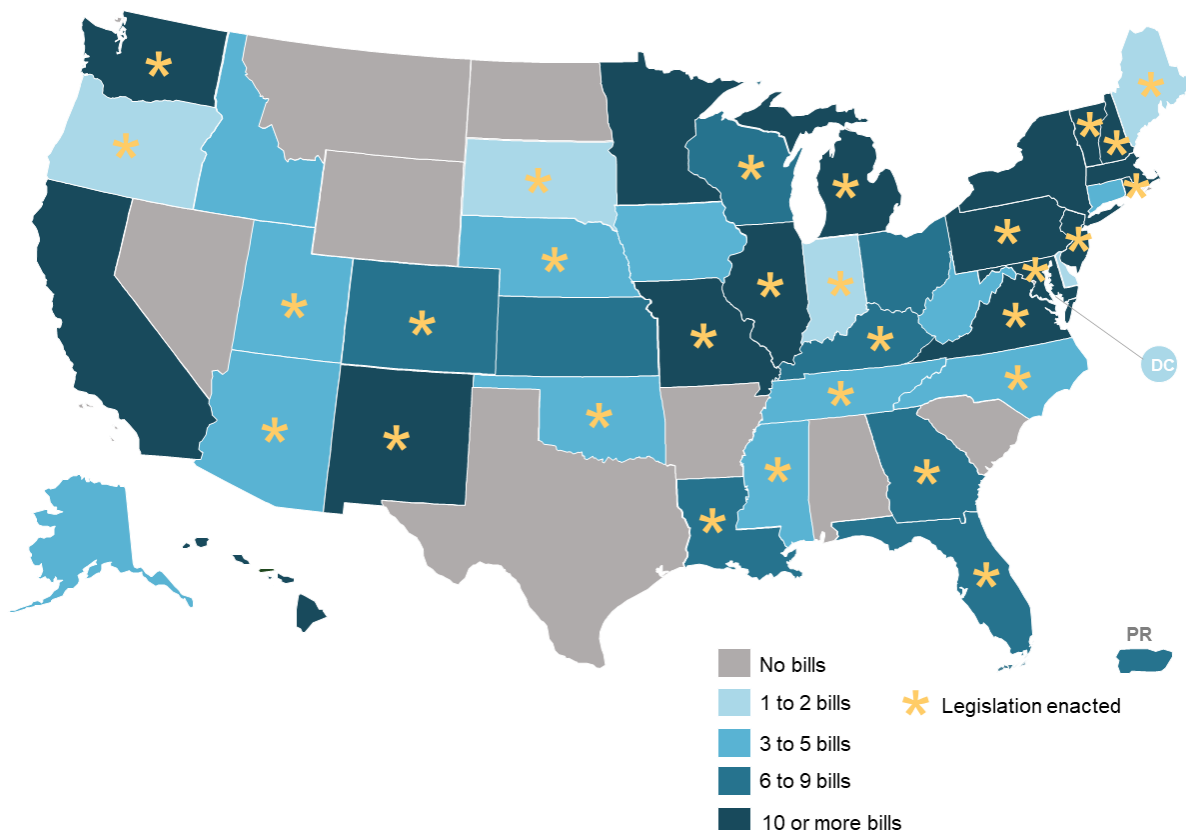
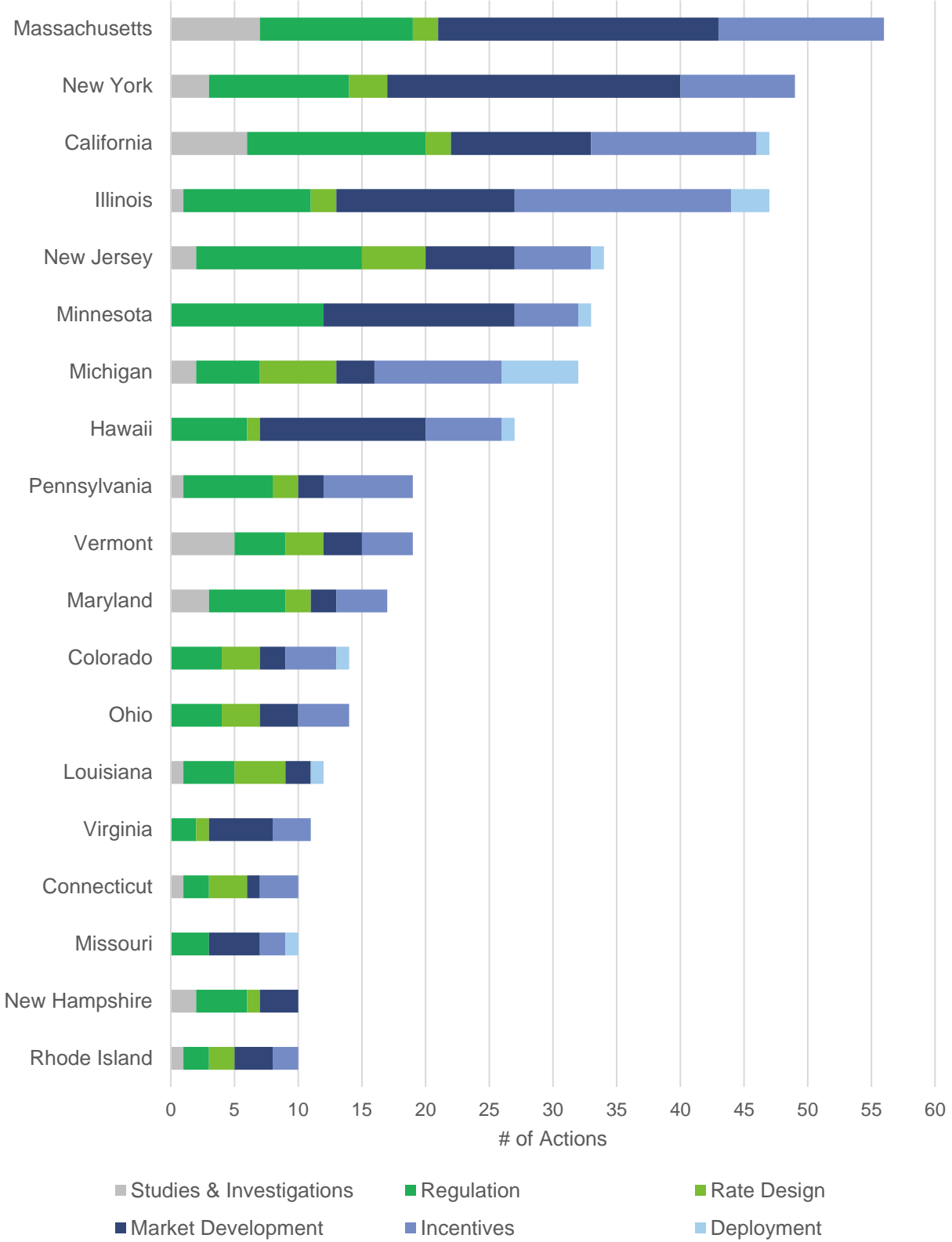


Figure 5. Most Active States of Q2 2024



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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