

STATES OF ELECTRIC VEHICLES

Q2 2023 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 2023 Quarterly Report, August 2023.

COVER DESIGN CREDIT

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 2023 ELECTRIC VEHICLE ACTION

In Q2 2023, 46 states plus DC and Puerto Rico took a total of 610 actions related to electric vehicles. Table 1 provides a summary of state and utility actions occurring during Q2 2023. Of the actions cataloged, the most common were related to Regulation (164), followed by Financial Incentives (157), and Market Development (149). All 50 states, plus DC and Puerto Rico, took actions planning for National Electric Vehicle Infrastructure (NEVI) program funding distribution.

Table 1. Q2 2023 Summary of Electric Vehicle Actions

Type of Action	# of Actions	% by Type	# of States
Type of Action	# Of Actions	70 by Type	
Regulation	164	27%	40 + DC, PR
Financial Incentives	157	26%	34 + DC, PR
Market Development	149	24%	28 + DC, PR
Rate Design	59	10%	30 + PR
Studies and Investigations	52	9%	27
Deployment	29	5%	18 + DC
Total	610	100%	46 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 2023

Five of the guarter's most notable electric vehicle actions are noted below.

Minnesota Lawmakers Enact Legislation Advancing Transportation Electrification

Minnesota legislators enacted a major transportation electrification bill in May 2023, establishing new incentive programs for electric vehicles, electrical panel upgrades, and electric school buses. The legislation also requires public utilities to file transportation electrification plans and adopts a preference for state fleets to purchase electric vehicles. The bill also includes dealership incentives to train employees in electric vehicle issues and purchase equipment for electric vehicle maintenance and repair.

New Mexico Utilities File Transportation Electrification Plans

El Paso Electric and PNM filed transportation electrification plans with New Mexico regulators in June 2023, each proposing a variety of new programs. El Paso Electric's \$14.7 million plan





includes new managed charging programs, a charging-as-a service program, and a number of incentives for charging stations and make-ready infrastructure. PNM's \$37.1 million plan also includes managed charging and incentives for charging stations and make-ready infrastructure, as well as mass transit and affordable mobility programs.

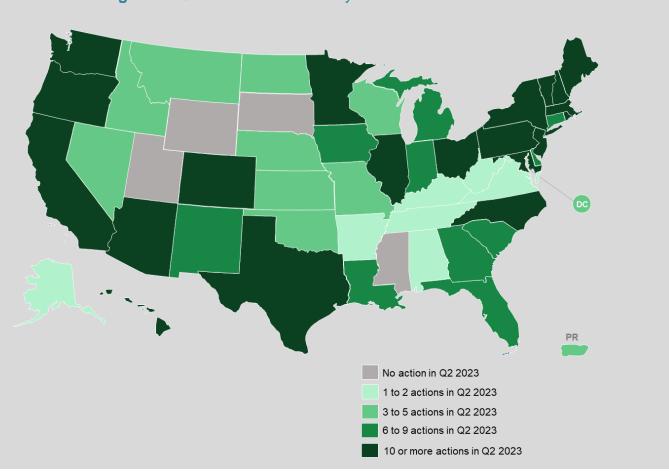


Figure 1. Q2 2023 State and Utility Action on Electric Vehicles

Louisiana Public Service Commission Examines Charging Station Regulation

The Louisiana Public Service Commission issued an order in May 2023, declining to exert jurisdiction over electric vehicle charging stations and exempting such stations from public utility regulation if they use electricity purchased from the utility. The order also directed utilities to submit proposed electric vehicle rates and the Commission Staff to file proposed rules regarding utility ownership of charging stations and other issues.

Maryland Legislators Adopt New Zero-Emission Vehicle and Charging Targets

Maryland lawmakers enacted multiple bills in April 2023 setting new transportation electrification targets for the state. One bill directs the Department of Environment to set





requirements for the sale of new zero-emission medium- and heavy-duty vehicles, while another bill sets requirements for electric vehicle-ready parking spaces for a variety of new construction building types. Legislators also extended and expanded incentives for charging equipment.

Delaware General Assembly Passes Legislation to Promote Electric Vehicles

Delaware legislators passed multiple bills in June 2023 to promote transportation electrification in the state. One bill adopts a new rebate program for electric vehicles, while a separate bill establishes targets for school bus electrification. Another bill passed during the quarter sets requirements for electric vehicle-capable parking spaces. The bills are currently awaiting action by the Governor.

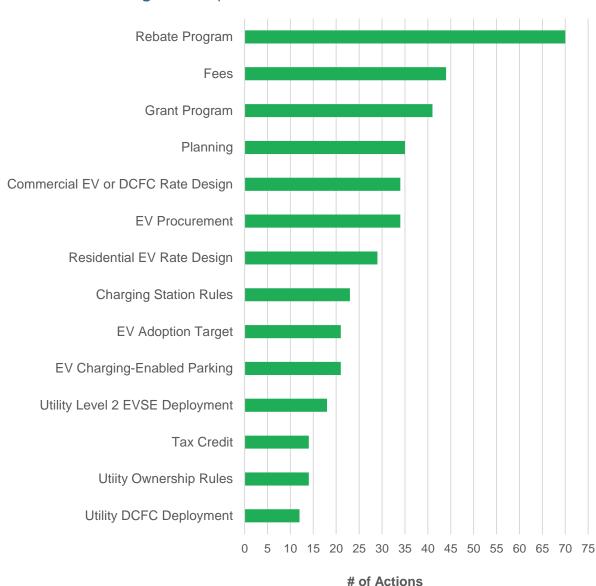


Figure 2. Top Electric Vehicle Actions of Q2 2023





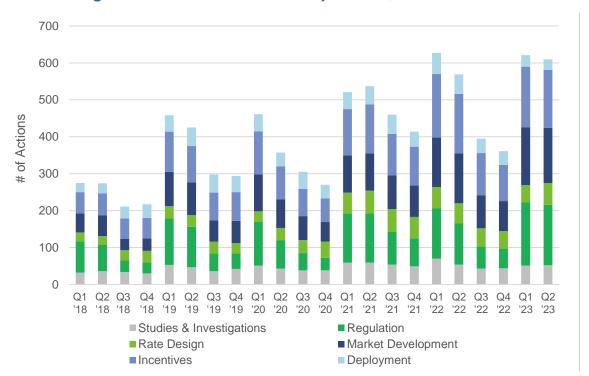


Figure 3. Electric Vehicle Action by Quarter, Q1 2018 to Q2 2023

TOP ELECTRIC VEHICLE POLICY TRENDS OF Q2 2023

Adopting Incentives Targeting Low-Income and Underserved Communities

States and utilities across the country are establishing incentive programs for electric vehicles and charging infrastructure, with many of these programs including higher incentives or dedicated funding for low- and moderate-income customers or underserved communities. Legislation enacted in Minnesota creates a new electric vehicle rebate program that includes additional incentives for income-qualified customers. PNM's transportation electrification plan filed in June 2023 proposes higher charging station incentives for low-income customers, with a certain number of rebates reserved for these customers. El Paso Electric's New Mexico transportation electrification plan also includes dedicated incentives for low-income customers and underserved communities. Similarly, electric vehicle incentive programs proposed by PSEG Long Island and AEP Ohio contain special incentives for low-income or disadvantaged communities, while Consumers Energy's proposed PowerMiDrive permanent public charging and fleet programs would prioritize applications assisting income-qualified and disadvantaged communities.

Lawmakers Establishing Requirements for Electric Vehicle-Capable Parking

Lawmakers in several states passed legislation establishing requirements for electric vehicle (EV)-ready parking for new construction. Illinois legislators enacted a bill requiring newly constructed single-family homes and small multifamily buildings to have at least one EV-





capable parking space for each residential unit with dedicated parking. For new large multifamily residential buildings, all parking spaces will need to be EV-capable. Maryland lawmakers enacted legislation setting requirements for EV-capable parking spaces for a variety of building types being newly constructed or undergoing significant renovations. In Delaware, legislators passed a bill requiring EV-capable parking spaces for new single-family homes and multifamily dwellings. The Minnesota Legislature also enacted a bill requiring the building code to set a minimum number of EV-ready spaces, EV-capable spaces, and EV charging spaces for new commercial and multifamily construction.

Utilities Proposing Charging-As-A-Service Programs

In recent years, utility proposals to deploy electric vehicle charging stations have declined, with regulators in several states limiting utility deployment efforts to make-ready infrastructure, with incentives being offered for charging stations themselves. However, one area where direct utility infrastructure deployment is picking up is charging-as-a-service programs. Through these programs, utilities offer customers the option of having a utility-owned and maintained charging station installed at their property for their use, typically in exchange for a monthly fee. In Texas, Entergy Texas and Xcel Energy have proposed charging-as-a-service programs, while Duke Energy has requested approval for a program in North Carolina. El Paso Electric included a charging-as-a-service program in its latest transportation electrification plan in New Mexico.

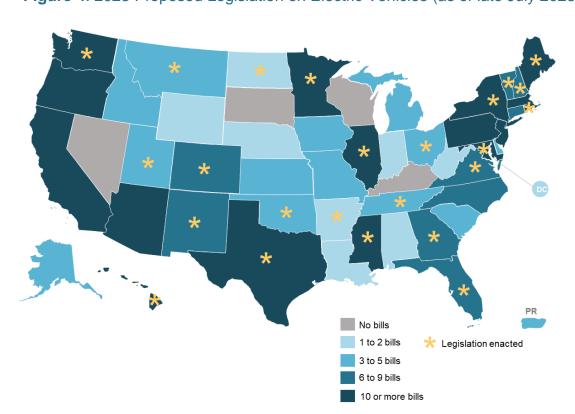


Figure 4. 2023 Proposed Legislation on Electric Vehicles (as of late July 2023)





California Massachusetts New York New Jersey Texas Minnesota Illinois North Carolina Hawaii Rhode Island Maryland Oregon Maine Pennsylvania Vermont Arizona Washington New Hampshire Colorado Ohio 0 5 10 15 20 25 30 35 40 45 50 55 # of Actions ■ Studies & Investigations ■ Regulation ■ Rate Design ■ Market Development Incentives Deployment

Figure 5. Most Active States of Q2 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
50 States of Electric Vehicles Report	\$1,500	\$500
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All-Tech Subscription (Includes 50 States of Electric Vehicles report, 50 States of Solar report, & 50 States of Grid Modernization report; plus biweekly legislative & regulatory tracking; policy data sheets, & monthly email policy updates for solar, grid modernization/energy storage, & electric vehicles)	\$10,500	N/A





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