

# 50 STATES OF ELECTRIC VEHICLES

Q1 2020 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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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* and *The 50 States of Grid Modernization*. 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

## Q1 2020 ELECTRIC VEHICLE ACTION

In Q1 2020, 47 states plus DC took a total of 461 actions related to electric vehicles. Table 1 provides a summary of state and utility actions occurring during Q1 2020. Of the 461 actions catalogued, the most common were related to Regulation (118), followed by Financial Incentives (117), and Market Development (100).

**Table 1. Q1 2020 Summary of Electric Vehicle Actions**

Type of Action	# of Actions	% by Type	# of States
Regulation	118	26%	40
Financial Incentives	117	25%	30 + DC
Market Development	100	22%	23 + DC
Studies and Investigations	51	11%	29 + DC
Deployment	46	10%	19 + DC
Rate Design	29	6%	16 + DC
<b>Total</b>	<b>461</b>	<b>100%</b>	<b>47 States + DC</b>

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 Q1 2020

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

### **New Jersey Lawmakers Adopt Ambitious Electric Vehicle Targets**

In January 2020, the New Jersey Legislature enacted S.B. 2252, which includes a requirement that 85% of light-duty vehicles sold or leased in the state are plug-in electric vehicles by December 31, 2040. The bill also includes requirements for charging station deployment and state electric vehicle procurement, as well as new incentive programs for electric vehicles and charging infrastructure.

### **California Public Utilities Commission Releases Draft Transportation Electrification Framework**

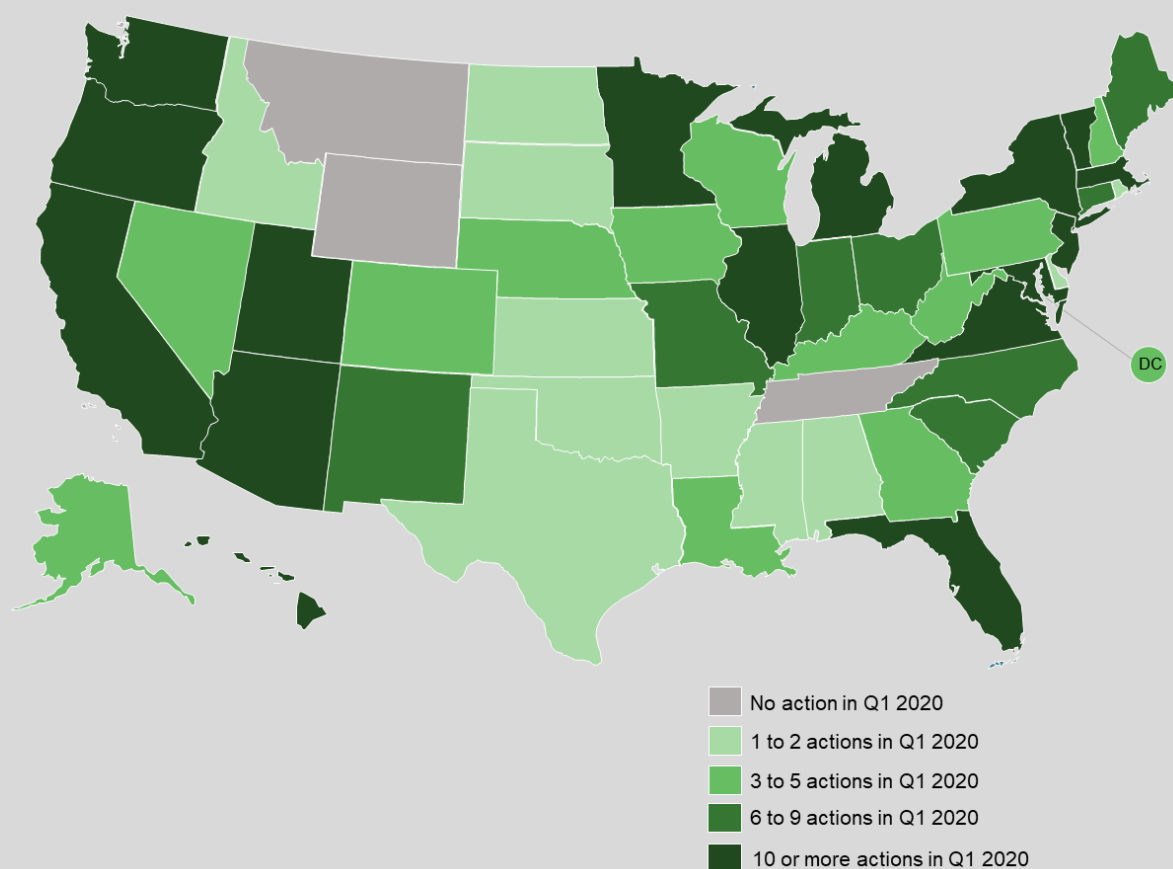
The California Public Utilities Commission Staff released its draft Transportation Electrification Framework in February 2020. The framework establishes a new process for the state's investor-owned utilities to develop 10-year strategic investment plans. The framework would

require these utilities to develop holistic transportation electrification plans within one year of adoption of the final framework.

### Utah State Legislature Enacts Electric Vehicle Charging Bills

The Utah State Legislature enacted a number of bills related to electric vehicle charging during Q1 2020. One enacted bill directs the Department of Transportation to create a statewide electric vehicle charging network plan, while another bill specifies that electric vehicle charging stations are only exempt from public utility regulation if the electricity is obtained from the utility. This bill also authorizes the Public Service Commission to approve \$50 million for the deployment of utility-owned charging infrastructure.

Figure 1. Q1 2020 State and Utility Action on Electric Vehicles



### PacifiCorp files Transportation Electrification Plan with Oregon Regulators

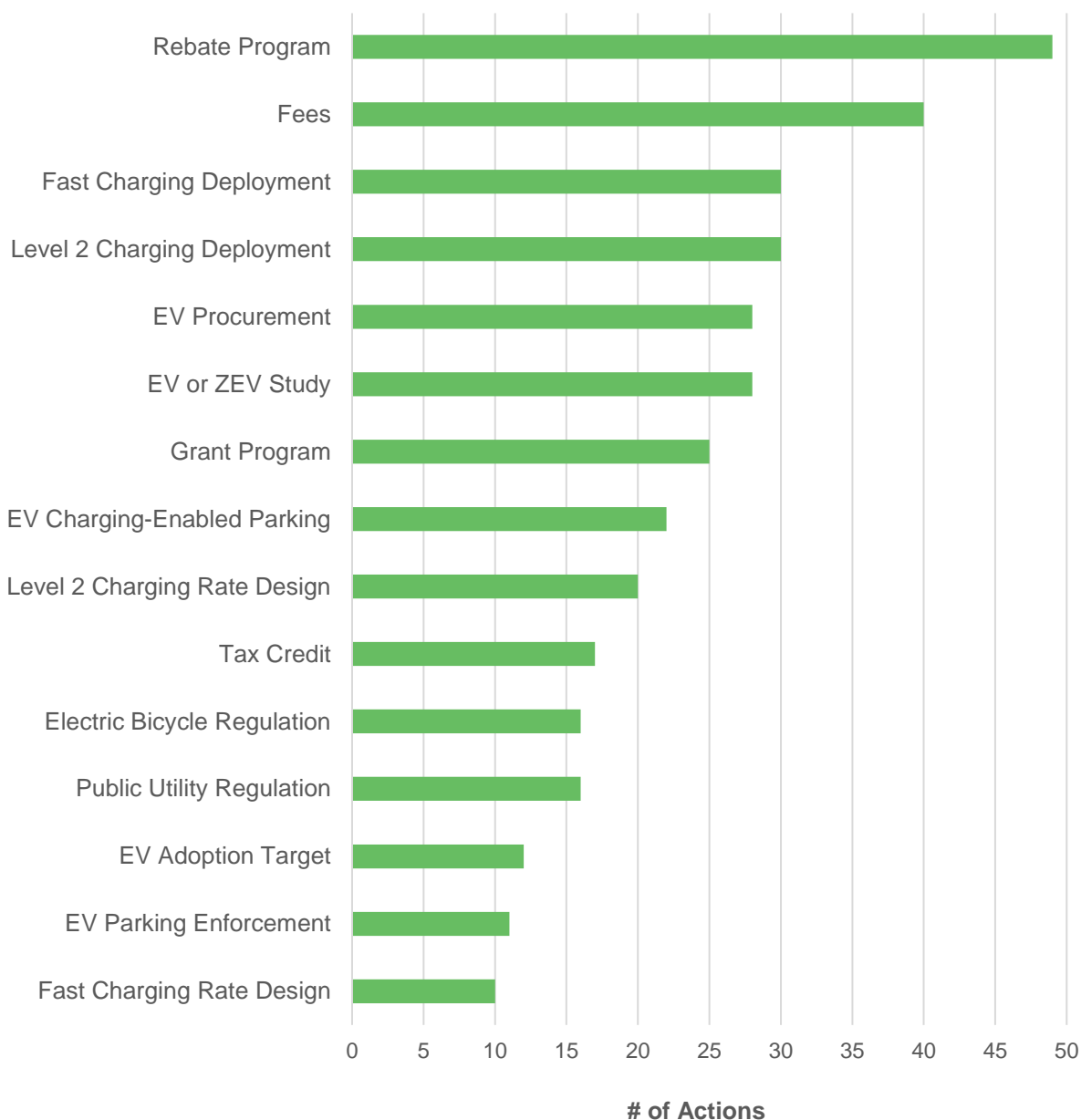
PacifiCorp filed its transportation electrification plan with Oregon regulators in February 2020. The plan includes an array of potential future intervention strategies, including new rate designs, new incentives for residential and commercial charging infrastructure, a new fleet

charging make-ready incentive program, and expansion of existing programs. Portland General Electric and Idaho Power filed their transportation electrification plans in 2019.

### Virginia Regulators Approve Dominion Smart Charging Infrastructure Pilot

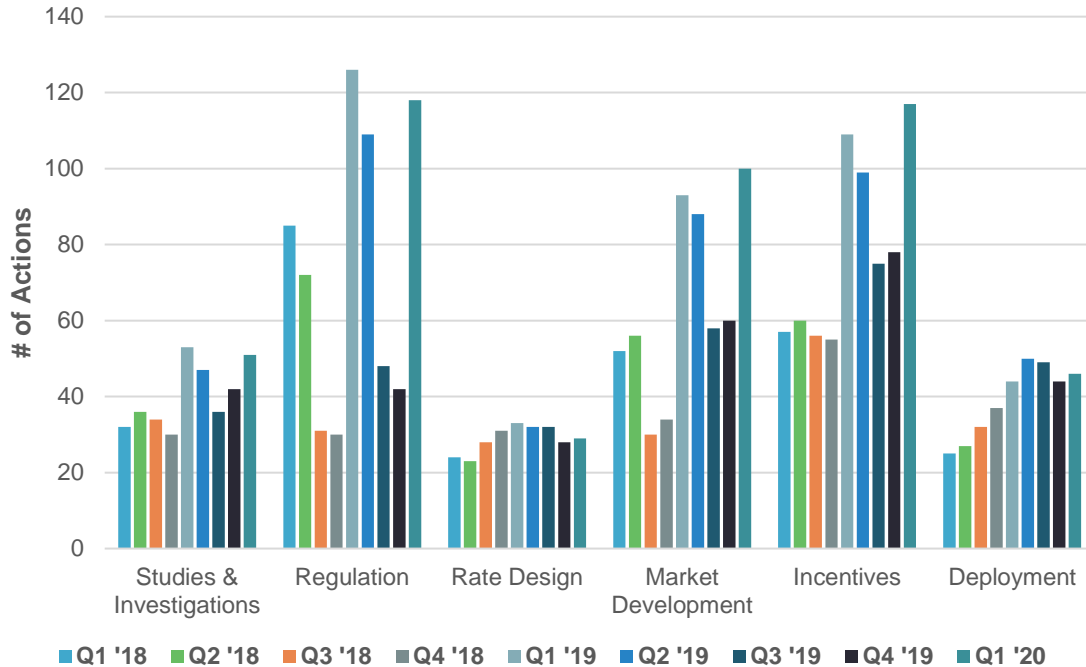
The Virginia Corporation Commission approved Dominion Energy’s Smart Charging Infrastructure Pilot Program in March 2020. The program, proposed as part of the utility’s Grid Transformation Plan, includes charging station rebates for multi-family, workplace, transit, and fast charging segments. The program also includes up to four utility-owned fast charging stations to study and support electrification in the rideshare industry.

**Figure 2. Top Electric Vehicle Actions of Q1 2020**





**Figure 3. Electric Vehicle Action by Category, Q1 2018 to Q1 2020**



## TOP ELECTRIC VEHICLE POLICY TRENDS OF Q1 2020

### Additional Electric Vehicle Registration Fee Proposals Largely Unsuccessful in 2020

While ten states increased registration fees for electric vehicles in 2019, bills adopting additional registration fees have been largely unsuccessful so far in 2020. Legislation including additional electric vehicle registration fees has been considered in a number of states thus far in 2020, including Arizona, Florida, Kentucky, New Mexico, and South Dakota. However, none of the bills under consideration in these states has been enacted and many state legislatures have already adjourned for the year. Furthermore, ten of the actions related to electric vehicle fees during the quarter are bills that would repeal or reduce existing electric vehicle registration fees. Bills repealing or reducing fees have been considered in Hawaii, Illinois, Indiana, Iowa, and Ohio, although none of these measures have advanced.

### State Lawmakers Considering Bills Authorizing Utility Investments in Electric Vehicle Charging Infrastructure

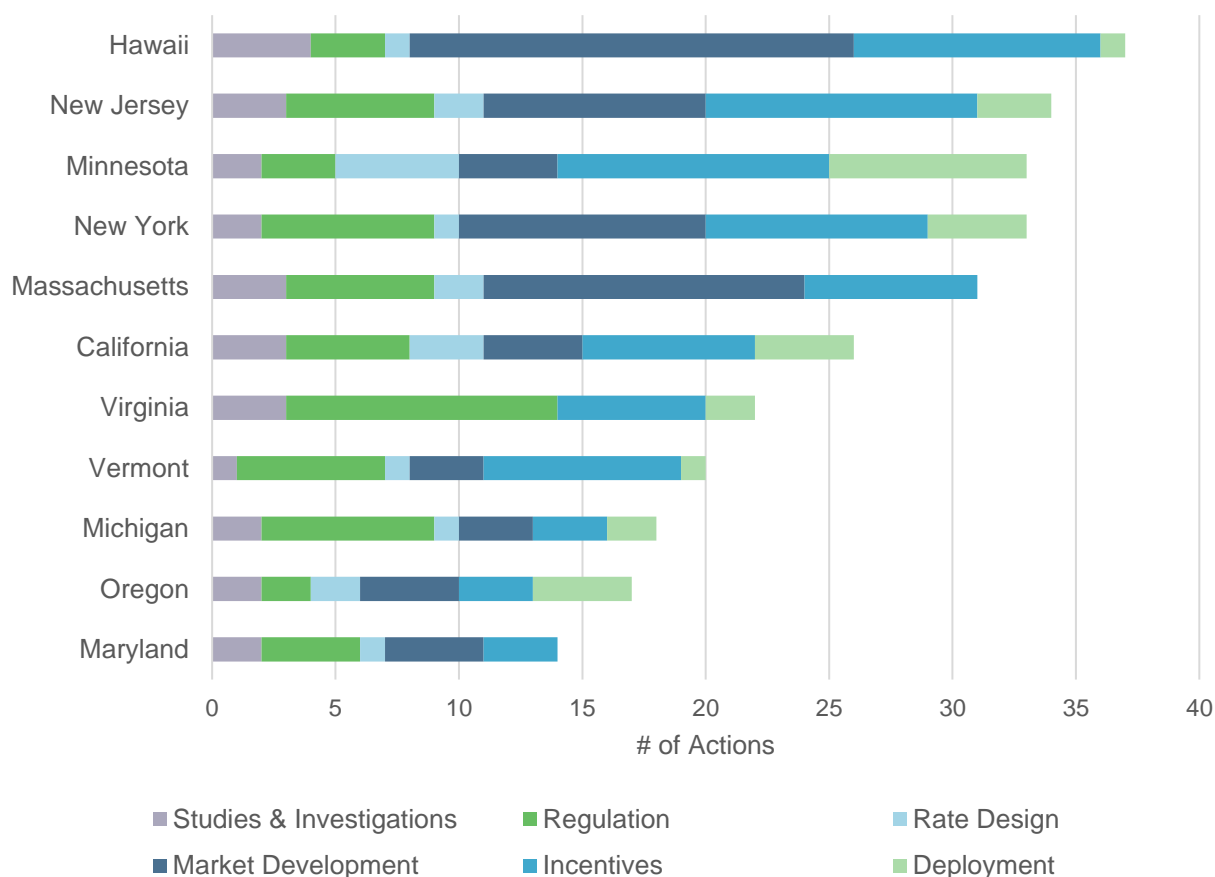
Some state legislatures across the country have recently been considering bills authorizing utility investments in electric vehicle charging infrastructure. In Utah, state lawmakers enacted legislation authorizing the Public Service Commission to approve \$50 million for the deployment of utility-owned charging infrastructure. In New Mexico, state legislators enacted a bill allowing public utilities to file applications for grid modernization projects, including infrastructure necessary to support electric vehicle charging. In Illinois, legislators considered

a bill allowing certain utilities to install and own charging infrastructure, and Oregon lawmakers considered bills allowing utilities to recover costs for prudent investments in infrastructure to support electric vehicle adoption and transportation electrification.

### Growing Efforts to Encourage Charging Infrastructure Development at Multi-Family Buildings

States and utilities are ramping up efforts to promote the development of electric vehicle charging infrastructure at multi-family buildings. In New Jersey, lawmakers adopted a requirement that at least 30% of all multi-family residential properties must be equipped with charging infrastructure by December 31, 2030. As part of Dominion Energy Virginia’s recently approved Smart Charging Infrastructure Pilot, the utility will offer rebates for charging stations at multi-family buildings, and PacifiCorp’s transportation electrification plan for its Oregon service territory includes multi-family charging station incentives. In DC, the transportation electrification working group filed a report in January 2020 with recommendations for Pepco’s multi-dwelling unit rebates. Lawmakers in several states also considered legislation prohibiting community associations from unreasonably restricting unit owners from installing electric vehicle charging stations.

Figure 4. Most Active States of Q1 2020



# 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

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Subscription Type	Annual Subscription	Single Report
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