

# 50 STATES OF ELECTRIC VEHICLES

Q3 2020 Quarterly Report

Executive Summary



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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* 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

## Q3 2020 ELECTRIC VEHICLE ACTION

In Q3 2020, 46 states plus DC took a total of 305 actions related to electric vehicles. Table 1 provides a summary of state and utility actions occurring during Q3 2020. Of the 305 actions catalogued, the most common were related to Financial Incentives (74), followed by Market Development (65), and Regulation (47).

**Table 1. Q3 2020 Summary of Electric Vehicle Actions**

Type of Action	# of Actions	% by Type	# of States
Financial Incentives	74	24%	23
Market Development	65	21%	17 + DC
Regulation	47	16%	16
Deployment	46	15%	34
Studies and Investigations	38	13%	27
Rate Design	35	12%	20 + DC
<b>Total</b>	<b>305</b>	<b>100%</b>	<b>46 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 Q3 2020

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

### California Governor Establishes Zero-Emission Vehicle Sales Goals

The Governor of California signed an executive order in September 2020 establishing a series of goals for the adoption of zero-emission vehicles in the state. The order sets a goal for 100% of in-state sales of new passenger cars and trucks to be zero-emission by 2035. By 2045, 100% of medium- and heavy-duty vehicles are to be zero-emission. Several agencies are to develop a zero-emission vehicle market development strategy to achieve the goals.

### New York Public Service Commission Approves Make-Ready Initiative

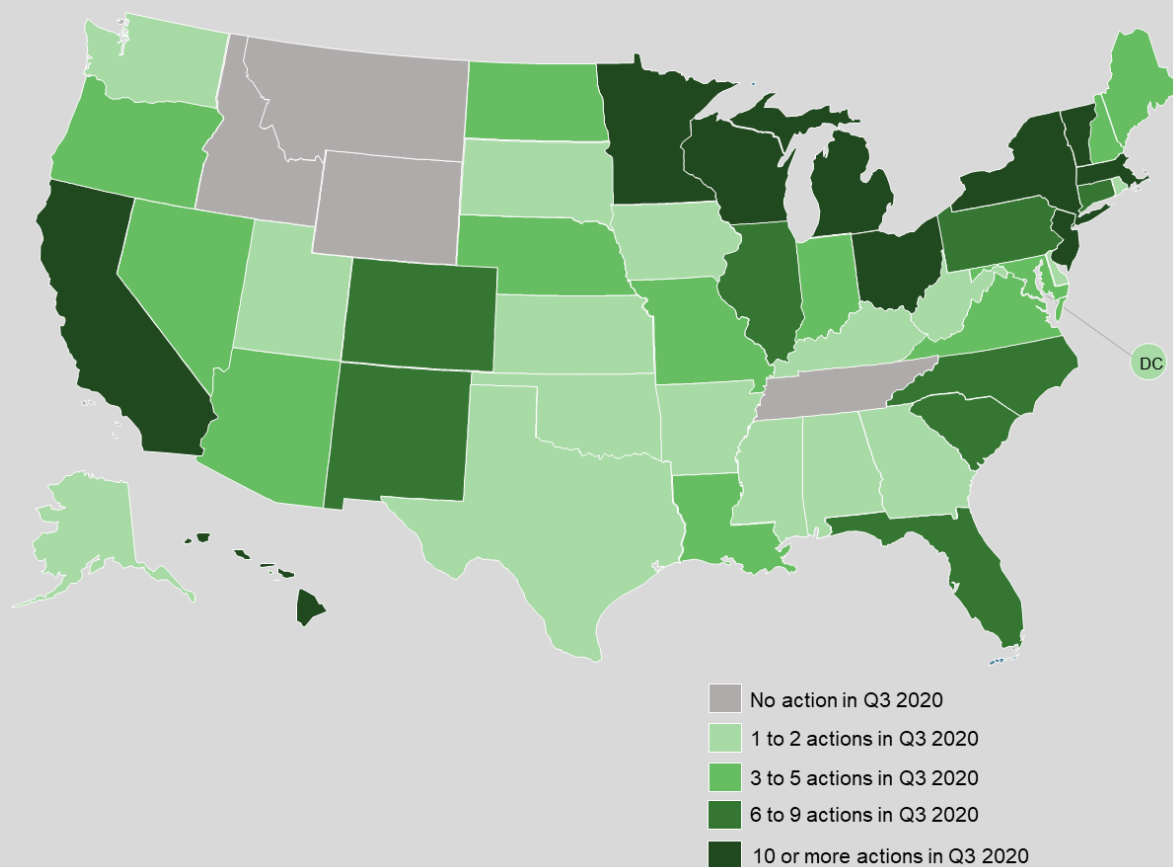
In July 2020, the New York Public Service Commission approved the Electric Vehicle Make-Ready Initiative. Under the new program, utilities will provide incentives for make-ready infrastructure for Level 2 and DC fast charging stations. The program has a total budget of

\$701 million, with \$206 million reserved for low-income access. Incentive amounts are structured as a percentage of costs.

### New Hampshire Regulators Issue Order on Electric Vehicle Rate Design

New Hampshire regulators issued an order in August 2020 regarding electric vehicle rate design standards. The Public Utility Commission’s order includes numerous findings, including which types of rate designs may or may not be appropriate for electric vehicle charging. The order also initiates a new proceeding to consider utility-specific electric vehicle time-of-use rate proposals.

Figure 1. Q3 2020 State and Utility Action on Electric Vehicles



### Regulators Approve Over \$400 Million in Charging Infrastructure Investments for Southern California Edison

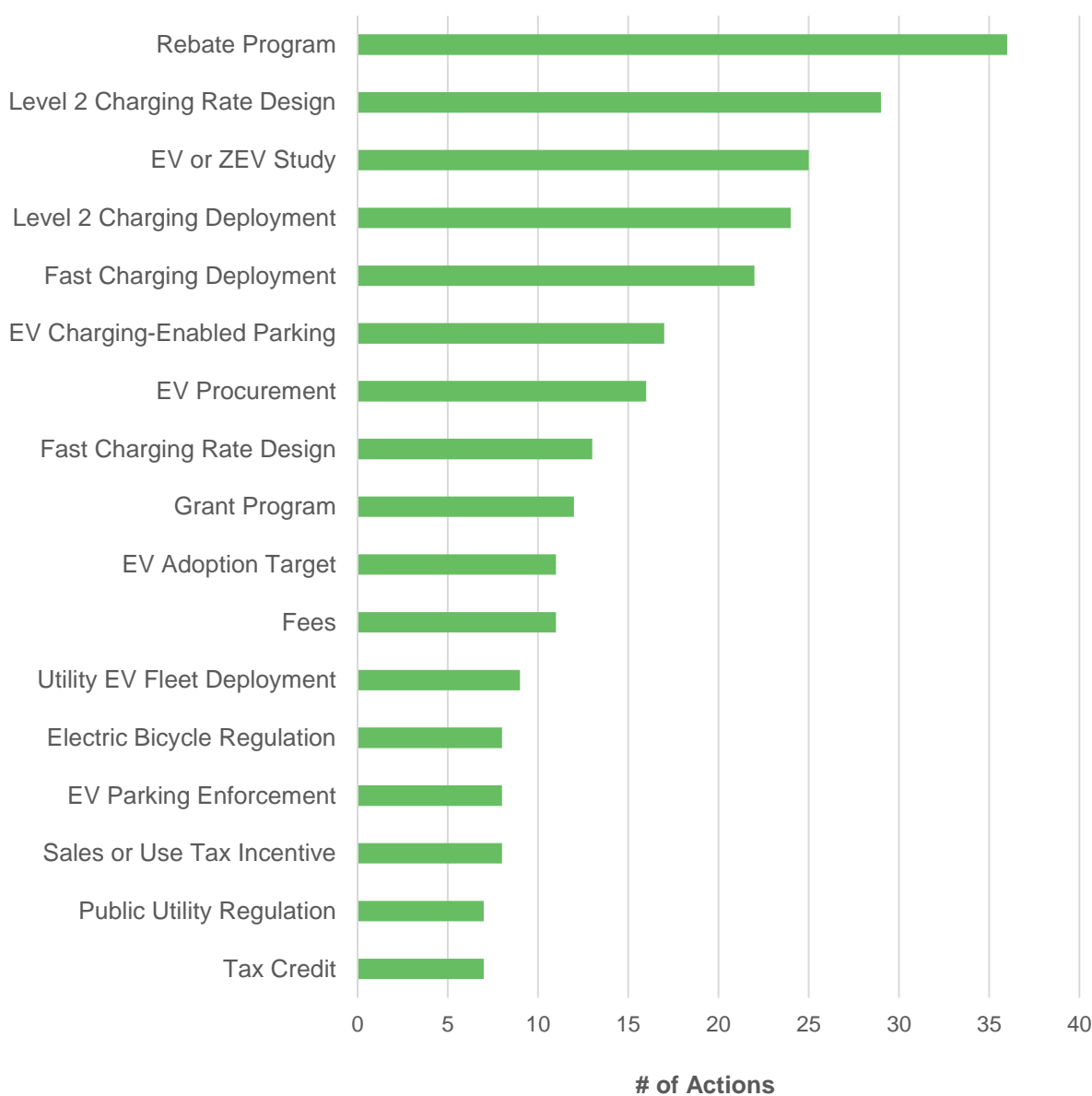
The California Public Utilities Commission issued a decision in July 2020, approving Southern California Edison’s Charge Ready 2 Program. The order approved a reduced budget of \$417.5 million for charging infrastructure and \$14.5 million for marketing, education, and outreach.

The program includes a mix of direct charging infrastructure deployment and incentives, with portions of the program reserved for multi-unit dwellings and disadvantaged communities.

### Utilities in Connecticut and New Mexico File Electric Vehicle Plans

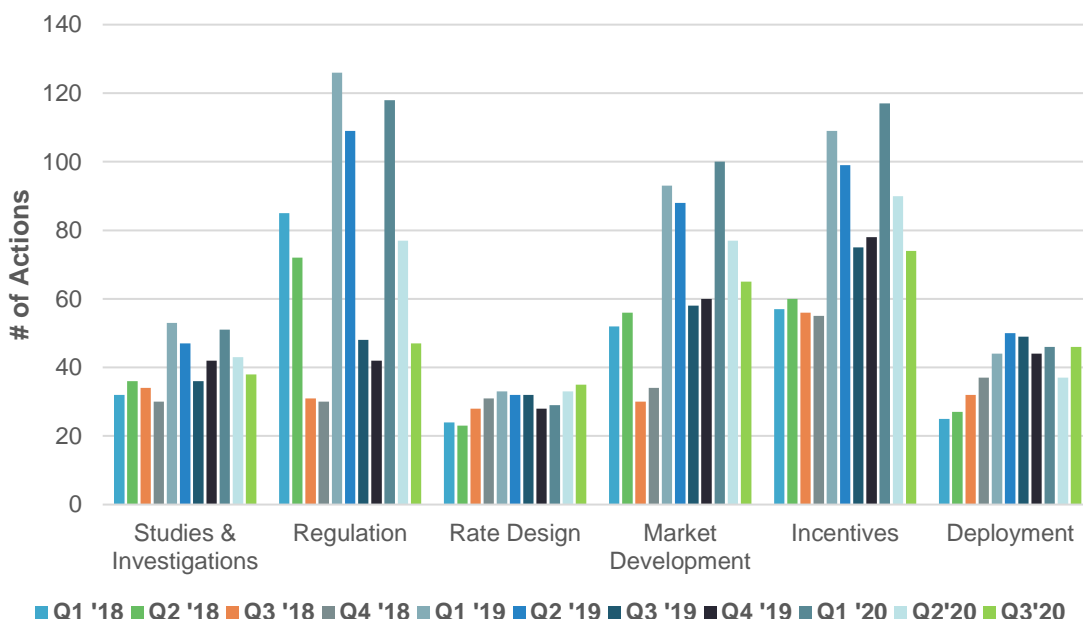
Eversource and United Illuminating in Connecticut, as well as Xcel Energy in New Mexico, filed major electric vehicle plans during Q3 2020. Eversource’s plan includes several charging station rebate programs, with the utility installing make-ready infrastructure. United Illuminating’s plan includes a managed charging program, and Xcel Energy’s plan includes incentives for Level 2 chargers and direct deployment of DC fast chargers.

**Figure 2. Top Electric Vehicle Actions of Q3 2020**





**Figure 3. Electric Vehicle Action by Category, Q1 2018 to Q3 2020**



## TOP ELECTRIC VEHICLE POLICY TRENDS OF Q3 2020

### Utilities Commit to Electrify Their Own Vehicle Fleets

A major trend emerging in Q3 2020 is that of utilities announcing commitments to electrify their own vehicle fleets. Xcel Energy announced a plan to electrify its fleet sedans by 2023, all of its light-duty vehicles by 2030, and 30% of its medium- and heavy-duty vehicles by 2030. Duke Energy pledged to convert 100% of its light-duty vehicles to electric by 2030 and 50% of its medium-duty, heavy-duty, and off-road vehicles to electric vehicles, hybrids, or other zero-carbon alternative by 2030. First Energy plans to have all aerial and light-duty trucks be electric or hybrid vehicles by 2031, with 30% electrification of these vehicles by 2030 and 100% electrification of these vehicles by 2050. Other utilities announcing commitments to electrify their fleets include Alliant Energy (100% light-duty fleet vehicles by 2030), the HECO Companies (100% electric passenger cars, SUVs, light pickups, and minivans by 2035), Southern Company (50% electric auto, SUV, minivan, forklift, ATV, and miscellaneous vehicles by 2030), Commonwealth Edison (100% electric fleet by 2030), and PNM (50% electric light-duty vehicles by 2030).

### Utilities Proposing a Variety of Managed Charging Programs

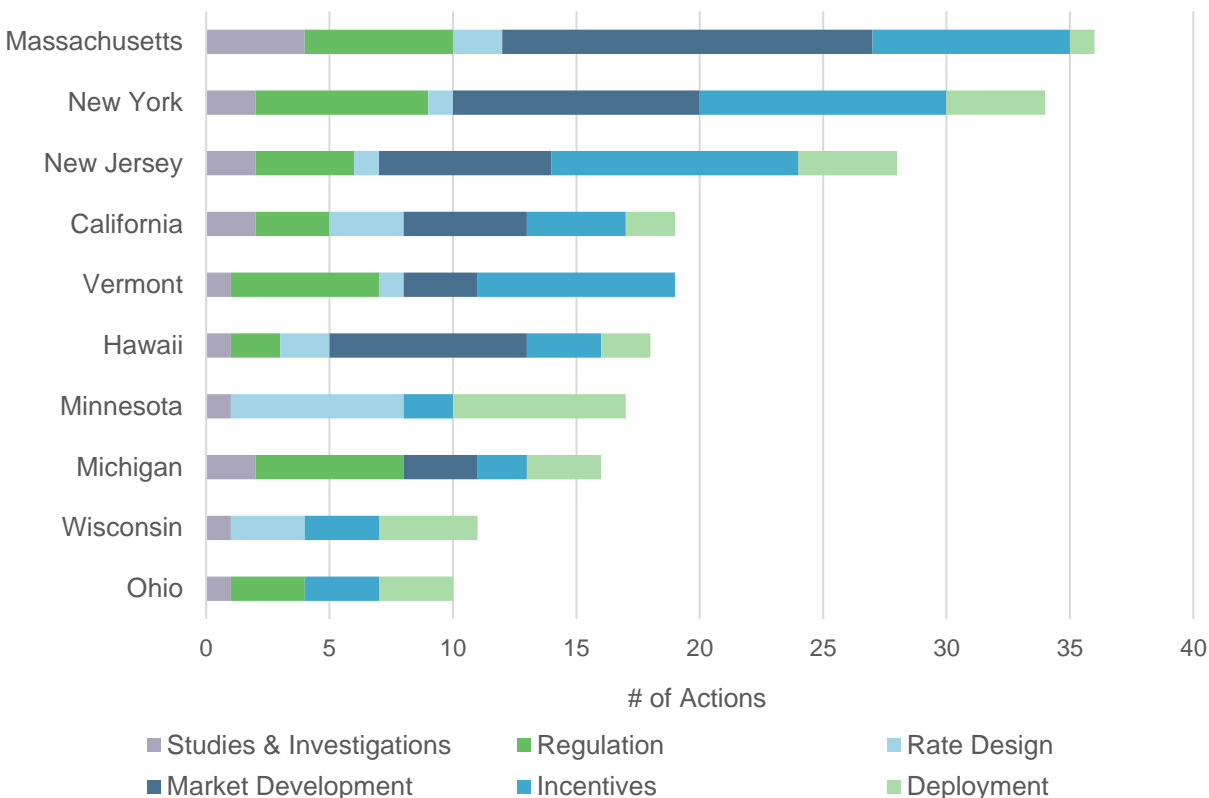
Utilities are increasingly including different types of managed charging programs in their transportation electrification plans. United Illuminating filed a plan with Connecticut regulators including a passive and active managed charging program that provides incentives for enrolling in the utility's time-of-use rate and for sharing charging data, as well as incentives for

networked chargers and active charging management. In New Mexico, Xcel Energy filed a plan including a program that would provide annual rebates to customers for participating in managed charging. In Virginia, regulators approved a new demand response program for Dominion Energy, where residential electric vehicle owners can receive an incentive for allowing the utility to control the charger during times of peak system demand.

### State Regulators and Utilities Prioritizing Investment in Low-Income Communities

States and utilities are prioritizing charging infrastructure investment in low-income communities in a number of ways. In California, regulators approved Southern California Edison’s Charge Ready 2 Program, while also requiring certain percentages of installations to target disadvantaged communities. Eversource filed an electric vehicle plan with Connecticut regulators that includes charging station rebates for multi-unit dwellings, with the utility covering 100% of the cost for low-income groups. Tampa Electric proposed a program in Florida that would fully fund DC fast charging stations for income-qualified hosts, and in New Mexico, Xcel Energy’s proposed transportation electrification plan includes an enhanced low-income charging rebate. In Oregon, Portland General Electric has proposed new rebate programs with increased rebate amounts for income-qualified customers.

**Figure 4. Most Active States of Q3 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

## PRICING

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Subscription Type	Annual Subscription	Single Report
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<b>All-Tech Subscription</b> <i>(Includes 50 States of Electric Vehicles report, 50 States of Solar report, &amp; 50 States of Grid Modernization report; plus biweekly legislative &amp; regulatory tracking; policy data sheets, &amp; monthly email policy updates for solar, grid modernization/energy storage, &amp; electric vehicles)</i>	\$10,500	N/A

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