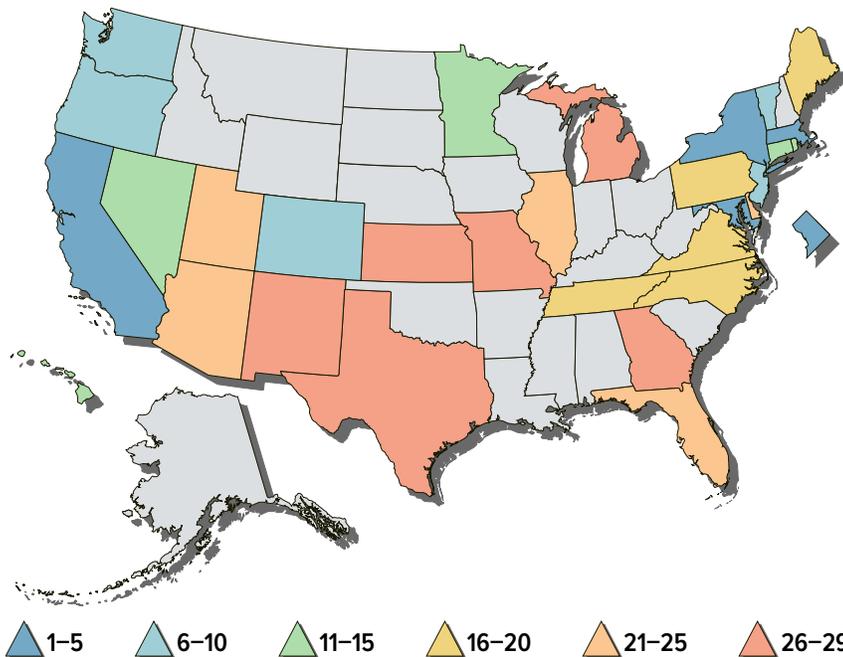


## UNITED STATES

The ACEEE State Transportation Electrification Scorecard ranks the top 30 states and the District of Columbia on their policy and program efforts to electrify transportation. It assesses six categories: planning and goal setting, incentives for electric vehicle (EV) deployment, transportation system efficiency, electric grid optimization, equity, and transportation electrification outcomes. California is far and away the national leader on transportation electrification policy and is home to policies not present (or not as robust) in other states, such as statewide EV-supportive building codes for multiunit dwellings, commercial buildings, and single-family homes. Thanks to aggressive actions to use EVs as a means to reduce state greenhouse gas (GHG) emissions and improve equitable access to clean transportation, California leads in five of the six categories used to rank states in the Scorecard. Rounding out the top 10 are New York, the District of Columbia, Maryland, Massachusetts, Washington, Vermont, Colorado, Oregon, and New Jersey.



## HIGHLIGHTS AND OPPORTUNITIES

States have made varying levels of progress on transportation electrification. All states, even early leaders in transportation electrification, have considerable room to improve their efforts to advance EVs and EV charging infrastructure to meet climate, pollution control, and economic development goals. States had more success in planning and setting deployment goals for EVs and EV charging infrastructure than in other policy areas, reflecting that most are still in the very early stages of implementing their EV policy road maps. States not among the top 30 of the *Scorecard* should establish a clear policy direction to encourage utility and third-party investment in EVs and charging infrastructure. States that are represented in the top 30 but are earlier in the process of developing a robust environment for transportation electrification can offer on-the-hood incentives for the purchase of light- and heavy-duty EVs to offset the additional upfront cost of these vehicles; they can also codify targets for the deployment of EVs and EV chargers. We recognize that the formidable challenges resulting from COVID-19 may not allow states to prioritize EV opportunities in the near term.

## PLANNING AND GOAL SETTING

State legislatures, governors, and public utility commissions are creating plans and setting targets for the number of EVs on the road to guide overall transportation electrification efforts. For early action, the most important step for states is to develop a long-term, systematic planning effort around EVs and EV charging infrastructure. Twenty-two states include light-duty and/or heavy-duty EV considerations in their comprehensive planning. While most states have undertaken this effort as a standalone process, like Colorado in its Electric Vehicle Plan 2020, jurisdictions like New Jersey, Virginia, and the District of Columbia have included planning for EVs and charging infrastructure as a part of their state energy plans. These plans help government leaders and stakeholders create a shared understanding of the energy landscape and chart a pathway to meeting overall state energy and emissions reduction goals.

As more EVs are adopted across America, there is a growing recognition that EV charging infrastructure should be a consideration in the design and construction of buildings. Five states have adopted charging-related infrastructure requirements for some building types as part of their minimum construction standards.

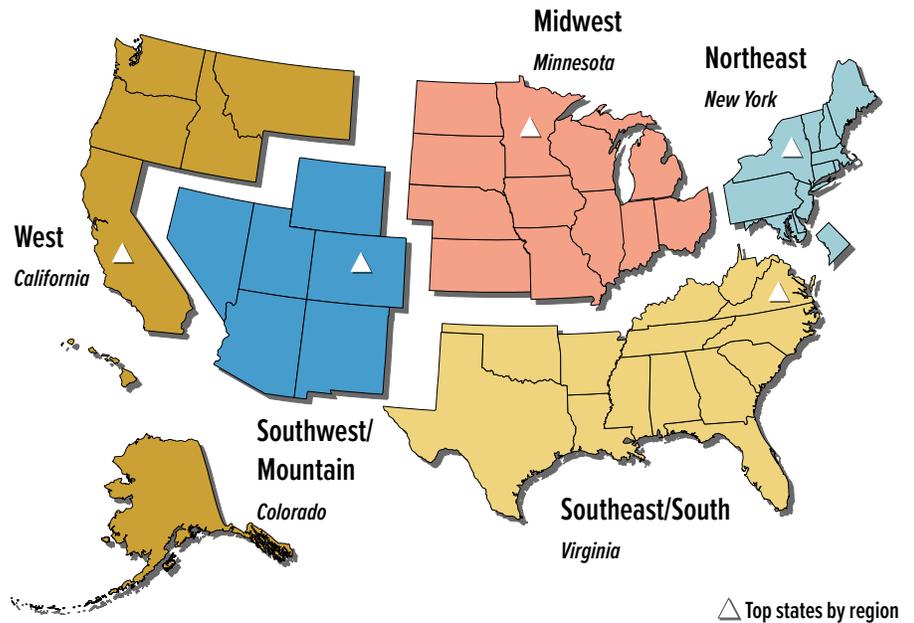
## INCENTIVES FOR ELECTRIC VEHICLE DEPLOYMENT

The higher initial cost of EVs and the high cost of installing associated charging infrastructure remain barriers to entry into the marketplace. As a result, policies promoting both financial and nonfinancial incentives for EV purchase, use, and charging infrastructure creation are fundamental to the uptake of EVs. Incentives such as rebates and tax credits for vehicle purchases already have a proven track record of increasing EV sales among individual consumers. Some states, however, have applied additional registration fees to these EVs, the primary motivation being to replace lost future gasoline tax revenues that fund road-related maintenance. These additional fees can slow EV deployment if they are too high.

Offering consistent and recurring incentives as the EV market grows will be important for all states. Nationwide, 12 states (all of which scored in the top 30 of the *State Transportation Electrification Scorecard*) have either on-the-hood rebates or grant program funding available for light-duty EVs. California and New York are the leading states for EV incentives; both have comprehensive and substantial rebates for light-duty EVs and utilities with committed investment and incentives for EV charging infrastructure. California's Clean Vehicle Rebate Project and New York's Drive Clean Rebate both offer incentives of up to \$2,000 toward the purchase of a plug-in EV.

## REGIONAL LEADERS

Outside the top 10, regional standouts are Minnesota in the Midwest, Connecticut in the Northeast, Virginia in the Southeast, and Nevada in the Southwest. Connecticut has adopted, and Nevada and Minnesota have issued regulations to adopt, California's light-duty zero-emission vehicle program, which requires manufacturers of light-duty vehicles to offer a certain number of zero-emission vehicles each year and to earn credits based on vehicle type and the electric driving range of the offered vehicles. Virginia's Making Efficient + Responsible Investments in Transit program provides funding for capital improvement projects, including the purchase or lease of new plug-in electric or hybrid electric vehicles.



## TRANSPORTATION SYSTEM EFFICIENCY

While transportation electrification will go a long way toward reducing GHG emissions, a true systems approach is needed to ensure that we maximize emissions reductions while also improving lives by providing accessible, cost-effective, equitable, and clean mobility options for all. State policy actors can set policy that influences the transition to a more efficient transportation system while also encouraging the use of electrified transportation options.

Setting a GHG emissions reduction goal and commitment for the transportation sector is an important first step states can take to guide their transportation systems to be more efficient and EV friendly. Just six states and the District of Columbia have done so to date. The District of Columbia's Sustainable DC 2.0 Plan includes a goal to reduce GHG emissions from the transportation sector 60% below 2006 levels by 2032. California's Cap-and-Trade Program and Oregon's Clean Fuels Program are the only state carbon pricing programs for transportation fuels.

California received all 12 points available in this section. The District of Columbia was the only other jurisdiction to receive more than half of the available points.

## ELECTRIC GRID OPTIMIZATION

The growing number of EVs on the road represents an opportunity to transition to a cleaner, more flexible electric power system with lower electricity rates for consumers. By offering time-varying electricity rates and managed EV charging programs, state regulators and utilities can encourage customers to charge their vehicles during times of day when electricity is cheap and abundant. This reduces pressure on the grid during peak periods. Additionally, utilities have an important role to play in removing barriers to direct current (DC) fast charging by offering specialized electricity rates or incentives that balance grid needs and customer charging economics. Some states, like Hawai'i, are exploring more experimental ways for EVs to interact with the electric power system, such as through vehicle-to-grid pilots. As renewable energy and energy efficiency become increasingly cost competitive, states can follow the lead of others, including Connecticut and Maine, by establishing long-term and interim emissions reduction targets for the electric industry to maximize the overall emissions and health benefits of every EV on the road.

## EQUITY

As electrification transforms the transportation industry, it is essential that the benefits of this transition are distributed fairly to low-income, economically distressed, and environmental justice communities. If states and utilities do not make a deliberate effort to include these marginalized groups in EV incentives and infrastructure development plans, there is a risk that transportation electrification will reinforce existing racial and economic inequities. Electrifying transit represents the opportunity to address and remediate long-standing issues that affect marginalized groups, like air pollution and access to mobility services and public transportation. States must commit to designing an equity-driven approach to transportation electrification and, more broadly, transportation planning, an approach that allows an inclusive decision making process and ensures accountability in terms of equitable outcomes.

Targeted investment is an impactful strategy that few states have taken to help ensure that transportation electrification is equitable. New York's EV Make-Ready Initiative, which aims to deploy more than 50,000 EV charging stations by 2025, includes \$206 million set aside to benefit low-income and economically distressed communities.

Only 23 states scored any points in this category, and every state shows room for improvement.

