

## Southeast Electric Vehicle Regional Strategy

Jess Siegel

## **INTRODUCTION**

Throughout the Southeast, state and local leaders are recognizing the benefits of electric vehicles (EVs) and beginning to develop goals and strategies to increase EV penetration. Tennessee cities, transit agencies, automotive companies, and other stakeholders have developed the Drive Electric Tennessee Roadmap to increase EV adoption rates. In November 2017, the Atlanta City Council passed city ordinance 17-0-1654, calling for the development of EV charging infrastructure in commercial businesses, multifamily units, and residential homes. In November 2018, North Carolina Governor Cooper issued Executive Order 80, setting an EV and other zero-emission vehicle target of 80,000 for the state by 2025.

Despite this increased attention from state decisionmakers, there is a limit to what states can do in isolation, given that roads cross state lines. From Virginia to Florida, people often travel between states for business, family visits, and vacation. Therefore, regional collaboration will be an important aspect of the EV build-out to truly offer expanded transportation options for families and corporate fleets. Furthermore, development of a consistent regional standard for EV charging stations—including administration and interoperability—will simplify the process of building infrastructure throughout the Southeast as well as make it less costly to develop. A concerted effort to develop policies that standardize infrastructure in support of EVs as an accessible option for travel across state borders will increase EV adoption in the Southeast. Transportation accounts for over 35% of total greenhouse gas emissions in the Southeast region.<sup>1</sup> Designed correctly, a regional EV plan can help the Southeast reduce greenhouse gas emissions, improve air quality, and reduce petroleum imports in favor of "home-grown" power. Electrification of the transportation sector provides an opportunity to reduce carbon emissions as well as localized pollution harmful to human health including smog-forming pollutants.<sup>2</sup> Finally, electrification of the transportation sector will reduce reliance on petroleum as we move towards vehicles fueled by the grid.

## DEVELOPING A SOUTHEAST ELECTRIC VEHICLE REGIONAL STRATEGY

States are recognizing the value of collaboration to plan for increased EV uptake. In October 2017, the governors of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming signed a Memorandum of Understanding (MOU) pledging to create an Intermountain West Electric Vehicle Corridor "that will make it possible to seamlessly drive an electric vehicle across the Signatory States' major transportation corridors."<sup>3</sup> Under the MOU,

Interested in developing a Southeast Electric Vehicle Regional strategy? Reach out to Jennifer Weiss at jen.weiss@duke.edu at the Nicholas Institute for Environmental Policy Solutions.

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<sup>&</sup>lt;sup>1</sup> Energy Information Administration (EIA), State Carbon Dioxide Emissions Data, 2016, Released October 31, 2018, https://www.eia.gov/ environment/emissions/state/.

<sup>&</sup>lt;sup>2</sup> Department of Energy (DOE), Reducing Pollution with Electric Vehicles, Office of Energy Efficiency and Renewable Energy, Accessed Jan 25, 2019, https://www.energy.gov/eere/electricvehicles/reducing-pollutionelectric-vehicles.

<sup>&</sup>lt;sup>3</sup> Memorandum of Understanding between Arizona, Colorado, Idaho,

the states have worked together to document existing state policies and develop minimum EV standards for the region.

Similarly, Northeastern states developed the Northeast Corridor Regional Strategy for Electric Vehicle Charging Infrastructure, "to ensure strategic integration of public and private infrastructure investments to build out a charging network that will meet the region's emerging needs." A Southeast Electric Vehicle Regional Strategy could enable states in the region to form a shared vision that will allow EV drivers to travel easily throughout the region, and encourage more to adopt this technology.

Regional collaborative efforts, including REV West and the Northeast Corridor states, have organized to achieve the following goals:

- Develop a plan to build a robust network of charging infrastructure that connects major highway corridors and allows EV drivers to travel easily throughout the region.
- Develop a plan to improve accessibility of EVs in rural communities.
- Identify policies and incentives to support the growth of EV adoption in the region.
- Develop voluntary minimum standards for EV charging infrastructure in the region.
- Identify opportunities to streamline the permitting process for EV charging stations at businesses and residential units.
- Identify opportunities to incorporate EV-ready electrical and building codes that require the incorporation of electrical infrastructure for EV charging stations.
- Establish methods for gathering, sharing, and analyzing EV and EV charging data.
- Identify opportunities for interstate bulk purchases of EV charging infrastructure to reduce capital investment costs.
- Collaborate on a regional plan for marketing, education, and outreach that promotes EV adoption in the region.

Montana, Nevada, New Mexico, Utah and Wyoming, Regional Electric Vehicle Plan for the West, October 2017

A Southeast Electric Vehicle Regional Strategy might strive for similar goals or identify new ones. States could work together to coordinate regional EV infrastructure planning and deployment, collaborate on codes and policies, share industry experience, and nurture interstate working relationships.

## **Useful Resources**

1. Electric Vehicle Outlook 2018, Bloomberg NEF, https://about.bnef.com/electric-vehicle-outlook/.

2. The National Association of State Energy Officials (NASEO), REV West: Electric Vehicle Baseline for Intermountain States, by Cassie Powers, Ed Carley, Sam Cramer, Emma Tobin, and Dylan Tucker, 2018, http://energy.nv.gov/uploadedFiles/ energynvgov/content/Programs/REVWest\_Baseline\_Final\_ Combined.pdf.

3. The Northeast States for Coordinated Air Use Management (NESCAUM), Northeast Corridor Regional Strategy for Electric Vehicle Charging Infrastructure, 2018– 2021, Northeast Corridor Steering Committee, 2018, http:// www.nescaum.org/documents/northeast-regional-chargingstrategy-2018.pdf/view.

4. Memorandum of Understanding between Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming, Regional Electric Vehicle Plan for the West, October 2017, https://www.colorado.gov/governor/sites/ default/files/rev\_west\_plan\_mou\_10\_12\_17\_all\_states\_ final\_1.pdf.