Advancing Electric Vehicle Policy in Pennsylvania

Electrification Coalition

Pennsylvania is one of the five states in the Electrification Coalition's (EC) Electric Vehicle (EV) Policy Accelerator. The EC initiated the program by conducting a state-by-state analysis of six factors: history of EV policy support, EV policy gaps, policy risks, political landscape, EV market share, and existing commitments to renewable energy and carbon emissions targets. We identified Pennsylvania as a state with prime potential for EV policy adoption. Other states in the Policy Accelerator include Michigan, Virginia, North Carolina, and Nevada. In these priority states, the EC works closely with state leaders, industry partners, and a broad set of stakeholders[1] to identify top transportation electrification policy priorities and drive their adoption.

1 Policy Priorities

In 2020, the EC identified the following policy priorities in Pennsylvania:

- Require Transportation Electrification Planning for utilities
- Enable direct-to-consumer EV sales
- Dedicate Regional Greenhouse Gas Initiative dollars for transportation electrification
- Optimize Volkswagen settlement spending
- Enact executive- and agency-level policy that leads to light-duty zero-emission vehicle (ZEV) adoption
- Create medium- and heavy-duty (MHD) EV incentives
- Adopt state fleet electrification targets

2 Outreach & Education

- The EC hosted the Pennsylvania EV policy bootcamp for advocates, policymakers, and stakeholders on September 30, 2020.
- We hosted the following EV policy working groups to provide expertise and share best practices:
  - A monthly PA MHD EV working group meeting to discuss near-term opportunities for PA transportation electrification in the MHD space
  - A bi-weekly PA EV working group, comprising NGOs, industry stakeholders, and other EV advocates
  - A bi-weekly meeting with PA Dept. of Environmental Protection and PA Dept. of Transportation to discuss current EV programs and legislation
- The EC met with key Pennsylvania state legislators throughout 2020 and 2021, and established relationships with staff in legislative offices and the administration.
- Thirty-one PA companies—from small businesses to multinational industry leaders – signed on to a letter urging the governor to join the Multi-State MHD ZEV Memorandum of Understanding (MOU), pledging that all new trucks and buses sold in the state will be zero-emission vehicles by 2050.
- The EC provided testimony in September 2021 at the Senate Transportation Committee hearing on "Vehicle Emissions and Electrification."
- The EC hosted an event in Harrisburg on September 28, 2021, that showcased various EV models and provided an opportunity to engage with committee members on current high-level EV-related bills.

3 EV Wins 2020–2021

- In June 2020, Pennsylvania signed the Multi-State Zero Emission MHD Vehicle MOU, demonstrating that the state is interested in truck and bus electrification.
- A Philadelphia school district has plans to acquire five electric buses for the 2021–2022 school year, and to convert up to 20% of its fleet to ZEVs by 2026.
- In June 2021, DEP celebrated 1,000 level-2 charging stations installed statewide, with funding from the DEP Driving Forward Program.
- The Transportation Revenue Options Commission released a report in August 2021 that shows a mileage-based user fee could serve as a viable option for long-term transportation funding.
- In October 2021, the city of Philadelphia released a plan for the city to electrify 6,000 vehicles in the city fleet by 2030.

4 Future Opportunities

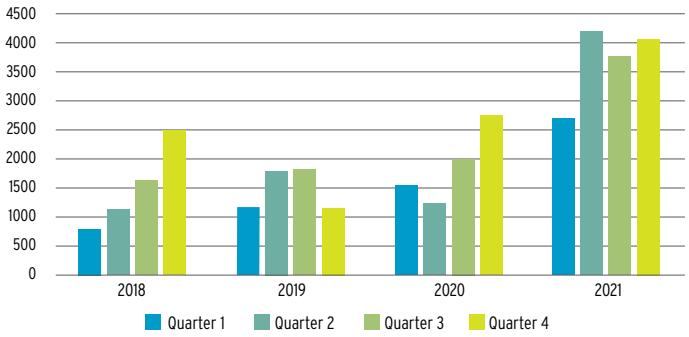
- Ensure state fleet electrification commitments are met, with clear, actionable steps to meeting targets
- Adopt MHD vehicle electrification policies, including adoption of the Advanced Clean Truck rule
- Educate policymakers further on EV policy opportunities for rural and low-income communities, potentially including opportunities for direct EV sales and EV incentive legislation
- Collaborate with Pennsylvania's Department of Transportation and Department of Administration on use of federal funds for EV charging infrastructure
- Support communities, businesses, and other stakeholders on the use of federal funding for EV charging infrastructure and EV deployment, with an emphasis on public–private partnerships
- Develop additional fleet-electrification tools and resources for state policymakers and local governments
- Continue to cultivate EV policy champions
- Advance EV policies and programs at the county level

[1] In Pennsylvania, the EC partners closely with the Pennsylvania Department of Environmental Protection, Pennsylvania Department of Transportation, Advanced Energy Economy, Ceres, American Lung Association, Plug In America, Natural Resources Defense Council, Sierra Club, Mobilify Southwest PA, ChargEVC, Twenty20 Strategies.

Market Analysis

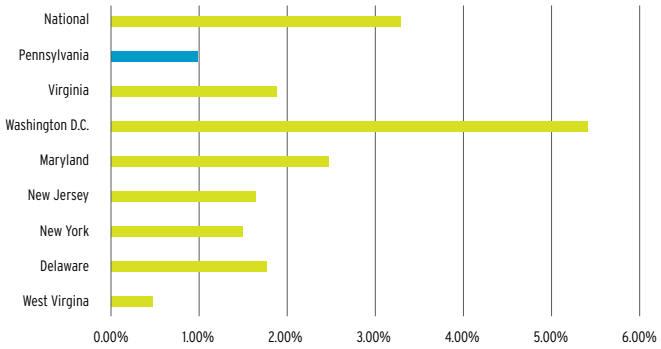
EV market penetration was one of several factors the EC considered before selecting our five EV Policy Accelerator states. We conduct market analysis on a quarterly basis, which helps us make the case for continued policy action and assess the impact of policy victories.
Data source: Atlas Public Policy

Pennsylvania BEV & PHEV Sales, 2018-2021



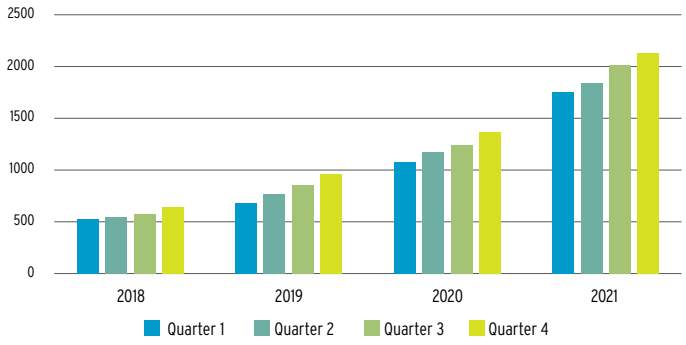
Pennsylvania EV sales have been steadily increasing, except for a temporary drop during the early part of the COVID-19 pandemic in 2020.

EV Market Share, Mid-Atlantic States Since 2019



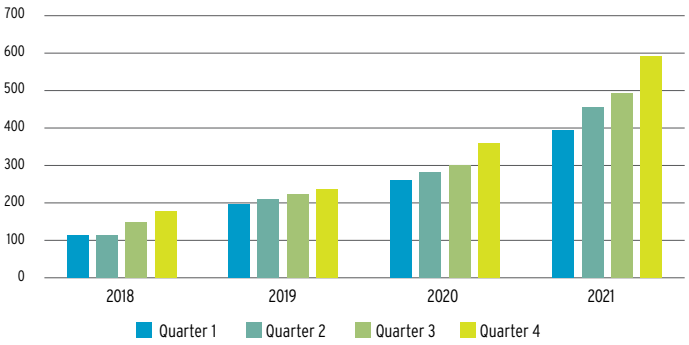
Pennsylvania's EV market share is lower than the national average. Relative to its neighboring states, Pennsylvania falls below average but is tracking steady with New York and New Jersey and is far ahead of West Virginia.

Pennsylvania Level 2 Charging Ports, 2018-2021



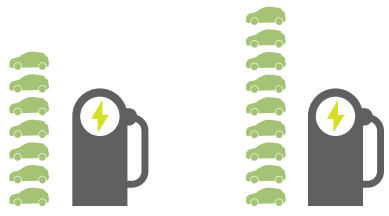
The number of Level 2 charging ports has been increasing consistently during the past several years, with marked growth in 2021.

Pennsylvania DC Fast Charging Ports, 2018-2021



The number of new direct current fast charging ports increased substantially in Q4 2021.

EVs Per Charging Port, Q3 2021



Pennsylvania
7.15

National
9.1

The number of BEVs per public charging port (including Level 1, Level 2, and direct current fast chargers) in Pennsylvania is slightly less than the national average. As EV adoption rates continue to rise, it will be important for the state to continue to foster charging infrastructure development.

Data source: Doll, Scooter. "The best (and worst) US states for EV charging." *Electrek*, last modified January 23, 2022. https://electrek.co/2022/01/23/the-best-and-worst-us-states-for-ev-charging/.