

## Survey Report: 2019 Electric Vehicles & Virginia Consumer Survey

### Overview

This report highlights the key findings from a survey designed to explore perceptions of electric vehicles among Virginia residents. This survey was conducted online from August 23–27, 2019, using a sample and platform provided by the national market research firm Dynata. The following analysis is based on a sample of 325 Virginians age 25 and older with college degrees and household incomes >\$75,000/year, and targeted residents of Fairfax County (144 responses / 44%), Richmond metro area (101 responses / 31%), Roanoke metro area (63 responses / 19%), and Charlottesville metro area (17 responses / 5%), and has a 95% confidence level and a margin of error +/- 5.5%. These demographic criteria were selected to roughly correspond with that of potential EV buyers (according to recent national data). Survey analysis was conducted by an independent researcher specializing in environmental science at the University of Virginia.

### Key Findings at a Glance

The survey reveals a number of findings of interest to parties with direct or indirect interest in driving the electric vehicle market forward and electrifying Virginia’s transportation sector:

- **Nearly three-quarters of respondents had a positive view of electric vehicles.** When asked, “Given what you know, what is your perception of EVs?”, 73% responded as having a “somewhat” or “very” positive view of electric vehicles.
- **45% of respondents would be likely to consider buying an EV.** 45% responded “somewhat” or “very” likely (assuming they were in the market for a new car within the next two years).
- **Support for Virginia’s transition from fossil fuels to clean energy is strong.** When asked, “How important is it to you that Virginia reduce its dependence on fossil fuels and transition to clean energy?”, 73% of respondents said it was “somewhat” or “very” important.
- **Similarly, nearly three-quarters of these Virginians support state-level EV incentives.** 73% of respondents “strongly support” or “support” Virginia offering an EV incentive.
- **Savings on fueling costs is the biggest motivator to purchasing an EV.** Of the benefits presented, “savings on gasoline costs” ranked #1, with 82% of respondents reporting it would make them “much more” or “somewhat more” likely to purchase an electric vehicle. “Better for the environment” and “ability to apply for a tax credit” were both cited as the second highest benefits to purchasing an EV at 70%.
- **Availability/proximity of charging stations and higher up-front costs,** at 70% and 62% respectively, are perceived as the top two barriers to purchasing an electric vehicle. This highlights the opportunity for public education around: 1) the range of the latest EV models and prevalence of home-charging, and 2) the lower cost of ownership of new EV models.

## Topline Results

Q1. Do you currently lease or own an electric vehicle or plug-in hybrid vehicle?

- Yes.....9.2%
- No.....90.7%

Q2. How much have you seen, read, or heard about electric vehicles?

- A lot.....17.8%
- Some..... 53.5%
- Not much .....26.2%
- Nothing at all ..... 2.5%

Q3. Given what you know about electric vehicles, what perception do you have of them?

- Very positive .....28.6%
- Somewhat positive ..... 44%
- Somewhat negative .....13.2%
- Very negative .....3.4%
- Neutral ..... 10.8%

Q4. Assuming you were in the market for a new car within the next two years or so, how likely would you be to consider buying or leasing a plug-in electric vehicle?

- Very likely ..... 16.3%
- Somewhat likely .....28.6%
- Not very likely.....30.8%
- Not at all likely.....20.3%
- Neutral ..... 4.0%

Q5\_1 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Better for the environment**

- Much more likely .....29.5%
- Somewhat more likely ..... 40.3%
- No difference .....26.2%
- Somewhat less likely ..... 1.5%
- Much less likely ..... 2.5%

Q5\_2 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Savings on gasoline costs**

- Much more likely ..... 38.2%
- Somewhat more likely ..... 44.0%
- No difference ..... 16.9%

- Somewhat less likely .....0.3%
- Much less likely ..... 0.6%

Q5\_3 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Convenience of re-powering**

- Much more likely .....20.3%
- Somewhat more likely .....32.0%
- No difference ..... 23.7%
- Somewhat less likely ..... 14.8%
- Much less likely ..... 9.2%

Q5\_4 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Ability to apply for tax credit**

- Much more likely ..... 25.8%
- Somewhat more likely .....44.3%
- No difference .....26.8%
- Somewhat less likely ..... 1.8%
- Much less likely ..... 1.2%

Q5\_5 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Quantity of car choices across electric car models**

- Much more likely .....17.5%
- Somewhat more likely .....32.4%
- No difference .....34.3%
- Somewhat less likely .....10.8%
- Much less likely .....5.0%

Q5\_6 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Unavailability or distance of charging stations**

- Much more likely .....7.4%
- Somewhat more likely ..... 9.5%
- No difference ..... 12.9%
- Somewhat less likely .....34.5%
- Much less likely ..... 35.7%

Q5\_7 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Duration of recharging**

- Much more likely .....9.2%
- Somewhat more likely ..... 14.5%
- No difference .....20.6%
- Somewhat less likely ..... 37.5%
- Much less likely ..... 18.2%

Q5\_8 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Higher up-front car costs**

- Much more likely .....4.9%
- Somewhat more likely ..... 9.2%
- No difference ..... 23.7%
- Somewhat less likely ..... 38.2%
- Much less likely ..... 24.0%

Q5\_9 Do each of the following factors make you more likely, less likely, or make no difference at all when thinking about purchasing an electric vehicle? - **Fewer model options compared to gas-powered cars**

- Much more likely ..... 3.1%
- Somewhat more likely ..... 7.1%
- No difference ..... 33.2%
- Somewhat less likely ..... 38.5%
- Much less likely ..... 18.2%

Q6. As you may know, some states offer incentives for buyers and lessees of electric vehicles. Do you support or oppose Virginia offering such an incentive?

- Strongly support .....32.0%
- Support..... 40.9%
- Oppose..... 8.0%
- Strongly oppose .....4.6%
- Neutral ..... 14.5%

Q7. In 2017, Virginians spent over \$33 million dollars per day on imported gasoline and diesel. How important is it to you that Virginia reduce its dependence on fossil fuels and transition to clean energy?

- Very important .....36.6%
- Somewhat important.....36.3%
- Not very important .....10.8%
- Not at all important .....5.8%
- Neutral ..... 10.5%