



Using market research to inform your EV efforts

Highlights from the 2020 E Source Electric Vehicle Residential Customer Survey

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Key takeaways

- Most respondents considering purchasing or leasing an electric vehicle (EV) are planning to do it in the next five years.
- Respondents who don't have an EV are concerned about EV costs and having enough charge to get to their destination.
- You can increase EV adoption by creating a seamless EV buying experience. Provide clear, useful information on your website and work with dealerships to educate customers.
- You can contact us to get more insights from the survey to help you implement EV initiatives at your utility.

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Study methodology and COVID-19

We fielded the survey online in April and May of 2020. The survey included 8,047 residential customers.

Of those customers, 7,347 respondents were in the US and 700 were in Canada. We recruited participants using a purchased sample of US and Canadian residential households from [Dynata](#), a global online market research firm. We set quotas for age, gender, income, and geographical location. We oversampled respondents who own or rent an all-electric or plug-in hybrid EV (n = 1,016 respondents). We weighted the sample to reflect EV adoption rates while staying within population norms.

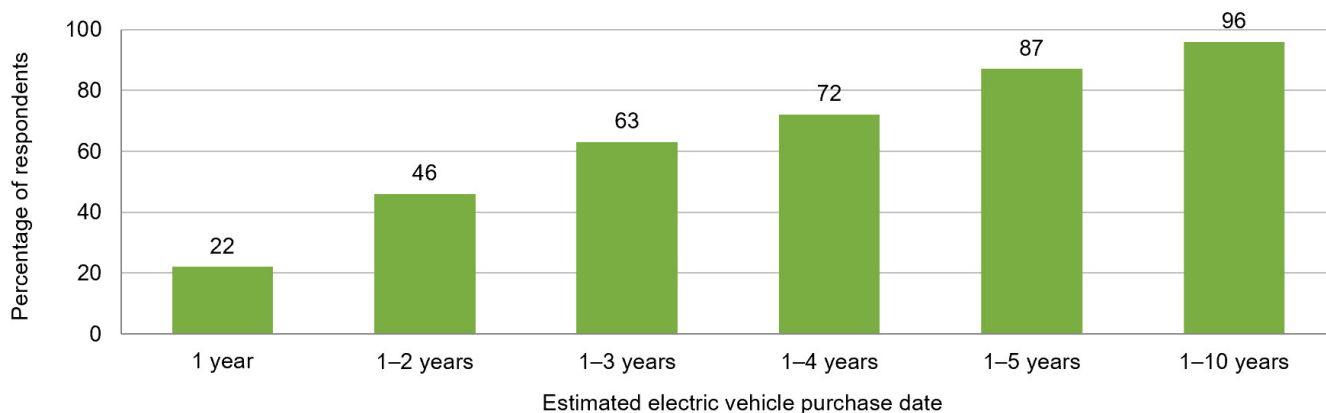
We conducted this survey during the COVID-19 pandemic and asked respondents to answer questions as they would have before the pandemic.

Close to 90% of respondents interested in purchasing an EV expect to buy one in the next five years (**figure 1**). To help you strengthen your EV strategies and support EV adoption in your territory, we compiled key findings from the 2020 E Source [Electric Vehicle Residential Customer Survey](#). The study focused on five topics:

- Customers' interest in all-electric vehicles
- Influences on customers' EV purchase
- Customers' barriers to EV purchase
- EV owners' charging habits
- EV owners' driving habits

Figure 1: When customers expect to purchase an EV

This graph shows the cumulative number of respondents who expect to buy or lease an EV within the given timeframe. For example, the 46% of respondents that indicated they would buy or lease an EV within two years includes the 22% of respondents who said they would buy or lease an EV within one year. Our survey results show that 96% of respondents who are interested in getting an EV will do so by 2030.



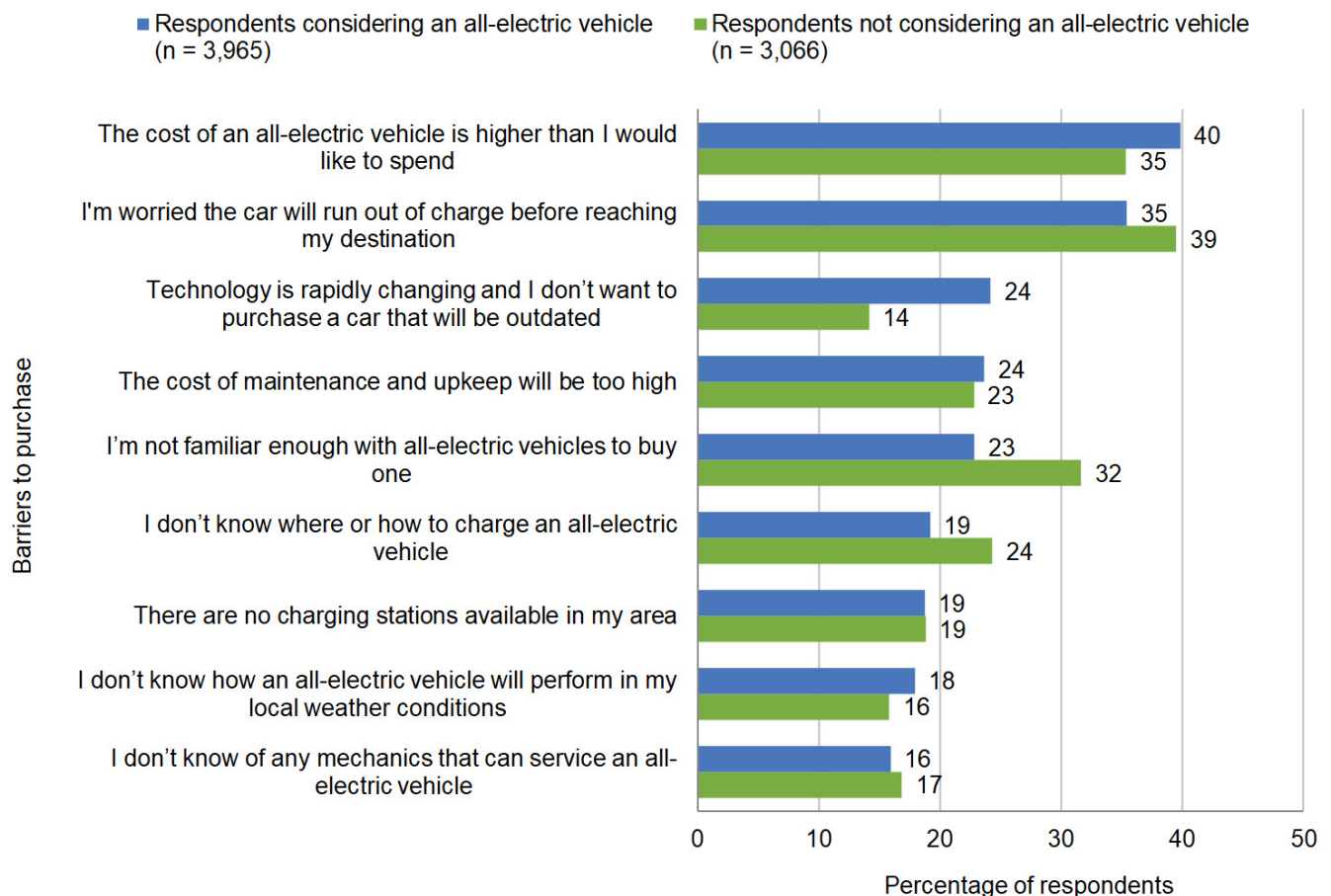
Base: Respondents from the US or Canada who are interested in purchasing or leasing an all-electric vehicle, n = 4,399. **Question S1_17:** When do you anticipate purchasing or leasing an all-electric vehicle? © E Source (2020 Electric Vehicle Residential Customer Survey)

Alleviating customers' concerns about EVs

Potential EV customers still have many barriers to purchasing an EV (**figure 2**). To alleviate customers' concerns, offer EV technologies and programs to meet your customers' needs.

Figure 2: Top barriers to purchasing an all-electric vehicle

Over one-third of respondents who don't already own an EV are most concerned with the cost to purchase an EV and have range anxiety.



Base: Respondents from the US and Canada who don't currently own a BEV or PHEV, n varies. **Question S2_4a and S2_5a:** What are the primary reasons preventing you from purchasing or leasing an all-electric vehicle? Select all that apply. **Note:** BEV = battery electric vehicle, PHEV = plug-in hybrid electric vehicle. © E Source (2020 Electric Vehicle Residential Customer Survey)

Our [Technology Assessment Service](#) can help you determine the EV products best suited for your service territory. For example, we found that customers who already own an EV are more likely to use Level 2 charging than Level 1. We can help you choose the right charging technologies and vendors to promote in your service territory. We can also help you target exact locations to install Level 2 charging stations. [Contact us](#) to learn more.

After determining the best technologies for your territory, our [Distributed Energy Resource Strategy Service](#) can help you design and

implement EV programs.

Addressing cost concerns. Fifty-nine percent of respondents who are concerned about EV costs want information on the up-front and maintenance costs of an all-electric vehicle. Provide an online calculator or vehicle comparison chart to help customers understand the costs of owning or leasing an EV.

Educating customers about the technology. Consider hosting ride-and-drive events and offering rebate and education programs with local dealerships. These events and programs can help customers understand the technology.

Relieving range anxiety. To reduce customers' worries about EVs running out of charge, you could expand your charging network to include multifamily buildings, parks, and grocery stores.

Creating a seamless customer experience

While EV adoption is in its early stages, focus on creating a great prepurchase experience and motivating customers to adopt EVs. Customer experience leaders at utilities should work closely with marketing and communications teams to raise awareness and encourage customers to buy EVs.

Because customers are looking online for information, your website is a key opportunity to deliver this information to them and position yourself as a trusted EV expert (**figure 3**). Find ways to personalize the website experience for customers and lead them to ride-and-drive events.

Figure 3: Top six ways potential EV buyers interact with EVs

Your customers are interacting with EVs with or without you. Respondents who are considering buying an EV are most likely to search online for information on EVs, so focus on your online presence.

Interactions with all-electric vehicles	Percentage of respondents
Searched online for information about all-electric vehicles	46
Watched a commercial, ad, television program, or online video about all-electric vehicles	41
Talked a coworker, friend, or family member who has an all-electric vehicle	36
Read a book or news article about all-electric vehicles	34
Researched charging technologies for all-electric vehicles	29
Looked up the location of public chargers near me	27

Base: US and Canadian respondents who are considering purchasing or leasing an all-electric vehicle, n = 3,965.
Question S1_18a: Please select all of the statements that apply to you and your interactions with all-electric vehicles. Select all that apply. © E Source (2020 Electric Vehicle Residential Customer Survey)

To learn more about how to educate and encourage customers to purchase an EV, check out our [Customer Experience Strategy Service](#).

How to find more research on EV technologies, programs, and customer experience

efforts

Whether you're just starting to develop EV initiatives or you want to improve your existing efforts, E Source is here to help. If you're an E Source member and would like to see more examples of our EV research, visit our [Electric vehicle resource center](#). If you aren't an E Source member, contact us to learn more about our Technology Assessment Service, Distributed Energy Resource Strategy Service, and Customer Experience Strategy Service.

To learn more about our findings from the Electric Vehicle Residential Customer Survey, [contact us](#).