



The Home Charging Experience

January 2024

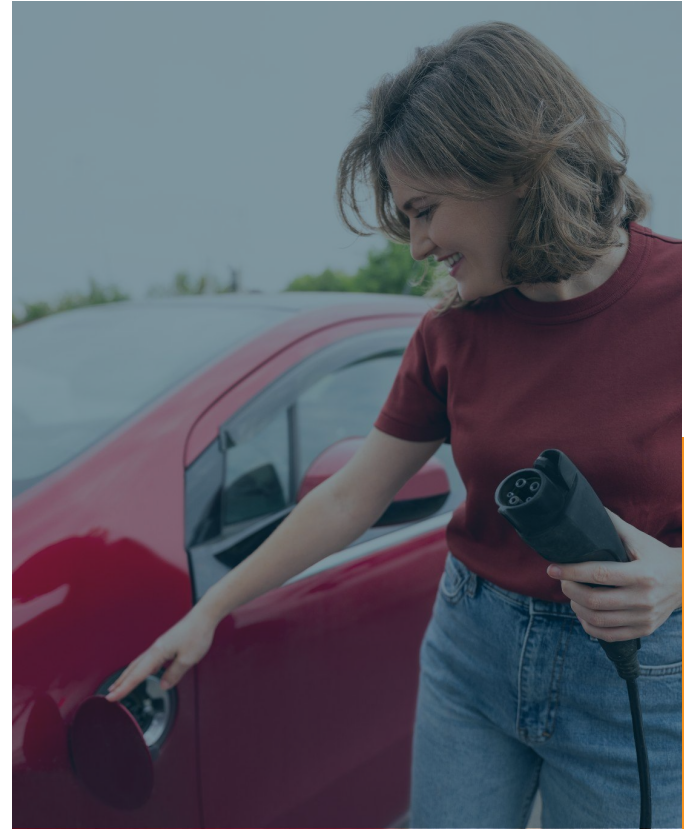
Methodology

This survey was conducted online over a three-week period from Nov. 8 to Nov. 29 of 2023. It was composed of 2,792 respondents.

To see the demographics of the survey respondents, please click [here](#) to move to slide 13.

The intent of our survey was to better understand the experience for both homeowners and renters, as we asked questions about private chargers and shared chargers. Since the vast majority of respondents are homeowners who have private home charging stations, the margin of error on percentages provided for those with shared chargers is much higher than for those with private/personal chargers.

Respondents were asked questions about what kind of charger they have at home, how and when they charge their EVs at home, their experience in charging their EVs at home, and more.





Main findings

Consumers use home charging often and usually overnight.

Over 80% of respondents charge their EVs at home at least once or twice a week. While those in multi-family housing also charge at home frequently, respondents from single-family homes are more likely to charge at home daily.

Access to home charging is impactful in the decision to get an EV, albeit less so for some consumers.

While almost 70% of respondents answered that access to home charging was at least influential in their decision to buy or lease an EV, home renters and younger consumers are more likely to have found ways to adapt without them.

Homeowners with private chargers find the home charger station installation process to be positive.

87% of respondents with private chargers found the overall installation process to be positive. This is largely driven by factors outside of cost, as only 38% of respondents used rebates to reduce the cost of home charger station installation.

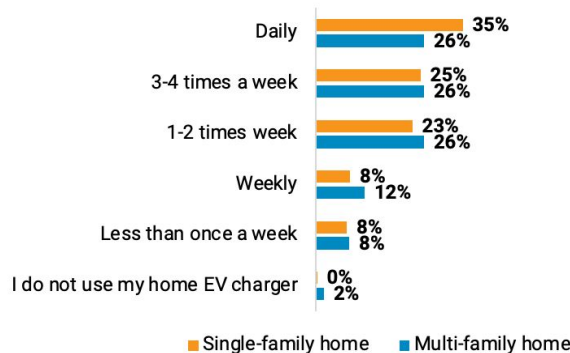
Consumers charge at home often, usually overnight.

Consumers charge at home frequently, with almost 60% of respondents answering that they charge at home either daily or 3-4 times a week.

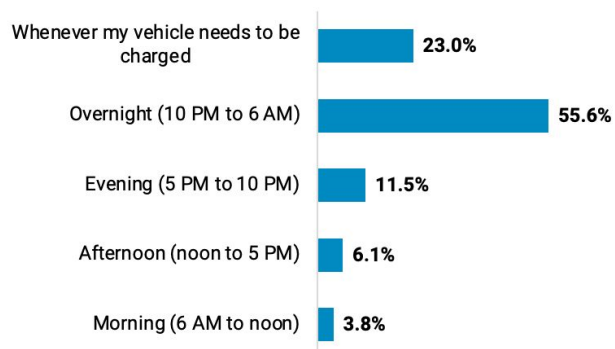
Consumers are most likely to charge overnight, with about 56% of respondents answering that they charge at home between 10 PM and 6 AM. This is true for respondents across different housing types and demographics.

Respondents in multi-family housing charge at home frequently but less so than those in single-family housing. 52% of respondents in multi-family housing charge either daily or 3-4 times a week.

How often do you use your home charger?



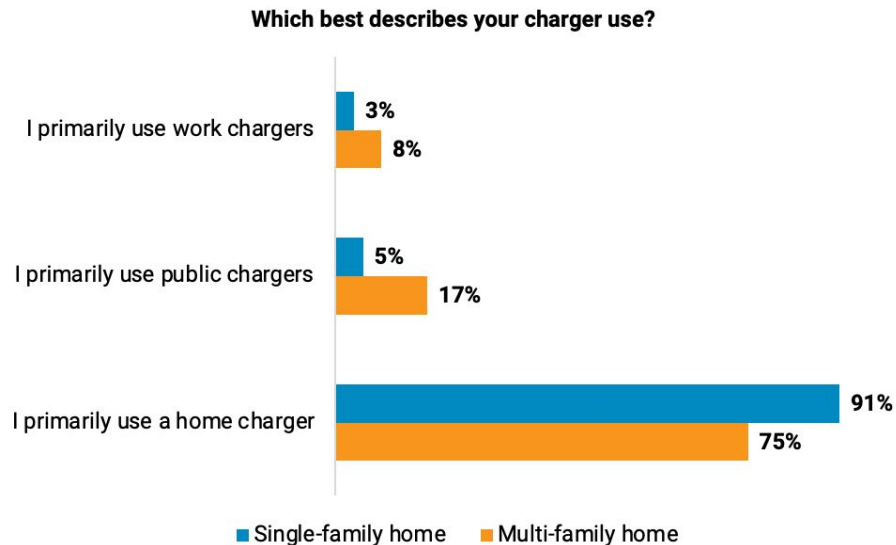
What time of day you primarily charge your EV?



Respondents depend on home charging, but those in multi-family housing are more likely to use public or work chargers.

Overall, about 90% of all respondents primarily use a home charger. 91% of those in single-family housing primarily use one, compared to 75% of those in multi-family housing.

Those who don't primarily use home chargers are more likely to use public chargers than work chargers. 17% of respondents in multi-family housing primarily use public chargers, while 8% use work chargers.

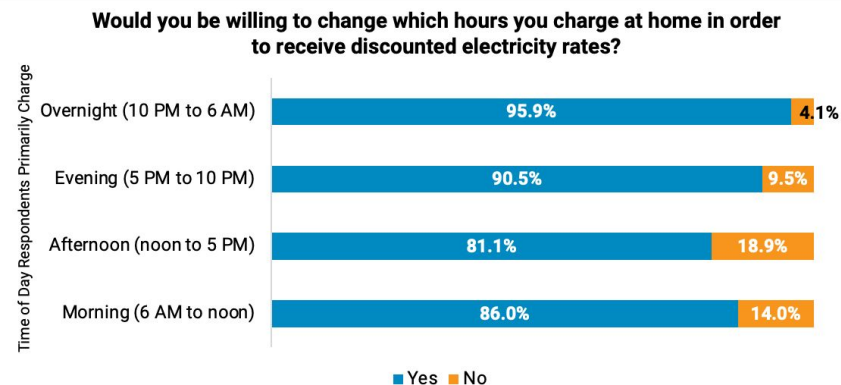


No matter what time consumers usually charge at home, they are willing to change charging hours for discount.

Overall, about 92% of respondents said that they would be willing to change which hours they charge at home in order to receive discounted utility rates.

Consumers who primarily charge their EVs overnight were most likely to say they would be willing to change their charging hours, with almost 96% saying so.

Across the board, consumers are willing to change their charging hours if informed of what kind of discounts they can receive.

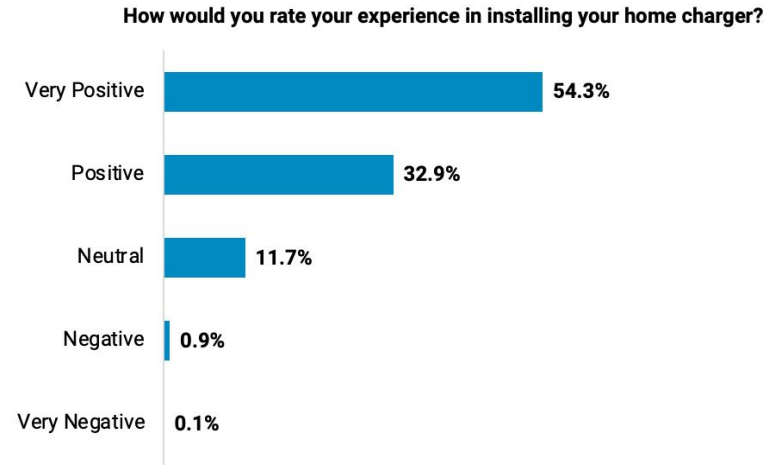


Consumers who have installed a home charger have found the experience to be positive.

Consumers who have been through the home charger installation process have found their experience to be either positive or very positive, with about 87% of respondents saying so.

Only 1% of respondents found the process to be negative, with only 3 respondents out of over 2,500 answering that it was very negative.

This is especially staggering as only 38% of consumers reported using rebates to reduce the costs of installation. Reduced costs on top of an easy process would only further maximize the experience of home charger installation.



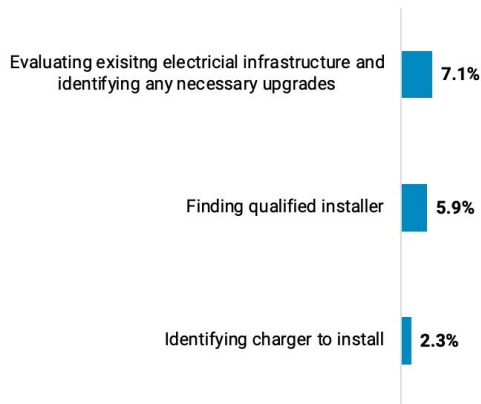
Due to rounding percentages, sum of values does not add up to exactly 100%.

Consumers with home charger stations haven't found many challenges with their installation process.

Although few respondents reported difficulty in the home charger installation process, the most common difficulty found was evaluating existing infrastructure and identifying necessary upgrades

People unfamiliar with electrical infrastructure or new to EVs are likely to experience similar problems, so these numbers could stand to grow as more consumers dive into the EV world.

Did you have difficulty with any of the following steps of the installation process?



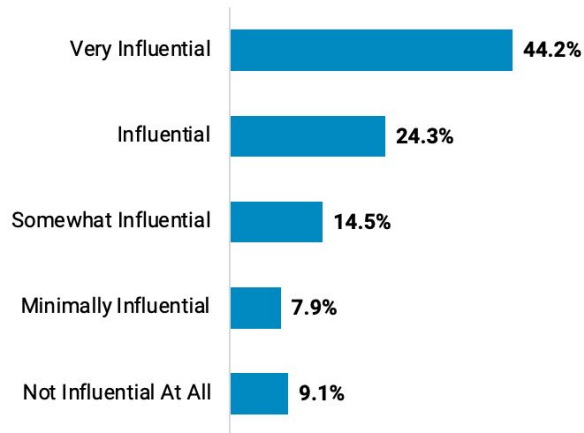
Access to home charging is an influential factor, albeit less so for those who are renters.

Overall, about 69% of respondents found access to home charging to be at least influential in their decision to buy or lease an EV.

Our survey sample heavily skewed towards respondents who own homes and have private chargers, so access to home charging being an influential factor is unsurprising.

51% of renters view access to home charging as influential, while 18% of renters said it was not influential at all.

How influential was access to home charging in your decision to buy or lease an EV?

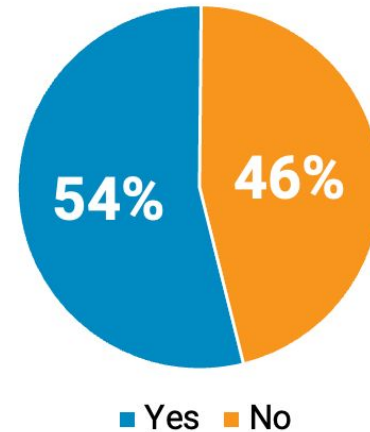


Consumers are split on if they'd be able to drive an EV without access to home charging, breaking upon age and home ownership/rental lines.

54% of respondents answered that they would be able to drive an EV without access to a home charger, compared to 46% of respondents who said they would not be able to.

74% of home renters said they would be able to drive an EV without access to a home charger. Furthermore, about 67% of respondents in multi-family housing said they would be able to, along with about 60% of respondents below the age of 45.

Given your experience with an EV, would you be able to drive an EV without access to a home charger?

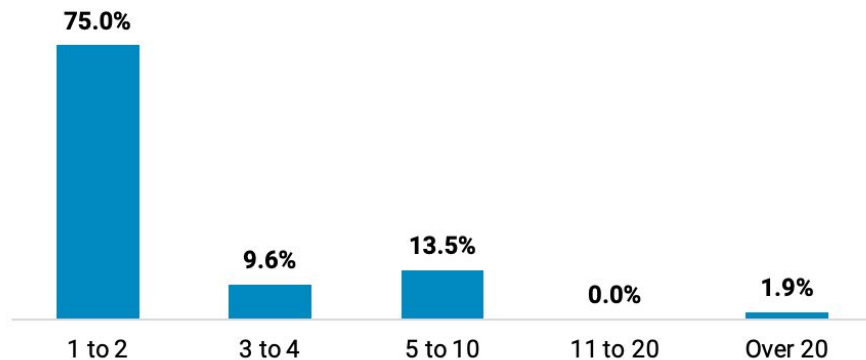


Among those who do have shared chargers at home, most only have 1 or 2.

75% of respondents with shared chargers answered that they only have access to 1 or 2 chargers in their home spaces.

An additional 9.6% have access to 3 to 4 chargers, while 13.5% have access to 5 to 10 chargers.

How many chargers are available at your home residence?



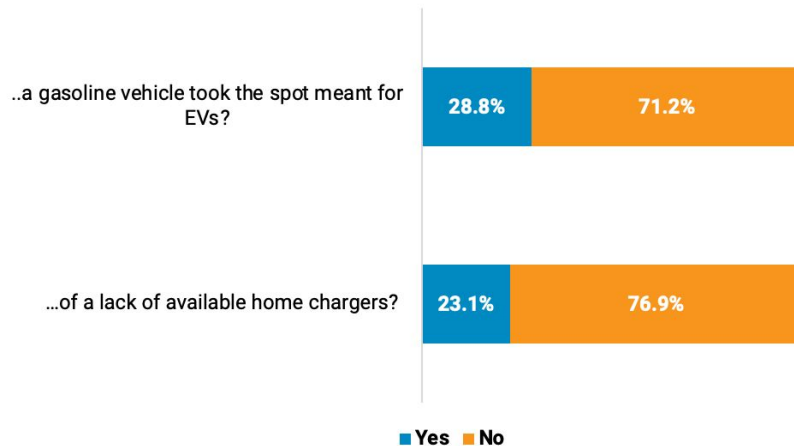
Sample of those with a shared charger was much smaller than those with private chargers (52 respondents total). Thus, this data has a much higher margin of error than data displayed previously.

Those with shared chargers are typically able to charge when they need to.

A total of 30% of respondents reported being unable to use a shared charger at home at one point.

Almost 29% reported being unable to charge because a gasoline vehicle took the spot meant for an EV, while 23% were unable to because there weren't enough available chargers.

Have you ever been unable to charge your EV because...



Sample of those with a shared charger was much smaller than those with private chargers (52 respondents total). Thus, this data has a much higher margin of error than data displayed previously.

Demographics

Age Range	Percentage
18-24	0.2%
25-34	1.6%
35-44	7.8%
45-54	13.8%
55-64	25.0%
65-74	34.0%
75+	17.6%

Race/Ethnicity	Percentage
Asian/Asian American or Pacific Islander	4.6%
Black or African American	2.5%
Hispanic or Latino	3.2%
White	85.1%
Other	1.5%

Some respondents declined to specify.

Gender Identity	Percentage
Male	82.2%
Female	17.5%
Nonbinary	0.3%

Some respondents either declined to specify or answered that they would prefer to self-describe.

Demographics

Do you own or lease an EV?	Percentage
Yes, I own an EV	93.4%
Yes, I lease an EV	6.0%
No	0.6%

Which best describes your home residence?	Percentage
Single-family home	89.1%
Multi-family housing (2-5 units)	6.2%
Multi-family housing (6+ units)	4.5%
Other	0.2%

Do you have access to EV charging at your home residence?	Percentage
Yes	95.9%
No	4.1%

Do you own or rent the residence you live in?	Percentage
Own	95.1%
Rent	4.9%

What type of home charging do you have access to?	Percentage
Level One Charging	27.4%
Level Two Charging	86.5%



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