



State of Vermont Electric Vehicle Incentive Program Incentive Recipient Survey Report



March 2022

Introduction

On behalf of the Vermont Agency of Transportation (VTTrans), VEIC developed and fielded survey research to understand the motivations, experiences, and demographics of Vermonters who received the state’s incentive for new plug-in electric vehicle (PEV) purchases.¹ This incentive was available to income-qualified Vermonters purchasing or leasing a new PEV with a base price of \$40,000 or less.

This report describes the research method and summarizes key findings from the research. It includes two appendices: Appendix A includes the survey instrument and Appendix B contains detailed survey response data for all questions.

Response data are cross tabulated with factors of interest (e.g., household income, PEV vehicle type, etc.) in instances the research team found differences correlated with factors that may be relevant to future incentive program designs.

Method

The survey represents recipients of the State of Vermont incentive for new PEVs between February 2019 and January 2022. The survey was fielded in February 2022. The survey instrument is in Appendix A.

As of the time of survey fielding, 1,134 incentive recipients had email addresses on file, 20 had no email address on file but did have a phone number, and 35 had neither a phone number nor an email address on file. All 1,134 incentive recipients with an email address on file were sent an email invitation to take the survey. Recipients who did not respond to this invitation were sent up to two follow up email invitations. This yielded 491 complete responses (41% of incentive recipients). After those reminder emails, VEIC staff made attempts to complete the survey by phone with 181 of the 663 remaining incentive recipients (643 with email who did not respond, 20 with a phone number and no email). This yielded 46 complete responses over the phone (4% of incentive recipients) and 11 responses from incentive recipients who completed the survey online after phone contact (1%). The overall response rate was 46%.

Table 1. Response rate

Contact information available	Email and phone	Phone only	Neither phone nor email	Total
# of incentive recipients	1134	20	35	1189
# of online responses	502	0	0	502
# of phone responses	43	3	0	46
Response rate	48%	15%	0%	46%

¹ The survey did not include recipients of the separate State-funded MileageSmart incentive program administered by Capstone Community Action supporting used high-efficiency vehicle purchases by income-qualified Vermonters.

Using phone call follow ups with a sample of the incentive recipients who did not respond to the email invitation allows for management of nonresponse bias (i.e., skew in data if people who did not respond are systematically different than people who did respond). The data in this report are weighted by survey completion method, except where indicated, so as not to overrepresent the population that was responsive to the email invitation. For example, incentive recipients who did not respond to the email invitation had a higher likelihood of having an annual household income of less than \$35,000. Weighting the data gives this lower-income group, which is underrepresented in the data from online survey completions, more accurate representation.

The margin of error for questions asked to all respondents is $\pm 3\%$ at a 95% confidence interval. Margin of error for each question varies with sample size for that question.

Key findings

Demographics

Compared to the Vermont population², incentive recipients are...

- Older (85% of incentive recipients are 40 or more years, 68% of adult Vermonters are 40 or more years old).
- More likely to have an annual household income³ between \$50,000 and \$149,999 (68% of incentive recipients vs. 49% of the Vermont population), and about half as likely to have an annual household income of less than \$35,000 (15% of incentive recipients vs. 28% of the Vermont population).
- More likely to live in a single-family home (81% of incentive recipients vs. 70% of the Vermont population) and to own this home (86% of incentive recipients vs. 71% of the Vermont population).
- More likely to live in Chittenden County (37% of incentive recipients vs. 25% of the Vermont population).

² Vermont population data source: 2019 American Community Survey

³ Income reported in this survey is annual household income at the time of the survey. Eligibility for the State of Vermont PEV incentive was based on individual or joint adjusted gross income (AGI) at the time of the application.

Table 2. Annual household income

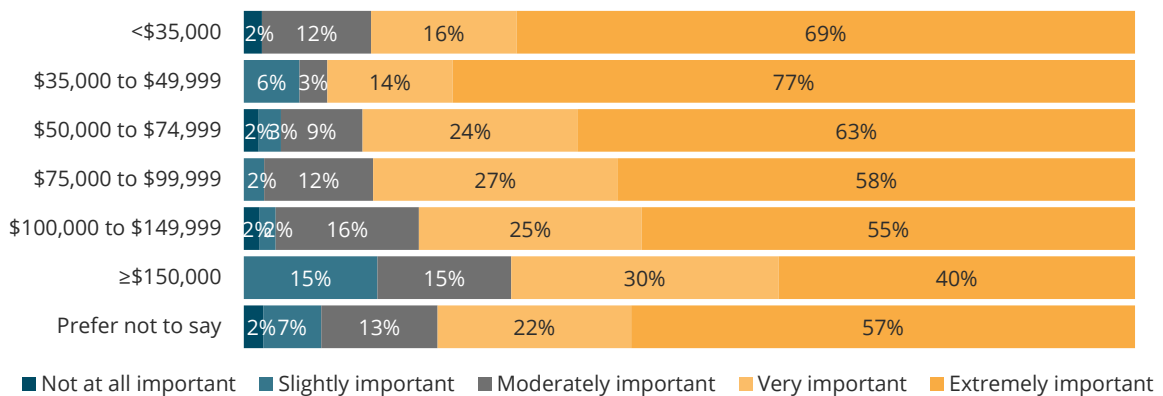
Income category	Vermont population	Incentive recipients
Less than \$10,000	5%	0%
\$10,000 to \$14,999	5%	1%
\$15,000 to \$24,999	9%	3%
\$25,000 to \$34,999	9%	11%
\$35,000 to \$49,999	12%	13%
\$50,000 to \$74,999	19%	23%
\$75,000 to \$99,999	14%	24%
\$100,000 to \$149,999	16%	22%
\$150,000 or more	11%	3%
<i>8% of respondents did not report their income</i>		

Appendix B includes a full report of demographic data collected via this survey.

State incentive

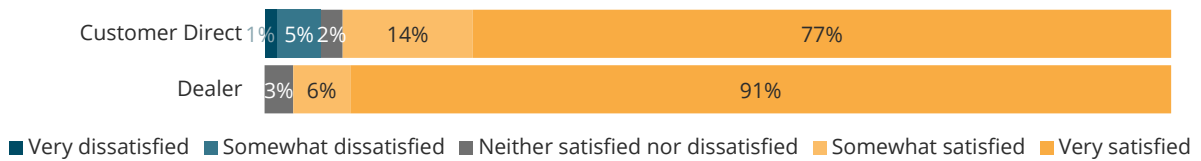
Almost all respondents indicated the state incentive had some importance in making their purchase of a PEV possible. Lower income respondents were more likely to indicate that the incentive was “extremely important” than higher-income Vermonters.

Figure 2. Importance of State incentive to PEV purchase decision, by income range



A majority of respondents were satisfied with the process of applying for and receiving the incentive. Those who received the incentive through their dealer were particularly satisfied with the process.

Figure 3. Satisfaction with incentive process, by incentive payment method



Dissatisfaction with the process typically centered on challenges with the pre-approval process, which was required for all consumer-direct incentives.

This pre-approval is ridiculous. Most people don't know about it until they are at the dealer buying the car.

It was not clear up front that I needed to get pre-approval.

I felt like the process of getting approved for a rebate and then applying for the rebate was redundant.

Half of respondents reported learning about the state incentive from either their salesperson (25%) or the Drive Electric Vermont website (25%). Other relatively common sources included their electrical utility, a friend or family member who drives a PEV, or a non-profit organization.

Other incentives

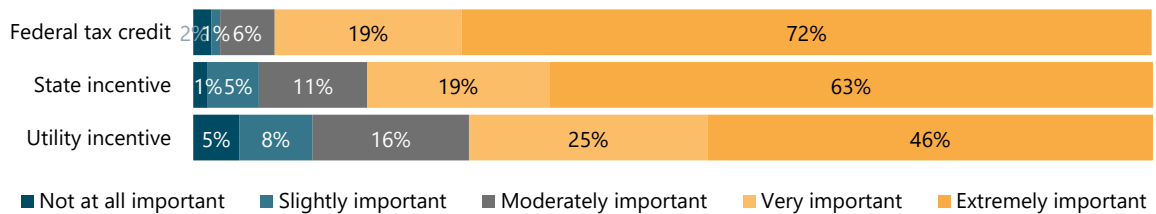
Most recipients of the State of Vermont PEV incentive also received an incentive from their utility and the federal government tax credit. More respondents indicated uncertainty about their participation in the federal tax credit program than in their utility's incentive program.

Figure 4. Participation in utility incentive and federal tax credit programs



The degree to which respondents reported each incentive was important to enabling their purchase of a PEV correlates with the maximum size of that incentive (e.g., the federal tax credit was rated as “extremely important” more than either other incentive and it has the largest potential value). At the time this survey was fielded, the maximum value of the federal tax credit was \$7,500 and the maximum value of the state incentive was \$4,000. The value of utility incentives varied. Green Mountain Power, the largest utility in the state, offered an incentive with a maximum value of \$2,500.

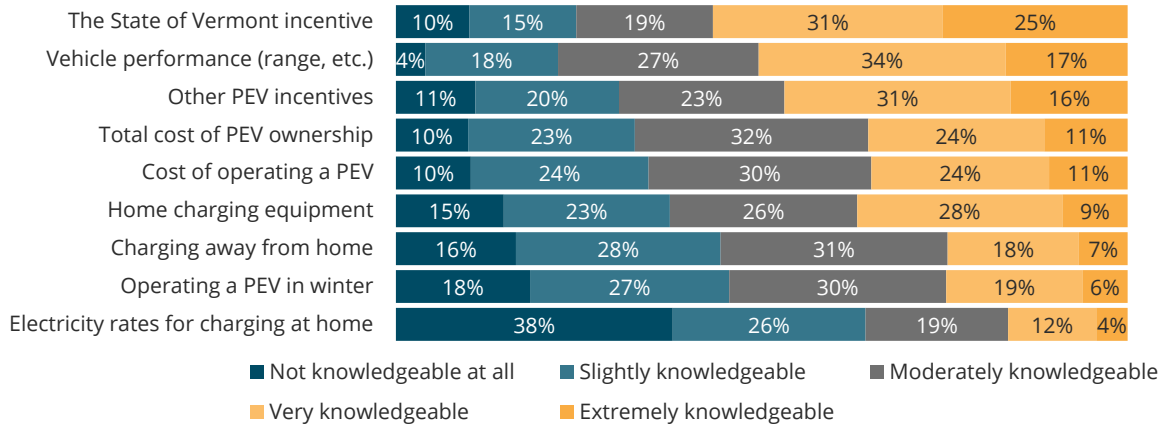
Figure 5. Importance of incentive to PEV purchase decision, by incentive



Salesperson experience

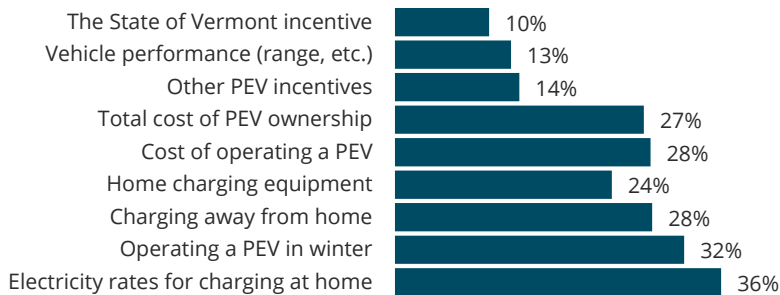
Respondents report working with salespeople who, on average, have a moderate understanding of PEV-related topics. The chart below shows data from respondents who discussed the listed topics with their salesperson.

Figure 6. Salesperson knowledge of topics discussed with respondents



This chart shows the proportion of respondents who did not discuss the topics listed below with their salesperson.

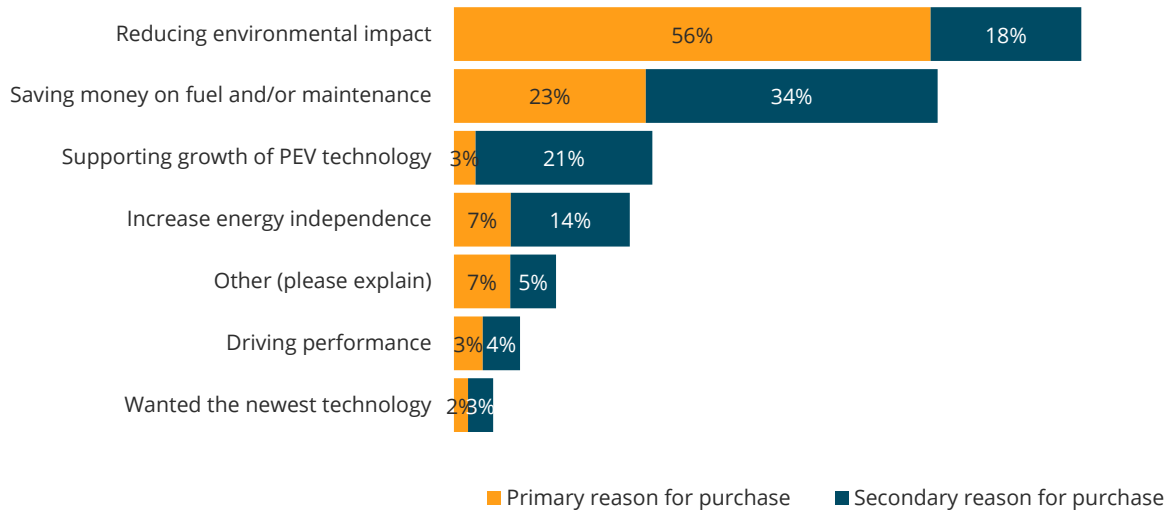
Figure 7. Respondents who did not discuss a topic with their salesperson



Motivations and concerns related to PEV purchase

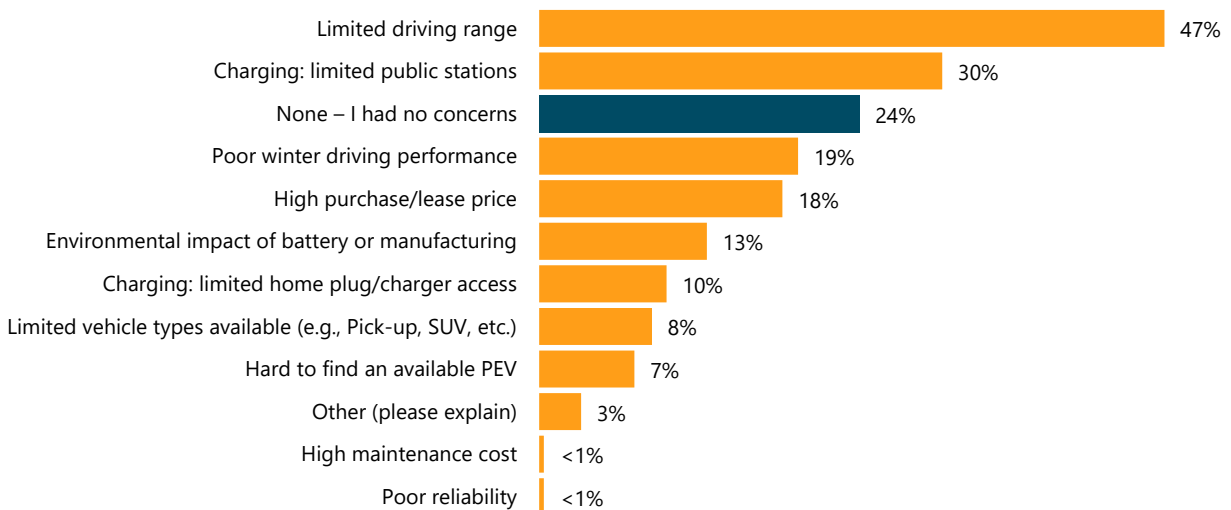
Environmental concerns and ongoing operational costs were the most cited reasons for choosing a PEV. Many of the “other” responses related to incentive availability, low lease price, or indicated “all of the above.”

Figure 8. Motivations for choosing a PEV



Respondents' concerns about PEVs related primarily to driving range and charging in public. Nearly a quarter of respondents indicated they had no concerns choosing a PEV rather than an internal combustion vehicle. "Other" concerns related to cargo space and a range of other topics.

Figure 3. Concerns about choosing a PEV



Few (17%) of respondents considered purchasing a pre-owned PEV. The most commonly cited reasons for preferring a new PEV related to the relatively low incentivized prices to purchase or lease a new PEV ("Price for pre-owned PEV was higher than new PEV with incentives," "Monthly

payment was too high on pre-owned"), a preference for the longer range offered by current-generation PEVs, and limited availability of suitable used PEVs (which may relate in part to the preference for the longer ranges of current-generation PEVs).

Almost all respondents were satisfied with their vehicle (92% for all-electric vehicle owners, 97% for plug-in hybrid vehicle owners).

Appendix A: Vermont PEV Incentive Participant Survey Instrument

This survey instrument is written to achieve research objectives described by VTTrans and, when possible, do so using questions that allow comparison with results from the California Clean Vehicle Rebate Project survey.⁴ Questions preceded by * are questions taken from that survey, with minor language modifications.

Values preloaded from incentive data

- Incentive type: Lease, Purchase, Preapproval
- Incentive option: Customer Direct, Dealer
- Incentive Amount: [various]
- City: [various]
- County: [various]
- Electric Utility: [various]
- Dealership: [various]
- Date of sale: [various]
- Car Model: [various, format: brand model (e.g., Nissan LEAF Plus)]
- Vehicle Type: AEV, PHEV
- Purchase Price: [various]
- Date Of Sale: [various]
- Age: [various]
- Gender: [various]
- IncomeType: LowAGI, LowWx, Moderate

Email invitation

[VTTrans logo]

Dear [Customer Name],

The Vermont Agency of Transportation would like to hear about your experience purchasing your [Car Model] for which you received a discount or rebate. At least part of this plug-in electric vehicle (PEV) discount or rebate was funded by the State of Vermont. Your feedback on your car shopping experience and the importance of the discount or rebate you received will inform how the State of Vermont supports Vermonters to purchase PEVs in the future.

⁴ Center for Sustainable Energy. California Clean Vehicle Rebate Project EV Consumer Survey Instrument. 2015. <https://cleanvehiclerebate.org/sites/default/files/docs/nav/transportation/cvrp/survey-results/EV%20Consumer%20Survey%20Dashboard%20Questions.pdf>

This short survey will take about 7 minutes. Your response will be confidential. As a thank you, you will be entered in a drawing for one of three \$50 gift cards once you finish the survey.

To take the survey, follow this link or copy and paste it into your web browser: [SURVEY LINK]

If you have questions about this survey, please contact [CONTACT DETAILS] and reference the "Vermont Electric Vehicle Rebate Survey."

Survey

Thank you for sharing your experience purchasing your plug-in electric [Car Model]. Your feedback will be confidential. You will be entered into a drawing for one of three \$50 gift cards once you finish the survey.

When answering the following questions, please consider only your experience shopping for and purchasing the [Car Model] you purchase on or around [Date of Sale].

The first few questions are about how you decided to acquire a plug-in electric vehicle (PEV) rather than a gas-powered vehicle.

1. Do you own or lease your [Car Model]?
 - a. Own
 - b. Lease

2. *Which of the following statements best describes your interest in acquiring a plug-in electric vehicle (PEV) when you started your search for a new vehicle?
 - a. I did not know PEVs existed
 - b. I had no interest in a PEV
 - c. I had some interest in a PEV
 - d. I was very interested in a PEV
 - e. I was ONLY interested in a PEV

3. *How important was information from the following sources in your decision to acquire a plug-in electric vehicle (PEV) rather than a similar gas-powered vehicle? *If you did not obtain information from a source please select "NA."* (Extremely important, Very important, Moderately important, Only slightly important, Not at all important, NA)
 - a. Friend/family member who does not drive a PEV
 - b. Friend/family member who drives a PEV
 - c. Car salesperson

- d. PEV manufacturer website
 - e. Drive Electric Vermont website
 - f. PEV test drive event
 - g. Electric utility
 - h. Online discussion forums
 - i. YouTube PEV videos
 - j. News story (newspaper, radio, TV, etc.)
 - k. Advertisement (newspaper, radio, TV, etc.)
 - l. Non-profit organization (e.g., Efficiency Vermont, Sierra Club, etc.)
 - m. Government agency (e.g., Agency of Transportation, etc.)
4. *Which of the following best describes the **most important** reason you chose a plug-in electric vehicle (PEV) rather than a similar gas-powered vehicle?
- a. Saving money on fuel
 - b. Saving money on maintenance
 - c. Reducing environmental impact
 - d. Increase energy independence
 - e. Wanted the newest technology
 - f. Driving performance
 - g. Supporting growth of PEV technology
 - h. Other (please explain)
5. Which of the following best describes the **second-most important** reason you chose a plug-in electric vehicle (PEV) rather than a similar gas-powered vehicle?
- a. [Display list from previous question without response selected in previous question]
6. The following are reasons some people say they would **not** choose a plug-in electric vehicle (PEV). Which of these, if any, **caused you to hesitate** when choosing a PEV rather than a gas-powered vehicle? If you had no hesitations about choosing a PEV rather than a gas-power vehicle, please select "None – I had no concerns."
- a. Environmental impact of battery or manufacturing
 - b. High purchase/lease price
 - c. High maintenance cost
 - d. Poor reliability
 - e. Limited driving range
 - f. Poor winter driving performance
 - g. Charging: limited public stations
 - h. Charging: limited home plug/charger access

- i. Limited vehicle types available (e.g., Pick-up, SUV, etc.)
- j. Hard to find an available PEV
- k. Other (please explain)
- l. None – I had no concerns

The next few questions are about rebates for plug-in electric vehicles.

7. ***[If Incentive option: Customer Direct]** You received a check for [Incentive Amount] after purchasing your plug-in electric vehicle from the State of Vermont through your electric utility. How important was this rebate in making it possible to acquire a plug-in electric vehicle?
- a. Extremely important
 - b. Very important
 - c. Moderately important
 - d. Slightly important
 - e. Not at all important

***[If Incentive option: Dealer]** As part of a State of Vermont program that works with car dealers, you received an incentive of [Incentive Amount] when purchasing your plug-in electric vehicle through [Dealership]. How important was this rebate in making it possible to acquire a plug-in electric vehicle?

- a. Extremely important
 - b. Very important
 - c. Moderately important
 - d. Slightly important
 - e. Not at all important
8. How did you first hear about this State of Vermont rebate?
- a. Friend/family member who does not drive a PEV
 - b. Friend/family member who does drive a PEV
 - c. Car salesperson
 - d. PEV manufacturer website
 - e. PEV test drive event
 - f. Online discussion forums
 - g. Blogs (not on manufacturer websites)
 - h. New story (newspaper, radio, TV, etc.)
 - i. Advertisement (newspaper, radio, TV, etc.)
 - j. Non-profit organization (e.g., Drive Electric Vermont, Efficiency Vermont, etc.)

- k. Government agency (e.g., Department of Transportation, etc.)
 - l. Electric utility
 - m. Other (please describe)
 - n. Not sure
9. How satisfied or dissatisfied were you with the process of applying for and receiving this State of Vermont rebate?
- a. Very satisfied
 - b. Somewhat satisfied
 - c. Neither satisfied nor dissatisfied
 - d. Somewhat dissatisfied
 - e. Very dissatisfied
10. **[If dissatisfied]** How could the process of applying for and receiving this rebate have been better?
- a. (Open end)
11. How many of your friends and family know that the State of Vermont offers this rebate for purchasing a PEV?
- a. (0-100% slider with a "Don't know" checkbox)
12. Did/will you receive a rebate from either of the following for purchasing your [Car Model]?
- a. Your electrical utility (Yes, No, Not sure)
 - b. The federal government as a tax credit (Yes, No, Not sure)
13. *[If at least one rebate = Yes] How important was each of the following in making it possible to acquire a plug-in electric vehicle?
- a. **[If electrical utility = Yes]** Rebate from your electrical utility (Extremely important, Very important, Moderately important, Slightly important, Not at all important)
 - b. **[If federal government = Yes]** Tax credit from the federal government (Extremely important, Very important, Moderately important, Slightly important, Not at all important)
14. *How knowledgeable was the salesperson you worked with about each of the following? If the salesperson did not discuss a topic please select "NA."
- a. The State of Vermont rebate
 - b. Other rebates (electric utility, federal)

- c. Total cost of PEV ownership (fueling, maintenance, etc.)
- d. Electricity rates for charging at home
- e. Home charging equipment
- f. Charging away from home (public, workplace, etc.)
- g. Vehicle performance (range, battery life, etc.)
- h. Cost of operating a PEV
- i. Operating a PEV in winter

You're making great progress! The next questions are about charging and driving your PEV.

15. Where do you charge your [Car Model]? Please select all that apply.

- a. Home
- b. Work
- c. Public chargers

16. **[If charge at home]** What type(s) of charger do you use at home?

- a. Level 1 charger / standard wall outlet
- b. Level 2 charger (240 V)
- c. Not sure

17. **[If charge at home AND if Level 2 is installed]** Who installed your Level 2 home charger?

- a. Installed it myself / friend or family member installed it
- b. Electrician
- c. Landlord
- d. Other (please describe)
- e. Not sure

18. **[If charge at home]** Does your electrical utility offer a special rate for charging EVs at off-peak times of day?

- a. Yes, and I am signed up for it
- b. Yes, but I am not using it
- c. No
- d. Not sure

19. **[If charge at home AND signed up for off-peak utility rate]** When charging at home, about how often do you charge during an off-peak time of day?

- a. (0-100% slider with a "Not sure" checkbox)

20. **[If charge at work]** What type(s) of charger do you use at work?
- Level 1 charger / standard wall outlet
 - Level 2 charger
 - DC fast charger
 - Not sure
21. **[If charge at public]** What type(s) of charger do you use at public charging stations?
- Level 1 charger / standard wall outlet
 - Level 2 charger
 - DC fast charger
 - Not sure
22. Are there specific locations you'd like to have more public charging available? If not, please leave this blank.
- (open end)
23. When you purchased your [Car Model], was this replacing a vehicle or adding to the number of vehicles in your household?
- Replaced a vehicle
 - Added a vehicle
24. **[If replaced a vehicle]** What type of vehicle did your [Car Model] replace?
- Gas-powered (not a hybrid)
 - Hybrid that didn't plug in to charge
 - Hybrid that plugged in to charge
 - All-electric (no gas)
25. About how many times per week do you commute to a job?
- None
 - 1
 - 2
 - 3
 - 4
 - 5
26. **[If commute > 0]** About how many miles is your commute roundtrip?
- (Open end, force numeric response)
27. About how many times per year do you drive more than 100 miles in a day?
- (Open end, force numeric response)

28. Any additional comments about acquiring or using your [Car Model] or the State of Vermont PEV incentive program?
- (open end)

You're almost done! These last questions help to make sure the State of Vermont is serving all Vermonters.

29. Do you own or rent your primary residence?
- Own
 - Rent
 - Other (please describe)

30. Which of the following best describes your primary residence?
- Single family home
 - Duplex
 - Condo, with about this many units: (open end)
 - Multi-family apartment, with about this many units: (open end)

31. [IF residence is Condo or Multifamily] Where do you normally park your vehicle at night?
- Garage
 - Carport
 - Dedicated outdoor parking space
 - Shared outdoor parking space
 - On-street parking
 - Other (please describe)

32. Are there solar panels at your primary residence?
- Yes
 - No

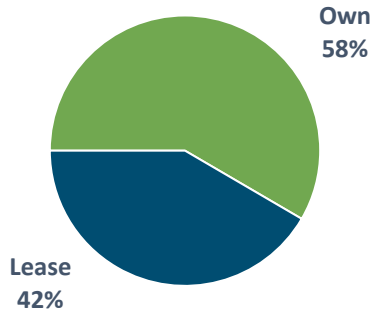
33. Which of the following best describes your annual household income before taxes?
- Less than \$10,000
 - \$10,000 to \$14,999
 - \$15,000 to \$24,999
 - \$25,000 to \$34,999
 - \$35,000 to \$49,999
 - \$50,000 to \$74,999
 - \$75,000 to \$99,999
 - \$100,000 to \$149,999

- i. \$150,000 to \$199,999
 - j. \$200,000 or more
 - k. Prefer not to say
34. Are you of Hispanic, Latino, or Spanish origin?
- a. Yes
 - b. No
 - c. Prefer not to say
35. What is your race? Please select all that apply.
- a. White
 - b. Black or African American
 - c. American Indian or Native Alaskan
 - d. Asian
 - e. Native Hawaiian or Pacific Islander
 - f. Other (please describe)
 - g. Prefer not to say
36. **[If Age is empty]** What is your age?
- a. (open end, force numeric response)
37. **[If Gender is empty]** Which of the following best describe your gender?
- a. Male
 - b. Female
 - c. Non-binary
 - d. Other
 - e. Prefer not to say

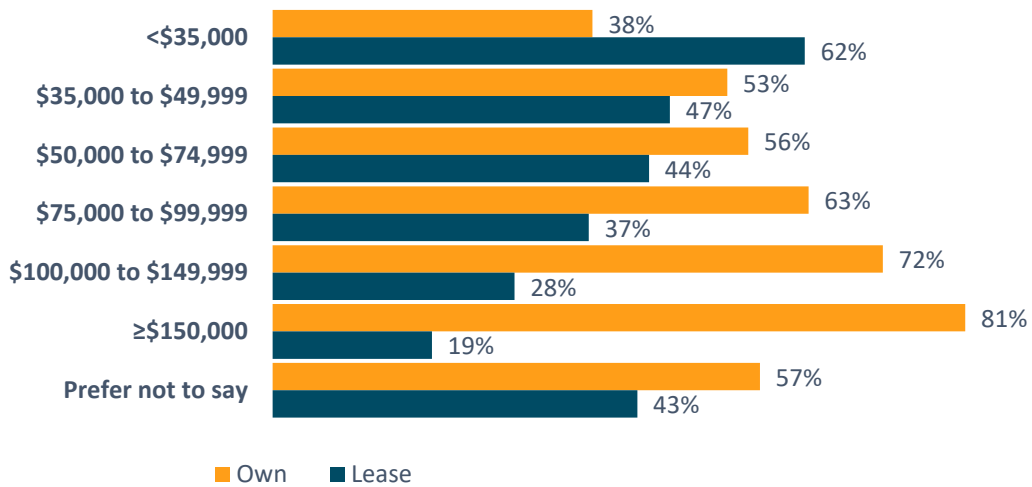
Thank you for completing this survey. Click "Submit survey" to submit your response and enter the drawing for one of three \$50 gift cards.

Appendix B: Detailed Survey Results

Q1 | Do you own or lease your [Car Model]?

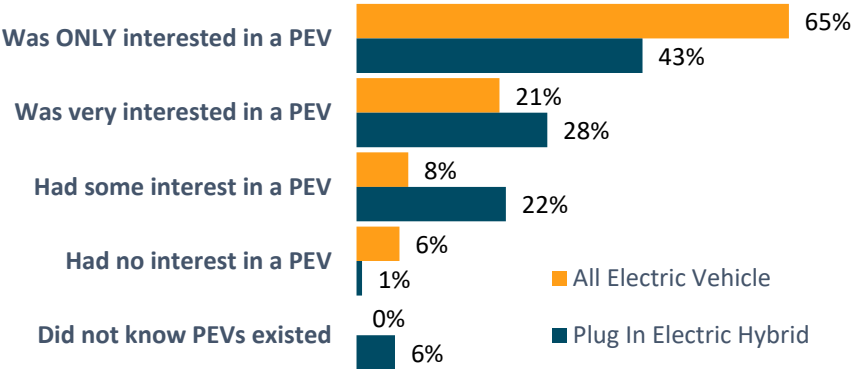


Own	60%
Lease	40%



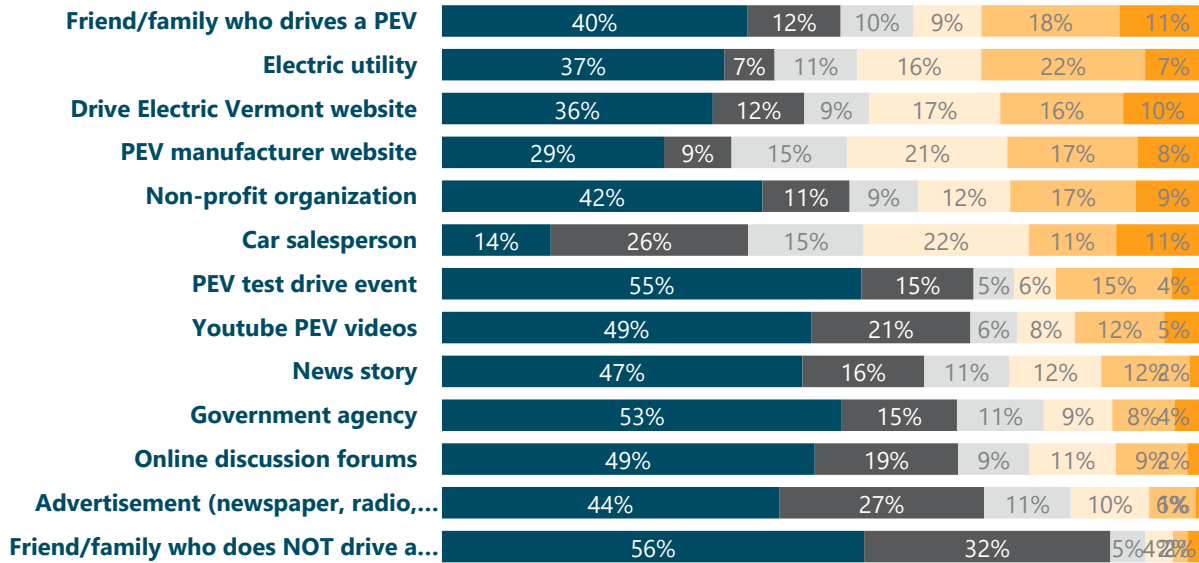
	Own	Lease
<\$35,000	38%	62%
\$35,000 to \$49,999	53%	47%
\$50,000 to \$74,999	56%	44%
\$75,000 to \$99,999	63%	37%
\$100,000 to \$149,999	72%	28%
≥\$150,000	81%	19%
Prefer not to say	57%	43%

Q2 | Which of the following statements best describes your interest in acquiring a plug-in electric vehicle (PEV) when you started your search for a new vehicle?



	All-Electric	Plug-in Hybrid
I was ONLY interested in a PEV	65%	43%
I was very interested in a PEV	21%	28%
I had some interest in a PEV	8%	22%
I had no interest in a PEV	6%	1%
I did not know PEVs existed	0%	6%

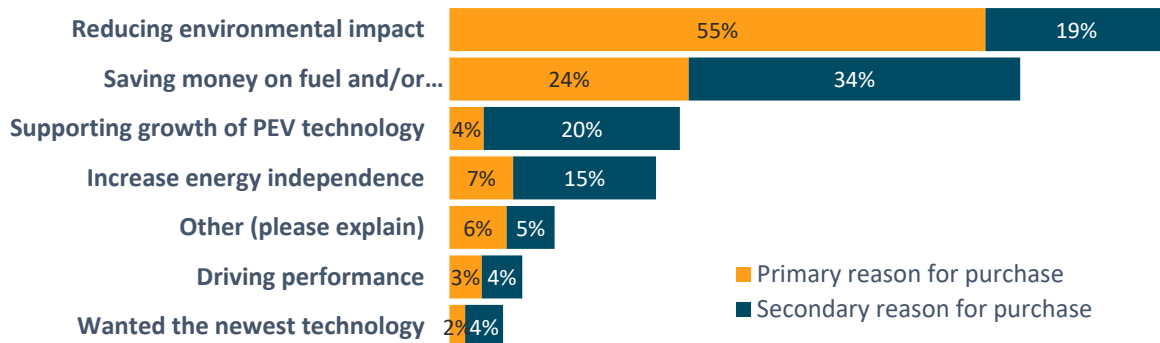
Q3 | How important was information from the following sources in your decision to acquire a plug-in electric vehicle (PEV) rather than a similar gas-powered vehicle? If you did not obtain information from a source please select "N/A."



■ N/A ■ Not at all important ■ Slightly important ■ Moderately important ■ Very important ■ Extremely important

	N/A	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Friend/family who drives a PEV	41%	12%	9%	11%	17%	10%
Electric utility	37%	7%	11%	17%	20%	7%
Drive Electric Vermont website	36%	11%	8%	17%	17%	11%
PEV manufacturer website	30%	9%	15%	20%	17%	9%
Non-profit organization	42%	11%	9%	14%	16%	8%
Car salesperson	15%	25%	15%	22%	11%	12%
PEV test drive event	54%	15%	5%	5%	15%	6%
YouTube PEV videos	48%	20%	6%	9%	12%	5%
News story	49%	16%	11%	11%	11%	2%
Government agency	52%	15%	11%	10%	8%	3%
Online discussion forums	49%	18%	10%	12%	9%	2%
Advertisement (newspaper, radio, etc.)	45%	28%	11%	10%	6%	1%
Friend/family who does NOT drive a PEV	54%	33%	5%	4%	2%	2%

Q4-5 | Which of the following best describes the most important reason and the second most important reason you chose a plug-in electric vehicle (PEV) rather than a similar gas-powered vehicle?

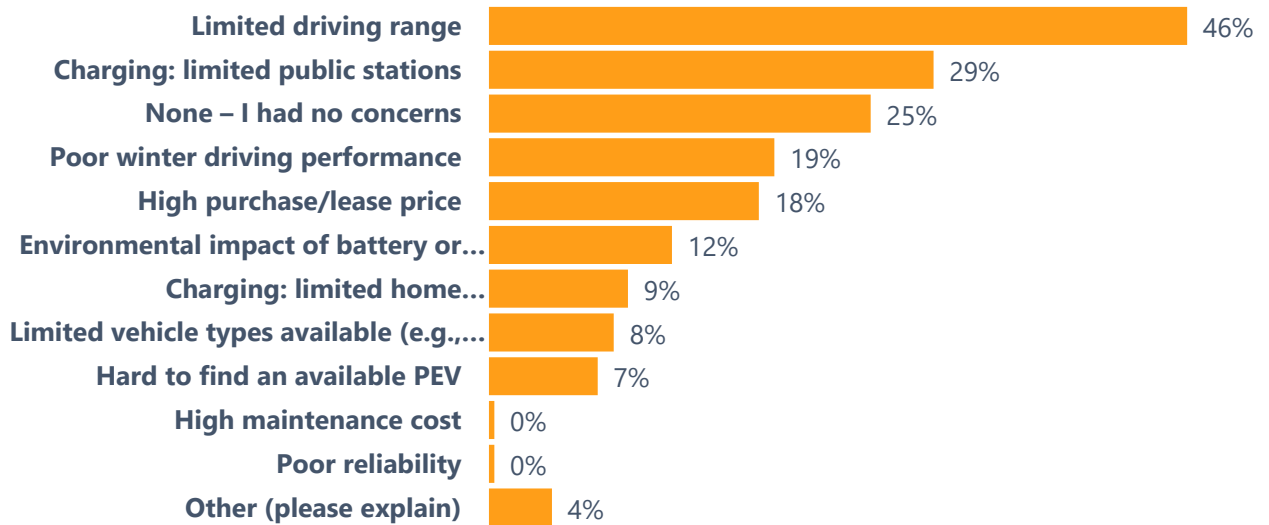


	Reducing Environmental Impact	Saving Money on Fuel and/or Maintenance	Supporting Growth of PEV Technology	Increase Energy Independence	Other (please explain)	Driving performance	Wanted the Newest Technology
Q4: Primary reason for purchase	55%	24%	4%	7%	6%	3%	2%
Q5: Secondary reason for purchase	19%	34%	20%	15%	5%	4%	4%

Q4 | Other (please explain):

Other (please explain)
All of the above
Nissan offered a two year lease and there were many rebates
The incentives made the vehicle was much more affordable
I owned a 2013 PEV and couldn't continue to use it as my only car due to range.
have been looking for hybrid, but couldn't find one and needed to trade in my car
Discounts and incentives made it the best value
Have solar panels that were generating more electricity than I was using.
Rebates
All of the above!
Big factory discounts and state incentives and \$3000.00 Costco incentive.
The rebate helped me to afford a car at all.
Car was less expensive than a gas powered
All of the above!
Incentives
All the above
Work for XXX so peer pressure!
Rebates-affordability
5th 9ne
Low monthly payment
good deal on purchase
and rebates really were important
best deal with dealership.
wanted cheapest car
payment on car
incentives

Q6 | The following are reasons some people say they would *not* choose a plug-in electric vehicle (PEV). Which of these, if any, caused you to *hesitate* when choosing a PEV rather than a gas-powered vehicle?



	%
Limited driving range	46%
Charging: limited public stations	29%
None – I had no concerns	25%
Poor winter driving performance	19%
High purchase/lease price	18%
Environmental impact of battery or manufacturing	12%
Charging: limited home plug/charger access	9%
Limited vehicle types available (e.g., Pick-up, SUV, etc.)	8%
Hard to find an available PEV	7%
High maintenance cost	0%
Poor reliability	0%
Other (please explain)	4%

Q6 | Other (please explain)

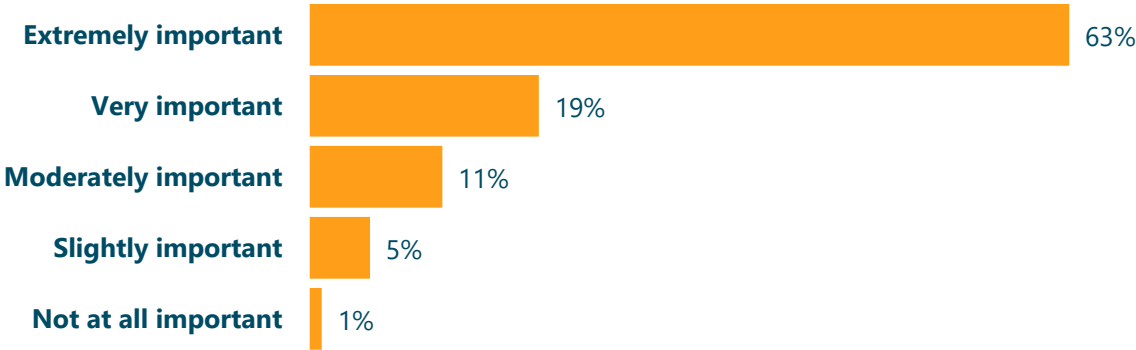
Other (please explain)
How long you have to charge car to get full charge
last Prius wasn't as good. And didn't entirely trust incentives.
likes having gas back up. Hybrid has higher HP than gas model
Bolt Recall - Reduced Usability
small trunk size due to battery size
Limited cargo space, only 2 wheel drive
No Tesla Service Centers in Vermont
Small trunk space
concern about having to replace the battery
Low-frequency electromagnetic radiation emitted at high levels by EV
Cargo space
No nearby Tesla dealer for service
High insurance cost

Q7 | How important was this [State of Vermont] rebate in making it possible to acquire a plug-in electric vehicle?

Survey-takers saw one of the following prompts depending on how they received their incentive.

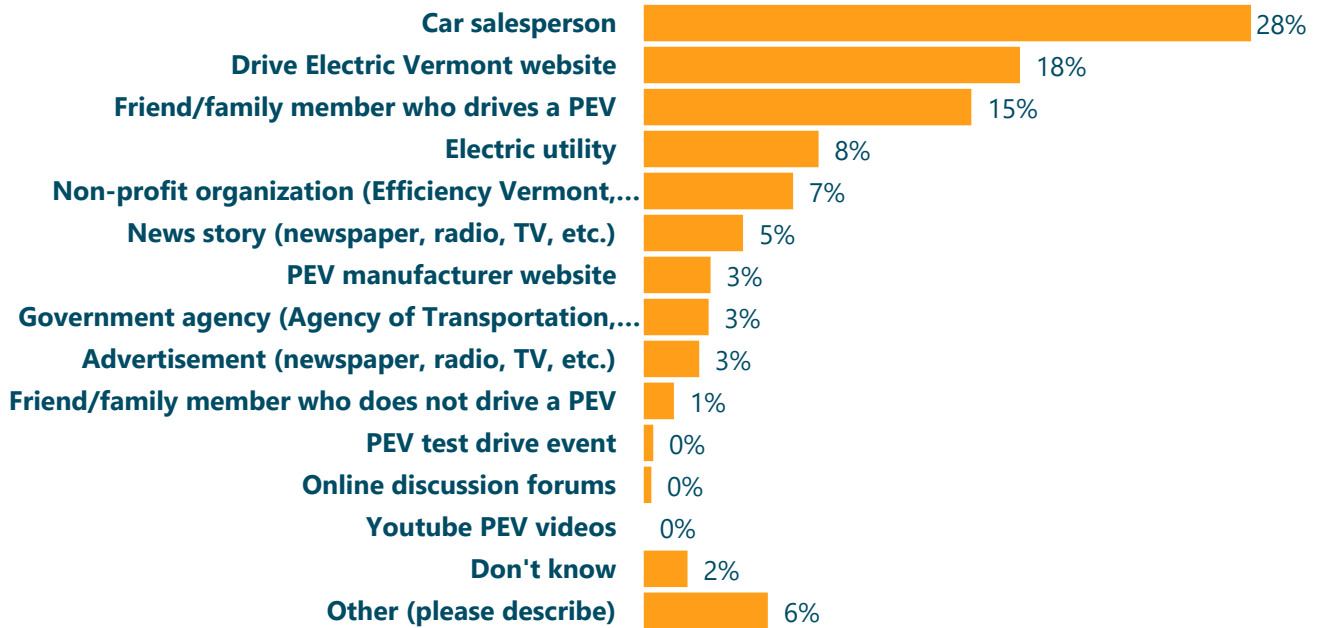
[Version 1] You received a check for [Incentive Amount] after purchasing your plug-in electric vehicle from the State of Vermont through your electric utility.

[Version 2] As part of a State of Vermont program that works with car dealers, you received an incentive of [Incentive Amount] when purchasing your plug-in electric vehicle through [Dealership].



	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Q7: How important was this rebate in making it possible to acquire a plug-in electric vehicle?	1%	5%	11%	19%	63%

Q8 | How did you first hear about this State of Vermont rebate?

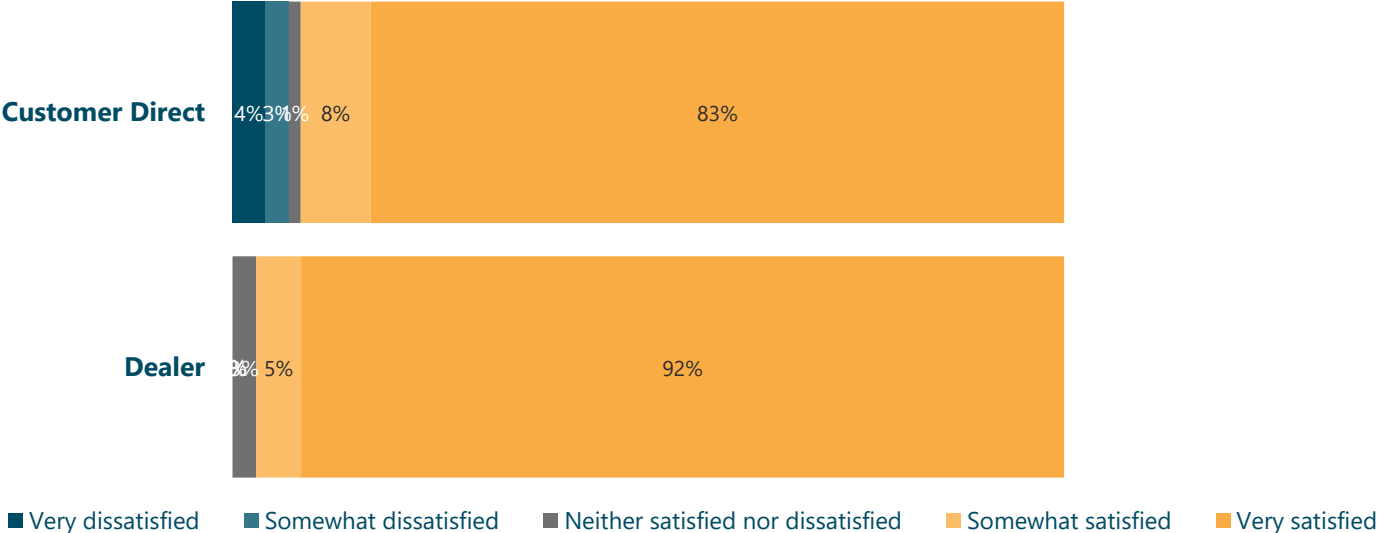


Car Salesperson	28%
Drive Electric Vermont website	18%
Friend/family member who drives a PEV	15%
Electric Utility	8%
Non-profit organization (Efficiency Vermont, Sierra Club, etc.)	7%
News story (newspaper, radio, TV, etc.)	5%
PEV manufacturer website	3%
Government agency (Agency of Transportation, etc.)	3%
Advertisement (newspaper, radio, TV, etc.)	3%
Friend/family member who does not drive a PEV	1%
PEV test drive event	0%
Online discussion forums	0%
YouTube PEV videos	0%
Don't know	2%
Other (please describe)	6%

Q8 | Other (please describe)

Other (please describe)
Google Search
doesn't remember
google search
googled it
work for solar company, and pay attention to incentives. Do my own research.
husband
web search
I am a photojournalist for the Bennington Banner and attended Drive Electric Week to report on the event.
Coworkers
Didn't get rebate
Mollie Burke, state Rep.
had a previous PEV
I researched online to learn about government rebates that are currently available.
Not sure which to select. There was a Drive Electric VT event in Waterbury in 2021 that I attended and was what convinced me we could afford an EV.
online car ratings/reviews
Work in policy - heard through state house
My Subaru mechanic
saw the car while waiting for safety recall
didn't know about it. did research
Experience in my career in energy efficiency
My job
I honestly do not recall - I work at XXXX so it may have been something I learned of at work. It may have been from Drive Electric Vermont - I am on several email lists from EV related advocacy groups.
Previous ownership and tax info
My job at the time
I may have also seen it on Drive Electric
Front Porch forum

Q9 | How satisfied or dissatisfied were you with the process of applying for and receiving this State of Vermont rebate?



	Customer Direct	Dealer
Very Dissatisfied	4%	0%
Somewhat dissatisfied	3%	0%
Neither satisfied nor dissatisfied	1%	3%
Somewhat satisfied	8%	5%
Very satisfied	83%	92%

Q10 | [If dissatisfied] How could the process of applying for and receiving this rebate have been better?

I want to preface this feedback that I'm very grateful for the refund and thankful they allowed it even though I wasn't pre-approval before purchase. Hoping sharing my experience will make it better for others. Clearer instructions about the pre-approval process. More accurate and timely updates on the application process. I received an email that said approved, then when I checked in 4 weeks later was told documents were missing. It was unclear from the approval email I needed to take further action. I still haven't received a check from the state.

Just make it easier..this preapproval is ridiculous most people dont know about it until they are at the dealer buying the car. The dealers wont mention the pre approval. Cant blame them.

It was not clear upfront that I needed to get pre-approval. The process was more onerous than necessary. Dealership was not aware of rebate or what was needed to get the rebate (Tesla sales are done out of state).

There was an extremely long wait for all the documentation from an out of state dealership so it took forever for my application to be processed.

Dealerships were extremely unhelpful -- they could be better informed about the process. We ended up purchasing the car from a dealership 60 miles away rather than the one in our hometown because the local dealer seemed incompetent

Never received a check. They kept asking for more info and then stopped returning my emails.

I thought it was a tax credit initially, and I think I thought I had missed the deadline, but they still worked it out for me, for which I was grateful.

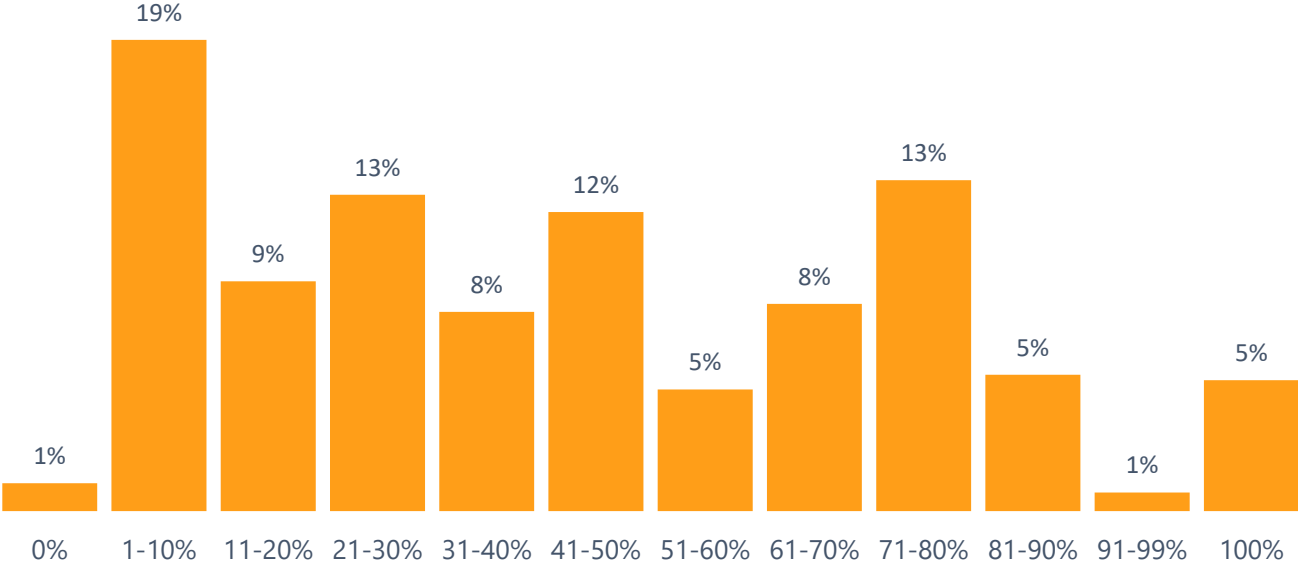
I never received my check.

I felt like going through the process of getting approved for a rebate and then applying for the rebate was redundant.

Clarity about first applying for eligibility for the rebate before purchasing the vehicle. I didn't understand that applying for the rebate was a 2-step process: first apply for eligibility, then apply for the rebate. It all worked out but I was really worried that I'd disqualified myself when I want to apply for the rebate and realized I'd missed a step. This rebate was VERY important in our decision to purchase the Kona.

No one knew at the dealer how to get the rebate. Was supposed to be done through dealer, but they didn't know how to do it. It was a very confusing process. Not a seamless process. Although Drive Electric they told us about utility rebate.

Q11 | About how many of your friends and family know that the State of Vermont offers this rebate for purchasing a PEV?

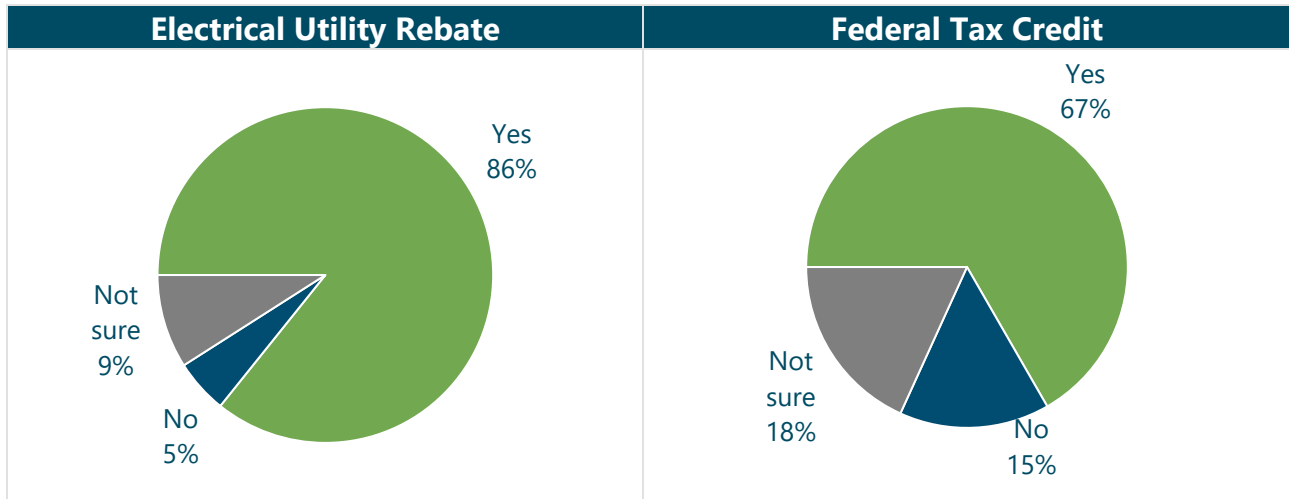


Percent of friends/family estimated to be aware of incentive

Percent of friends/family estimated to be aware of incentive	%
0%	1%
1%-10%	19%
11%-20%	9%
21%-30%	13%
31%-40%	8%
41%-50%	12%
51%-60%	5%
61%-70%	8%
71%-80%	13%
81%-90%	5%
91%-99%	1%
100%	5%

Q12 | Did/will you receive a rebate from either of the following for purchasing your [Car Model]?

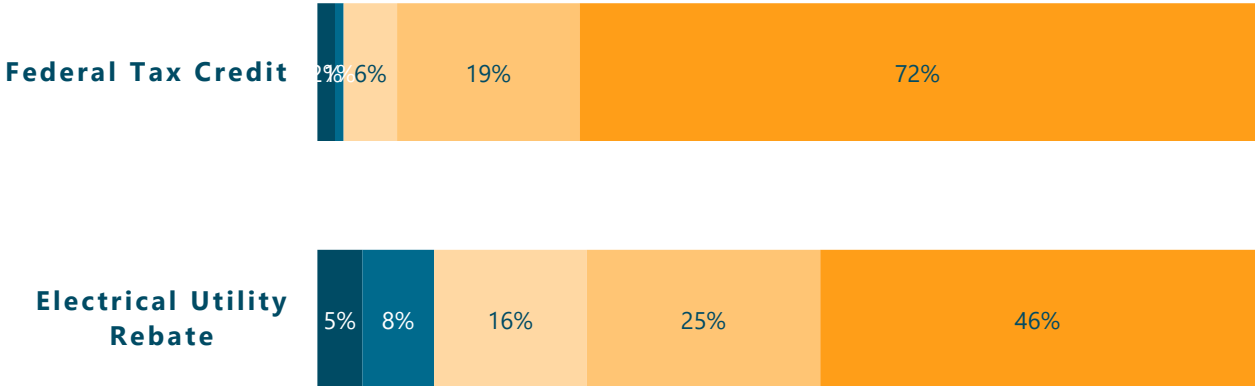
- a. Your electrical utility (Yes, No, Not sure)
- b. The federal government as a tax credit (Yes, No, Not sure)



	Electrical Utility Rebate	Federal Tax Credit
Yes	85%	67%
No	5%	15%
Not Sure	9%	18%

Q13 | How important was each of the following in making it possible to acquire a plug-in electric vehicle?

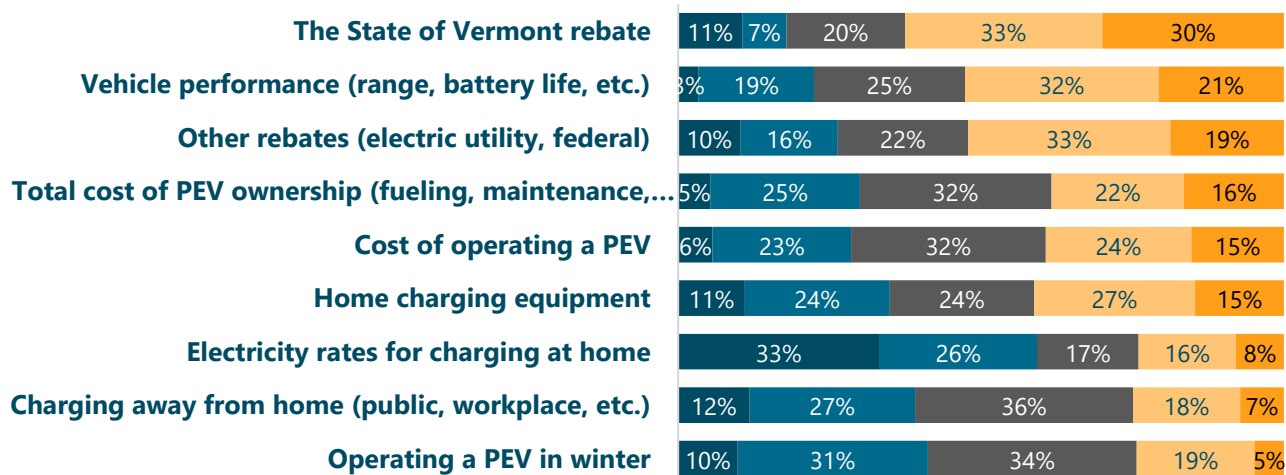
- a. Rebate from your electrical utility (Extremely important, Very important, Moderately important, Slightly important, Not at all important)
- b. Tax credit from the federal government (Extremely important, Very important, Moderately important, Slightly important, Not at all important)



■ Not at all important ■ Slightly important ■ Moderately important ■ Very important ■ Extremely important

	Electrical Utility Rebate	Federal Tax Credit
Not at all important	5%	2%
Slightly important	8%	1%
Moderately important	16%	6%
Very important	25%	19%
Extremely important	46%	72%

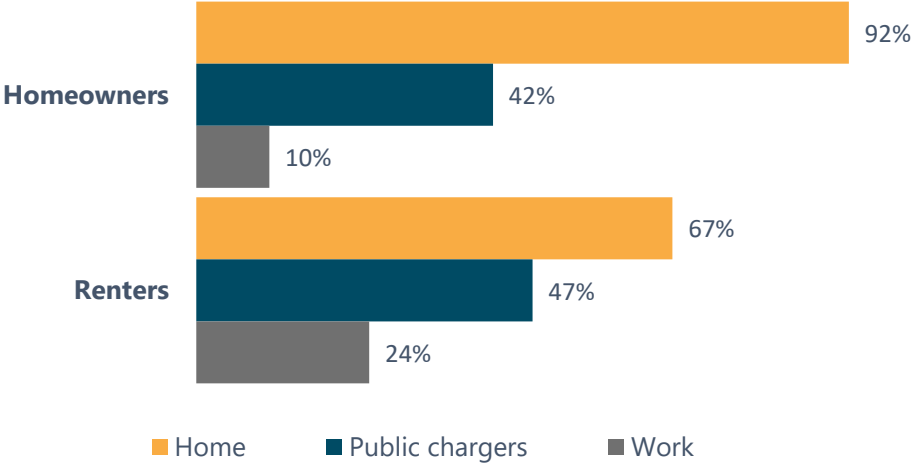
Q14 | How knowledgeable was the *salesperson* you worked with about each of the following? *If the salesperson did not discuss a topic please select "N/A."*



■ Not knowledgeable at all ■ Slightly knowledgeable ■ Moderately knowledgeable ■ Very knowledgeable ■ Extremely knowledgeable

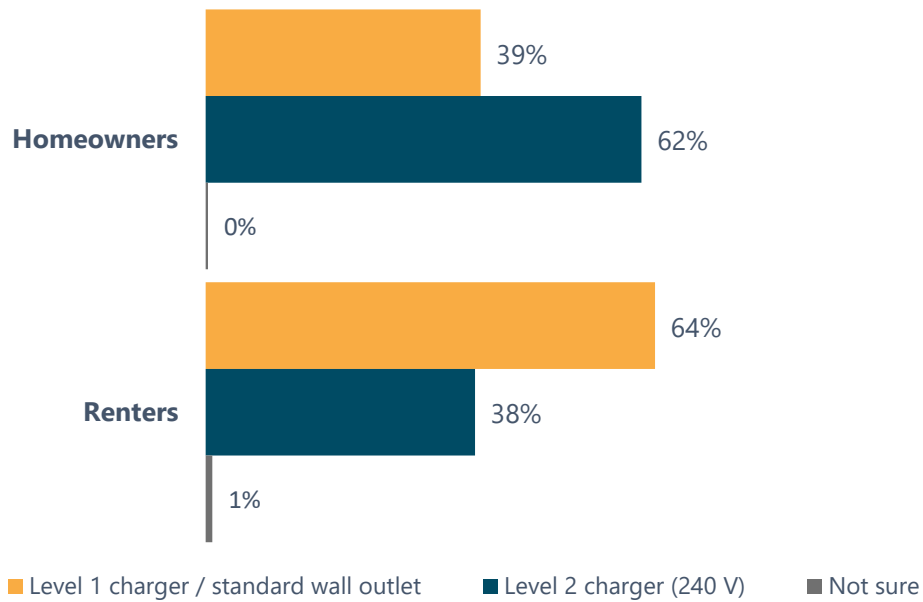
	Not knowledgeable at all	Slightly knowledgeable	Moderately knowledgeable	Very knowledgeable	Extremely knowledgeable
The State of Vermont rebate	11%	7%	20%	33%	30%
Vehicle performance (range, battery life, etc)	3%	19%	25%	32%	21%
Other rebates (electric utility, federal)	10%	16%	22%	33%	19%
Total cost of PEV ownership (fueling, maintenance,)	5%	25%	32%	22%	16%
Cost of operating a PEV	6%	23%	32%	24%	15%
Home charging equipment	11%	24%	24%	27%	15%
Electricity rates for charging at home	33%	26%	17%	16%	8%
Charging away from home (public, work, etc.)	12%	27%	36%	18%	7%
Operating a PEV in winter	10%	31%	34%	19%	5%

Q15 | Where do you charge your [Car Model]? Please select all that apply.



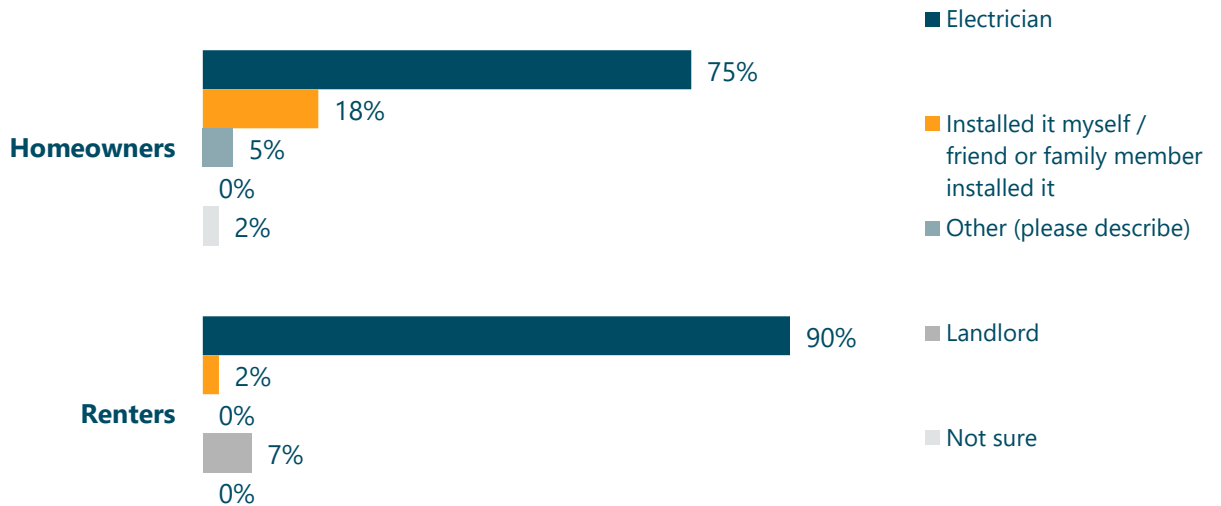
	Homeowners	Renters
Home	92%	67%
Public chargers	42%	47%
Work	10%	24%

Q16 | [If charge at home] What type(s) of charger do you use at home?



	Homeowners	Renters
Level 1 charger/standard wall outlet	39%	64%
Level 2 charger (240 volt)	62%	38%
Not sure	0%	1%

Q17 | [If charge at home AND Level 2 is installed] Who installed your Level 2 home charger?



	Homeowners	Renters
Electrician	75%	90%
Installed it myself/friend or family member installed it	18%	2%
Other (please describe)	5%	0%
Landlord	0%	7%
Not sure	2%	0%

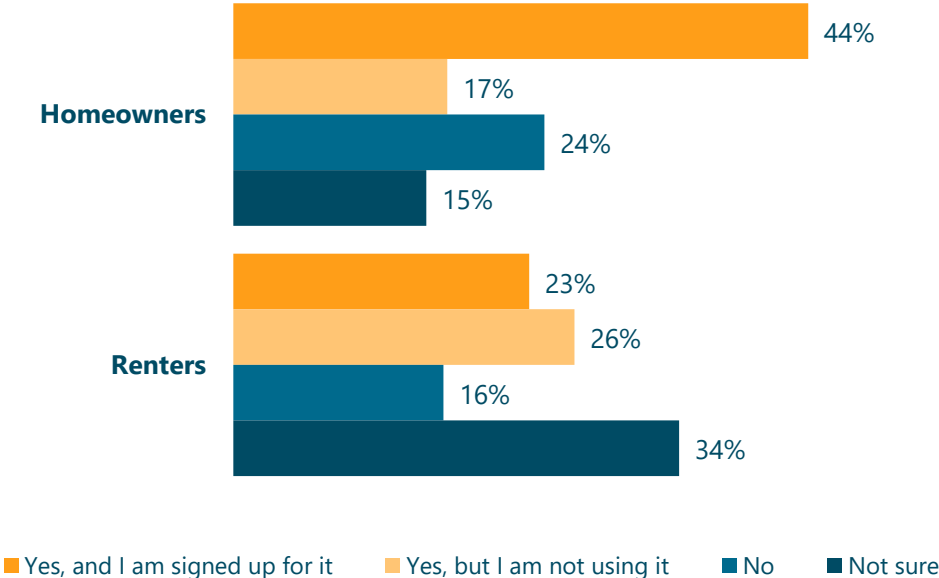
Other Responses:

Already installed by previous owners when we purchased our home

haven't yet

Cost to install \$1700 and she dug the trench and dug the hole for it.

Q18 | [If charge at home] Does your electrical utility offer a special rate for charging EVs at off-peak times of day?



	Homeowners	Renters
Yes, and I am signed up for it	44%	23%
Yes, but I am not using it	17%	26%
No	24%	16%
Not sure	15%	34%

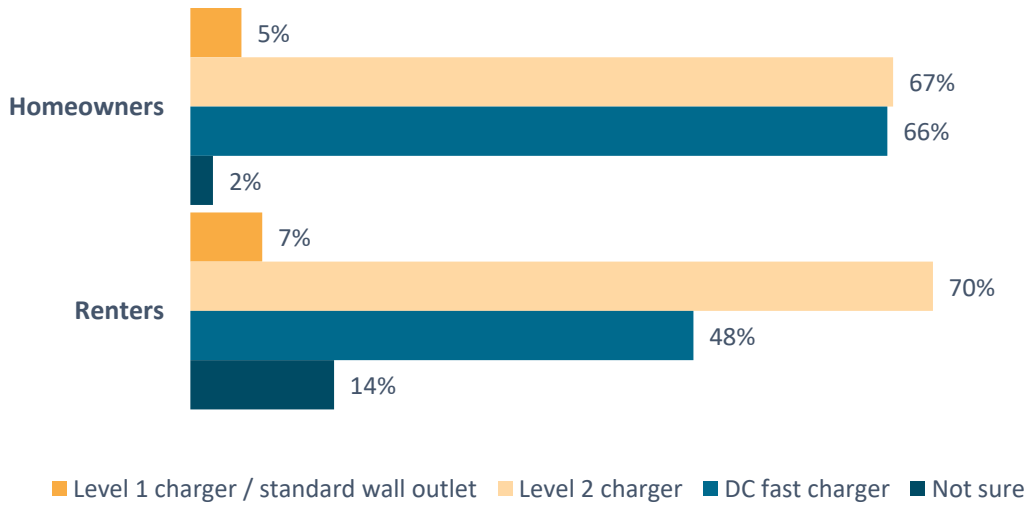
**Q19 | [If charge at home AND signed up for off-peak utility rate]
When charging at home, about how often do you charge during an off-peak time of day?**

% time charging off-peak	90%

	<\$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 to \$149,999	≥\$150,000	Prefer not to say
% time charging off-peak	87%	93%	94%	94%	82%	70%	94%

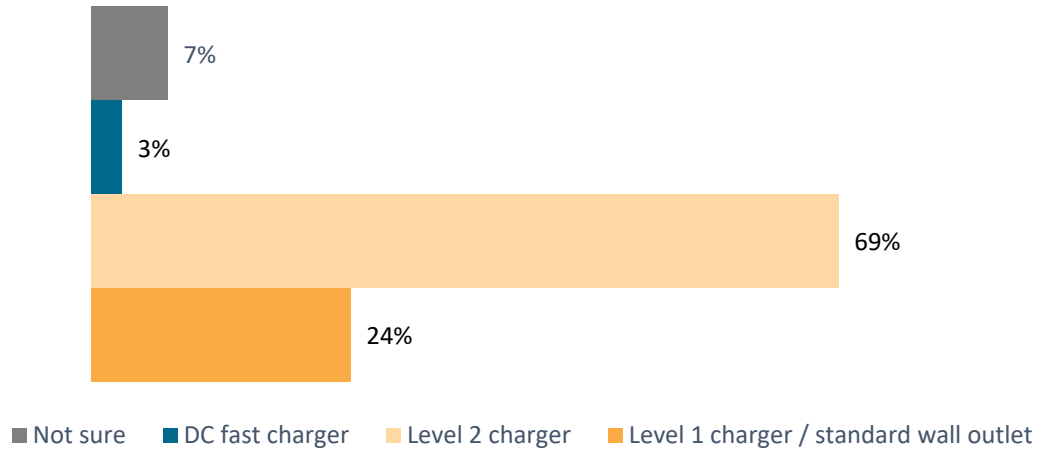
	Homeowners	Renters
% time charging off-peak	89%	93%

Q20 | [If charge at work] What type(s) of charger do you use at work?



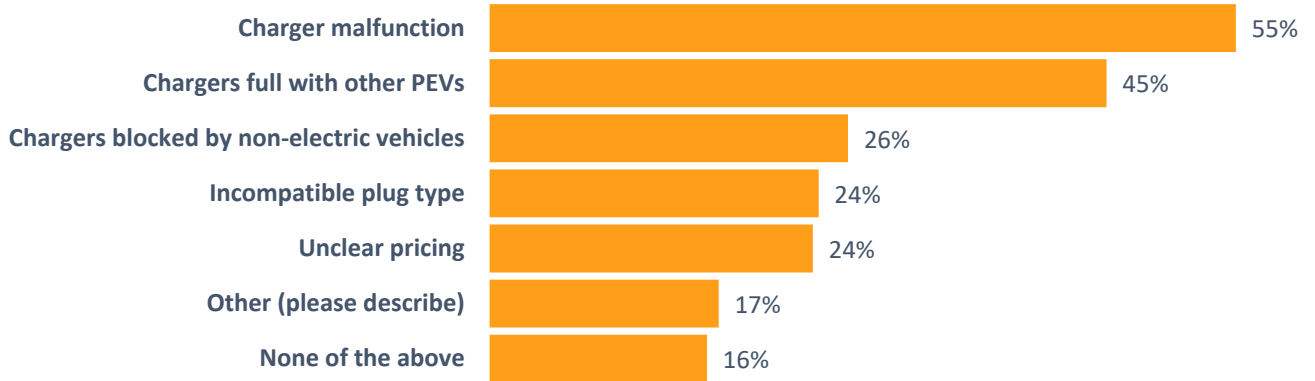
	Homeowners	Renters
Level 1 charger/standard wall outlet	5%	7%
Level 2 charger	67%	70%
DC fast charger	66%	48%
Not sure	2%	14%

Q21 | [If charge at public] What type(s) of charger do you use at public charging stations?



	%
Level 1 charger / standard wall outlet	24%
Level 2 charger	69%
DC fast charger	3%
Not sure	7%

Q21 | [If charge at public] Have you experienced challenges using public charging stations? Please select all that apply or "None of the above."



	%
Charger malfunction	55%
Chargers full with other PEVs	45%
Chargers blocked by non-electric vehicles	26%
Incompatible plug type	24%
Unclear pricing	24%
Other (please describe)	17%
None of the above	16%

Q21 | Have you experienced challenges using public charging stations? Other (please describe)

poor app to manage charging station
Availability of chargers
Cost per kw too high
Lack of public charging station infrastructure
First time I had to call to get it started. It was also not made clear when I got the car that I had to sign up in advance
Anything other than a fast (Tesla) charger is essentially useless
Lack of DC fast charger throughout the state!!!!!!!!!!!!!!
Have experienced (very rarely) blocking by ICE, charger out of order. When travelling, wish all level 2 used same plug style ,
Risk of cat convertor theft
Need a card instead of using an app. One station (Berling VT, Comfort Inn) had a help phone number that called a hotel in Nevada, wasn't much help.
Hard to locate even with gps app like an eater egg hunt
Need to install several apps and create accounts for each network (ChargePoint, Electrify America, SemaConnect, etc.)
Lack of level 3 chargers
They need to take any credit card
Connecting with Electrify America is always problematic
needed an app
Use dealer charge station.
Inconvenient locations therefore stuck inside car.
Used as parking spaces by evs that aren't charging
Incompatible phone app
Having to pay for parking (Brattleboro High Grove lot)
Access. At some ski areas the charger is in a reserved guess space.
Apps non-functional. Why don't they just allow a credit card payment? In-app makes it inaccessible to people without smartphones or with no service.
Hard to find, also seem to charger slower than home charger.
Expensive
Charger speed varies a lot.
not enough stations nearby
Gmp power is .17 per kwh and mobil is .35per kwh. Price too high for the range you get
Too hard to find a compatible charger that is fast on rural roads.
Unclear on how to use them
Inconvenient. Seems like there should be more installed at places where people spend a lot of time: ball fields, shopping plazas, etc.
Not enough level 2 chargers available in Montpelier, Vermont
Only once, in Bradford, VT where the chargers were out of order, both DC and Level 2
chargers too many miles apart, poor customer service, hard to read screens, inconvenient locations
Learning curve of how to pay

Multiple apps required depending on station owner/install

EVgo will deny this, but they go off line when extreme cold. I have sat at every chargers (Danville, Bradford, Brattleboro, Bennington) have all been off line in extreme cold. Spent 4 hours in car at Bradford location. App said it was on, but when I got there it would not work/off line.

rarely full of chargers. just wish there were more fast chargers.

some chargers won't let you use without credit card

Chargers show off network a lot and doesn't communicate that to EVGo and Chargepoint.

have found if not a member of their network at some charging stations, can't find out how to become member of network

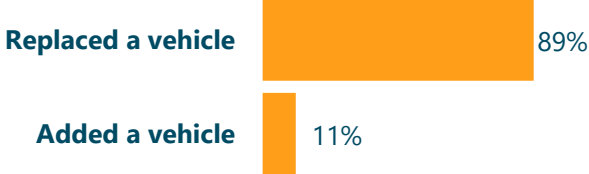
all chargers are all different apps. Would be better if just 1 service.

finding a charger can be difficult even with map. Says there are chargers where there are not, like across from Shaw's in Colchester (Roosevelt Hwy) but not there. Also at Fanny Allen you'll get ticketed if you are not an employee or patient. But still shows up on map as a charging option.

Q22 | Are there specific locations you'd like to have more public charging available? *If not, please leave this blank.*

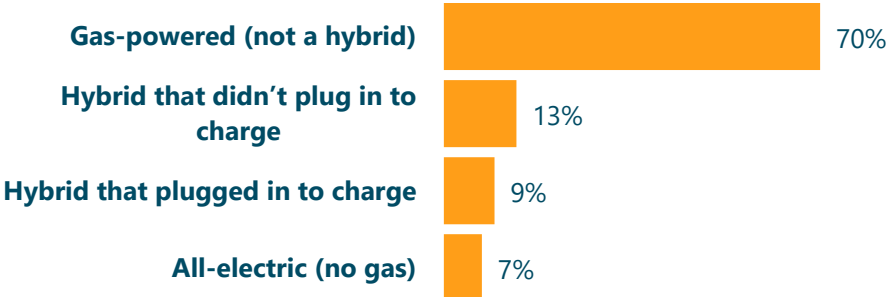
	%
No comment	50%
Specific town, region, or location	16%
Retail or restaurant locations	13%
Highway or rest stop	12%
Parking areas	5%
Everywhere	5%
Need faster chargers	5%
Ski resort or other recreation	3%
Park and ride	3%
Workplace	2%
Gas stations	2%
Schools	2%
Hospital	1%
Other	2%

Q23 | When you purchased your [Car Model], was this replacing a vehicle or adding to the number of vehicles in your household?



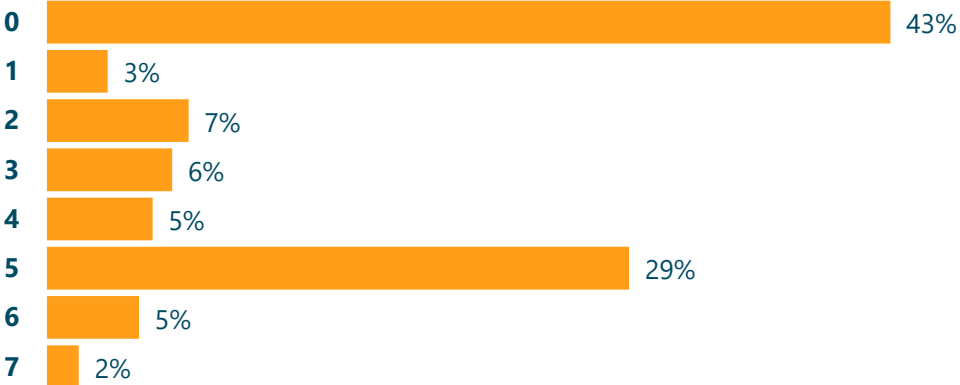
	%
Replaced a vehicle	89%
Added a vehicle	11%

Q24 | [If replaced a vehicle] What type of vehicle did your [Car Model] replace?



	%
Gas-powered (not a hybrid)	70%
Hybrid that didn't plug in to charge	13%
Hybrid that plugged in to charge	9%
All-electric (no gas)	7%

Q25 | About how many days per week do you commute to a job?



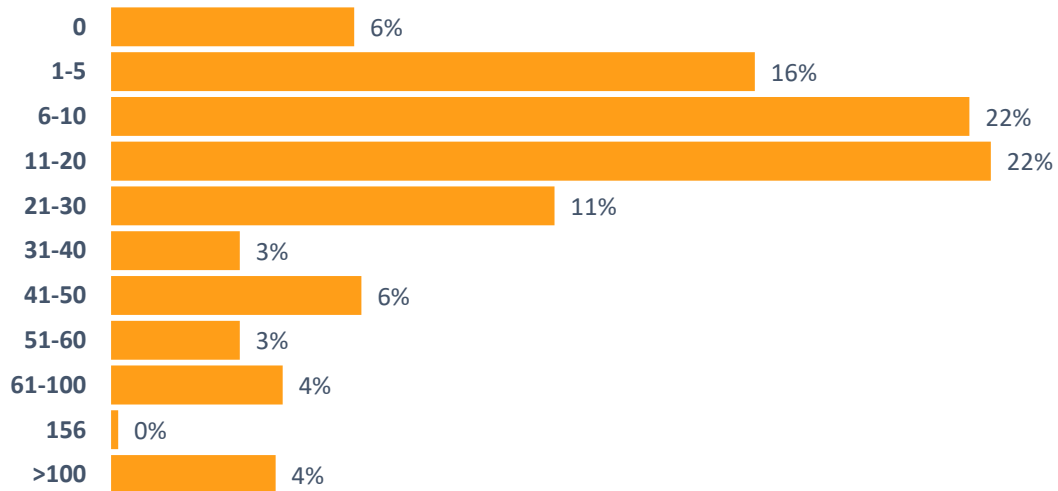
Number of days per week commuting to a job	%
0	43%
1	3%
2	7%
3	6%
4	5%
5	29%
6	5%
7	2%

Q26 | [If commuter] About how many miles is your commute roundtrip?

	Average commute miles per week
All Electric Vehicle	145
Plug-in Hybrid Electric Vehicle	140

County	Average commute miles per week
Addison	179
Bennington	93
Caledonia	189
Chittenden	122
Essex	125
Franklin	195
Grand Isle	267
Lamoille	207
Orange	134
Orleans	172
Rutland	115
Washington	169
Windham	170
Windsor	118

Q27 | About how many times per year do you drive more than 100 miles in a day?



County	Times per year driving more than 100 miles in a day
Addison	26
Bennington	18
Caledonia	41
Chittenden	23
Essex	50
Franklin	42
Grand Isle	15
Lamoille	51
Orange	38
Orleans	30
Rutland	28
Washington	31
Windham	23
Windsor	27

	All-Electric Vehicle	Plug-in Hybrid Electric Vehicle
About how many times per year do you drive more than 100 miles per day?	26	31

Q28 | Any additional comments about acquiring or using your [Car Model] or the State of Vermont PEV incentive program?

The bolt recall has somewhat turned me off of buying a bolt or another electric vehicle from GM. Additionally the battery life is bad to the point of being almost unusable in the winter.
The incentive program made this purchase possible; I would not have been able to afford a new EV without state and federal incentive programs.
Some of the questions seemed based on this being my first PHEV or electric car. In fact, this purchase came after buying a TESLA and setting up my home charging for that car. The charger works for both. I might be willing to charge my PHEV away from home if I knew more about the networks of chargers that are available.
IT ALL WORKED WELL. I JUST WISH THERE WAS MORE MONEY AVAILABLE FOR VEHICLES AND INFRASTRUCTURE.
I did not get a home charger installed until 6 months after purchasing my EV. I had to walk a mile to the nearest level 2 charger. I seriously considered selling my EV when I realized how inconvenient it is to not have a home charger. I was also shocked at how few fast chargers there are in this state, and that the ones that do exist do not necessarily have the plug I need. I am a one-car household. When people ask me about owning an EV, I am quick to say that it is only a feasible option if you can have a home charger, and ideally, if you have a second ICE car for when you need to travel.
Need signs along the highway as to which exits have fast charging or charging. Not only will help EV drivers but will further put the idea of easy charging in the public view.
Car dealership didn't know how to process the incentive so we had to do it after the fact. Love the car. Wish there were more PEVs with ranges of 300 plus miles.
It would be great to have a Tesla dealer in Vermont.
I am very satisfied with the PEV incentive program and am happy that my state offers it to increase EV adoption.
I'm happy with my purchase overall, but think improvements could be made concerning the infrastructure of public charging stations (i.e., quantity, locations nearby other infrastructure like gas stations, welcome centers, town centers), the knowledge of sales and tech staff at dealerships, and incentives for installing home charging stations.
My electric utility (Washington Electric) has a off peak time charging program but it only applies to all EV vehicles... not PHEVs. I would participate in a PHEV rate program or peak time charging program if there was one. Such programs should be offered at the time the utility vehicle incentive is offered to ensure efficient program design and to minimize missed opportunities.
It would have been easier if the incentive program was initiated at the car dealership.
The incentive program is essential to make it affordable.
thank you!
My biggest issue is the inequity among electric utility customers. Mine is Lyndonville Electric, served as are many other small municipal utilities by VPPSA, that offers some rebates and incentives. But these are very small compared to the opportunities for Green Mountain Power customers. The average customer of a small muni doesn't even know about VPPSA. I know this because of my work with HEAT Squad.
Another thought. I was unfamiliar with leasing vs owning, and I previously was not tracking my mileage very well. The lease fee varies based on your best guess of mileage over the coming 3 years. That was stressful and I may have gotten it wrong. More info on that on Drive Electric would be helpful.
Love the car, and the idea of helping improve the environment.
As many Vermonters do, I live in multi-unit housing. These living situations present real challenges for retrofitting charging-station availability. My personal living situation provides an assigned parking space in a common garage, and my condo

association has been open to looking into charging options but the costs of installation are high. Ultimately I have been forced to rely entirely on public charging stations to charge my car. As EVs become more and more prevalent, these kinds of infrastructure issues will urgently need to be addressed.
I'm glad these programs exist
The incentive should be weighted towards favoring BEV over Plug-in hybrids. Both are good but one is better and one actually supports the transition to an all-electric future.
Signs for EV charging so I'm not flipping through an app as I drive around a plaza looking for it.
Work with power companies to subsidize EV charging rates, at least to help motivate people towards the shift.
The dealership I went to did not know about the State rebate and how they could apply for it. I had to inform them about it and that should not be the case. I think the problem might have been with the dealership and the particular sales person who was very nice but not especially informed.
Already traded Model 3 in question for new higher trim Model 3.
Also salesperson question is N/A for Tesla. The best part is never having to deal with a salesperson. I didn't even have to interact with a human to take delivery of my new car.
We consider the PEV a transitional car. We own two cars, one the PEV and another an all-electric Leaf. We would prefer to own/drive only electric vehicles, but the range on most all-electric vehicles is not quite where we would like yet, and the price for all-electric is still too high.
We managed to squeak this lease out but even with the incentives the month payment is still way too high and I am concerned about what type of payment we'll end up when the lease is up and we have to re-finance the car to purchase it. These cars should be made affordable for normal mortals and they just aren't yet.
Not being available at the point of sale is likely a barrier to some folks
I honestly didn't know I got a rebate from the State of VT. It probably went through the sale paperwork. Since I was leasing most of the rebates went to the Dealer, but it lowered the lease payments significantly.
I live in a condo. The type of car I bought is better suited to home living. It's also not ideal for winter as it takes too long to warm up and get into battery mode. By the time it does, I've arrived at my destination using gas. I wouldn't have purchased this vehicle if I knew this. Bad research on my part.
Keep the PEV Incentive Program intact and fully funded until there is mass PEV adoption in Vermont!
No
Update the pricing strategy to reflect market conditions. The current Tesla Model 3 doesn't qualify for the State Rebate. It only qualifies for the Utility Rebate.
The incentive program is top shelf. We used the only to buy and have installed a Tesla Wall Connector. BUT, Vermont needs to allow a Tesla service center to open somewhere in the state and also allow Teslas to be delivered in Vermont. We had to drive to Paramus, NJ to pick up ours. Our friends who live in NH had their Tesla Model 3 delivered. We were told by Tesla that Vermont DMV did not allow Teslas to be delivered in VT. :-)
After I had taken possession of my vehicle, TESLA got me the registration materials (it took 6 weeks) which was required to enroll in VT incentives. Once enrolled and registered I got notice from V Drive Electric that depending on when i purchased my vehicle would dictate IF I get the incentive. That had me panicked because I would not have been able to justify the purchase without the incentive proceeds. I made the cutoff but it was a surprise that I would hope others could avoid if the state clearly warned buyers that there would be a program change whihc could be consequential - perhaps grandfathering any sales in process...
I think the range goes down more in the very cold temps (below 20) than I was led to believe. I heard 20% decrease, but when it's less than 15 degrees, it's like a 30-40% drop. And I never knew until I had the car that it may charge more slowly in cold temps.
I know the Agency is actively looking for solutions to make up for lost gas tax revenue. I understand the need for this however I oppose flat fees added to annual registration. I know that my gas car was costing me, on average, \$70/year in gas

taxes (not entirely to VT). I suspect if a flat fee is added it will be along the line of \$100/year - based on what other states have done. I oppose that. For me, I would at registering out of state (I have family in PA, MD, GA and FL). For potential buyers I think it would be a negative.

I support a per mile fee, that would be equivalent to what I would pay for a similar gas car. Or a tax on public chargers. I would be fine with a tax on my home charging, but I suspect that is very complicated to separate my home electric use for vehicle vs other uses. But maybe I'm wrong, as my utility does the ability to slow my charger during peak usage times.

Yes, the incentive is not enough. I've found that the sweet spot for me is a car payment of about \$200/mo. I got this by leasing my Ioniq but only because there was a manufacturer discount of \$10000. Total discounts were \$15000 which is what allowed me to lease a new EV. I'm not sure what I'm going to do when my lease is up.

The rebates made all the difference in my choosing to purchase a PEV

More level III chargers are needed to support the current and future ownership and tourists visiting with EV's. The charging infrastructure in this state is ridiculous, particularly given the cold and long driving distances. People can buy or lease EV's here, but they don't dare take them too far for risk of running out of charge, particularly in the winter months.

I am getting more range than some others because of the way I drive --- Maybe offer classes in how to maximize vehicle range by driving style. I am able to make net zero trips in town because of my style of driving ---- regenerating enough to make up for electrical use. If range is the issue, teach people how to drive reasonably. So it takes 30 minutes more to get back from Boston - but you can do it on one charge, for example.

It was very helpful when sales rep told me about the state incentive program and also when the dealership did the application paperwork. Wish I knew how to get the info out to general public to raise awareness and encourage more purchases

I didn't realize that the state incentive would be taxed - it was a surprise to see this on my tax return at the end of the year.

My work commute is down to 2 days per week due to COVID-19 as is my longer trips. I had leased a 2017 Bolt and when the lease ran out in 2020, I was planning on buying out the lease. Between the GM incentives and State rebates I decided to buy a 2020.

I would have preferred replacing the Volt with another one as it was a perfect transition vehicle until there is better charging infrastructure. I was able to do 80+% of my driving all electric and didn't have to worry about finding a functional charging station on longer trips. I only got the Bolt because Chevy stopped making the Volt.

This is my second Nissan LEAF. I love driving it and gets lots of questions from family and friends about driving a PEV. For about 95% of my driving this car is ideal. When I take longer trips, which isn't all that often, it would be nice if charging stations were more abundant so I could plug during visits. I've had a few long and late trips home. I'm used to owning my cars a long time, but might consider leasing my next PEV for three years.

I chose prius prime because of the efficiency, but wish it had a larger battery capacity; and of course. more storage space... can't have both!

Thank you so much for making our EV purchase possible!

Here's a plus of PEV ownership that never gets mentioned: the sheer euphoria that comes with having a fun-to-drive car that gives you the added satisfaction of knowing that you're doing something concrete to save the planet.

It's a great car. I am going to be looking at the new Subaru Solterra when it becomes available and thinking of going completely electric.

None

The biggest issue is that my Leaf has a CHAdeMO fast charger port. This limits my opportunities considerably, as they are being phased out. We were going to take it to Connecticut for a funeral, but decided the charging issues would be too stressful. I finally charged at my nearest fast charger successfully for the first time yesterday. (We got a \$250 EVGo credit I've been trying to use) It has been down every time I've tried until yesterday. Turns out part of it may have been pilot error.

Like it , some power companies have better incentives I see

Need more charging stations especially at work where it could be utilized the most

Not sure if any state incentives are still available for this car, as MSRP is now above \$40,000. Also, since Tesla does not operate dealerships here, the incentive was taxable.
Please be sure to incentivize preowned PEV's and hybrids as well - the point is to avoid using fossil fuels.
no
It is important that buyers understand the limitations that exist with range (especially winter range) and with the current inadequate fast charging infrastructure. I am now retired so I use my Bolt for most driving needs. Before my retirement, I often had to take my pick-up truck to job sites and meetings as my winter range was too short for the Bolt.
Make it a ticket-able traffic violation for a non-PEV to block access to a charger!
Was a great leasing experience....will upgrade to the Nissan Ariya when released
I didn't receive my Vermont rebate yet and my electric company didn't qualified me for low income extra incentive even though I qualified for it but did not receive any explanation from them.
Thank you to all parties that are working to make ownership of an EV or PHEV more likely!
The purchase incentive does not pertain to leased vehicles but this survey doesn't account for that in your questions.
Also, we need a better guide to how various outside temps affect battery charge as we are doing long distance driving.
Thanks!
This is the best car I have ever owned. The best for the environment, quietest, safety features, smoothest riding, least expensive to maintain. The incentive program should be continued and expanded to include more money and the threshold for a vehicle to qualify should be increased.
The most convenient, and best, Kia dealer for Rutland is in Queensbury, NY. Though acquiring the rebates that made my purchase possible were fairly easy to track down for me, the New York dealer had no part of signing up for them, even though they also own the Nissan (Leaf) dealership in Rutland. Having that dealer participate from New York, might increase the sales to Vermonters.
Very grateful that Vermont has incentive programs.
Tesla 3s are all-electric, not PEVs, but I have tried to answer usefully.
I think it would be helpful if the information about the State of VT PEV incentive program was better known. I had never heard of it before the car dealer mentioned it and he had just learned of it from another buyer.
Love my all electric car
The dealers need to really explain the difference in charging mileage in winter. It is significant. I drove from Burlington to see family in Indiana over Christmas and I almost got stranded 3 times. I planned the trip in October, when I was getting 275-290 miles per charge and it was a shock in winter weather that the car would not charge more than 190-210 miles and took 45 minutes longer to charge! The midwest is a decade behind in charger availability, too. That needs to be increased before these cars can be driven cross-country.
We're super happy with our Kia. It works great. We have one car for our 2 person household and this electric car is it.
The state MUST prioritize rollout of FastDC charging for GM products statewide on the same scale as that Tesla has adopted. Level 2 is outdated and serves little use. VTrans subject matter experts, GMP, and REV should decide where to place state-funded infrastructure. It should NOT be decided by munis or other stakeholders who would prioritize placement of state-funded infrastructure in small, out of the way communities when more well-used sites are always full (ie MontP stations are ALWAYS full, build more there, many more. Lots of people drive EVs to MontP from throughout the state.
We were shopping for a new car. We've had a Prius for 11. years, very happy with dependability, mileage, longevity. So we favored getting another Prius. I didn't know much at all about plug-in hybrid Prius Prime. I liked the plug-in feature when I

learned about it from the salesperson, but disappointed by only 20 mi. of elec power. I surprised myself by buying the showroom model on the spot. Didn't even take a test drive. I'm not an impulsive person but I just did it.
Enjoyed working with the State
None
The LEAF is a fine vehicle, although winter battery capacity is much lower than advertised. We like the vehicle and are happy with it, despite the constraints of battery capacity.
I did not get a Federal rebate because covid happened and I didn't make enough money to need to pay taxes large enough to offset \$7500. I also ended up paying taxes on the \$4000 Vermont Tax rebate - as if it was money I made rather than spent. That was weird, and it wasn't a mistake of taxes as far as I can tell and as far as I have researched -- POOR people NEED BETTER INCENTIVES -- if you say \$7500 federal rebate, it should give us money back since we spent it, rather than assume we're rich enough to have to pay \$7500 in taxes and maybe get something back. In my case it was nothing at all. I was taxed on the VT rebate, and was then screwed and got nothing federally. That was really crappy. I'm on a fixed income and make less than \$12k a year and I saved up for three years to make this happen. The rebates were CRITICAL. Luckily I'm ridiculously good at being poor, but I've been screwed all year. Covid made it worse, but it was bad...
The \$125000 income threshold seems low for many people who would like to own this type of vehicle to get a Vermont rebate. I would also say it would have been helpful to know that the electrical component hasn't works on the cold January day. Could never use a pure electrical car in Vermont as you only vehicle.
In order for PEV's to become more popular with the general public there will need to be a much greater dissemination of information regarding the true limitations in performance especially during the winter months. After 18 months I continue to learn more about how it operates in cold conditions. It should also be widely advertised what the most effective charging strategies should be, because it is a very different approach compared to an ICE vehicle.
It doesn't help that my Bolt is under GM recall for replacement of the battery and the battery is currently limited to 80% of maximum charge. Additionally, charging stations need to increase in availability as well as, their reliability. Right now I see too many stations have reliability issues for whatever reason. This unreliability makes it very difficult to plan a trip that will require a recharge.
So more and better information about using a PEV and better reliability of charging stations.
The Vermont PEV incentive program is very good and easy to use especially when done through a participating dealer.
Even though I don't use DC fast chargers that often, knowing that they are around is a confidence builder. That is, you can't necessarily judge their success by exactly how often they are used. They might increase purchases of PEVs without much use at all. Back when I converted gas cars to EVs we had a saying Converting cars is easy compared to converting people.
We sold 2 ICE vehicles to help pay for the VW ID4. The state and federal rebates were very important to us - we're both pretty retired and have limited funds.
I wish it was larger.
I love my Bolt and appreciate the incentives that make it an affordable choice for me, as well as the off-peak charging program with BED/Packetized Energy. I also appreciated the personnel/leasing process at Lamoille Valley Chevrolet even though they are a little over an hour away from me.
My wife and I were not even considering buying a new car, but the combination of incentives from the feds, state, and GMP dropped the price for this Prius Prime to very attractable levels. Hoping to purchase an all electric vehicle in the not too distant future as we are generating a bit more power with ours home solar panels than we are consuming. Keep up the incentives! Bring on the charging stations!
speaking up is important
It is the best car I have ever owned. It handles very well in snow and on icy roads..I am a per diem worker so it is impossible for me to estimate how many miles I drive for workm
Spread the word, PVs WORK IN VERMONT

Thank you- we're very happy with our purchase!
I really appreciate the financial incentives to get more EVs on the road and now we need to have the public chargers to match the number of EVs. Especially for those of us that don't have at-home or at-work charging.
Utility GMT providing a free L2 charger was key!
Please ad the base model Ford lightning
I wanted to drive electric, but there were so many drawbacks/risks to justify the price. However, the incentives made it possible to try out an electric vehicle and I absolutely love it. It unfortunately cannot replace the gas 4WD SUV for certain tasks. Also, the cost of public charging (\$0.31/minute) is 3x more than gas if using the gas SUV. That makes the PEV only possible as a commuter car.
Cost is the number one objection I hear about EVs. Generous, accessible rebates to bring down the purchase cost is the best way to increase EV uptake in Vermont.
Vermont needs more DC fast charging stations, lots more.
Love the car! Keep up the incentives! Oh and in lieu of paying fuel taxes we are ok with an alternative transportation taxation for EV's.
The incentives made it a no-brainer. My net cost including all incentives was about \$17,000.00 after trade-in. Most of my driving is 15 miles or less on a daily basis. I am very satisfied, but may look at an all electric vehicle if I ever buy another car. I'm 81 and this one may last as long as I need a car.
GM has assigned me a concierge to keep track of on a daily basis of when my battery replacements will be coming. At least they worked to make it, possible for me to park,in my garage, but 134 to 151 charged miles isn't sufficient. When my new batteries arrive I will be able to charge 301 miles and that will be most welcome.
Not at this time.
The Vermont state PEV program, in combination with the Green Mountain Power incentives (purchase rebate and Level 2 charger) and the federal tax credit, make us very proud to live here: Bravo to all three organizations! The vehicle has performed very well as far as performance, reliability, energy consumption and relative value. The dealership salesperson was neither a positive or negative factor in our purchase/evaluation process.
We need more chargers and incentives as well as more models by manufacturers to get us quicker into EVs so we can cut emissions by half. That would be huge for our planet! Thank you!
Would like to see more public level 3 charging stations
Rav 4 has an all electric range 2 or 3x further than it's best competition. I live between Hardwick and Montpelier. Shorter range would have me burning gas everyday. I'm getting 117 miles to the gallon. Next car will be all electric if level 3 charging becomes available here.
A good decision. I find the battery recall/limitations frustrating at the moment.
Thank you for helping me to afford a car.
The incentives really helped push me toward looking at PHEV and not an efficient gas vehicle. I was interested in electric already, but it was the extra incentive i needed. The money back and the fuel savings made it silly not to buy an EV of some sort.
I look forward to more varieties of electric vehicles being available in the future.
I thought the whole process was great
We love this car and couldn't have afforded it without GMP and the State of VT rebates. Thank you!
this is my fourth EV Nissan Leaf.... love it and am looking forward to 400 mile range

I got the free level 2 charger but couldn't find an electrician to install it for months and then when I did find someone they wanted to charge several thousand dollars so I sent it back. It would have taken many years for the charger to pay for the cost of installation in savings. Maybe create a program to help smooth that part of the process?
As I think about it, I think it was a post from Drive Electric Vermont with rebate info that got me going. What I didn't know until I visited a dealer was that the rebates are all rolled into the lease period, making the car EXTREMELY affordable. I had never leased before, but that was a no-brainer. Many people may think they can't afford a new car even with all the rebates, not realizing how affordable a leased EV is.
I wish PEV incentives were available for more expensive EVs. Also, wish a household were not limited to one incentive. I was hoping to purchase a longer range PEV, but I have used our one household allowance for the incentive already.
Thank you!
I doubt if I would ever go back to driving a gas powered engine. In fact I'm trying to find a PEV with more range. And I'm try to talk my friends into PEV purchases too. This is good progress. Thank you VT for your support of this technology.
To move from hybrid to EV we need to dramatically increase infrastructure
Vermont is leading the way in the nation for making PEV's available for the community, particularly for low income individuals like myself. I could not have afforded my current vehicle without this help, and it is an amazing service that is largely unknown in the general public. While the advantage of the state is leading among the nation, the infrastructure to support the vehicles is aging, lacking repairs, and inconsistent. This and the challenge to overcome stigmas of PEV's are the major challenges for transitioning to a cleaner, greener world in transportation.
I loved my Leaf, but when the lease was up we turned it in and did not lease another car for me because of car prices being so high, we are getting by with one car now.
Everything has been good!
Thanks to VT for encouraging going electric. My experience with the Bolt has been smooth and fun. I'm not usually in the vanguard...but being there has been an unexpected pleasure.
I'm grateful
Keep up the good work. Thank you.
We are incredibly grateful for and proud of all the people and programs that made available the fantastic financial support these incentives offered us!
Thank you so much! Because of them, we were able to install our own solar array and go 100% PEV, get heat pumps, and a heat pump hot water heater. It's immensely gratifying to live in a state with so much real support for getting off fossil fuels.
I rave about our Bolts to people all the time.
The only issue was the car needed to be registered before getting the rebate. VT dmv didn't get me plates for 6 months!!!!!! Then it was another month before the rebate came.
Thank you for asking!
I AM so grateful for the rebates and I could not have done it without these rebates. Thank you!
We were unable to take advantage of the free Level 2 charger Washington Electric offered because we could not get a Wifi service in our driveway.
Need better charging at multi-unit housing
The Drive Electric Vermont event in Waterbury is the reason we purchased an EV. We thought it was out of our price range before the event. Learning about incentives, seeing EVs in person, and talking with other owners is what pushed us into buying one when my car died. We almost didn't get one though because there were none to be found. It seems like I got the last 2022 Kona EV in New England last year...we had to go all the way to Maine to pick it up. Finding an EV to purchase was the single hardest part of the process. Another comment is that the program disincentivizes buying used cars. I felt guilty spending so much for the luxury of having a new car but financially it just made sense to buy new since the incentives made

<p>it better (not that their were used EVs available to buy anyway though!) than purchasing used. Thank you for providing these incentives and helping us move to EV. We are expecting our first baby in a few weeks and felt morally obligated for his sake to live greener.</p>
<p>We LOVE our Prius Prime, and the combination of rebates brought the cost down to the price of a regular Prius, so it was an easy choice to buy it!</p>
<p>My biggest disappointment with this car is that it apparently 'insists' on being in gas-engine mode when the weather is very cold (won't use the EV even when EV is chosen). Because our daily commute is very short, this means that the engine never warms up, and the mpg is about the same as my '09 Prius. I do not understand.</p>
<p>I traded in my fully electric Nissan Leaf because it wasn't suitable as a sole vehicle for Vermont winters. It's a great car for running errands and doing short trips. I couldn't drive it safely during negative temperature drops in Vermont because I couldn't run the heater if I wanted to reach my destination. I had to conserve miles and this became dangerous because my windshield froze (so visibility became an issue) and my hands and feet hurt from being so cold. I switched to a plug in hybrid because it allows me to use gas when I have to during the coldest part of winter, it eliminates my anxiety range and I am still able to drive on electricity for my work commute.</p>
<p>Just to reiterate - an incentive for used purchases is a MUCH superior environmental policy to disproportionate incentives for new vehicles. The incentives should be extended to used vehicles.</p>
<p>My commute numbers above are kind of averages. I'm in a 2 car household but the Nissan Leaf has become our go-to car and the 2nd car only gets used maybe once a week. So the Leaf probably covers 90%+ of our driving, which has been great.</p>
<p>We also have a Tesla-- the Tesla charging network is better than those for other cars by an order of magnitude. My charging comments above relate to non-Tesla networks. I have driven EVs exclusively since 2013-- and the non-Tesla networks have barely improved in overall usability.</p>
<p>Just that we are grateful for VT's effort to increase reliable charging stations throughout the state as well as work toward helping low income VT'ers to acquire PEVs or hybridvehicles</p>
<p>Have Tesla too</p>
<p>We like our EV even better than we expected. (Wish I could say the same for the dealership.)</p>
<p>The rebates we received from the state of VT and Green Mountain Power..and the free home charger made it possible for us to afford an EV. A wonderful program.</p>
<p>Thanks, VT!</p>
<p>Great program, thanks. I am disappointed in winter driving efficiency and didn't have any warning about it but probably would have bought it anyway.</p>
<p>I was very happy that Alderman's, the dealership I leased my most recent Bolt from, handled all the rebate paperwork for me. There were SIX total rebates, so it was a lot of minutia! As for downsides, I was bummed that my new Bolt was also part of the massive battery recall from GM -- and that there is still no sign of when the recall repair can happen due to supply chain issues. Oh well, at least I park my car outside, so there is no danger of it burning my house down while I wait. :-)</p>
<p>I leased my 2020 Bolt to replace a 2017 Bolt. There weren't many changes or improvements but I've been really happy with it. It was stressful driving to Boston because I-89 has virtually no charging available, especially in New Hampshire. It's disappointing that there are not more fast chargers around town. I sometimes use the one at the Alchemist in Stowe. The pricing is so different between municipalities; it's pretty confusing. It's annoying that the main parking garage in town and the only chargers in Winooski are Chadmo chargers for the Leaf, and there aren't any for regular Level 2 cars. The incentive from the state and Burlington Electric were awesome, but didn't make my decision for me. I knew I wanted another Bolt. I was in cancer treatment, though, and not really working at all, so it was a real help. I do save money having an electric car and am constantly answering questions and talking to people about it when I'm plugged in. The Hannaford charging stations near my house in the NNE are pretty frustrating because a lot of regular cars park there. I wish chargers were put further away from the doors of stores because I'd guess we're all happy to walk a little more and not have to fight people for spots. I've had people yell at me, like I'm getting special treatment by having a spot close to the store. People are lazy, weird and angry lately.</p>

Q29 | Do you own or rent your primary residence?

	Incentive recipients	Vermont population
Homeowners	86%	71%
Renters	14%	29%

Q30 | Which of the following best describes your primary residence?

	Incentive recipients	Vermont population
Single-family home	81%	70%
Duplex	4%	18%
Condo	10%	
Multi-family apartment	4%	
Mobile home	0%	6%

Q31 | [If Condo or Multifamily] Where do you normally park your vehicle at night?

	Condo	Multifamily apartment
Garage	21%	27%
Carport	32%	2%
Dedicated outdoor parking space	19%	20%
Shared outdoor parking space	16%	48%
On-street parking	0%	4%

Q32 | Are there solar panels at your primary residence?

	Single-Family Home	Duplex	Condo	Multifamily Apartment	Mobile Home
Yes	40%	9%	24%	4%	0%
No	60%	91%	76%	96%	100%

	Homeowners	Renters
Yes	39%	12%
No	61%	88%

Q33 | Which of the following best describes your annual household income before taxes?

	Incentive recipients	Vermont population
Less than \$10,000	0%	5%
\$10,000 to \$14,999	1%	5%
\$15,000 to \$24,999	3%	9%
\$25,000 to \$34,999	11%	9%
\$35,000 to \$49,999	13%	12%
\$50,000 to \$74,999	23%	19%
\$75,000 to \$99,999	24%	14%
\$100,000 to \$149,999	22%	16%
≥\$150,000	3%	11%
<i>8% of respondents indicated "Prefer not to say"</i>		

Q34 | Are you of Hispanic, Latino, or Spanish origin?

	Incentive recipients	Vermont population
Hispanic/Latino/Spanish	3%	2%
Not Hispanic/Latino/Spanish	97%	98%
<i>4% of respondents indicated "Prefer not to say"</i>		

Q35 | What is your race? Please select all that apply.

	Incentive recipients	Vermont population
White	97%	94%
Asian	1%	1%
American Indian or Native Alaskan	1%	<1%
Other	1%	<1%
Multiple races	0%	2%
Black or African American	0%	1%
Pacific Islander	0%	<1%
<i>4% of respondents indicated "Prefer not to say"</i>		

Q36 | What is your age?

	Incentive recipients	Vermont population (<20 years old omitted)
<20	0%	NA
20-29	4%	17%
30-39	11%	15%
40-49	17%	15%
50-59	22%	18%
60-69	27%	19%
70-79	17%	12%
80 or older	2%	6%

Q37 | Which of the following best describe your gender?

	Incentive recipients	Vermont population
Female	44%	50%
Male	56%	50%
Other	0%	NA