



e-FILING REPORT COVER SHEET

COMPANY NAME: Idaho Power Company

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes If yes, submit a redacted public version (or a cover letter) by email. Submit the confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order.

Select report type: RE (Electric) RG (Gas) RW (Water) RT (Telecommunications)
 RO (Other, for example, industry safety information)

Did you previously file a similar report? No Yes, report docket number:

Report is required by: OAR 860-087-0030
 Statute
 Order

Note: A one-time submission required by an order is a compliance filing and not a report (file compliance in the applicable docket)

Other SB 1547
(For example, federal regulations, or requested by Staff)

Is this report associated with a specific docket/case? No Yes, docket number: UM1815

List Key Words for this report. We use these to improve search results.

Idaho Power Company's 2020 TE Program Evaluation Report

Send the completed Cover Sheet and the Report in an email addressed to PUC.FilingCenter@puc.oregon.gov

Send confidential information, voluminous reports, or energy utility Results of Operations Reports to PUC Filing Center, PO Box 1088, Salem, OR 97308-1088 or by delivery service to 201 High Street SE Suite 100, Salem, OR 97301.

Matt Larkin
Revenue Requirement Senior Manager
mlarkin@idahopower.com

November 1, 2021

Public Utility Commission of Oregon
Filing Center
201 High Street SE, Suite 100
P.O. Box 1088
Salem, Oregon 97301

RE: UM 1815 - Idaho Power Company's 2020 Transportation Electrification ("TE")
Program Evaluation Report

Attention Filing Center:

Pursuant to OAR 860-087-0030 and Oregon Laws 2016, Chapter 028, Sections 20 and 29 (SB 1547), Idaho Power Company ("Idaho Power" or "Company") applied to the Public Utility Commission of Oregon ("Commission") for an order authorizing the Company to implement an Electric Vehicle Awareness & Education Program ("Program") on December 30, 2016. The Commission approved the Company's application for its Program in Order No. 17-286 of Docket No. UM 1815. Order No. 17-286 directed the Company to implement the Program beginning in 2018 and ending in 2020, and to provide a yearly Program evaluation report to the Commission in 2019, 2020 and 2021.

In compliance with Order No. 17-286 and pursuant to OAR 860-087-0040, the Company hereby submits to the Commission an evaluation report of the Company's Program for 2020 in accordance with the requirements of OAR 860-087-0040.

It is respectfully requested that all formal data requests to the Company regarding this filing be addressed to the following:

By email (preferred): dockets@idahopower.com

By regular mail:
Matt Larkin
Revenue Requirement Senior Manager
Idaho Power Company
1221 W. Idaho Street
Boise, Idaho 83702

If you have any substantive questions about the report, please contact me at 208-388-2461 or mlarkin@idahopower.com.

Very truly yours,



Matt Larkin

LDN/sg
Enclosure
cc: UM 1815 Service List via email



Electric Vehicle Awareness & Education Program Evaluation

November 1, 2021

I. PROCEDURAL BACKGROUND

Section 20 of Oregon Senate Bill 1547 (“SB 1547”), signed into law March 8, 2016, pertains to Transportation Electrification Programs. Within Section 20, the Legislative Assembly declares that transportation electrification (“TE”) is necessary to reduce petroleum use, achieve optimum levels of energy efficiency and carbon reduction, meet federal and state air quality standards, meet Oregon’s greenhouse gas emission reduction goals, and improve public health and safety. Section 20 also mandates that the Public Utility Commission of Oregon (“Commission”) direct each Oregon electric utility to file applications, in a form and manner prescribed by the Commission, for programs to accelerate TE. As a result of this mandate, the Commission initiated a rulemaking in Docket No. AR 599 to establish rules concerning utilities’ applications for TE programs.

In Order No. 16-447 in Docket No. AR 599, the Commission adopted OAR 860-087-0030, which requires an electric company to file applications for TE programs, and identifies what each application must include. OAR 860-087-0040 was also adopted in Order No. 16-447, which requires an electric company to report the results of its evaluation for each TE Program approved by the Commission.

Pursuant to OAR 860-087-0030 and Oregon Laws 2016, Chapter 028, Sections 20 and 29 (SB 1547), Idaho Power Company (“Idaho Power” or “Company”) applied to the Commission for an order authorizing the Company to implement an Electric Vehicle Awareness & Education Program (“Program”) on December 30, 2016. The Commission approved the Company’s application for its Program on July 27, 2017 in Order No. 17-286 of Docket No. UM 1815. Order No. 17-286 directed the Company to implement the Program beginning in 2018 and ending in 2020, and to provide a yearly Program report to the Commission in 2019, 2020 and 2021. It should be noted that Idaho Power has continued its efforts with regard to TE awareness and education in 2021, although the initial term of the Program ended in 2020. Idaho Power intends to continue these efforts until it files its next TE Plan, which is currently subject to ongoing discussions in Docket No. UM 2165.

In compliance with Order No. 17-286 and pursuant to OAR 860-087-0040, Idaho Power hereby respectfully submits to the Commission an evaluation report of the Company’s Program for 2020.

II. **PROGRAM DESCRIPTION**

Idaho Power's TE Program is designed to increase electric vehicle ("EV") awareness and educate customers on the potential benefits of EV ownership, including lower fuel costs, lower maintenance costs, little to no emissions, vehicle performance, energy independence, and local economic benefits. The Program is also designed to help customers understand vehicle and charging technology and the options that are available. Through awareness and education, Idaho Power believes it has and will continue to address key barriers to EV adoption within its Oregon service area, including customer perception surrounding driving range and price.

Program Elements

Idaho Power's Program aims to raise awareness of EVs and provide EV education through a multi-faceted approach, including (1) increasing the visibility of EVs in the Company's Oregon service area, (2) providing resources to customers interested in learning more about EVs, and (3) providing EV training to trade allies.

1. Increasing the Visibility of EVs

In an effort to increase the visibility of EVs in the Company's Oregon service area, the Company committed to showcasing its electric fleet vehicles in at least two events per year.

2. EV Materials & Resources

The Program also consists of providing EV materials and resources to customers interested in learning more about the costs and benefits of EVs. Idaho Power utilizes several mediums to communicate and educate customers on the benefits of EVs including, a Company webpage dedicated to EVs, EV marketing materials, and customer access to an EV subject matter expert.

3. EV Training

Another component of the Program includes providing training and education to trade allies. Idaho Power's Program commits to holding at least one training event annually to trade ally groups with a role in EV adoption.

III. **2020 PROGRAM SUMMARY**

In 2020, Idaho Power provided EV education through a combination of public and virtual events. Due to the COVID-19 pandemic and resulting "stay-at-home" orders issued in Oregon and Idaho, the Company altered the structure of its EV awareness and education program early in the year. Rather than continuing to provide EV education and awareness through public events, Idaho Power shifted to virtual events and content in order to prevent the spread of COVID-19 and prioritize the health and safety of its customers and

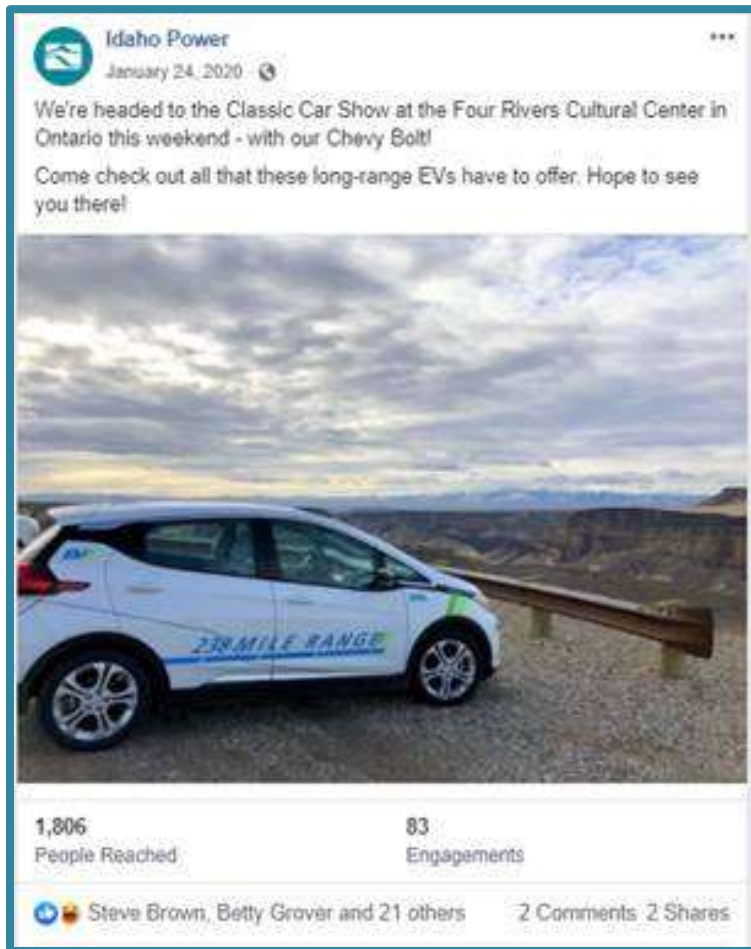
employees. Through these virtual events, the Company was able to reach multiple audiences with the intent of achieving greater levels of awareness and knowledge of EVs.

In January 2020, prior to the onset of COVID-19, the Company participated in the Ontario Classic Car Show. Idaho Power had one of the Company's EVs on display and advertised the many benefits of EVs. Later in the year, Idaho Power sponsored two EV webinars related to fleet electrification. Finally, the Company held a virtual training course for auto dealerships on EV technology, how and where to charge EVs and the future of electric transportation. The following sections detail Idaho Power's Program accomplishments for 2020.

A. Ontario Classic Car Show

The Ontario Classic Car Show is a two-day event, where classic cars are displayed. The event was held at the Four Rivers Cultural Center in Ontario, Oregon on January 25 and 26. Idaho Power created an EV display and showcased its all-electric Chevy Bolt. The Chevy Bolt is wrapped to highlight the 238-mile vehicle range. The Chevy Bolt also had window posters highlighting the features of the vehicle and information on the Oregon state tax credits for EV purchases. Idaho Power also had three types of brochures available to provide information on the benefits of EVs and charging. These brochures on EVs, Home Charging, and Workplace Charging, are provided in Attachments 1 - 3.

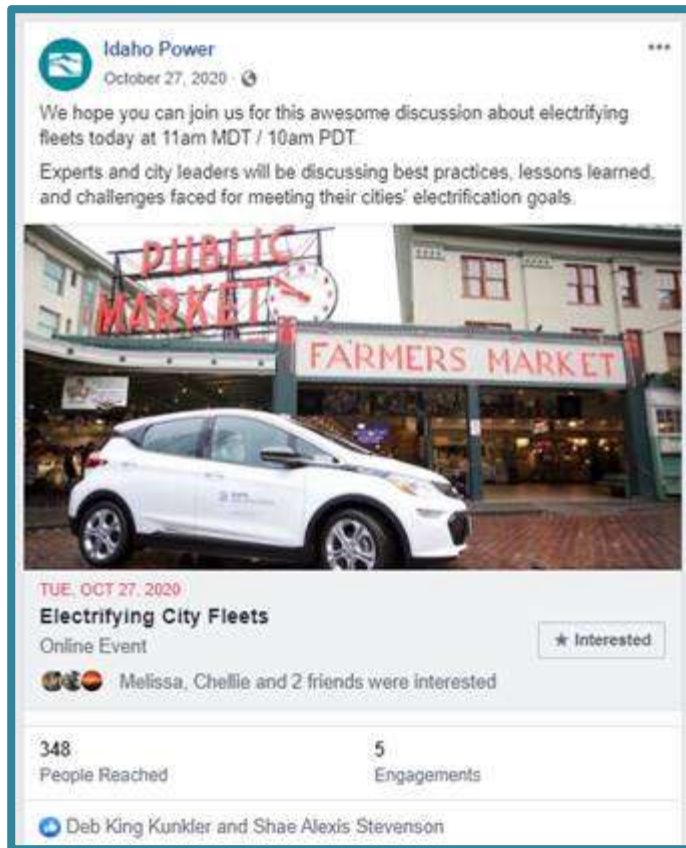
Idaho Power promoted its attendance at the Ontario Classic Car Show through a Facebook post. The post was targeted to the Company's Oregon customers and resulted in 1,806 people reached, 83 engagements and 2 shares.



B. Electrifying City Fleets Webinar

Idaho Power sponsored a national webinar, conducted by Forth, on electrifying city fleets on October 27, 2020. City leaders and industry experts led a discussion on best practices, lessons learned, and the challenges faced with meeting their cities' electrification goals. The webinar was attended by 228 participants, of which 66 were from the state of Oregon.

Idaho Power Energy Advisors personally invited municipal customers located in the Company's Oregon service area. The Company also promoted the event through social media. A boosted Facebook post targeted to Oregon customers reached 348 people and resulted in 5 engagements.



C. EVs Beyond the Road Webinar

Idaho Power partnered with the Treasure Valley Clean Cities Coalition (“TVCCC”) to host a webinar on the opportunities and benefits of fleet electrification and to connect fleet managers. During the webinar, fleet managers discussed their experiences with electric forklifts and electric utility vehicles. The event also featured a presentation on current fleet technologies and future technologies coming to the market, including the expanding availability of electric trucks, and medium and heavy-duty vehicles. The webinar was held on December 10, 2020, and was attended by 47 participants, 4 of which were from the state of Oregon.

The event was promoted through multiple channels, including direct email to TVCCC’s stakeholder list, notifications on Forth’s website, and social media posts on Facebook. Idaho Power Energy Advisors also personally invited small business and commercial customers in its Oregon service area.

D. Introduction to EVs for Dealerships

Idaho Power again partnered with TVCCC to host a virtual training for car dealerships in Oregon and Idaho. The training event focused on the benefits of EVs, types of EVs, charging options, and strategies for increasing sales of EVs. The

webinar was facilitated by D+R International, a building and transportation electrification services consulting firm with industry expertise in technology and markets for EVs and EV chargers. The training webinar was held on December 17, 2020, and was attended by 39 participants, none of which were from Idaho Power's Oregon service area.

E. Other Accomplishments

In 2020 Idaho Power continued to promote its Choose EV Web Platform and included EV marketing materials with Oregon customer bills in November 2020. The Company also continued to work with stakeholders, such as Forth, to promote EV adoption in Oregon.

1. Choose EV Web Platform

The Choose EV web platform includes interactive tools to research EVs, compare cars and benefits, and learn about state and federal rebates. The site highlights the Oregon Clean Vehicle Rebate Program including the Charge Ahead Rebate. See idahopower.chooseev.com for more information on the Company-sponsored Choose EV web platform.

2. Bill Insert

Idaho Power included an EV educational insert with Oregon residential customer bills in November 2020, reaching approximately 11,000 customers. The EV insert includes information on the many benefits of EVs, including cost savings. The EV informational insert is provided as Attachment 4.

3. Forth

Idaho Power's EV subject matter expert, Patti Best, continues to serve on the Forth Board of Directors. Formerly known as Drive Oregon, Forth's mission is to advance electric, smart and shared transportation in the Pacific Northwest and beyond through innovation, demonstration projects, advocacy and engagement. By having one of its employees on the Forth Board of Directors, Idaho Power is able to leverage information and ideas on promoting EVs in its Oregon service area.

IV. PROGRAM EVALUATION (OAR 860-087-0040)

Pursuant to OAR 860-087-0040, Idaho Power is required to evaluate and report the results of its Program. The Program evaluation is to include information required under OAR 860-087-0030(1)(g)(A)-(F), as well as, OAR 860-087-0040(1)(b)-(h).

A. OAR 860-087-0030(1)(g)(A)-(F)

OAR 860-087-0030(1)(g)(A)-(F) specify how electric companies will evaluate their TE programs and are established as part of companies' TE program applications. In its application Idaho Power detailed how it would evaluate its Program and provides a recap below in compliance with OAR 860-087-0040.

Timeline of program evaluation and evaluation reporting schedule (OAR 860-087-0030 (1)(g)(A))

In compliance with Commission Order No. 17-286, Idaho Power will provide annual evaluation reports to the Commission in 2019, 2020 and 2021. The Program evaluation report will address all reporting requirements specified in ORS 860-087-0040.

Cost of evaluation (OAR 860-087-0030 (1)(g)(B))

In the Company's Program application, it estimated program evaluation costs of \$500 primarily for printing and focus group costs. Idaho Power incurred minimal costs to evaluate the Program for 2020. The evaluation costs primarily consisted of labor costs to conduct a survey among its Oregon Empowered Community¹ participants to assess EV awareness. The Company has not included labor expense in the 2020 Program costs as it relied on its existing workforce to conduct the survey.

How the evaluation was conducted and whether third-party evaluation was necessary (OAR 860-087-0030 (1)(g)(C))

In the Company's Program application, Idaho Power stated that it would conduct Program evaluation internally due to the cost of third-party evaluations for an education program of this size. As planned, Idaho Power conducted the Program evaluation internally.

How the evaluation addresses identified barriers (OAR 860-087-0030 (1)(g)(D))

As explained in Idaho Power's Program application, during the three-year Program period, Idaho Power expects to evaluate Program impact on market barriers by examining updated data and trends to identify and quantify the pace and extent of EV adoption in its service area. Specifically, evaluation efforts will attempt to determine if and how the Program impacted EV awareness, the number of EVs, the availability of EVs and access to EV charging stations within Idaho Power's Oregon service area. Data used for this evaluation is detailed in the following section.

A discussion of the method of data collection and how the data was used to evaluate the effectiveness of the program (OAR 860-087-0030 (1)(g)(E))

¹ The Empowered Community is an online survey group facilitated by Idaho Power, consisting of Idaho and Oregon customers in various rate classes.

As outlined in the Company’s TE Program application, Idaho Power used a combination of existing data sources and internal survey instruments to collect Program data. Those data sources and how they were used to evaluate Program effectiveness are provided in the table below.

Program Impact	Evaluation Sources
Number of Customers Reached	<ul style="list-style-type: none"> Attendees at events Social media click-through rates Attendees at trainings
Awareness Achieved	<ul style="list-style-type: none"> Empowered Community Online Panel Company-facilitated focus groups Surveys
Number of EVs	<ul style="list-style-type: none"> Data from the Oregon Department of Energy (“ODOE”)
Availability of EVs	<ul style="list-style-type: none"> Dealership contact
Number of Public Charging Stations	<ul style="list-style-type: none"> Plugshare.com

Any other evaluative information requested by the Commission (OAR 860-087-0030 (1)(g)(F))

Not applicable.

B. OAR 860-087-0040(1)(b)-(h)

OAR 860-087-0040(1)(b)-(h) outline the information that must be included in companies’ TE program evaluation reports. The following section includes this information for Idaho Power’s Program.

Assessment of program costs and benefits realized by ratepayers and the electric company (OAR 860-087-0040(1)(b))

Idaho Power estimated total annual programs costs including delivery, marketing, administration and evaluation of \$8,000. For 2020, Program costs totaled \$8,828. A breakdown of 2020 Program costs is provided below:

Group	Cost
Events & Training	\$5,815
Administration	\$2,914
Marketing	\$99
Total	\$8,828

The Company did not seek cost recovery for the Program. Rather, all costs have been expensed.

As the proposed program is an awareness and education program, immediate financial benefits to customers are not quantifiable. However, the Company does believe the Program is providing intrinsic benefits to its customers. Although Idaho Power cannot quantify these types of benefits, there is value in EV education and awareness and its impact on barriers to adoption.

Tracking of program costs over the life of the program (OAR 860-087-0040(1)(c))

Program costs totaled \$7,076 in 2018, \$1,230 in 2019² and \$8,828 in 2020, equating to a total cost of \$17,134 over the life of the Program. A breakdown of costs over the life of the Program is provided below:

Group	Cost
Events & Training	\$11,369
Administration	\$5,335
Marketing	\$430
Total	\$17,134

Progress against identified market barriers and implementation barriers (OAR 860-087-0040(1)(d))

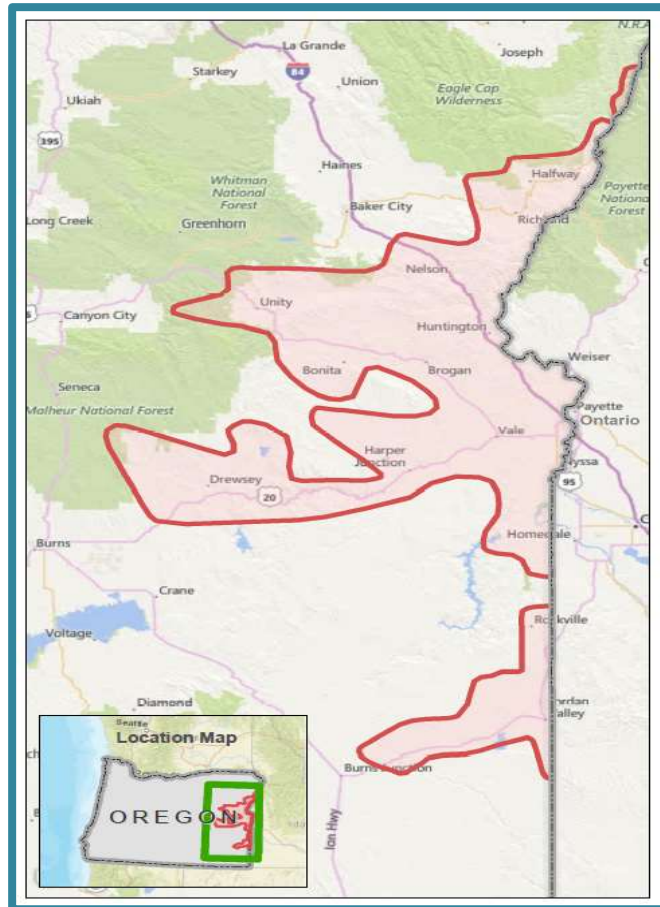
Identified barriers to EV adoption include driving range, access to public charging, dealership availability, and price. These barriers exist for Idaho Power’s Oregon customers, and are exacerbated by the characteristics of the service area.

Idaho Power’s Oregon service area spans some of the most remote landscape across eastern Oregon. The service area encompasses 4,744 square miles, and is largely comprised of rural communities. The largest town in Idaho Power’s Oregon service area is Ontario, which has a population of roughly 11,000. The next largest towns are Nyssa, with a population of approximately 3,200, and Vale with a population of approximately 2,100. The majority of the remaining towns in Idaho Power’s Oregon service area have populations of less than 300. As of year-end 2020, Idaho Power’s Oregon service area consisted of 19,505 total customers, 13,711 of which are residential customers.

Market Barrier: Driving Range

² As discussed in Idaho Power’s 2019 Program Evaluation Report, program expenses for 2019 were under budget as a result of the cancellation of the EV training event for electricians and contractors. Although Idaho Power aggressively marketed the training event, the Company did not receive any registrations.

Idaho Power’s Oregon service area is located in a remote portion of eastern Oregon and is mostly comprised of rural communities. The closest metropolitan statistical area is Boise, Idaho,³ which is 56 miles east of Ontario, Oregon. The closest metropolitan statistical area within Oregon is Bend,⁴ which is 260 miles west of Ontario. Below is a map of Idaho Power’s service area in Oregon:



The rural nature of Idaho Power’s Oregon service area presents a challenge to the range capabilities of midlevel and used EVs. In order to travel outside the rural area, or even between many of the towns within this area, customers would likely need a newer model EV with longer range capabilities, which comes at a higher cost, or access to public charging, which is limited.

Idaho Power is encouraged by the improvements in battery technology and driving range in newer model EVs. The Company believes continued improvement in this area will ease this market barrier for its Oregon customers so long as it isn’t cost prohibitive, another market barrier that will be discussed later.

³ “September 2018 Office of Management and Budget Bulletin No. 18-04.” U.S. Census Bureau. <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>

⁴ “September 2018 Office of Management and Budget Bulletin No. 18-04.” U.S. Census Bureau. <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>

Market Barrier: Public Charging

Public charging station availability is limited within Idaho Power's Oregon service area. As of September 2021, Plugshare.com, a website that allows users to find and review charging stations, reported six locations to charge EVs in the Company's Oregon service area. Of these six locations, two stations are designed for EV charging, including the Electrify America DC Fast Charging site located in Huntington, Oregon, and the Tesla Supercharger site located in Ontario, Oregon. While the Tesla Supercharger site is public, it is for Tesla vehicles only. The other four locations, including a hotel, campground, RV park and state parks, consist of electrical outlets that EV drivers can use for charging. Below is a map of charging station availability in Idaho Power's Oregon service area, provided by PlugShare.com:



Market Barrier: Dealership Availability

As of July 2021, ODOE reported that 28 EVs, including 19 Battery Electric Vehicles (“BEV”) and 9 Plug-in Hybrid Electric Vehicles (“PHEV”), were registered in Idaho Power's Oregon service area.⁵ A contributing factor to the absence of EV's in eastern Oregon is the lack of availability. In September 2021, Idaho Power contacted the car dealerships located within its Oregon service area to assess the availability of EVs. One of the dealerships had an EV in stock; the Toyota RAV4 Prime, a PHEV with a

⁵ <https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx>. Note, ODOE's Oregon Electric Vehicle Dashboard states there are 23 EVs registered in Idaho Power's service area. However, ODOE's EV Dashboard Data Excel file, also available on the website, reports 28 EVs in Idaho Power's service area.

42-mile all-electric range on a full charge.⁶ While the number and variety of EVs available is minimal, Idaho Power is hopeful that the presence of EVs at local dealerships will increase and ultimately help spur interest and adoption in its Oregon service area.

Idaho Power is particularly optimistic about the introduction of electric light-duty trucks as trucks are very common in the Company's service area. Idaho Power's rural Oregon service area is home to many ranchers and farmers who rely on trucks as their primary vehicle. The rurality and nearby mountain ranges of this area also make it attractive to recreationists that pull trailers, boats, and other recreational equipment. The Company anticipates that electric trucks will have a positive impact on the acceleration of TE in its Oregon service area. Currently, there are many types of electric trucks in the works with a few models expected to enter the market this year or within the next few years, including the Tesla Cybertruck, the Bollinger B2, the GMC Hummer, the Chevy Silverado, the Ford F-150 Lightning, the RAM 1500 EV, and the Rivian R1T.⁷ However, it will be important for electric trucks to be powerful, have long-range capabilities, and most importantly, be affordable. Although there is progress being made in this segment of the EV market, many of the electric truck models in development may not be available to the mass market, and specifically to the eastern Oregon market, for many years. Idaho Power will be closely monitoring the development and launch of electric trucks so that it can promote these vehicles among its customers and local dealerships.

Market Barrier: Price

Although the range and cost of EVs are improving as technology advances, the price of EVs remains a barrier to adoption. This barrier is amplified when considering the income levels of Idaho Power's Oregon customers. According to the United States Census Bureau, the median household income for Ontario, Oregon is \$36,922, and the percentage of persons living below the poverty line is 27.3 percent.⁸ In comparison, the median household income and poverty rate for Boise, Idaho are \$65,463, and 13.7 percent, respectively, and \$76,231, and 12.3 percent, respectively, for Portland, Oregon.⁹ In August 2020, the Oregon Center for Public Policy reported that Malheur County, the county in which the majority of Idaho Power's Oregon customers reside, has the highest poverty rate in Oregon.¹⁰ Malheur County has also been identified as a "high poverty hotspot,"¹¹ or a geographic concentration of poor residents by the Oregon Department of Human Services.

⁶ <https://api.toyotainventory.com/VEHICLES/JTMEB3FV0MD050691/monroney>

⁷ <https://www.caranddriver.com/news/g29994375/future-electric-cars-trucks/>

⁸ For comparison the Toyota RAV4 Prime, which is the only PHEV currently available in Idaho Power's Oregon service area, is priced at \$44,258 before tax rebates and state incentives.

⁹ Data derived from US Census Bureau. Median Household Income (in 2019 inflation-adjusted dollars). 2015-2019 American Community Survey 5-year estimates. Analysis derived data for Ontario, and separate analyses derived the same data for the cities of Boise and Portland for comparison purposes.

¹⁰ https://www.ocpp.org/2020/08/07/poverty-oregon/#_edn19

¹¹ "High Poverty Hotspots – Malheur County" *Oregon.gov*. Oregon Department of Human Services Office of Forecasting, Research, & Analysis. Hotspot: The US Census Bureau's definition of a poverty area is a tract with a poverty rate of 20 percent or more. The Oregon Department of Human Services defines a high poverty hotspot as a

Due to the educational nature of the Company's Program, it is difficult to measure the Program's direct impact on driving range, public charging, dealership availability and price barriers. The Company is monitoring technological progress, dealership availability and available incentives so that it can market this information to customers and help address these barriers. Although Idaho Power does not have current plans to invest in charging infrastructure due to the costs it could impose on its customers, the Company will continue to leverage partnerships to promote and market public charging in its Oregon service area, similar to its work with Electrify America and the Huntington, Oregon public charging station, which is discussed in detail in Idaho Power's 2018 EV Program Evaluation Report.

Current risk that investment will result in stranded costs (OAR 860-087-0040(1)(e))

Not applicable.

Whether any program modifications are recommended to help meet expected outcomes (OAR 860-087-0040(1)(f))

Idaho Power did not make any modifications to the Program structure for 2021, with the exception of offering more virtual options due to the COVID-19 pandemic. However, the Company did reevaluate options for events and trainings in an effort to provide more tailored content for Idaho Power's Oregon customer base, reach new audiences, maximize customer interactions and use Program funds most efficiently. One of the events identified by Idaho Power as being more tailored for its customers was a webinar on rural TE programs. Idaho Power sponsored Bridging the Gap: Rural Electric Transportation Programs on April 13, 2021. The webinar focused on the differences in rural transportation needs compared to urban ones, electrifying different types of equipment, such as tractors, forklifts and other work vehicles, and highlighted Forth's e-tractor sharing project. The Company continues to look for opportunities to provide valuable EV education to its Oregon customers in 2021 and beyond.

Updated market data, including a description of changes in the condition of the transportation electrification market within the electric company's service territory (OAR 860-087-0040(1)(g))

In Idaho Power's initial Program application, the Company explained that TE was essentially nonexistent in the region of eastern Oregon. While the Company believes that progress is being made in terms of awareness and education, it will be years before the TE market experiences significant change. Idaho Power includes a discussion below on updated market metrics as well as survey statistics.

census tract or contiguous group of tracts with poverty rates of 20 percent or more for two consecutive measurements. Poverty rates were measured in the Census Bureau's 2011-2015 and 2010-2014 American Community Surveys.

As mentioned previously, ODOE reported there were 28 EVs registered in Idaho Power's service area as of July 2021. In comparison, 29 EVs were registered in Idaho Power's service area in June 2020, representing a slight decrease in EV ownership. While Idaho Power cannot attest to the relatively stagnant level of EV ownership, it is worth noting that there was a change in the data source between the two reporting periods. Idaho Power previously relied on a report produced by the Oregon Department of Environmental Quality ("DEQ") to determine the number of EVs in Idaho Power's service area. DEQ is no longer publishing this report. As a result, Idaho Power now relies on ODOE for this information.

As noted previously, [Plugshare.com](https://www.plugshare.com) currently reports that there are six charging locations within the Company's Oregon service area, consisting of 22 charging ports total. Compared to last year, one additional charging port, consisting of a standard electrical outlet at a campground, has been added.

One of the car dealerships located in the Company's Oregon service area continues to carry EVs. As mentioned previously, the number and variety of EVs available in Idaho Power's Oregon service area is minimal, but the introduction of EVs at this local dealership within the last two years signifies progress in the market.

A December 2018 survey of Idaho Power's Empowered Community revealed that 36 percent of the Oregon respondents had "never been in or seen an EV". The Company posed this survey question again to its Oregon members of the Empowered Community in December 2019 and December 2020 to gauge changes in the level of EV awareness. In the December 2019 survey this figure decreased to 25 percent, and in the December 2020 survey this figure decreased to zero. Idaho Power found it encouraging that all survey respondents had been in the presence of an EV as this is an important factor in increasing awareness and knowledge of EVs. Additionally, results of the December 2020 survey showed that 10 percent of participants "love EVs and wished they owned one," compared to 8 percent in the prior survey, and 50 percent said they "like EVs but have questions or concerns." Finally, 50 percent of participants said they would purchase an EV over a traditional gas- or diesel-powered vehicle if the price was the same. Idaho Power is optimistic about the percentage of respondents who like EVs and would likely be open to further education and potential adoption, as well as the percentage of respondents who may be open to purchasing an EV as they become more affordable. The December 2020 Empowered Community EV survey and response statistics are provided in Attachment 5.

Evaluation of whether and how the program has accelerated transportation electrification (OAR 860-087-0040(1)(h)(A))

As the Program emphasizes awareness and education, it is difficult to determine and measure how the Program has accelerated TE, though the results of the Empowered Community EV survey discussed above indicate positive results. Idaho Power continues to believe that market barriers to adoption for its eastern Oregon customers are significant and it will take years for market transformation to occur in this remote,

rural area. Nonetheless, Idaho Power is committed to increasing awareness of the benefits of EVs and ensuring that its customers have access to the latest information.

Idaho Power believes that education and awareness is the first step in accelerating TE. The consumer purchase cycle begins with awareness of the technology, followed by consideration to determine if that vehicle will meet the consumer's needs. Once a customer has determined that the technology could work, they begin to evaluate the different options and eventually may purchase a vehicle. The Company's TE Program is a prudent first step towards accelerating TE and achieving the objectives established by the Legislative Assembly in SB 1547.

Evaluation of whether and how the program has stimulated innovation, competition and customer choice (OAR 860-087-0040(1)(h)(B))

As the Program emphasizes awareness and education of EVs, it is difficult to gauge the impact on innovation, competition, and customer choice. However, as discussed above, the availability of EVs at dealerships in the Company's Oregon service area has increased since the inception of the Program. Additionally, in the long-term the Program may have an indirect impact on these elements through increased consumer demand for EVs and charging equipment. Idaho Power will be attentive to these components in the future if/when the TE market in its Oregon service area has expanded and warrants more infrastructure.

Evaluation of whether and how the program has supported system efficiency and operational flexibility, including the ability to integrate variable resources (OAR 860-087-0040(1)(h)(C))

As the Program emphasizes awareness and education, and given the level of EV adoption in eastern Oregon, there has not been an impact on the Company's electrical system efficiencies and operational flexibility, including the ability to integrate variable generating resources.

V. **CONCLUSION**

Idaho Power's Program intends to improve visibility and awareness of EVs in its Oregon service area through targeted education, including showcasing EVs at local events, providing resources to customers interested in learning more about EVs and offering EV training to trade allies. The Program is an essential first step to gaining customer understanding of the benefits of EVs, which will eventually lead to increased adoption and acceleration of TE. Idaho Power achieved its Program objectives for 2020 and looks forward to continued discussions regarding transportation electrification in its upcoming TE Plan.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
CASE NO. UM 1815**

IDAHO POWER COMPANY

ATTACHMENT 1

Want to learn more?

Visit idahopower.com/EV to:

- / Calculate savings
- / Compare cars
- / Learn about tax credits and incentives
- / Find charging stations
- / Learn about providing charging stations at your business



Chevy Bolt

Electric Vehicles



IDAHO POWERED™

With prices among the lowest in that nation, record reliable service and clean energy sources, Idaho Power proudly supports customer use of EVs. The company even has its own fleet of cost-effective, environmentally friendly EVs. These include passenger cars, pickup trucks, forklifts, bucket trucks and utility vehicles.

Idaho Power will continue to monitor EV technology and work with customers to add new charging stations so EVs can be enjoyed by all.

Thinking about adding an
EV TO YOUR FLEET?

Come see ours in **ACTION**

Email us at ev@idahopower.com.



Nissan Leaf

Chevy Volt



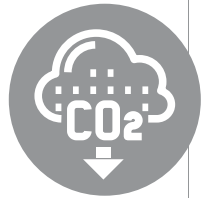
P.O. Box 70
1221 W. Idaho St.
Boise, ID 83702
idahopower.com

What are the benefits of electric vehicles (EV)?



Fuel savings

Mile for mile, it costs less than half to fuel an EV compared to a gas-powered vehicle. And with electricity prices among the lowest in the nation, Idaho Power makes charging EVs affordable.



Better air quality

With low or no tailpipe emissions, EVs reduce air pollution.



Less maintenance

All-electric vehicles have fewer moving parts and fewer fluids, resulting in lower maintenance costs. Also, most EVs come with a manufacturer warranty of up to 10 years or 100,000 miles.



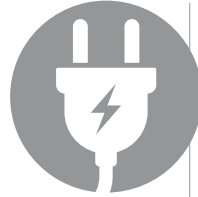
Performance

With instant acceleration, EVs are fun, quiet and easy to drive.



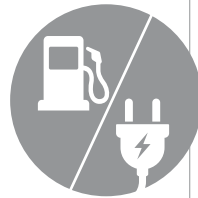
Compare EV options and federal tax credits at idahopower.com/ev

What are the types of EVs?



All-electric

All-electric vehicles have a battery and an electric motor instead of a gas tank and an internal combustion engine. They run entirely on electricity and do not produce exhaust from the burning of fossil fuels. They are “fueled” by plugging into an outlet.



Plug-in Hybrid

Hybrid EVs have a battery and an electric motor, as well as a gas-powered internal combustion engine. These EVs can run off the battery, then switch to gas power when the battery is depleted. Like all-electric EVs, hybrid EVs are plugged in to charge the battery.

How far can EVs travel?

Different EVs can travel different distances before needing to be charged (called range), but most EVs can travel well over 100 miles per charge. Some EVs can even travel over 300 miles per charge! This range gets most drivers easily through their typical commute for several days.

TIP: Use the timer on your car or charger to manage when you charge. Charging after 9 p.m. helps keep prices lower for everyone.

How are EVs charged?

EVs can be fueled by simply plugging them into an outlet connected to the power grid. There are different types, or levels, of outlets that charge at different speeds. The time it takes to charge will depend on the size of the battery, how full it is and the type of charger. Since most people drive less than 30 miles a day, it may only take a short time to top off the battery each night.

A standard household 120-volt outlet (called a **Level 1 charger**) may be used but takes longer to charge — 9 to 24 hours for full charge.

A faster charging outlet (called a **Level 2 charger**) fully charges in 4 to 6 hours and can be installed in homes but require additional equipment.* More efficient chargers are labeled ENERGY STAR®.

Fast-charging stations (called **DC fast chargers**) are available along interstate corridors for long-distance travelers. In the time it takes to take a break or stop for lunch (25 to 40 minutes), EVs can fully recharge at these stations.

Where can I charge my EV?

Outside of the home, EV charging stations are available to use throughout the country. You can find these stations by visiting idahopower.com/EV or plugshare.com.

*Idaho Power recommends talking to an electrician to see if electric-service changes are needed for any electrical work.



**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
CASE NO. UM 1815**

IDAHO POWER COMPANY

ATTACHMENT 2

Fluctuating gas prices, advancements in battery technology, environmental concerns and federal incentives have all led to an increased interest in electric vehicles (EVs). As your electricity provider, Idaho Power is preparing for accelerated consumer adoption of EVs and wants to help our customers better understand the technology.

How much energy does it take to charge an EV?

It takes about 0.3 kilowatt hours (kWh) to go one mile in an EV. So for example, a 10-mile commute to work would require 3 kWh of electricity.

DOE's eGallon calculator provides up-to-date gasoline vs. electricity prices at: www.energy.gov/maps/egallon.



IDAHO POWERED™



What about Idaho Power's Time of Day plan?

We're encouraging EV owners to consider our Time of Day pricing plan instead of the Standard plan. The Time of Day plan has lower prices weekdays after 9 pm and all day on weekends and holidays. This option could save you money and, by charging during off hours, you'll help even out demand on the power grid. For more information, visit idahopower.com/TOD.

The first step to determining which plan is right for you is to register to use myAccount. Signing up is easy and you'll get access to detailed information about your account and energy use. To enroll, go to idahopower.com/register.

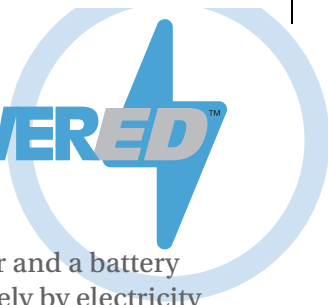
Electric Vehicle HOME CHARGING



Learn more at idahopower.com/ev



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Boise, ID 83702
www.idahopower.com



What is an EV?

EVs run off an electric motor and a battery pack. They're powered entirely by electricity and have low to no emissions. Also referred to as Battery Electric Vehicles (BEVs) or Plug-in Electric Vehicles (PEVs), EVs are charged by plugging into a charging station.

Example: Nissan Leaf

Plug-In Hybrid Electric Vehicles (PHEVs) are hybrids with larger battery packs and an Internal Combustion Engine. PHEVs can be plugged into a charging station to recharge their battery pack(s) or run off gasoline.

Example: Chevy Volt

What are the benefits of owning an EV?

Fuel savings: Electricity as a fuel can be significantly cheaper than gasoline or diesel.

Better air quality: EVs are low to no emissions vehicles, which improves air quality.

Local fuel: More than half of Idaho Power's energy is generated in our service area, meaning your fuel dollars stay at home.

Less maintenance: EVs have far fewer moving parts to be maintained than traditional vehicles.

Performance: Unlike traditional engines, EVs are always "on," meaning instant acceleration.



Nissan Leaf

Chevy Volt

I'm interested – how do I charge it?

EVs are powered all or in part by electricity. The time it takes for a full charge depends on the type of vehicle, temperature, driving habits and the type of charging station, among other factors.

There are three options for charging:

Level 1 – 120V, dedicated 15-20A circuit.

Used both at home and work, Level 1 charging draws a lower electrical demand but takes longer to charge a car than the other options.

Level 2 – 240V, dedicated 30-40A circuit.

Typically found at businesses and public sites, these units are also available for home use. This type of unit will recharge an EV much faster than Level 1, allowing multiple users throughout the day. Home EV charging stations typically range from \$600 to \$800 plus installation. Installation costs vary and will be higher if wiring or electrical service upgrades are needed.

DC Fast Charging – 480V.

These units are typically found at public facilities. Note that not all EVs are equipped for fast charging.



Visit www.PlugShare.com to find public charging locations in your area.

Charging at Home

EVs all come with a Level 1, 120 Volt charging cord that can be plugged into a standard electric socket, providing a slow charge. While the Level 1 may work well for a plug-in electric hybrid, it may not be sufficient for an all electric vehicle, which can take overnight or longer to fully charge at 120 Volts.

For faster charging, you'll want a Level 2 charging station. Level 2 stations require a dedicated 208/240 Volt circuit, similar to wiring used for electric clothes dryers.

Placement

Consider where you'll park your EV. Make sure the cord is long enough to reach your parking spot. For stations installed outdoors, ensure the unit is rated for outdoor weather.

Compatibility

Make sure the station you choose is compatible with the make, model and year of vehicle and your electrical service. The speed a car can charge is measured in kilowatts (kW) or Amps and can vary depending on the car. The more kilowatts or amps, the faster the charge. If your electrical service panel can handle it, you'll likely want a charging station that can charge as fast as your car can accommodate.

Where to buy a charging station

Charging stations can be purchased online through a variety of retailers. Your vehicle manufacturer may offer recommendations or discounts on specific products.

Idaho Power recommends using a licensed electrician for any home or workplace electrical work.

**BEFORE THE
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IDAHO POWER COMPANY

ATTACHMENT 3

Fluctuating gas prices, advancements in battery technology, environmental concerns and federal incentives have all led to an increased interest in electric vehicles (EVs). As your electricity provider, Idaho Power is preparing for accelerated consumer adoption of EVs and wants to help our customers better understand the technology.

What is an EV?

EVs run off an electric motor and a battery pack. They're powered entirely by electricity and have zero tailpipe emissions. Also referred to as Battery Electric Vehicles (BEVs) or Plug-in Electric Vehicles (PEVs), EVs are charged by plugging into a charging station. **Example: Nissan Leaf.**

Plug-In Hybrid Electric Vehicles (PHEVs) are hybrids with larger battery packs and an Internal Combustion Engine. PHEVs can be plugged into a charging station to recharge their battery pack(s) or run off gasoline. **Example: Chevy Volt.**



Nissan Leaf

Chevy Volt

IDAHO POWERED™

Idaho Power's leading the way:

To get familiar with the technology, Idaho Power has added several passenger EVs to our fleet, as well as hybrid-electric bucket trucks, electric utility vehicles and battery-assisted trucks. We also installed five charging stations of varying make and model at our Downtown Boise office, specifically for employee workplace charging. We will continue to monitor advancements in EV and charging station technology to make sure our customers have the information they need.

Email ev@idahopower.com for information.



EV WORKPLACE Charging



Want to see
CHARGING STATIONS?
in **ACTION?**
Schedule a visit.



Learn more at
idahopower.com/ev



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Charging an EV

EVs are powered all or in part by electricity. The time it takes for a full charge depends on the type of vehicle, temperature, driving habits and the type of charging station, among other factors.

There are three options for charging:

Level 1 – 120V, dedicated 15-20A circuit.

Used both at home and work, Level 1 charging draws a lower electrical demand but takes longer to charge a car than the other options.

Level 2 – 240V, dedicated 30-40A circuit.

Typically found at businesses and public sites, these units are also available for home use. This type of unit will recharge an EV much faster than Level 1, allowing multiple users throughout the day.

DC Fast Charging – 480V.

These units are typically found at public facilities. Note that not all EVs are equipped for fast charging.



Compare EV options and Federal Tax Credits at www.fueleconomy.gov

Workplace Charging

Installing workplace charging stations for employee, customer and fleet vehicles offers a low-cost benefit that will expand your business' transportation and parking options. Charging at work or in public places can help EV drivers double their all-electric daily commuting range and provides a charging location for employees and customers without access to home charging. Level 1 and 2 charging stations cost anywhere from \$1,000 to over \$7,500, depending on the number of ports and functionality. Installation costs are additional.

For employees: Most employees spend 40 hours a week or more at work, and studies show that next to home, work is the preferred place to charge.

For your fleet: Adding EVs to your company fleet demonstrates your company's commitment to sustainability. EVs are fun to drive, easy to maintain, and may even reduce your business' transportation-related operating costs.

For your customers: Installing charging stations for customers with EVs provides a convenient way to recharge while they visit your business, and may encourage them to stay longer or visit more frequently.



How much energy does it take to charge an EV?

It takes about 0.3 kilowatt hours (kWh) to go one mile in an EV. So for example, a 10-mile commute to work would require 3 kWh of electricity.

DOE's eGallon calculator provides up-to-date gasoline vs. electricity prices at: www.energy.gov/maps/egallon.

I'm Ready to Buy – What's Next?

- ⚡ Choose the EV charging station that best suits your needs.
- ⚡ Consult with the product manufacturer on any special installation requirements.
- ⚡ Get bids from contractors and electricians before proceeding.
- ⚡ Ensure all local, state, and federal codes are met.



Visit www.PlugShare.com to find public charging locations in your area.

Idaho Power recommends using a licensed electrician for any home or workplace electrical work.

**BEFORE THE
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IDAHO POWER COMPANY

ATTACHMENT 4

Consider an Electric Vehicle (EV)

With prices among the lowest in the nation, record reliable service and clean-energy goals, Idaho Power proudly supports customer use of EVs.



WANT TO LEARN MORE?

- ✓ Calculate savings
- ✓ Compare cars
- ✓ Learn about Oregon tax credits and incentives
- ✓ Find charging stations
- ✓ Learn about providing charging stations at your business

Visit idahopower.com/EV

 **IDAHO POWER**®

An IDACORP Company

Why choose an EV?



Fuel Savings

Mile for mile, it **costs one-third to half** the amount to fuel an EV compared to a gas-powered vehicle.



Better Air Quality

With no tailpipe emissions, all-electric vehicles **don't contribute to air pollution.**



Less Maintenance

All-electric vehicles have fewer moving parts and fluids, resulting in **lower maintenance costs.**



Performance

With instant acceleration, EVs are fun, quiet and **easy to drive.**

**BEFORE THE
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IDAHO POWER COMPANY

ATTACHMENT 5

Empowered Community

2020 Oregon Member EV Survey Results Compared to 2019 and 2018 Oregon Member EV Survey Results

2020 Oregon Electric Vehicle Survey vs. 2019 and 2018 Oregon Electric Vehicle Survey Summary of Results

- 2019 survey sent to 52 members of Empowered Community who have an Oregon zip code.
- 28 of the 52 responded for a 54% response rate (very small sample to evaluate).
- Like in previous studies, the majority of the respondents in the 2020 study were between the ages of 55 and 74.
- None of the respondents in the 2020, 2019 or 2018 study currently own an EV.
- In the 2020 study, respondents who are between the ages of 55 and 74 were the most familiar with EVs.
- More women responded to the 2020, 2019 and 2018 studies than men but in all years the men were more familiar with EVs than women.
- The respondents in 2020, 2019 and 2018 that indicated they were most familiar with EVs were those with a college degree.
- A new question was added in the 2020 study asking respondents if they are aware of any public EV charging stations in their area. More than half the respondents (57%) said they are aware of public EV charging stations in their area.
- More respondents in the 2019 study indicated they had seen or been in an EV than respondents in either the 2020 or 2018 study.
- As in the 2018 and 2019 studies, two respondents in the 2020 study indicated they had driven an EV before.
- As in past years, among the respondents in the 2020 study who said they are familiar with EVs, most said their knowledge of EVs had increased in the last two years and their primary sources for information included: the internet, family or friends or personal research.
- As in 2018 and 2019, the majority of respondents in the 2020 study said they like EVs but they have some question or concerns. Again, only one respondent said they didn't like EVs.
- What respondents like best about EVs has changed over the last three years. In 2018, the primary reason was "No, or low, vehicle emissions" and "No, or little, fossil fuel required to power vehicle." In 2020 the thing respondents said they like best about EVs is "Low maintenance" followed by "Little noise output" and "No, or little, fossil fuel required to power vehicle."
- The things respondents say they like least about EVs has not changed over the past three years including: "Not good for long trips," "Purchase price" and "Not very many public EV charging stations."
- A question was added in the 2020 survey to establish what type of vehicle the respondent currently drives to help understand the future potential for EVs. Forty-seven percent of the respondents drive an SUV, thirty-two percent drive a sedan and eighteen percent drive a truck.
- When asked how likely they would be to purchase an EV if the purchase price of the EV was the same as a gas or diesel fueled vehicle, almost half said "somewhat" or "very" likely in the 2020 study.
- When asked how likely they would be to purchase an EV if the distance you could drive on a battery charge of an EV was the same as the distance you could drive on a tank of gas diesel fuel, just under two-thirds of respondents in the 2020 study said "somewhat" or "very" likely.
- The majority of respondents in the 2018, 2019 and 2020 studies said they typically drive more than 50 miles at least monthly with eleven percent of the respondents in the 2020 study saying they drive more than 50 miles on a daily basis compared to thirteen percent in 2019 and fifteen percent in 2018.

2020 compared to 2019 and 2018 OR EV survey results
Summary Results

2020 Oregon Electric Vehicle Survey Compared to 2019 & 2018 Surveys

Do you already own an Electric Vehicle (EV)?	2018	2019	2020
Total	20	24	28
Yes	0%	0%	0%
No	100%	100%	100%

Are you aware of any public EV charging stations in your area? <i>(asked only in 2020 study)</i>			2020
Total			28
Yes			57%
No			43%

How familiar are you with EVs? (again by EVs we are referring specifically to Plug-in Electric Vehicles or Plug-in Hybrid Electric Vehicles)	2018	2019	2020
Total	20	24	28
Very familiar	5%	13%	0%
Somewhat familiar	50%	38%	36%
Not very familiar	30%	33%	43%
Not familiar at all	15%	17%	21%

Have you ever been in an EV or seen an EV? <i>(asked only of respondents who indicated they are very or somewhat familiar with EVs)</i>	2018	2019	2020
Total	11	12	10
Yes	45%	75%	100%
No	36%	25%	0%
Not sure	18%	0%	0%

Have you ever driven an EV? <i>(asked only of respondents who indicated they have been in or seen an EV)</i>	2018	2019	2020
Total	5	9	10
Yes	40%	22%	20%
No	60%	78%	80%

2019-Overall what was your impression of the EV you drove? *(not asked in 2018)*

Over priced to fix. Not to mention the long term cost to title and registration
The car was very quiet and powerful.

2020-Overall what was your impression of the EV you drove?

They are way to small for my family and not anywhere close to affordable or economical
Very quiet with good acceleration. My only concern is distance driving.

2020 compared to 2019 and 2018 OR EV survey results
Summary Results

Would you say you have become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years? *(asked only of respondents who indicated they are very or somewhat familiar with EVs)*

	2018	2019	2020
Total	11	12	10
More informed about EVs	64%	67%	70%
Knowledge of EVs not changed	36%	33%	30%

Through what channels have you gained more information about EVs in the last 2 years? *(asked only of respondents who indicated they have become more informed about EVs in the last two years)*

	2018	2019	2020
Total	7	8	7
Family or friends	57%	50%	43%
Personal research	29%	63%	29%
Car dealership	14%	25%	0%
Television	43%	0%	29%
Radio	0%	0%	0%
Podcast	0%	13%	14%
Car show	0%	0%	0%
EV informational booth	0%	0%	0%
Internet	71%	50%	86%
Social Media (Facebook, Twitter, Instagram, etc.)	14%	0%	14%
Printed material (newspaper, magazines, etc.)	29%	38%	29%
Other (please specify)	0%	0%	0%

Overall, what is your opinion of EVs? *(asked only of respondents who indicated they are very or somewhat familiar with EVs)*

	2018	2019	2020
Total	11	12	10
I love them and I wish I owned one	0%	8%	10%
I like them but I have questions or concerns	55%	58%	50%
I don't like them	9%	8%	10%
I don't know enough about them to form an opinion	18%	0%	20%
Other (Please specify)	18%	25%	10%

2018 Other (Please specify) Responses

I know I would not buy one based upon my transportation requirements
too small of a car, wish they had bigger ones!

2019 Other (Please specify) Responses

They need to come way down in price not to mention be able to hold and entire family plus half a horse trailer.
They are too expensive to keep up and repair not to mention registration.
concerned about batteries and safety
Not in the market for a new car at this time.

2020 Other (Please specify) Responses

Anyone that thinks they are affordable are high and obviously doesn't have a large family

2020 compared to 2019 and 2018 OR EV survey results
Summary Results

Which of the following do you like best about EVs? *(asked only of respondents who indicated they love EVs and wish they owned one or those who indicated they like EVs but have some questions or concerns)*

	2018	2019	2020
Total	6	8	6
No, or low, vehicle emissions	83%	50%	67%
No, or little, fossil fuel required to power vehicle	67%	63%	83%
Overall cheaper to operate	0%	50%	50%
Little noise output	33%	50%	83%
Low maintenance	17%	38%	100%
Other (Please specify)	0%	0%	17%
None of the above	17%	0%	0%

Which, if any, of the following do you like least about EV's? *(asked only of respondents who indicated they love EVs and wish they owned one or those who indicated they like EVs but have some questions or concerns)*

	2018	2019	2020
Total	6	8	6
Not good for long trips	83%	88%	83%
Needs special equipment to charge at home	33%	25%	33%
Not very many public EV charging stations	67%	50%	67%
Special equipment is needed for roadside assistance or emergencies	50%	0%	0%
Sometimes it's too small for what I need to do	50%	13%	33%
Purchase price	67%	75%	67%
Other (Please specify)	0%	0%	0%
None of the above	0%	0%	0%

2019-You mentioned that you have some questions or concerns about EVs, what are those questions or concerns? *(asked only of respondents who said they like EVs but have questions or concerns) (not asked in 2018)*

I just need to do more research
The overall range is too low for rural areas.
Primarily I wonder whether an EV would work in rural Western locations where distances are greater.
Battery life, cost of replacement battery, range of travel on a charge.
Distance, safety
battery safety storage capacity
long distance

2020-You mentioned that you have some questions or concerns about EVs, what are those questions or concerns? *(asked only of respondents who said they like EVs but have questions or concerns)*

How long the batteries last. The battery replacement cost. Distance driving.
How much weight can one handle
Safety and battery longevity
Travel range, fire safety, level two charging availably, I want a base model EV without unnecessary options on them.
Covered in previous questions

2020 compared to 2019 and 2018 OR EV survey results
Summary Results

Which, if any, of the following are reasons why you don't like EVs? *(asked only of respondents who indicated they dislike EVs)*

	2018	2019	2020
Total	1	1	1
Not good for long trips	100%	100%	0%
Needs special equipment to charge at home	100%	0%	100%
Not very many public EV charging stations	100%	0%	0%
Special equipment is needed for roadside assistance or emergencies	100%	100%	100%
Sometimes it's too small for what I need to do	100%	100%	100%
Purchase price	100%	100%	100%
Other (Please specify)	100%	100%	0%
None of the above	0%	0%	0%

2018 Other (Please specify) Responses

State fees too high are not durable enough to be a family car or haul a trailer

2019 Other (Please specify) Responses

Depreciate in resale value very fast. Expected life shorter than financing term.

What additional information would you need to form an opinion about EVs?

Range and cost vs gas or diesel.

Overall safety of batteries including in a crash and life of batteries and replacement costs. Concern about distance between recharge and length of time to recharge when out on the road.

What type of vehicle do you currently drive? *(asked only in 2020 study)*

	2020
Total	28
Sedan	32%
SUV	47%
Crossover	0%
Van	4%
Truck	18%
Other (Please specify)	0%

If available in your area and the purchase price of a new vehicle of your choice was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase the electric powered version of the vehicle?

	2018	2019	2020
Total	20	24	28
Very likely	10%	17%	14%
Somewhat likely	45%	29%	36%
Not very likely	25%	25%	25%
Not likely at all	20%	29%	25%

If available in your area and the distance you could drive on a tank of gas or battery charge was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase the electric powered version of the vehicle of your choice?

	2018	2019	2020
Total	20	24	28
Very likely	25%	25%	25%
Somewhat likely	40%	42%	39%
Not very likely	20%	8%	25%
Not likely at all	15%	25%	11%

2020 compared to 2019 and 2018 OR EV survey results
Summary Results

If there were more public charging stations located in your area, or along highways, how likely would you be to purchase the electric powered version of the vehicle of your choice? <i>(only asked in 2020 study)</i>			2020
Total			28
Very likely			32%
Somewhat likely			29%
Not very likely			32%
Not likely at all			7%

2019-Why would you not consider purchasing an EV? *(asked only of respondents who said they are "Not very likely" or "Not likely at all" to purchase an EV) (not asked in 2018)*

Too much if a rural area
Power outage potential
The lack of range, living in a rural community the lack of charging stations, the inability of electric vehicles to tow and haul large loads.
I tow trailers for boats, ATVs, firewood, backhoe, etc. I go to remote mountain and desert areas to recreate. I also carry a lot of gear but rarely more than one passenger but occasionally 3 to 6 passengers. I need 4x4 for recreation and winter roads. I prefer to drive older used vehicles as they are cheaper to own and maintain. I do a lot of my own repairs or have my men do them. Electric cars and especially trucks are totally impractical. Plus they are over priced requiring longer term loans and then their value drops faster as the expected life is short, batteries being the weak link in longevity. I also resent the way they are being shoved down our throats by government, industry, tree huggers, Obama et al and environmentalists like that dummy phony Greta and all who worship her.
I keep my vehicles for a long time. I'd be concerned about battery safety and replacement costs.
If its not 4 wheel drive it wouldnt be very useful to me.
I like gas powered engines.
They are very underpowered at this point. We are usually pulling a trailer.

2020-Why would you not consider purchasing an EV? *(asked only of respondents who said they are "Not very likely" or "Not likely at all" to purchase an EV)*

I don't plan on purchasing a new vehicle at my age.
Not the right time for our family.
Driving distance and time to charge
Im not financially established for another vehicle
I enjoy driving the vehicle I currently own. I do not know enough about EV to want to convert.
Recharging time; cost of replacing batteries
Most things I do are in remote locations, mtns and such with most requiring 4x4 often. Not many EV stations I where I go
Until someone comes up with a way to dispose of batteries in a way that does not harm ANYTHING, I have no interest in electric vehicles.
We live very rural and besides that I know how to work on a gas or diesel engine, so if one breaks down out in the boonies, then one can hopefully fix said rig, thinking not so much with an electric rig.

2020 compared to 2019 and 2018 OR EV survey results
Summary Results

Overall, considering all driving you do, how often would you say you drive more than 50 miles in a day?	2018	2019	2020
Total	20	24	28
Daily	15%	13%	11%
Weekly	20%	21%	25%
Monthly	40%	38%	25%
A few times per year	25%	25%	32%
Never	0%	4%	7%

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		EDUCATION_ROLLUP					
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
public EV charging stations in your area?	Base	28	0	3	3	1	9	11	1	9	19	0	6	10	7	5	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Yes	COUNT	16	0	3	3	1	7	2	0	6	10	0	3	6	4	3
		COL %	57.1 %	0 %	100 %	100 %	100 %	77.8 %	18.2 %	0 %	66.7 %	52.6 %	0 %	50 %	60 %	57.1 %	60 %
	No	COUNT	12	0	0	0	0	2	9	1	3	9	0	3	4	3	2
		COL %	42.9 %	0 %	0 %	0 %	0 %	22.2 %	81.8 %	100 %	33.3 %	47.4 %	0 %	50 %	40 %	42.9 %	40 %

		Total	AGE_ROLLUP							Q7_GENDER		EDUCATION_ROLLUP					
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
How familiar are you with EVs?	Base	24	0	3	3	1	9	11	1	9	19	0	6	10	7	5	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Very familiar	COUNT	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	12.5 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Somewhat familiar	COUNT	9	0	0	2	1	2	4	1	6	4	0	1	4	4	1
		COL %	37.5 %	0 %	0 %	66.7 %	100 %	22.2 %	36.4 %	100 %	66.7 %	21.1 %	0 %	16.7 %	40 %	57.1 %	20 %
	Not very familiar	COUNT	8	0	3	1	0	4	4	0	3	9	0	4	4	1	3
		COL %	33.3 %	0 %	100 %	33.3 %	0 %	44.4 %	36.4 %	0 %	33.3 %	47.4 %	0 %	66.7 %	40 %	14.3 %	60 %
	Not familiar at all	COUNT	4	0	0	0	0	3	3	0	0	6	0	1	2	2	1
		COL %	16.7 %	0 %	0 %	0 %	0 %	33.3 %	27.3 %	0 %	0 %	31.6 %	0 %	16.7 %	20 %	28.6 %	20 %

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB1

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	AGE_ROLLUP							Q7_GENDER		EDUCATION_ROLLUP					
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
Have you ever been in an EV or seen an EV?	Base		12	0	0	2	1	2	4	1	6	4	0	1	4	4	1
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Yes	COUNT	9	0	0	2	1	2	4	1	6	4	0	1	4	4	1
		COL %	75 %	0 %	0 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	0 %	100 %	100 %	100 %	100 %
	No	COUNT	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	25 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Not sure	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

asked only of respondents who said they are very or somewhat familiar with EVs and who said they have been in or seen and EV

		Total	AGE_ROLLUP							Q7_GENDER		EDUCATION_ROLLUP					
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
Have you ever driven an EV?	Base		10	0	0	2	1	2	4	1	6	4	0	1	4	4	1
			--	0.00%	0.00%	20.00%	10.00%	20.00%	40.00%	10.00%	60.00%	40.00%	0.00%	10.00%	40.00%	40.00%	10.00%
	Yes	COUNT	2	0	0	1	0	0	1	0	1	1	0	0	1	1	0
		COL %	20 %	0 %	0 %	50 %	0 %	0 %	25 %	0 %	16.7 %	25 %	0 %	0 %	25 %	25 %	0 %
	No	COUNT	8	0	0	1	1	2	3	1	5	3	0	1	3	3	1
		COL %	80 %	0 %	0 %	50 %	100 %	100 %	75 %	100 %	83.3 %	75 %	0 %	100 %	75 %	75 %	100 %

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB1

asked only of respondents who said they are very or somewhat familiar with EVs and who said they have been in or seen and EV

		Total	AGE_ROLLUP						Q7_GENDER		EDUCATION_ROLLUP						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
Have you become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years?	Base	12	0	0	2	1	2	4	1	6	4	0	1	4	4	1	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	More informed about EVs	COUNT	8	0	0	1	1	2	3	0	4	3	0	1	2	3	1
		COL %	66.7 %	0 %	0 %	50 %	100 %	100 %	75 %	0 %	66.7 %	75 %	0 %	100 %	50 %	75 %	100 %
	Knowledge of EVs not changed	COUNT	4	0	0	1	0	0	1	1	2	1	0	0	2	1	0
		COL %	33.3 %	0 %	0 %	50 %	0 %	0 %	25 %	100 %	33.3 %	25 %	0 %	0 %	50 %	25 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB1

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	AGE_ROLLUP						Q7_GENDER		EDUCATION_ROLLUP						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
Overall, what is your opinion of EVs?	Base	10	0	0	2	1	2	4	1	6	4	0	1	4	4	1	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	I love them and I wish I owned one	COUNT	1	0	0	0	1	0	0	0	1	0	0	0	0	0	1
		COL %	10 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	16.7 %	0 %	0 %	0 %	0 %	0 %	100 %
	I like them but I have questions or concerns	COUNT	5	0	0	1	0	2	2	0	4	1	0	1	3	1	0
		COL %	50 %	0 %	0 %	50 %	0 %	100 %	50 %	0 %	66.7 %	25 %	0 %	100 %	75 %	25 %	0 %
	I don't like them	COUNT	1	0	0	0	0	0	0	1	0	1	0	0	1	0	0
		COL %	10 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	25 %	0 %	0 %	25 %	0 %	0 %
	I don't know enough about them to form an opinion	COUNT	2	0	0	0	0	0	2	0	1	1	0	0	0	2	0
		COL %	20 %	0 %	0 %	0 %	0 %	0 %	50 %	0 %	16.7 %	25 %	0 %	0 %	0 %	50 %	0 %
Other (Please specify)	COUNT	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	
	COL %	10 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %	25 %	0 %	0 %	0 %	25 %	0 %	

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB1

		Total	AGE_ROLLUP						Q7_GENDER		EDUCATION_ROLLUP						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
What type of vehicle do you currently drive?	Base		28	0	3	3	1	9	11	1	9	19	0	6	10	7	5
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Sedan	COUNT	9	0	1	1	1	2	4	0	4	5	0	0	4	3	2
		COL %	32.1 %	0 %	33.3 %	33.3 %	100 %	22.2 %	36.4 %	0 %	44.4 %	26.3 %	0 %	0 %	40 %	42.9 %	40 %
	SUV	COUNT	12	0	1	1	0	5	4	1	3	9	0	3	5	3	1
		COL %	42.9 %	0 %	33.3 %	33.3 %	0 %	55.6 %	36.4 %	100 %	33.3 %	47.4 %	0 %	50 %	50 %	42.9 %	20 %
	Crossover	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Van	COUNT	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0
		COL %	3.6 %	0 %	0 %	33.3 %	0 %	0 %	0 %	0 %	0 %	5.3 %	0 %	16.7 %	0 %	0 %	0 %
	Truck	COUNT	5	0	0	0	0	2	3	0	2	3	0	1	1	1	2
		COL %	17.9 %	0 %	0 %	0 %	0 %	22.2 %	27.3 %	0 %	22.2 %	15.8 %	0 %	16.7 %	10 %	14.3 %	40 %
	Other (Please specify)	COUNT	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
		COL %	3.6 %	0 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	5.3 %	0 %	16.7 %	0 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB1

		Total	AGE_ROLLUP						Q7_GENDER		EDUCATION_ROLLUP					
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus
If available in your area and the purchase price of a new vehicle of your choice was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	28	0	3	3	1	9	11	1	9	19	0	6	10	7	5
		--	0.00%	10.71%	10.71%	3.57%	32.14%	39.29%	3.57%	32.14%	67.86%	0.00%	21.43%	35.71%	25.00%	17.86%
Very likely	COUNT	4	0	0	0	1	2	1	0	1	3	0	0	2	0	2
	COL %	14.3 %	0 %	0 %	0 %	100 %	22.2 %	9.1 %	0 %	11.1 %	15.8 %	0 %	0 %	20 %	0 %	40 %
Somewhat likely	COUNT	10	0	1	2	0	3	4	0	5	5	0	3	2	3	2
	COL %	35.7 %	0 %	33.3 %	66.7 %	0 %	33.3 %	36.4 %	0 %	55.6 %	26.3 %	0 %	50 %	20 %	42.9 %	40 %
Not very likely	COUNT	7	0	1	1	0	3	2	0	3	4	0	0	4	3	0
	COL %	25 %	0 %	33.3 %	33.3 %	0 %	33.3 %	18.2 %	0 %	33.3 %	21.1 %	0 %	0 %	40 %	42.9 %	0 %
Not likely at all	COUNT	7	0	1	0	0	1	4	1	0	7	0	3	2	1	1
	COL %	25 %	0 %	33.3 %	0 %	0 %	11.1 %	36.4 %	100 %	0 %	36.8 %	0 %	50 %	20 %	14.3 %	20 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		EDUCATION_ROLLUP					
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
If available and distance on a tank of gas or battery charge was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base		28	0	3	3	1	9	11	1	9	19	0	6	10	7	5
			--	0.00%	10.71%	10.71%	3.57%	32.14%	39.29%	3.57%	32.14%	67.86%	0.00%	21.43%	35.71%	25.00%	17.86%
	Very likely	COUNT	7	0	1	0	1	3	2	0	2	5	0	0	3	1	3
		COL %	25 %	0 %	33.3 %	0 %	100 %	33.3 %	18.2 %	0 %	22.2 %	26.3 %	0 %	0 %	30 %	14.3 %	60 %
	Somewhat likely	COUNT	11	0	0	3	0	4	4	0	5	6	0	3	3	3	2
		COL %	39.3 %	0 %	0 %	100 %	0 %	44.4 %	36.4 %	0 %	55.6 %	31.6 %	0 %	50 %	30 %	42.9 %	40 %
	Not very likely	COUNT	7	0	2	0	0	2	3	0	2	5	0	3	2	2	0
		COL %	25 %	0 %	66.7 %	0 %	0 %	22.2 %	27.3 %	0 %	22.2 %	26.3 %	0 %	50 %	20 %	28.6 %	0 %
	Not likely at all	COUNT	3	0	0	0	0	0	2	1	0	3	0	0	2	1	0
		COL %	10.7 %	0 %	0 %	0 %	0 %	0 %	18.2 %	100 %	0 %	15.8 %	0 %	0 %	20 %	14.3 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB1

		Total	AGE_ROLLUP						Q7_GENDER		EDUCATION_ROLLUP						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
If there were more public charging stations located in your area, or along highways, how likely would you be to purchase the electric powered version of the vehicle of your choice?	Base		28	0	3	3	1	9	11	1	9	19	0	6	10	7	5
			--	0.00%	10.71%	10.71%	3.57%	32.14%	39.29%	3.57%	32.14%	67.86%	0.00%	21.43%	35.71%	25.00%	17.86%
	Very likely	COUNT	9	0	1	0	1	3	4	0	3	6	0	0	3	2	4
		COL %	32.1 %	0 %	33.3 %	0 %	100 %	33.3 %	36.4 %	0 %	33.3 %	31.6 %	0 %	0 %	30 %	28.6 %	80 %
	Somewhat likely	COUNT	8	0	0	1	0	4	3	0	3	5	0	3	2	2	1
		COL %	28.6 %	0 %	0 %	33.3 %	0 %	44.4 %	27.3 %	0 %	33.3 %	26.3 %	0 %	50 %	20 %	28.6 %	20 %
	Not very likely	COUNT	9	0	2	2	0	2	3	0	3	6	0	3	3	3	0
		COL %	32.1 %	0 %	66.7 %	66.7 %	0 %	22.2 %	27.3 %	0 %	33.3 %	31.6 %	0 %	50 %	30 %	42.9 %	0 %
	Not likely at all	COUNT	2	0	0	0	0	0	1	1	0	2	0	0	2	0	0
		COL %	7.1 %	0 %	0 %	0 %	0 %	0 %	9.1 %	100 %	0 %	10.5 %	0 %	0 %	20 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB1

		Total	AGE_ROLLUP						Q7_GENDER		EDUCATION_ROLLUP						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Some high school	High school graduate	Some college	College graduate	Graduate school plus	
Considering all driving you do, how often would you say you drive more than 50 miles in a day?	Base		28	0	3	3	1	9	11	1	9	19	0	6	10	7	5
			--	0.00%	10.71%	10.71%	3.57%	32.14%	39.29%	3.57%	32.14%	67.86%	0.00%	21.43%	35.71%	25.00%	17.86%
	Daily	COUNT	3	0	1	0	0	2	0	0	1	2	0	1	2	0	0
		COL %	10.7 %	0 %	33.3 %	0 %	0 %	22.2 %	0 %	0 %	11.1 %	10.5 %	0 %	16.7 %	20 %	0 %	0 %
	Weekly	COUNT	7	0	0	0	1	5	1	0	3	4	0	1	3	1	2
		COL %	25 %	0 %	0 %	0 %	100 %	55.6 %	9.1 %	0 %	33.3 %	21.1 %	0 %	16.7 %	30 %	14.3 %	40 %
	Monthly	COUNT	7	0	1	2	0	1	2	1	1	6	0	1	1	3	2
		COL %	25 %	0 %	33.3 %	66.7 %	0 %	11.1 %	18.2 %	100 %	11.1 %	31.6 %	0 %	16.7 %	10 %	42.9 %	40 %
	A few times per year	COUNT	9	0	1	1	0	1	6	0	4	5	0	3	3	2	1
		COL %	32.1 %	0 %	33.3 %	33.3 %	0 %	11.1 %	54.5 %	0 %	44.4 %	26.3 %	0 %	50 %	30 %	28.6 %	20 %
	Never	COUNT	2	0	0	0	0	0	2	0	0	2	0	0	1	1	0
		COL %	7.1 %	0 %	0 %	0 %	0 %	0 %	18.2 %	0 %	0 %	10.5 %	0 %	0 %	10 %	14.3 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB2

		Total	Q4_LENGTH_OF_SERVICE					Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
public EV charging stations in your area?	Base	28	10	9	9	0	17	7	1	3	0	0	19	6	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	Yes	COUNT	16	5	6	5	0	10	5	0	1	0	0	11	4
		COL %	57.1 %	50 %	66.7 %	55.6 %	0 %	58.8 %	71.4 %	0 %	33.3 %	0 %	0 %	57.9 %	66.7 %
	No	COUNT	12	5	3	4	0	7	2	1	2	0	0	8	2
		COL %	42.9 %	50 %	33.3 %	44.4 %	0 %	41.2 %	28.6 %	100 %	66.7 %	0 %	0 %	42.1 %	33.3 %

		Total	Q4_LENGTH_OF_SERVICE					Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
How familiar are you with EVs?	Base	28	10	9	9	0	17	7	1	3	0	0	19	6	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	Very familiar	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Somewhat familiar	COUNT	10	4	4	2	0	7	2	0	1	0	0	8	2
		COL %	35.7 %	40 %	44.4 %	22.2 %	0 %	41.2 %	28.6 %	0 %	33.3 %	0 %	0 %	42.1 %	33.3 %
	Not very familiar	COUNT	12	4	4	4	0	7	3	0	2	0	0	7	3
		COL %	42.9 %	40 %	44.4 %	44.4 %	0 %	41.2 %	42.9 %	0 %	66.7 %	0 %	0 %	36.8 %	50 %
	Not familiar at all	COUNT	6	2	1	3	0	3	2	1	0	0	0	4	1
		COL %	21.4 %	20 %	11.1 %	33.3 %	0 %	17.6 %	28.6 %	100 %	0 %	0 %	0 %	21.1 %	16.7 %

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB2

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own			
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you ever been in an EV or seen an EV?	Base		10	4	4	2	0	7	2	0	1	0	0	8	2
			--	--	--	--	--	--	--	--	--	--	--	--	--
	Yes	COUNT	10	4	4	2	0	7	2	0	1	0	0	8	2
		COL %	100 %	100 %	100 %	100 %	0 %	100 %	100 %	0 %	100 %	0 %	0 %	100 %	100 %
	No	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Not sure	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

asked only of respondents who said they are very or somewhat familiar with EVs and who said they have been in or seen and EV

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own			
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you ever driven an EV?	Base		10	4	4	2	0	7	2	0	1	0	0	8	2
			--	--	--	--	--	--	--	--	--	--	--	--	--
	Yes	COUNT	2	1	1	0	0	2	0	0	0	0	0	2	0
		COL %	20 %	25 %	25 %	0 %	0 %	28.6 %	0 %	0 %	0 %	0 %	0 %	25 %	0 %
	No	COUNT	8	3	3	2	0	5	2	0	1	0	0	6	2
		COL %	80 %	75 %	75 %	100 %	0 %	71.4 %	100 %	0 %	100 %	0 %	0 %	75 %	100 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB2

asked only of respondents who said they are very or somewhat familiar with EVs and who said they have been in or seen and EV

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own			
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years?	Base	10	4	4	2	0	7	2	0	1	0	0	8	2	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	More informed about EVs	COUNT	7	1	4	2	0	6	0	0	1	0	0	7	0
		COL %	70 %	25 %	100 %	100 %	0 %	85.7 %	0 %	0 %	100 %	0 %	0 %	87.5 %	0 %
	Knowledge of EVs not changed	COUNT	3	3	0	0	0	1	2	0	0	0	0	1	2
		COL %	30 %	75 %	0 %	0 %	0 %	14.3 %	100 %	0 %	0 %	0 %	0 %	12.5 %	100 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB2

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	Q4_LENGTH_OF_SERVICE					Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Overall, what is your opinion of EVs?	Base	10	4	4	2	0	7	2	0	1	0	0	8	2	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	I love them and I wish I owned one	COUNT	1	0	1	0	0	1	0	0	0	0	0	1	0
		COL %	10 %	0 %	25 %	0 %	0 %	14.3 %	0 %	0 %	0 %	0 %	0 %	12.5 %	0 %
	I like them but I have questions or concerns	COUNT	5	1	2	2	0	4	1	0	0	0	0	4	1
		COL %	50 %	25 %	50 %	100 %	0 %	57.1 %	50 %	0 %	0 %	0 %	0 %	50 %	50 %
	I don't like them	COUNT	1	1	0	0	0	1	0	0	0	0	0	0	1
		COL %	10 %	25 %	0 %	0 %	0 %	14.3 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
	I don't know enough about them to form an opinion	COUNT	2	1	1	0	0	0	1	0	1	0	0	2	0
		COL %	20 %	25 %	25 %	0 %	0 %	0 %	50 %	0 %	100 %	0 %	0 %	25 %	0 %
	Other (Please specify)	COUNT	1	1	0	0	0	1	0	0	0	0	0	1	0
		COL %	10 %	25 %	0 %	0 %	0 %	14.3 %	0 %	0 %	0 %	0 %	0 %	12.5 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2020 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent
If available in your area and the purchase price of a new vehicle of your choice was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	28	10	9	9	0	17	7	1	3	0	0	19	6
		--	--	--	--	--	--	--	--	--	--	--	--	--
Very likely	COUNT	4	0	3	1	0	4	0	0	0	0	0	4	0
	COL %	14.3 %	0 %	33.3 %	11.1 %	0 %	23.5 %	0 %	0 %	0 %	0 %	0 %	21.1 %	0 %
Somewhat likely	COUNT	10	3	2	5	0	7	3	0	0	0	0	7	2
	COL %	35.7 %	30 %	22.2 %	55.6 %	0 %	41.2 %	42.9 %	0 %	0 %	0 %	0 %	36.8 %	33.3 %
Not very likely	COUNT	7	3	3	1	0	2	3	0	2	0	0	5	1
	COL %	25 %	30 %	33.3 %	11.1 %	0 %	11.8 %	42.9 %	0 %	66.7 %	0 %	0 %	26.3 %	16.7 %
Not likely at all	COUNT	7	4	1	2	0	4	1	1	1	0	0	3	3
	COL %	25 %	40 %	11.1 %	22.2 %	0 %	23.5 %	14.3 %	100 %	33.3 %	0 %	0 %	15.8 %	50 %

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own			
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
If available and distance on a tank of gas or battery charge was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	28	10	9	9	0	17	7	1	3	0	0	19	6	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	Very likely	COUNT	7	1	4	2	0	5	2	0	0	0	0	6	1
		COL %	25 %	10 %	44.4 %	22.2 %	0 %	29.4 %	28.6 %	0 %	0 %	0 %	0 %	31.6 %	16.7 %
	Somewhat likely	COUNT	11	3	2	6	0	7	3	0	1	0	0	8	2
		COL %	39.3 %	30 %	22.2 %	66.7 %	0 %	41.2 %	42.9 %	0 %	33.3 %	0 %	0 %	42.1 %	33.3 %
	Not very likely	COUNT	7	4	3	0	0	3	2	0	2	0	0	5	1
		COL %	25 %	40 %	33.3 %	0 %	0 %	17.6 %	28.6 %	0 %	66.7 %	0 %	0 %	26.3 %	16.7 %
	Not likely at all	COUNT	3	2	0	1	0	2	0	1	0	0	0	0	2
		COL %	10.7 %	20 %	0 %	11.1 %	0 %	11.8 %	0 %	100 %	0 %	0 %	0 %	0 %	33.3 %

2020 compared to 2019 and 2018 OR EV survey results

2020 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE					Q4_Rent_Own			
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Considering all driving you do, how often would you say you drive more than 50 miles in a day?	Base	28	10	9	9	0	17	7	1	3	0	0	19	6	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	Daily	COUNT	3	1	1	1	0	2	1	0	0	0	0	2	1
		COL %	10.7 %	10 %	11.1 %	11.1 %	0 %	11.8 %	14.3 %	0 %	0 %	0 %	0 %	10.5 %	16.7 %
	Weekly	COUNT	7	1	3	3	0	4	2	0	1	0	0	6	1
		COL %	25 %	10 %	33.3 %	33.3 %	0 %	23.5 %	28.6 %	0 %	33.3 %	0 %	0 %	31.6 %	16.7 %
	Monthly	COUNT	7	4	1	2	0	5	2	0	0	0	0	3	3
		COL %	25 %	40 %	11.1 %	22.2 %	0 %	29.4 %	28.6 %	0 %	0 %	0 %	0 %	15.8 %	50 %
	A few times per year	COUNT	9	4	3	2	0	5	2	0	2	0	0	7	1
		COL %	32.1 %	40 %	33.3 %	22.2 %	0 %	29.4 %	28.6 %	0 %	66.7 %	0 %	0 %	36.8 %	16.7 %
	Never	COUNT	2	0	1	1	0	1	0	1	0	0	0	1	0
		COL %	7.1 %	0 %	11.1 %	11.1 %	0 %	5.9 %	0 %	100 %	0 %	0 %	0 %	5.3 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2019 XTAB1

asked only of respondents who said they are very or somewhat familiar with Eves and who said they have been in or seen and EV

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Have you ever driven an EV?	Base		9	0	0	1	1	3	4	0	4	5	0	1	3	0	3	0	2
			--	0%	0%	11%	11%	33%	44%	0%	44%	56%	0%	11%	33%	0%	33%	0%	22%
	Yes	COUNT	2	0	0	1	0	0	1	0	1	1	0	0	1	0	1	0	0
		COL %	22.2 %	0 %	0 %	100 %	0 %	0 %	25 %	0 %	25 %	20 %	0 %	0 %	33.3 %	0 %	33.3 %	0 %	0 %
	No	COUNT	7	0	0	0	1	3	3	0	3	4	0	1	2	0	2	0	2
		COL %	77.8 %	0 %	0 %	0 %	100 %	100 %	75 %	0 %	75 %	80 %	0 %	100 %	66.7 %	0 %	66.7 %	0 %	100 %

2020 compared to 2019 and 2018 OR EV survey results

2019 XTAB1

asked only of respondents who said they are very or somewhat familiar with Eves and who said they have been in or seen and EV

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Have you become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years?	Base	12	0	0	1	1	4	6	0	7	5	0	1	4	0	5	0	2	
		--	0%	0%	8%	8%	33%	50%	0%	58%	42%	0%	8%	33%	0%	42%	0%	17%	
	More informed about EVs	COUNT	8	0	0	0	0	4	4	0	5	3	0	1	4	0	2	0	1
		COL %	66.7 %	0 %	0 %	0 %	0 %	100 %	66.7 %	0 %	71.4 %	60 %	0 %	100 %	100 %	0 %	40 %	0 %	50 %
	Knowledge of EVs not changed	COUNT	4	0	0	1	1	0	2	0	2	2	0	0	0	0	3	0	1
		COL %	33.3 %	0 %	0 %	100 %	100 %	0 %	33.3 %	0 %	28.6 %	40 %	0 %	0 %	0 %	0 %	60 %	0 %	50 %

2020 compared to 2019 and 2018 OR EV survey results

2019 XTAB1

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Overall, what is your opinion of EVs?	Base		12	0	0	1	1	4	6	0	7	5	0	1	4	0	5	0	2
			--	0%	0%	8%	8%	33%	50%	0%	58%	42%	0%	8%	33%	0%	42%	0%	17%
	I love them and I wish I owned one	COUNT	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0
		COL %	8.3 %	0 %	0 %	0 %	0 %	25 %	0 %	0 %	14.3 %	0 %	0 %	0 %	25 %	0 %	0 %	0 %	0 %
	I like them but I have questions or concerns	COUNT	7	0	0	0	1	3	3	0	4	3	0	1	3	0	1	0	2
		COL %	58.3 %	0 %	0 %	0 %	100 %	75 %	50 %	0 %	57.1 %	60 %	0 %	100 %	75 %	0 %	20 %	0 %	100 %
	I don't like them	COUNT	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0
		COL %	8.3 %	0 %	0 %	0 %	0 %	0 %	16.7 %	0 %	14.3 %	0 %	0 %	0 %	0 %	0 %	20 %	0 %	0 %
	I don't know enough about them to form an opinion	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Other (Please specify)	COUNT	3	0	0	1	0	0	2	0	1	2	0	0	0	0	3	0	0
		COL %	25 %	0 %	0 %	100 %	0 %	0 %	33.3 %	0 %	14.3 %	40 %	0 %	0 %	0 %	0 %	60 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
If available and purchase price of a new vehicle of your choice was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	24	0	2	2	2	10	8	0	9	15	0	2	10	1	7	1	3	
		--	0%	8%	8%	8%	42%	33%	0%	38%	63%	0%	8%	42%	4%	29%	4%	13%	
	Very likely	COUNT	4	0	0	0	1	2	1	0	2	2	0	1	1	1	0	0	1
		COL %	16.7 %	0 %	0 %	0 %	50 %	20 %	12.5 %	0 %	22.2 %	13.3 %	0 %	50 %	10 %	100 %	0 %	0 %	33.3 %
	Somewhat likely	COUNT	7	0	1	0	0	4	2	0	2	5	0	0	4	0	2	0	1
		COL %	29.2 %	0 %	50 %	0 %	0 %	40 %	25 %	0 %	22.2 %	33.3 %	0 %	0 %	40 %	0 %	28.6 %	0 %	33.3 %
	Not very likely	COUNT	6	0	1	1	0	1	3	0	3	3	0	1	2	0	2	1	0
		COL %	25 %	0 %	50 %	50 %	0 %	10 %	37.5 %	0 %	33.3 %	20 %	0 %	50 %	20 %	0 %	28.6 %	100 %	0 %
	Not likely at all	COUNT	7	0	0	1	1	3	2	0	2	5	0	0	3	0	3	0	1
		COL %	29.2 %	0 %	0 %	50 %	50 %	30 %	25 %	0 %	22.2 %	33.3 %	0 %	0 %	30 %	0 %	42.9 %	0 %	33.3 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
If available and distance on a tank of gas or battery charge was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	24	0	2	2	2	10	8	0	9	15	0	2	10	1	7	1	3	
		--	0%	8%	8%	8%	42%	33%	0%	38%	63%	0%	8%	42%	4%	29%	4%	13%	
	Very likely	COUNT	6	0	0	0	1	3	2	0	3	3	0	1	3	1	0	0	1
		COL %	25 %	0 %	0 %	0 %	50 %	30 %	25 %	0 %	33.3 %	20 %	0 %	50 %	30 %	100 %	0 %	0 %	33.3 %
	Somewhat likely	COUNT	10	0	1	1	0	5	3	0	3	7	0	1	3	0	3	1	2
		COL %	41.7 %	0 %	50 %	50 %	0 %	50 %	37.5 %	0 %	33.3 %	46.7 %	0 %	50 %	30 %	0 %	42.9 %	100 %	66.7 %
	Not very likely	COUNT	2	0	1	0	0	0	1	0	1	1	0	0	1	0	1	0	0
		COL %	8.3 %	0 %	50 %	0 %	0 %	0 %	12.5 %	0 %	11.1 %	6.7 %	0 %	0 %	10 %	0 %	14.3 %	0 %	0 %
	Not likely at all	COUNT	6	0	0	1	1	2	2	0	2	4	0	0	3	0	3	0	0
		COL %	25 %	0 %	0 %	50 %	50 %	20 %	25 %	0 %	22.2 %	26.7 %	0 %	0 %	30 %	0 %	42.9 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Considering all driving you do, how often would you say you drive more than 50 miles in a day?	Base	24	0	2	2	2	10	8	0	9	15	0	2	10	1	7	1	3	
		--	0%	8%	8%	8%	42%	33%	0%	38%	63%	0%	8%	42%	4%	29%	4%	13%	
	Daily	COUNT	3	0	0	1	1	1	0	0	2	1	0	0	2	0	0	0	1
		COL %	12.5 %	0 %	0 %	50 %	50 %	10 %	0 %	0 %	22.2 %	6.7 %	0 %	0 %	20 %	0 %	0 %	0 %	33.3 %
	Weekly	COUNT	5	0	1	1	1	0	2	0	1	4	0	0	2	0	3	0	0
		COL %	20.8 %	0 %	50 %	50 %	50 %	0 %	25 %	0 %	11.1 %	26.7 %	0 %	0 %	20 %	0 %	42.9 %	0 %	0 %
	Monthly	COUNT	9	0	0	0	0	6	3	0	5	4	0	1	2	1	3	0	2
		COL %	37.5 %	0 %	0 %	0 %	0 %	60 %	37.5 %	0 %	55.6 %	26.7 %	0 %	50 %	20 %	100 %	42.9 %	0 %	66.7 %
	A few times per year	COUNT	6	0	1	0	0	2	3	0	1	5	0	1	3	0	1	1	0
		COL %	25 %	0 %	50 %	0 %	0 %	20 %	37.5 %	0 %	11.1 %	33.3 %	0 %	50 %	30 %	0 %	14.3 %	100 %	0 %
	Never	COUNT	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0
		COL %	4.2 %	0 %	0 %	0 %	0 %	10 %	0 %	0 %	0 %	6.7 %	0 %	0 %	10 %	0 %	0 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2019 XTAB2

		Total	Q4_LENGTH_OF_SERVICE												
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
How familiar are you with EVs?	Base	24	7	9	8	0	15	5	0	4	0	0	21	1	
		--	29%	38%	33%	0%	63%	21%	0%	17%	0%	0%	88%	4%	
	Very familiar	COUNT	3	1	0	2	0	2	0	0	1	0	0	3	0
		COL %	12.5 %	14.3 %	0 %	25 %	0 %	13.3 %	0 %	0 %	25 %	0 %	0 %	14.3 %	0 %
	Somewhat familiar	COUNT	9	1	5	3	0	5	3	0	1	0	0	9	0
		COL %	37.5 %	14.3 %	55.6 %	37.5 %	0 %	33.3 %	60 %	0 %	25 %	0 %	0 %	42.9 %	0 %
	Not very familiar	COUNT	8	3	4	1	0	4	2	0	2	0	0	6	0
		COL %	33.3 %	42.9 %	44.4 %	12.5 %	0 %	26.7 %	40 %	0 %	50 %	0 %	0 %	28.6 %	0 %
	Not familiar at all	COUNT	4	2	0	2	0	4	0	0	0	0	0	3	1
		COL %	16.7 %	28.6 %	0 %	25 %	0 %	26.7 %	0 %	0 %	0 %	0 %	0 %	14.3 %	100 %

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you ever been in an EV or seen an EV?	Base	12	2	5	5	0	7	3	0	2	0	0	12	0	
		--	17%	42%	42%	0%	58%	25%	0%	17%	0%	0%	100%	0%	
	Yes	COUNT	9	1	5	3	0	6	1	0	2	0	0	9	0
		COL %	75 %	50 %	100 %	60 %	0 %	85.7 %	33.3 %	0 %	100 %	0 %	0 %	75 %	0 %
	No	COUNT	3	1	0	2	0	1	2	0	0	0	0	3	0
		COL %	25 %	50 %	0 %	40 %	0 %	14.3 %	66.7 %	0 %	0 %	0 %	0 %	25 %	0 %
	Not sure	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

asked only of respondents who said they are very or somewhat familiar with EVs and who said they have been in or seen and EV

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you ever driven an EV?	Base	9	1	5	3	0	6	1	0	2	0	0	9	0	
		--	11%	56%	33%	0%	67%	11%	0%	22%	0%	0%	100%	0%	
	Yes	COUNT	2	1	1	0	0	2	0	0	0	0	0	2	0
		COL %	22.2 %	100 %	20 %	0 %	0 %	33.3 %	0 %	0 %	0 %	0 %	0 %	22.2 %	0 %
	No	COUNT	7	0	4	3	0	4	1	0	2	0	0	7	0
		COL %	77.8 %	0 %	80 %	100 %	0 %	66.7 %	100 %	0 %	100 %	0 %	0 %	77.8 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2019 XTAB2

asked only of respondents who said they are very or somewhat familiar with Eves and who said they have been in or seen and EV

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years?	Base	12	2	5	5	0	7	3	0	2	0	0	12	0	
		--	17%	42%	42%	0%	58%	25%	0%	17%	0%	0%	100%	0%	
	More informed about EVs	COUNT	8	0	3	5	0	5	2	0	1	0	0	8	0
		COL %	66.7 %	0 %	60 %	100 %	0 %	71.4 %	66.7 %	0 %	50 %	0 %	0 %	66.7 %	0 %
	Knowledge of EVs not changed	COUNT	4	2	2	0	0	2	1	0	1	0	0	4	0
		COL %	33.3 %	100 %	40 %	0 %	0 %	28.6 %	33.3 %	0 %	50 %	0 %	0 %	33.3 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB2

asked only of respondents who said they are very or somewhat familiar with EVs

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Overall, what is your opinion of EVs?	Base	12	2	5	5	0	7	3	0	2	0	0	12	0	
		--	17%	42%	42%	0%	58%	25%	0%	17%	0%	0%	100%	0%	
	I love them and I wish I owned one	COUNT	1	0	0	1	0	0	1	0	0	0	0	1	0
		COL %	8.3 %	0 %	0 %	20 %	0 %	0 %	33.3 %	0 %	0 %	0 %	0 %	8.3 %	0 %
	I like them but I have questions or concerns	COUNT	7	0	4	3	0	6	1	0	0	0	0	7	0
		COL %	58.3 %	0 %	80 %	60 %	0 %	85.7 %	33.3 %	0 %	0 %	0 %	0 %	58.3 %	0 %
	I don't like them	COUNT	1	0	0	1	0	0	0	0	1	0	0	1	0
		COL %	8.3 %	0 %	0 %	20 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	8.3 %	0 %
	I don't know enough about them to form an opinion	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Other (Please specify)	COUNT	3	2	1	0	0	1	1	0	1	0	0	3	0
		COL %	25 %	100 %	20 %	0 %	0 %	14.3 %	33.3 %	0 %	50 %	0 %	0 %	25 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
If available and the purchase price of a new vehicle was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	24	7	9	8	0	15	5	0	4	0	0	21	1	
		--	29%	38%	33%	0%	63%	21%	0%	17%	0%	0%	88%	4%	
	Very likely	COUNT	4	1	2	1	0	3	1	0	0	0	0	4	0
		COL %	16.7 %	14.3 %	22.2 %	12.5 %	0 %	20 %	20 %	0 %	0 %	0 %	0 %	19 %	0 %
	Somewhat likely	COUNT	7	1	2	4	0	5	1	0	1	0	0	7	0
		COL %	29.2 %	14.3 %	22.2 %	50 %	0 %	33.3 %	20 %	0 %	25 %	0 %	0 %	33.3 %	0 %
	Not very likely	COUNT	6	4	1	1	0	5	1	0	0	0	0	4	0
		COL %	25 %	57.1 %	11.1 %	12.5 %	0 %	33.3 %	20 %	0 %	0 %	0 %	0 %	19 %	0 %
	Not likely at all	COUNT	7	1	4	2	0	2	2	0	3	0	0	6	1
		COL %	29.2 %	14.3 %	44.4 %	25 %	0 %	13.3 %	40 %	0 %	75 %	0 %	0 %	28.6 %	100 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
If available and distance on a tank of gas or battery charge was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase an EV?	Base	24	7	9	8	0	15	5	0	4	0	0	21	1	
		--	29%	38%	33%	0%	63%	21%	0%	17%	0%	0%	88%	4%	
	Very likely	COUNT	6	1	4	1	0	5	1	0	0	0	0	6	0
		COL %	25 %	14.3 %	44.4 %	12.5 %	0 %	33.3 %	20 %	0 %	0 %	0 %	0 %	28.6 %	0 %
	Somewhat likely	COUNT	10	3	1	6	0	7	2	0	1	0	0	9	0
		COL %	41.7 %	42.9 %	11.1 %	75 %	0 %	46.7 %	40 %	0 %	25 %	0 %	0 %	42.9 %	0 %
	Not very likely	COUNT	2	2	0	0	0	1	1	0	0	0	0	1	0
		COL %	8.3 %	28.6 %	0 %	0 %	0 %	6.7 %	20 %	0 %	0 %	0 %	0 %	4.8 %	0 %
	Not likely at all	COUNT	6	1	4	1	0	2	1	0	3	0	0	5	1
		COL %	25 %	14.3 %	44.4 %	12.5 %	0 %	13.3 %	20 %	0 %	75 %	0 %	0 %	23.8 %	100 %

2020 compared to 2019 and 2018 OR EV survey results
2019 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Considering all driving you do, how often would you say you drive more than 50 miles in a day?	Base	24	7	9	8	0	15	5	0	4	0	0	21	1	
		--	29%	38%	33%	0%	63%	21%	0%	17%	0%	0%	88%	4%	
	Daily	COUNT	3	0	2	1	0	2	1	0	0	0	0	3	0
		COL %	12.5 %	0 %	22.2 %	12.5 %	0 %	13.3 %	20 %	0 %	0 %	0 %	0 %	14.3 %	0 %
	Weekly	COUNT	5	3	1	1	0	3	1	0	1	0	0	4	1
		COL %	20.8 %	42.9 %	11.1 %	12.5 %	0 %	20 %	20 %	0 %	25 %	0 %	0 %	19 %	100 %
	Monthly	COUNT	9	2	3	4	0	4	3	0	2	0	0	9	0
		COL %	37.5 %	28.6 %	33.3 %	50 %	0 %	26.7 %	60 %	0 %	50 %	0 %	0 %	42.9 %	0 %
	A few times per year	COUNT	6	2	3	1	0	5	0	0	1	0	0	4	0
		COL %	25 %	28.6 %	33.3 %	12.5 %	0 %	33.3 %	0 %	0 %	25 %	0 %	0 %	19 %	0 %
	Never	COUNT	1	0	0	1	0	1	0	0	0	0	0	1	0
		COL %	4.2 %	0 %	0 %	12.5 %	0 %	6.7 %	0 %	0 %	0 %	0 %	0 %	4.8 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP						Q7_GENDER		Q9_EDUCATION								
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
How familiar are you with EVs?	Base	COUNT	20	0	2	2	4	6	5	1	7	13	0	4	5	1	6	0	4
		COL %	--	0%	10%	10%	20%	30%	25%	5%	35%	65%	0%	20%	25%	5%	30%	0%	20%
	Very familiar	COUNT	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0
		COL %	5%	0%	0%	50%	0%	0%	0%	0%	14.3%	0%	0%	25%	0%	0%	0%	0%	0%
	Somewhat familiar	COUNT	10	0	2	0	2	2	3	1	6	4	0	2	2	0	5	0	1
		COL %	50%	0%	100%	0%	50%	33.3%	60%	100%	85.7%	30.8%	0%	50%	40%	0%	83.3%	0%	25%
	Not very familiar	COUNT	6	0	0	1	1	3	1	0	0	6	0	0	2	1	0	0	3
		COL %	30%	0%	0%	50%	25%	50%	20%	0%	0%	46.2%	0%	0%	40%	100%	0%	0%	75%
	Not familiar at all	COUNT	3	0	0	0	1	1	1	0	0	3	0	1	1	0	1	0	0
		COL %	15%	0%	0%	0%	25%	16.7%	20%	0%	0%	23.1%	0%	25%	20%	0%	16.7%	0%	0%

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Have you ever been in an EV or seen an EV?	Base		11	0	2	1	2	2	3	1	7	4	0	3	2	0	5	0	1
			--	0%	18%	9%	18%	18%	27%	9%	64%	36%	0%	27%	18%	0%	45%	0%	9%
	Yes	COUNT	5	0	1	1	0	2	1	0	4	1	0	2	1	0	2	0	0
		COL %	45.5 %	0 %	50 %	100 %	0 %	100 %	33.3 %	0 %	57.1 %	25 %	0 %	66.7 %	50 %	0 %	40 %	0 %	0 %
	No	COUNT	4	0	0	0	2	0	2	0	2	2	0	0	1	0	2	0	1
		COL %	36.4 %	0 %	0 %	0 %	100 %	0 %	66.7 %	0 %	28.6 %	50 %	0 %	0 %	50 %	0 %	40 %	0 %	100 %
	Not sure	COUNT	2	0	1	0	0	0	0	1	1	1	0	1	0	0	1	0	0
		COL %	18.2 %	0 %	50 %	0 %	0 %	0 %	0 %	100 %	14.3 %	25 %	0 %	33.3 %	0 %	0 %	20 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Have you ever driven an EV?	Base		5	0	1	1	0	2	1	0	4	1	0	2	1	0	2	0	0
			--	0%	20%	20%	0%	40%	20%	0%	80%	20%	0%	40%	20%	0%	40%	0%	0%
	Yes	COUNT	2	0	1	0	0	1	0	0	1	1	0	0	1	0	1	0	0
		COL %	40 %	0 %	100 %	0 %	0 %	50 %	0 %	0 %	25 %	100 %	0 %	0 %	100 %	0 %	50 %	0 %	0 %
	No	COUNT	3	0	0	1	0	1	1	0	3	0	0	2	0	0	1	0	0
		COL %	60 %	0 %	0 %	100 %	0 %	50 %	100 %	0 %	75 %	0 %	0 %	100 %	0 %	0 %	50 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results
2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Would you say you have become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years?	Base		11	0	2	1	2	2	3	1	7	4	0	3	2	0	5	0	1
			--	0%	18%	9%	18%	18%	27%	9%	64%	36%	0%	27%	18%	0%	45%	0%	9%
	More informed about EVs	COUNT	7	0	1	0	1	2	2	1	4	3	0	2	2	0	3	0	0
		COL %	63.6 %	0 %	50 %	0 %	50 %	100 %	66.7 %	100 %	57.1 %	75 %	0 %	66.7 %	100 %	0 %	60 %	0 %	0 %
	Knowledge of EVs not changed	COUNT	4	0	1	1	1	0	1	0	3	1	0	1	0	0	2	0	1
		COL %	36.4 %	0 %	50 %	100 %	50 %	0 %	33.3 %	0 %	42.9 %	25 %	0 %	33.3 %	0 %	0 %	40 %	0 %	100 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Overall, what is your opinion of EVs?	Base		11	0	2	1	2	2	3	1	7	4	0	3	2	0	5	0	1
			--	0%	18%	9%	18%	18%	27%	9%	64%	36%	0%	27%	18%	0%	45%	0%	9%
	I love them and I wish I owned one	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	I like them but I have questions or concerns	COUNT	6	0	0	0	2	2	1	1	5	1	0	2	2	0	1	0	1
		COL %	54.5 %	0 %	0 %	0 %	100 %	100 %	33.3 %	100 %	71.4 %	25 %	0 %	66.7 %	100 %	0 %	20 %	0 %	100 %
	I don't like them	COUNT	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
		COL %	9.1 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %	0 %	0 %	0 %	0 %	20 %	0 %	0 %
	I don't know enough about them to form an opinion	COUNT	2	0	1	0	0	0	1	0	0	2	0	0	0	0	2	0	0
		COL %	18.2 %	0 %	50 %	0 %	0 %	0 %	33.3 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %	40 %	0 %	0 %
	Other (Please specify)	COUNT	2	0	0	1	0	0	1	0	2	0	0	1	0	0	1	0	0
		COL %	18.2 %	0 %	0 %	100 %	0 %	0 %	33.3 %	0 %	28.6 %	0 %	0 %	33.3 %	0 %	0 %	20 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION							
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree	
Which of the following do you like best about EVs?	Base	COUNT	6	0	0	0	2	2	1	1	5	1	0	2	2	0	1	0	1
		COL %	--	0%	0%	0%	33%	33%	17%	17%	83%	17%	0%	33%	33%	0%	17%	0%	17%
	No, or low, vehicle emissions	COUNT	5	0	0	0	1	2	1	1	5	0	0	2	1	0	1	0	1
		COL %	83.3 %	0%	0%	0%	50 %	100 %	100 %	100 %	100 %	0%	0%	100 %	50 %	0%	100 %	0%	100 %
	No, or little, fossil fuel required to power vehicle	COUNT	4	0	0	0	0	2	1	1	4	0	0	2	1	0	1	0	0
		COL %	66.7 %	0%	0%	0%	0%	100 %	100 %	100 %	80%	0%	0%	100 %	50 %	0%	100 %	0%	0%
	Overall cheaper to operate	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Little noise output	COUNT	2	0	0	0	0	1	0	1	2	0	0	1	1	0	0	0	0
		COL %	33.3 %	0%	0%	0%	0%	50 %	0%	100 %	40%	0%	0%	50 %	50 %	0%	0%	0%	0%
	Low maintenance	COUNT	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0
		COL %	16.7 %	0%	0%	0%	0%	50 %	0%	0%	20%	0%	0%	0%	50 %	0%	0%	0%	0%
	Other (Please specify)	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	None of the above	COUNT	1	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0
		COL %	16.7 %	0%	0%	0%	50 %	0%	0%	0%	0%	100 %	0%	0%	50 %	0%	0%	0%	0%

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree
Base		20	0	2	2	4	6	5	1	7	13	0	4	5	1	6	0	4
		--	0%	10%	10%	20%	30%	25%	5%	35%	65%	0%	20%	25%	5%	30%	0%	20%
Very likely	COUNT	2	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	2
	COL %	10 %	0 %	0 %	0 %	25 %	16.7 %	0 %	0 %	14.3 %	7.7 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Somewhat likely	COUNT	9	0	1	1	0	4	2	1	5	4	0	3	1	1	3	0	1
	COL %	45 %	0 %	50 %	50 %	0 %	66.7 %	40 %	100 %	71.4 %	30.8 %	0 %	75 %	20 %	100 %	50 %	0 %	25 %
Not very likely	COUNT	5	0	1	0	2	0	2	0	0	5	0	1	1	0	2	0	1
	COL %	25 %	0 %	50 %	0 %	50 %	0 %	40 %	0 %	0 %	38.5 %	0 %	25 %	20 %	0 %	33.3 %	0 %	25 %
Not likely at all	COUNT	4	0	0	1	1	1	1	0	1	3	0	0	3	0	1	0	0
	COL %	20 %	0 %	0 %	50 %	25 %	16.7 %	20 %	0 %	14.3 %	23.1 %	0 %	0 %	60 %	0 %	16.7 %	0 %	0 %

If available in your area and the purchase price of a new vehicle of your choice was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase the electric powered version of the vehicle?

2020 compared to 2019 and 2018 OR EV survey results
2018 XTAB1

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB1

		Total	AGE_ROLLUP							Q7_GENDER		Q9_EDUCATION						
			less than 25	25-34	35-44	45-54	55-64	65-74	75 or older	Male	Female	Less than high school	High school graduate or GED	Some college or technical school	Associate degree	College degree	Some graduate school	Graduate degree
Base		20	0	2	2	4	6	5	1	7	13	0	4	5	1	6	0	4
		--	0%	10%	10%	20%	30%	25%	5%	35%	65%	0%	20%	25%	5%	30%	0%	20%
Very likely	COUNT	5	0	0	0	1	3	1	0	3	2	0	0	1	1	1	0	2
	COL %	25 %	0 %	0 %	0 %	25 %	50 %	20 %	0 %	42.9 %	15.4 %	0 %	0 %	20 %	100 %	16.7 %	0 %	50 %
Somewhat likely	COUNT	8	0	1	1	1	2	2	1	3	5	0	4	0	0	3	0	1
	COL %	40 %	0 %	50 %	50 %	25 %	33.3 %	40 %	100 %	42.9 %	38.5 %	0 %	100 %	0 %	0 %	50 %	0 %	25 %
Not very likely	COUNT	4	0	1	1	1	0	1	0	0	4	0	0	2	0	1	0	1
	COL %	20 %	0 %	50 %	50 %	25 %	0 %	20 %	0 %	0 %	30.8 %	0 %	0 %	40 %	0 %	16.7 %	0 %	25 %
Not likely at all	COUNT	3	0	0	0	1	1	1	0	1	2	0	0	2	0	1	0	0
	COL %	15 %	0 %	0 %	0 %	25 %	16.7 %	20 %	0 %	14.3 %	15.4 %	0 %	0 %	40 %	0 %	16.7 %	0 %	0 %

If available in your area and the distance you could drive on a tank of gas or battery charge was the same for an EV and a traditional gas or diesel powered vehicle, how likely would you be to purchase the electric powered version of the vehicle?

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
How familiar are you with EVs?	Base	20	8	6	6	0	11	5	0	3	1	0	14	3	
		--	40%	30%	30%	0%	55%	25%	0%	15%	5%	0%	70%	15%	
	Very familiar	COUNT	1	0	1	0	0	1	0	0	0	0	0	0	0
		COL %	5 %	0 %	16.7 %	0 %	0 %	9.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Somewhat familiar	COUNT	10	4	3	3	0	5	2	0	3	0	0	8	0
		COL %	50 %	50 %	50 %	50 %	0 %	45.5 %	40 %	0 %	100 %	0 %	0 %	57.1 %	0 %
	Not very familiar	COUNT	6	3	1	2	0	3	2	0	0	1	0	4	2
		COL %	30 %	37.5 %	16.7 %	33.3 %	0 %	27.3 %	40 %	0 %	0 %	100 %	0 %	28.6 %	66.7 %
	Not familiar at all	COUNT	3	1	1	1	0	2	1	0	0	0	0	2	1
		COL %	15 %	12.5 %	16.7 %	16.7 %	0 %	18.2 %	20 %	0 %	0 %	0 %	0 %	14.3 %	33.3 %

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you ever been in an EV or seen an EV?	Base	11	4	4	3	0	6	2	0	3	0	0	8	0	
		--	36%	36%	27%	0%	55%	18%	0%	27%	0%	0%	73%	--	
	Yes	COUNT	5	1	2	2	0	4	0	0	1	0	0	4	0
		COL %	45.5 %	25 %	50 %	66.7 %	0 %	66.7 %	0 %	0 %	33.3 %	0 %	0 %	50 %	0 %
	No	COUNT	4	2	2	0	0	1	1	0	2	0	0	3	0
		COL %	36.4 %	50 %	50 %	0 %	0 %	16.7 %	50 %	0 %	66.7 %	0 %	0 %	37.5 %	0 %
	Not sure	COUNT	2	1	0	1	0	1	1	0	0	0	0	1	0
		COL %	18.2 %	25 %	0 %	33.3 %	0 %	16.7 %	50 %	0 %	0 %	0 %	0 %	12.5 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Have you ever driven an EV?	Base	5	1	2	2	0	4	0	0	1	0	0	4	0	
		--	20%	40%	40%	0%	80%	0%	0%	20%	0%	0%	80%	0%	
	Yes	COUNT	2	1	1	0	0	2	0	0	0	0	0	2	0
		COL %	40 %	100 %	50 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %	50 %	0 %
	No	COUNT	3	0	1	2	0	2	0	0	1	0	0	2	0
		COL %	60 %	0 %	50 %	100 %	0 %	50 %	0 %	0 %	100 %	0 %	0 %	50 %	0 %

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Would you say you have become more informed about EVs in the last 2 years or has your knowledge of EVs not changed in the last 2 years?	Base	11	4	4	3	0	6	2	0	3	0	0	8	0	
		--	36%	36%	27%	0%	55%	18%	0%	27%	0%	0%	73%	0%	
	More informed about EVs	COUNT	7	2	2	3	0	4	0	0	3	0	0	6	0
		COL %	63.6 %	50 %	50 %	100 %	0 %	66.7 %	0 %	0 %	100 %	0 %	0 %	75 %	0 %
	Knowledge of EVs not changed	COUNT	4	2	2	0	0	2	2	0	0	0	0	2	0
		COL %	36.4 %	50 %	50 %	0 %	0 %	33.3 %	100 %	0 %	0 %	0 %	0 %	25 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Overall, what is your opinion of EVs?	Base		11	4	4	3	0	6	2	0	3	0	0	8	0
			--	36%	36%	27%	0%	55%	18%	0%	27%	0%	0%	73%	0%
	I love them and I wish I owned one	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	I like them but I have questions or concerns	COUNT	6	2	2	2	0	4	1	0	1	0	0	5	0
		COL %	54.5 %	50 %	50 %	66.7 %	0 %	66.7 %	50 %	0 %	33.3 %	0 %	0 %	62.5 %	0 %
	I don't like them	COUNT	1	1	0	0	0	1	0	0	0	0	0	1	0
		COL %	9.1 %	25 %	0 %	0 %	0 %	16.7 %	0 %	0 %	0 %	0 %	0 %	12.5 %	0 %
	I don't know enough about them to form an opinion	COUNT	2	1	1	0	0	0	1	0	1	0	0	1	0
		COL %	18.2 %	25 %	25 %	0 %	0 %	0 %	50 %	0 %	33.3 %	0 %	0 %	12.5 %	0 %
	Other (Please specify)	COUNT	2	0	1	1	0	1	0	0	1	0	0	1	0
		COL %	18.2 %	0 %	25 %	33.3 %	0 %	16.7 %	0 %	0 %	33.3 %	0 %	0 %	12.5 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own		
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent	
Which of the following do you like best about EVs?	Base		6	2	2	2	0	4	1	0	1	0	0	5	0
			--	33%	33%	33%	0%	67%	17%	0%	17%	0%	0%	83%	0%
	No, or low, vehicle emissions	COUNT	5	1	2	2	0	4	1	0	0	0	0	5	0
		COL %	83.3 %	50 %	100 %	100 %	0 %	100 %	100 %	0 %	0 %	0 %	0 %	100 %	0 %
	No, or little, fossil fuel required to power vehicle	COUNT	4	1	1	2	0	3	1	0	0	0	0	4	0
		COL %	66.7 %	50 %	50 %	100 %	0 %	75 %	100 %	0 %	0 %	0 %	0 %	80 %	0 %
	Overall cheaper to operate	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	Little noise output	COUNT	2	0	1	1	0	2	0	0	0	0	0	2	0
		COL %	33.3 %	0 %	50 %	50 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %	40 %	0 %
	Low maintenance	COUNT	1	0	1	0	0	1	0	0	0	0	0	1	0
		COL %	16.7 %	0 %	50 %	0 %	0 %	25 %	0 %	0 %	0 %	0 %	0 %	20 %	0 %
	Other (Please specify)	COUNT	0	0	0	0	0	0	0	0	0	0	0	0	0
		COL %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
	None of the above	COUNT	1	1	0	0	0	0	0	0	1	0	0	0	0
		COL %	16.7 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	0 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own	
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent
Base		20	8	6	6	0	11	5	0	3	1	0	14	3
		--	40%	30%	30%	0%	55%	25%	0%	15%	5%	0%	70%	15%
Very likely	COUNT	2	0	1	1	0	2	0	0	0	0	0	2	0
	COL %	10 %	0 %	16.7 %	16.7 %	0 %	18.2 %	0 %	0 %	0 %	0 %	0 %	14.3 %	0 %
Somewhat likely	COUNT	9	4	3	2	0	4	3	0	1	1	0	6	1
	COL %	45 %	50 %	50 %	33.3 %	0 %	36.4 %	60 %	0 %	33.3 %	100 %	0 %	42.9 %	33.3 %
Not very likely	COUNT	5	2	1	2	0	3	2	0	0	0	0	4	1
	COL %	25 %	25 %	16.7 %	33.3 %	0 %	27.3 %	40 %	0 %	0 %	0 %	0 %	28.6 %	33.3 %
Not likely at all	COUNT	4	2	1	1	0	2	0	0	2	0	0	2	1
	COL %	20 %	25 %	16.7 %	16.7 %	0 %	18.2 %	0 %	0 %	66.7 %	0 %	0 %	14.3 %	33.3 %

2020 compared to 2019 and 2018 OR EV survey results

2018 XTAB2

		Total	Q4_LENGTH_OF_SERVICE				Q6_PRIMARY_HEAT_SOURCE						Q4_Rent_Own	
			Less than 10 years	10-25 years	More than 25 years	Don't know	Electricity	Natural Gas	Propane	Wood	Fuel Oil	Other	Own	Rent
Base		20	8	6	6	0	11	5	0	3	1	0	14	3
		--	40%	30%	30%	0%	55%	25%	0%	15%	5%	0%	70%	15%
Very likely	COUNT	5	2	2	1	0	3	2	0	0	0	0	5	0
	COL %	25 %	25 %	33.3 %	16.7 %	0 %	27.3 %	40 %	0 %	0 %	0 %	0 %	35.7 %	0 %
Somewhat likely	COUNT	8	2	3	3	0	4	2	0	1	1	0	5	1
	COL %	40 %	25 %	50 %	50 %	0 %	36.4 %	40 %	0 %	33.3 %	100 %	0 %	35.7 %	33.3 %
Not very likely	COUNT	4	2	1	1	0	3	1	0	0	0	0	3	1
	COL %	20 %	25 %	16.7 %	16.7 %	0 %	27.3 %	20 %	0 %	0 %	0 %	0 %	21.4 %	33.3 %
Not likely at all	COUNT	3	2	0	1	0	1	0	0	2	0	0	1	1
	COL %	15 %	25 %	0 %	16.7 %	0 %	9.1 %	0 %	0 %	66.7 %	0 %	0 %	7.1 %	33.3 %

